Reporter Archives Collection

This volume is part of a continuing series preserving the historical record of the Papua New Guinea University of Technology. Compiled from recovered hard-copy editions of The Reporter, these annual volumes safeguard the University's stories, achievements, and milestones for future generations.

See companion volumes for other years in the collection.

COMPILED BY:
ERIC H. KUNA

VOLUME

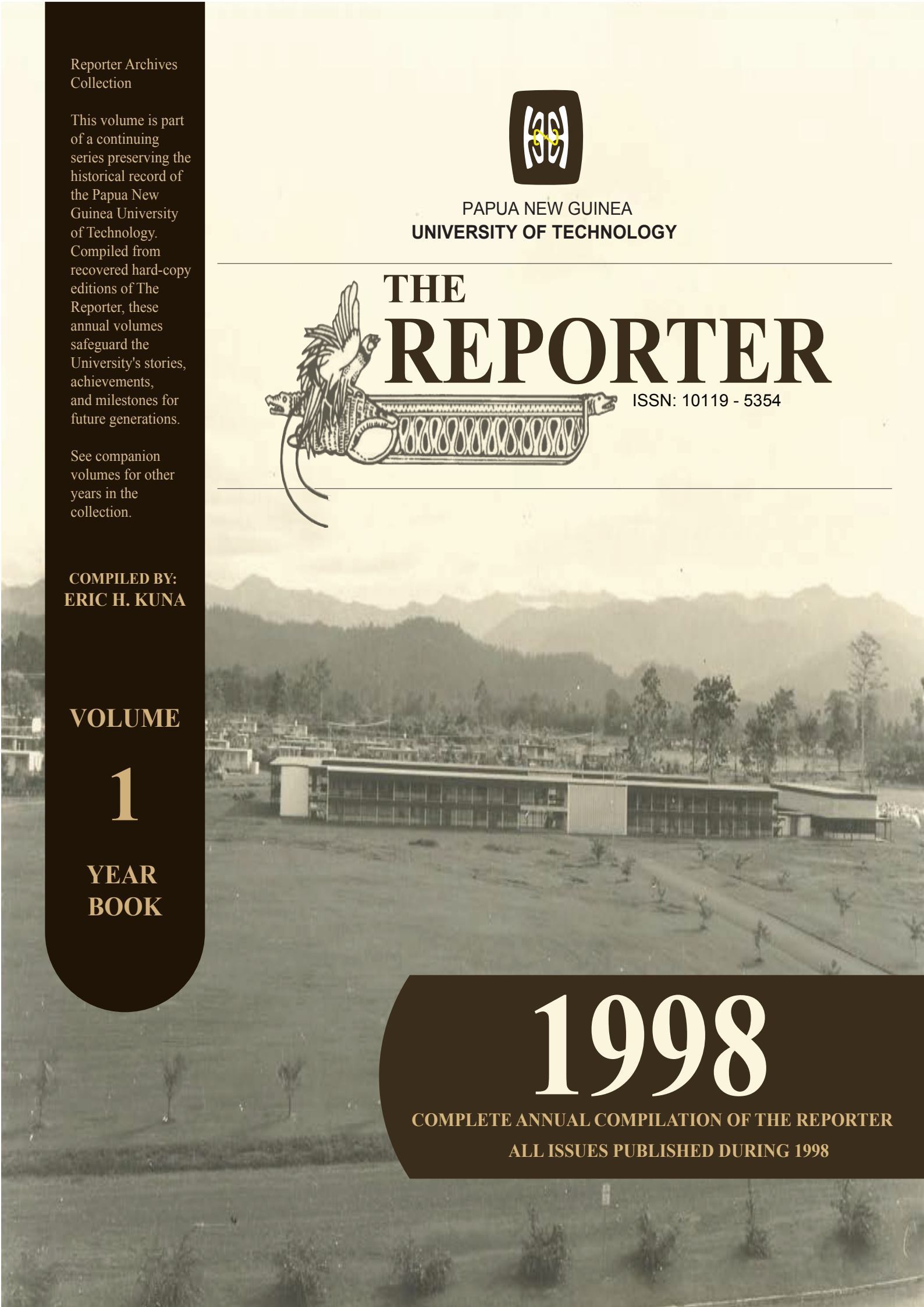
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YEAR BOOK

PAPUA NEW GUINEA
UNIVERSITY OF TECHNOLOGY

THE REPORTER

ISSN: 10119 - 5354



1998

COMPLETE ANNUAL COMPILATION OF THE REPORTER

ALL ISSUES PUBLISHED DURING 1998

About This Volume

The Reporter is the official news publication of the Papua New Guinea University of Technology, documenting the University's journey, achievements, events, research, and community life through the years.

This volume forms part of the Reporter Archives Collection, an ongoing initiative to recover, preserve, and make accessible the University's historical records. The contents have been carefully compiled from surviving hard-copy editions, many of which existed only in printed form. Through digitisation and archival preservation efforts, these records have been brought together into annual volumes to safeguard the institutional memory of the University for future generations.

While every effort has been made to reproduce the original publications faithfully, some source materials may reflect the limitations of the surviving copies available at the time of compilation.

** Please note: All articles are from original hard copies which are scanned and compiled. No modifications, editing has been done except for covers.**

Readers are encouraged to explore companion volumes covering other years, together forming a continuous historical record of the Papua New Guinea University of Technology from its early years to the present day.

Compiled by Eric H. Kuna
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The Reporter

30th ANNIVERSARY UNITECH 1967 - 1997

Incorporating campuses at: TARAKA BUMBU BULOLO VUDAL

ISSUE No:1272 ISSN:10119-5354 30 JANUARY 1998 WEEKLY

Unitech face 40 percent cut in 1998 revised Supply Bill

Vice Chancellor imposes cost cutting measures for first quarter

By STEVEN BUSIN

The Papua New Guinea University of Technology Vice Chancellor, Dr James Kaiulo, has instructed all Departmental Heads to take stringent cost effective measures to help reduce spending by the Uni-ity.

The Vice Chancellor's action is a direct result of cuts in the University's budget by the National Government for the first quarter.

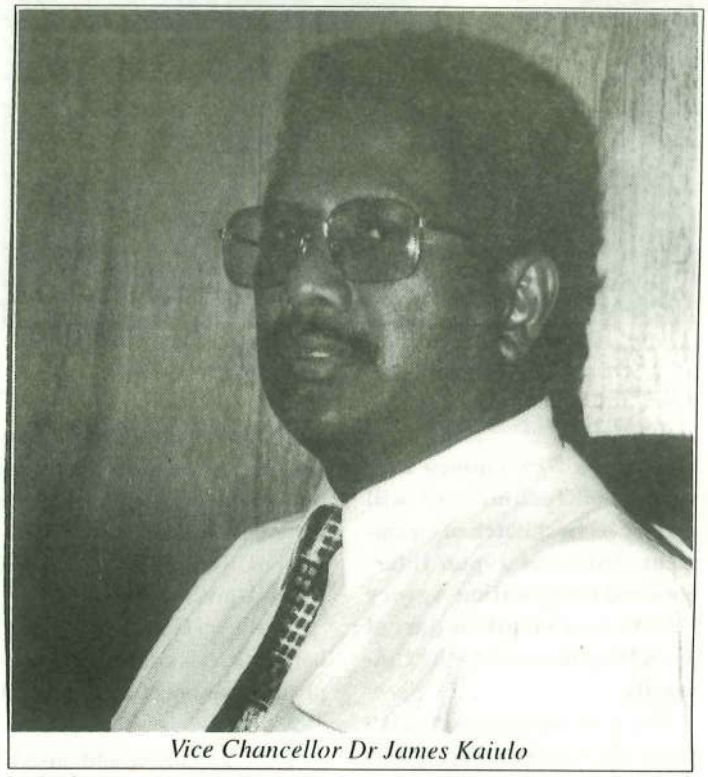
In a Memorandum dated 22 January advising all Departmental Heads and Directors of Centres, Dr Kaiulo said: " As a result of a futher revision to the origional 1998 Supply Bill, the PNG University of Technology's allocation for the three months to end of March 1998 has been reduced by 40 percent."

"The reduced allocation makes it impossible to allocate normal budgeted expenditure amounts to Departments and Centres. Departments and Centres can get their first budget figures from Bursary," his memorandum stated.

The budget cuts has also forced the University management further delay the Orientation and Registration by two weeks which is now scheduled to begin on February 16 - 20.

As part of cost cutting measures, Dr Kaiulo said, the following actions must be taken immediately by Departments/ Centres so that the University operates within its Supply Bill allocations in the first quarter of 1998:

- Reduce employment of temporary staff (Building and Grounds, Security, etc) by 50 percent,
- Restrict all domestic travel,
- No overseas travel unless authorised by the Vice Chancellor,
- Defer all staff recruitment,
- Defer all recreational fares
- Defer payment of all gratuity,



Vice Chancellor Dr James Kaiulo

- Defer payment of all ERSA and IMA protection payments,
- Restrict usage of water, electricity and phones,
- No capital purchases and
- Restrict fuel usage by all University vehicles to one refill a week unless authorised by the Vice Chancellor.

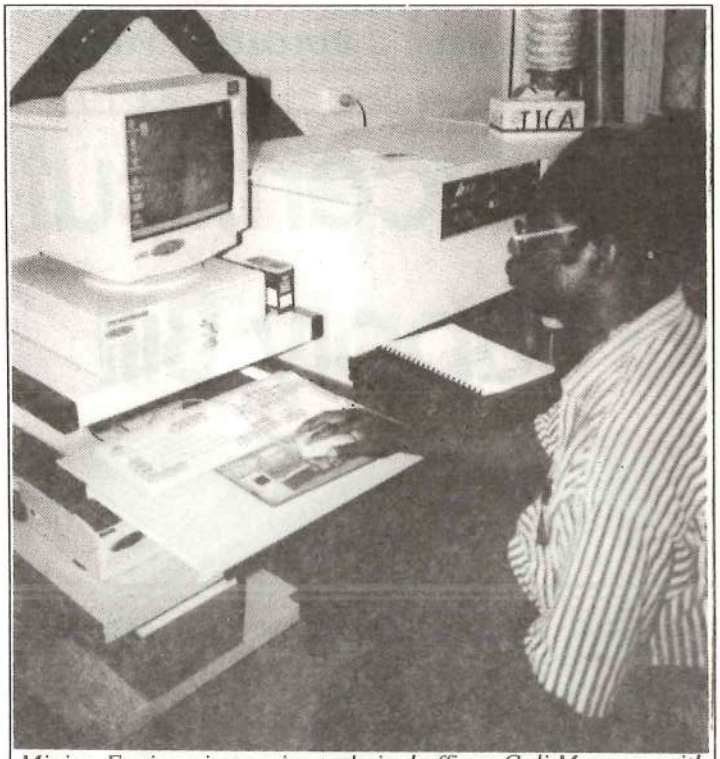
Dr Kaiulo strongly urged all staff to follow his directives in order for the University to go through to take the University through until the National Budget is passed by the National Government in March.

Meanwhile, also in a memorandum to Heads of Departments, the Vice Chancellor imposed strict control measures to the usuage of institutional vehicles.

The control measures are part of a decision reached by the Finance and General Purposes Committee in their 190th meeting last year.

The control measures on the use of University vehicles could be seen on Page 6 of the Reporter.

First batch K10 million JICA equipment aid to arrive next month



Mining Engineering senior technical officer, Guli Maragau with an analyser donated by JICA

By STEVEN BUSIN

The Papua New Guinea University of Technology will receive its first batch of equipment from the Japan International Cooperation Agency (JICA) next month as part of it's K10 million aid to the University.

The K10 million aid deal between JICA and the Papua New Guinea government was signed on July 31 1997 by Papua New Guinea Ambassador to Japan Mr Aiwa Olmi and Mr Kasuhiko Koyama, General Manager, Public Supply Department, Marubeni Corporation for improvement of equipment for the Papua New Guinea University of Technology and the Vudal University College.

Marubeni Corporation on behalf of JICA is contracted to supply the equipment until 9 March 1998.

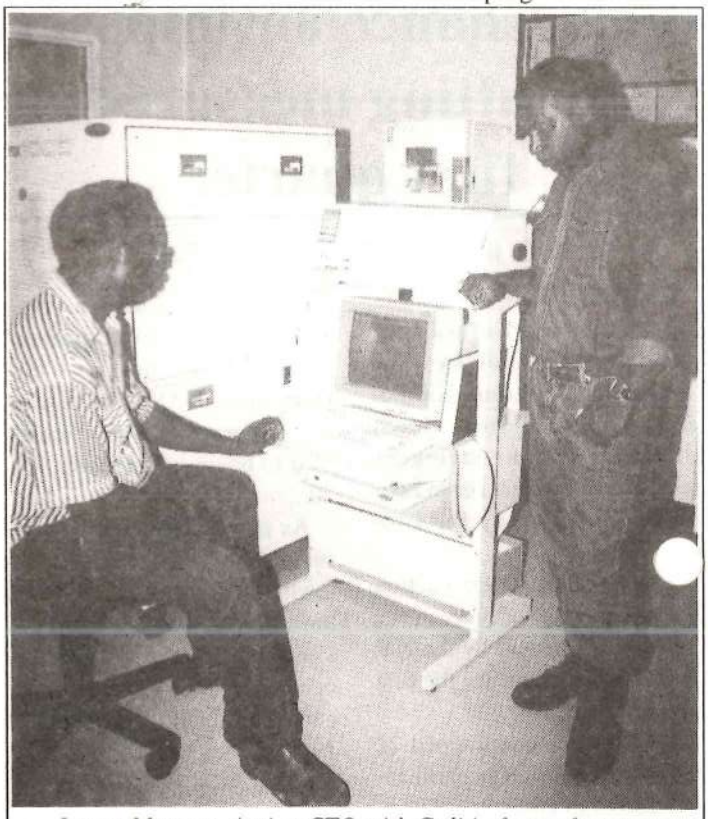
The company would also be responsible to deliver equipment from Japan, Australia, United Kingdom, United States of America, Germany, Italy and Papua New Guinea and install the equipments at the University.

The grant component is broken into the following components;

i) Supply of equipment to be imported to PNG Y491, 289, 000 (K6,516, 000)
ii) Supply of equipment to be procured in PNG Y219, 752, 000 (K2, 914,869)
iii) Installation work Y10, 159,000 (K134, 752)

PNG University of Technology Vice Chancellor, Dr James Kaiulo, has indicated that the assistance provided by the Japanese Government through JICA will commence an important rehabilitation programme in replacing the obsolete teaching and research equipment and facilities at the University.

However, Dr Kaiulo said the University will be approaching other donor agencies for upgrading other teaching and research facilities at the University in order to improve the quality of academic programmes.



Lenny Muyong, Acting CTO with Guli in front of an x-ray machine also donated by JICA

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Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

1998, a year of challenges for PNG University of Technology

By STEVEN BUSIN

After a hectic and rather controversial year at the national scene, we have come to the beginning of another year, and this year, may have in store for us a few surprises.

Expect the unexpected as the famous Papua New Guinean saying goes " PNG, is the land of the unexpected."

Last year, 1997 kicked off with the Sand Line Crisis with former Army General, Jerry Singirok stirring up a constitutional crisis when he addressed the nation and called for the Prime Minister to step down.

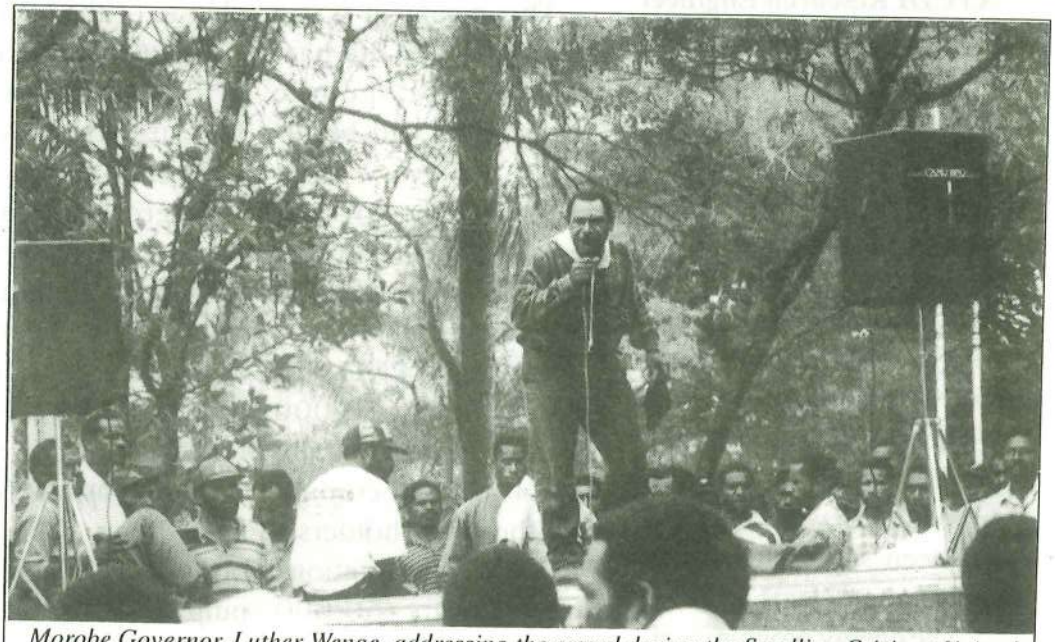
His call sparked violence and looting in the nation's capital which spilt over to other centres of the country, as well as receiving world wide attention from news hounds.

Papua New Guinea University of Technology students joined the public outcry by staging a sit in protest in front of the University Campus which they used to voice their grievances in a more diplomatic manner.

At the height of the crisis, the then Prime Minister, Sir Julius Chan, his Deputy, Chris Haiveta stepped aside to let normal investigations to take place, and apparently, the instigators were served with sentences ranging from 5 to 10 years. The inquiry into the whole saga is being carried on into the new year.

Then, came the prolonged drought, which scientists pinned down as being caused by the El Nino Effect. Unitech staff and students also participated to raise funds for people in the affected areas with a cold water lunch at the main gate.

These events were followed by a string of controversies, subsequently, the unforeseen cataclysm, have brought about massive spending by the National Government thus creating a hole in the national coffers.



Morobe Governor, Luther Wenge, addressing the crowd during the Sandline Crisis at Unitech Campus. He was then an aspiring candidate for the national elections.

Apparently, Parliament was forced to pass a Supply Bill to see the country go through the first quarter until March when Parliament sits down to deliberate and pass the 1998 National Budget.

The Papua New Guinea University of Technology has been hit hard with a 40 percent cut in its Supply Bill, thereby, forcing the management of the University to further delay the Orientation and Registration week by another two weeks.

The Orientation and Registration week was scheduled to kick off next Monday (February 2nd) however, it was rescheduled to be held from 16 - 20 February.

The University management reacted by imposing cost effective measures to help reduce spending by the University and let it go through the first three months of the year until the passing of the budget in March.

The cost cutting measures imposed include;

- a 50 percent cut in the employment of temporary staff;
- restriction on all domestic and international travel unless authorised by the Vice Chancellor,
- deferral of all staff recruitment/ recreational leave fares/ payment of gratuity / payment of all ERSA and IMA protection payments,
- restrict usage of water, electricity and telephones
- no capital purchases and
- restrict fuel usage by all university vehicle to one refill a week unless authorised by the VC.

Over the years, budget cuts to the University have been on the decline.

The same predicament is also faced by other universities in the country and sister universities in Australia.

According to a report in the Campus Review (Jan 16-20 1998) the Australian Vice Chancellors Committee (AVCC) are also urging the government for more funding to keep the quality of education to par to the ever changing technological world.

Accordingly, Dr Kaiulo, in his paper, " My Vision for Papua New Guinea University of Technology," the decline in government budgetary support is one of the challenges facing higher education in PNG.

Amongst other challenges as stated in Dr Kaiulo's report are;

- expenses and prices increasing faster than cost of living
- impacts of modern technology
- expectation to link with the changing economy
- focus on college and university education to improve responsiveness to national, provincial and district human resource development need
- excess to higher education programs limited by availability of bed spaces
- improve articulation between various higher education programmes
- review the current higher education act to accommodate the changing character of higher education.

As such, the University of Technology at large should cooperate together as much possible to tackle the challenges and continue providing quality education to students who will be the country's future brains and leaders.

It would be this new generation of leaders that would guide the country into the next century.

Coffee waste to produce energy for PNG homes mooted

ATCDI Research Engineer Garaio Gafiye has recently returned from the 2nd ASEAN Renewable Energy Conference in Phuket, Thailand where he held discussions with the Chinese Biogas Society for possible assistance in developing a biogas technology using coffee pulp waste.

Gafiye said a number of people in PNG have attempted this work but have not been successful due to technical problems.

"The energy program is already communicating with the Chinese and possible work plans are being prepared," he said.

"Basically we want to minimise pollution of the environment and utilise the large quantity of waste to produce biogas for cooking, lighting and heating.

"Other benefits include fertiliser product, employment creation establishment of small industries.

"Pollution of the environment is a big problem in PNG.

"Wastes from mines, agro industries, abattoir, municipal etc. are contributing to the pollution of the environment adversely affecting the lives of the communities.

"The affected areas are mostly streams and rivers that are used for drinking, washing and hunting.

"This means of waste disposal is a health hazard because people downstream will be affected.

"Some of these wastes are very useful resources which are disposed of in this manner.

"At present PNG produces about 50,000 tonnes of coffee annually with 60 percent coming from the small holders.

"The large plantations dump about 50,000 tonnes of coffee pulp.

"These are dumped into piles which often lead to run off into water courses.

"This causes degradation of water quality and is a great concern for the communities and the government.

"This are dumped into piles which often lead to run off into water courses.

"This courses degradation of the water quality and is a great concern for the communities and the government.

"This method of waste removal is illegal under the terms of the Water Resources Act and if the charge specified under the Act was applied, the coffee industry would pay about one million kina per year for the discharge of the effluent.

"There is no evidence of the government enforcing this Act to control pollution.

"Agro wastes in most cases have always been of use to communities. Wastes have been used as fuel for cooking and heating and also as fertilisers.

"One waste which has not been seriously considered is coffee pulp waste which is disposed of in large quantities and is difficult to use in it's present form.

" This waste could be reused as a source of energy to produce biogas for cooking heating and lighting.

"The coffee pulp waste could be given appropriate treatment to produce biogas."

Gafiye said, there were enough large coffee plantations in the inland areas for this project to be feasible.

Currently, he said, there were no biogas plants utilising coffee pulp in PNG and may be elsewhere in the world as far as they know.

"Biogas work was trialed on a small scale by ATCDI in the early 1970's using pig manure," he said.

"This project operated for a few years and closed down.

"Later on some experimental work was undertaken using night soil, animal wastes, sewer sludge and abattoir wastes but these attempts were not successful.

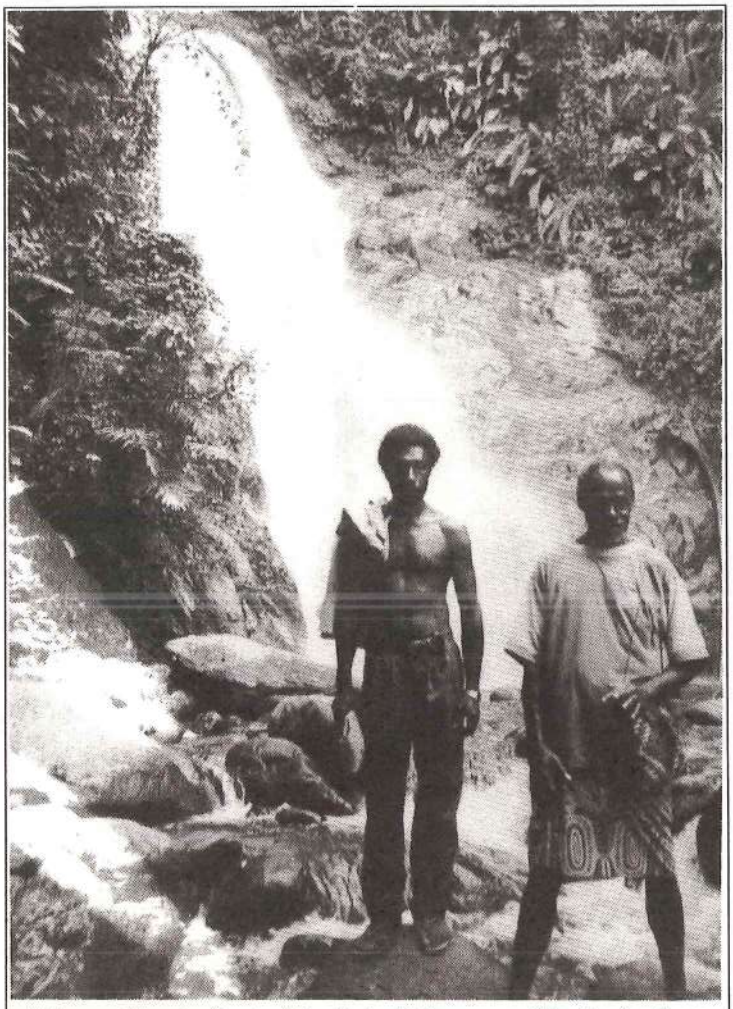
"The Coffee Research Institute in Aiyura did some work to produce biogas using coffee pulp but it was abandoned the project due also to technical and funding problems.

"ATCDI is hoping to send one of it's engineers, Bob Kamila to the biogas Research and Training Centre (BRTC) in Chengdu to undergo 8 weeks trainin on biogas production starting in August.

"It also planned for two Chinese biogas experts to do data collection in PNG after that course.

"In the last 10 years we have discussed this idea with a number of different people and also through results of recent work by others we think we are on the right track by inviting the Chinese experts to help us to crack this problem."

ATCDI carrys out survey for Salamaua micro hydro scheme



Village elders in front of the Bula Falls, a possible site for the a micro hydro project

The Appropriate Technology and Community Development Institute (ATCDI) is currently carrying out studies to indentify suitable micro hydro sites to for villages and government institutions within the Salamaua area of Morobe Province.

According to ATCDI the government institutions and villages that would benefit from the project are Salamaua High School, Salamaua Health Centre, Salamaua Station and council station, the Busama and Buakap villages.

Gafiye said their visit to the area was to evaluate the current status of the existing Bula micro hydro scheme installed by the Lutheran Mission in the 1960's, and to make an assessment of all other potential sites in the vicinity of the concerned centres and villages.

The sites visited are all feasible sites and that the power outputs calculated for each site are only approximate figures.

However, Gafiye said that one concern here was that the longer distances for power trasmission will increase prohect costs and somtinges it becomes uneconomical to install a scheme.

The Bula Falls would serve Gwado and Busama villages while the either Bubung or Tabola rivers will serve Buakap and the Malolo Bible School.

The hamlets in between the villages or on the outskirts can have battery charging systems.

The people are very enthusiastic about the prospect of having power in their homes.

Busama village already has a Micro hydro working committee which is important for new projects.

Meanwhile, a recommendation has beeen made for a prefeasibility study of three other sites to be undertaken to determine the power output, load centre power demands and the project cositngs in order to select two sites for possible implemenation and to make a separate visit to Asini village, Salamaua High School and the Salamaua Station to identify potential sites for them.

Printing staff get new uniforms



The "A" Team of the Printing Office pose for a picture in their new uniforms.

University of Technology Printing Staff have recently acquired new uniforms for the section.

According to the Printing Manager, Benny Alefay the uniforms were to boost the morale of his staff who at times had to work late into the evenings and weekends to have urgent work printed.

"This is a sort of thankyou for them," he said.

According to Alefay the uniforms were purchased last year.

NOTICES & CLASSIFIEDS

CONTROL OF UNIVERSITY VEHICLES

I wish to make the following observation on the control of University vehicles:

1. Some University staff use University vehicles to drop off and pick up their dependents in town.

2. Some University staff use the University vehicles for personal purposes on campus and off campus.

3. Some University staff use the vehicles purchased from Trust Account as private vehicles after hours and on weekends.

This is an ongoing problem and the University should address this issue seriously.

The Finance and General Purpose Committee in its 190th Meeting has agreed to the following measures for controlling movements to be implemented in 1998:

1. Pool all University vehicles at the transport yard after working hours except designated vehicles for senior officers and essential services.

2. All University vehicles to have Z plates whether purchased from recurrent funds or trust accounts funds.

3. University vehicles should not be used for personal purposes.

4. Total ban on transporting dependents except for designated vehicles for School, Nadzab, Hospital runs and for senior university officers.

The Security staff will be authorised to check all University vehicles at the main gate to ensure that only authorised persons travel in university vehicles out of campus.

A review of the above measures will be provided to the Finance and General Purposes Committee in mid 1998.

I will appreciate it if we could all cooperate in implementing the Finance and General Purposes Committee resolutions.

James V Kaiulo
Vice-Chancellor

VIDEO TAPES FOR RENT

1. Feature films from the AV Unit are available for rent to members of the Video which is created for the UniversityCommunity.

2. Membership charges are K10 per year. Anyone with a video recorder can become a member. Films are rented for private viewing only.

There is a charge of K2.00 per night per film. Every additional day - K2.Double tapes - K4. Weekend charges - K3 (Friday night to Monday morning).

4. No more than two films are rented to one customer at the same time.

5. Lost or damaged tapes must be paid for: Original tapes - as priced. Copies - K20.

6. A list of films is available. Members can reserve films by telephone - 473 4364. Contact: Hubert - Officer in Charge. Veronica and Diane - Reservations.

Happy Viewing.

PUBLIC NOTICE

The Reporter wishes to advise the University Community and the Public that it will start charging all classifieds and public notices.

This would not include official University notices.

Clients are expected to pay upfront in cash in order to have their advertisement published in our weekly issues.

The rates are as follows:
Full Page: K10
Half Page: K7
Quarter Page: K5
1 full column: K3
1/2 column: K1
1/4: K0.50

Deadline for bookings on Tuesday weekly.

Editor

Security Information

Excessive noise on campus

Campus residents are hereby informed once again that excessive noise on campus must cease after 11 pm which is in line with the Vice Chancellor's Rules and Regulations on excessive noise.

Re-introduction of visitors application pass

Unitech campus residents are hereby informed that Security Committee decided in 1997 to re-introduce visitors pass commencing 02 March 1998. Visitors will stay/live with staff members for a period not exceeding two months. For further information, please contact Director Security Services on 4888.

Security Services telephone numbers

Following are correct and working telephone numbers to Campus Security/Police in case of emergency

Duty Officer:	473 4444/473 4209
Campus Police	473 4282/ 473 4215
Main Gate	473 4299
Directors Office	473 4888
Directors House	473 4336
Chief Security Officer	473 4384

Eka Pisae
Director Security Services

Notice to All Staff

1997 Statement of Earnings

Staff are advised that 1997 Group Certificates are not available for distribution due to late posting of Group Certificates from Internal Revenue Commission.

Niki Mambere
Asst Accountant - Payroll

Post Card

A Post Card addressed to: Don, Kyeing and Bianca Black. Please pick it up from Information Office.

Position Vacant

South Pacific Commission has vacancies for the following positions: 1. Cataloguer . 2. Recruitment of Programme, Support, Planning and Evaluation Advisor. 3. Recruitment of Programme, Support, Planning and Evaluation Officer.

Interested persons please, come and collect copies of the application form from the Information Office.

Shuttle Services

Islands Nationair welcomes you aboard their new Bus Shuttle Service.

Prices: **K15 Adult fare.**
K10 child/Student fare.
One way fare - Lae Nadzab/ Nadzab Lae.
K20 hire car with driver.

For bookin gs and enquiries contact Lae Travel Office located at 2nd street Lae.

Contact Simon Vinalu, Jerry Wimulu or Peter Bangin on Phone: **472 5277/472 5279. Fax: 472 3072**

Welcome to all staff and students

As this is the first Reporter issue of the year, the Editorial team, would like to welcome all staff and students at the start of the another academic year.

The Reporter would be bringing you all the happenings of this year.

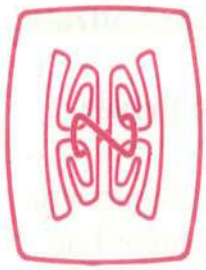
We also welcome comments on issues where you think the Repoter can improve upon or include.

Please do not hasitate to call into the Public Relations Office with your views.

Editorial team

AIRMAIL

STAMP HERE



If unclaimed please return to:

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Papua New Guinea University of Technology
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The Reporter

30th ANNIVERSARY UNITECH 1967 - 1997

Incorporating campuses at: TARAKA BUMBU BULOLO VUDAL

ISSUE No:1273 ISSN:10119-5354 06 FEBRUARY 1998 WEEKLY

Unitech celebrates first March Graduation next month

By STEVEN BUSIN

The Papua New Guinea University of Technology, next month, will witness its inaugural graduation at the beginning of a year.

This is a result of a decision made by the University's Council to do away with the traditional end of year graduations in November. Last year's graduation was the University's last November graduation.

PNG University of Technology Pro Vice Chancellor (Academic), Dr. Philip Siaguru said that next month's graduation would be used to test, whether the University, had in place a system that could comfortably cater for future March graduations.

"The whole system would change as of next month and we are basically reorganising the whole traditional pattern, especially in terms of management, certificate processing and academic gradings," he said.

"We have also realised that the adoption of the change would create a backlog on a lot of things."

"These include final year students who pass their supplementary examinations."

"And as for those final year students who pass their supplementary examinations, would then have to wait until March next year to graduate."



Graduands during last November's Graduation Ceremony

"It would not be fair on them, so it was decided that there was a need to stage a small graduation next month (March), so that these students and others who have missed out last year could participate."

On another front, Dr Siaguru said, it was an ideal opportunity for new students to witness a full University graduation ceremony.

"Previously when it was staged in November, it became a final year affair, with the absence of junior students," he said.

"The final year students, their relatives and invited friends were the only ones who witnessed the occasions."

"I can recall during my days as a student, I had not witnessed a single graduation until it was my own turn to graduate."

"So it is good to have it in March so that the whole student body could witness what it is like to participate in such a special event."

"Generally, it ignites a flame of excitement in these new intakes on what it is like to be part of the University community which is making a significant contribution to the progress of the nation."

"It also motivates students to commit themselves to their studies, so that one day, they too could be part of the group of students receiving their Degrees, Diplomas and Certificates."

"Graduation in November is always a squeeze as everybody works flat out for three solid weeks. However, we prefer going through it slowly and tediously so that we do it well."

Unitech staff/students have mixed reactions over registration delay



A carpenter busy doing maintenance work on an academic building

The two weeks postponement in Orientation and Registration has been received with mixed reaction from members of staff and students at the Papua New Guinea University of Technology.

The delay in commencement in the University's orientation and registration program is a direct result of the Government slashing the University's budget by 40 percent, leaving no choice for the University management but to put back the official commencement of the academic year by two weeks.

In interviews carried out by The Reporter, the delay for some has come with a sigh of relief and have taken it as a blessing in disguise as it has enabled them ample time to prepare and catch up with urgent and outstanding issues or work.

The University's Admissions Officer, Leo Fugre, when fronted up with the question said that the postponement has given him enough time to send out offer letters to new students as they were running a little behind time.

He added: "The hold up was at the Education Measurement Unit who did not release results promptly resulting in us falling behind schedule and with the postponement, it has given us enough time to send all our letters out and I am grateful to the University management for that."

Fellow collegue at the Students Affairs Section, Yawi Rapi, who is the Scholarship Officer also shared the same sentiments saying it has also given him enough time to catch up with some outstanding work before the begining of the registrations.

It is a bit relieving, said Henry Konaka, Assistant Accountant - Income/Revenue, as there were a lot of things not in place for the students.

"It has enabled us to defer expenditure in terms of overheads and by delaying the registration by two weeks has put us in a bit of comfortable situation to meet outstanding commitments," Konaka said.

On the other note, Konaka said he could recall during the 1995 graduation, the previous Vice Chancellor, Misty Baloiloi as part of his speech said: "'The University gives back to the Government what it has given us. If the Government does not give us enough money then the standard of education of students going out would also decline."

Hennie Aisime, Personnel Admistration Officer said the postponement due to budget cuts has its advantages and disadvantages.

"The delay has made it possible to bring nearly all new staff onto the campus, however, with the budget cuts, we have been finding it very difficult to purchase tickets for them."

"I sometimes go nearly to the point of crying when negotiating with the Bursary for release of funds to get those new staff onto the campus," she said.

Mary Lunga, a Matheson Library staffer said: "The Library is rearranging its book shelves, therefore the two weeks deferment was adequate to put the shelves into their new order, because if the students were here, they would have been a deterrant.

Meanwhile, the Buildings and [illegible]tenance section would be carrying out only internal emergency maintenance on institutional buildings.

According to Buildings and Maintenance Manager, Bernard Tzilu, at the moment, they are concentrating their efforts on students accommodation which was mostly completed.

"We are carrying out maintenance also to academic buildings ," Tzilu said.

"Most big projects are on hold," he said due to the cut in the University's Supply Bill.

He urged all staff and students to understand the situation the University was going through.

"I am also pleased that staff who have approached us have understood our situation by not putting undue pressure on us," he said.

"Whatever resources that we have we are putting them to good [illegible]

He has also warned residence not to go near trees that have their brances hanging over main power supply lines.

"There are several trees on campus that have their branches touching the main electricity supply lines and people should be very careful not to go under these trees especially during rainy days.

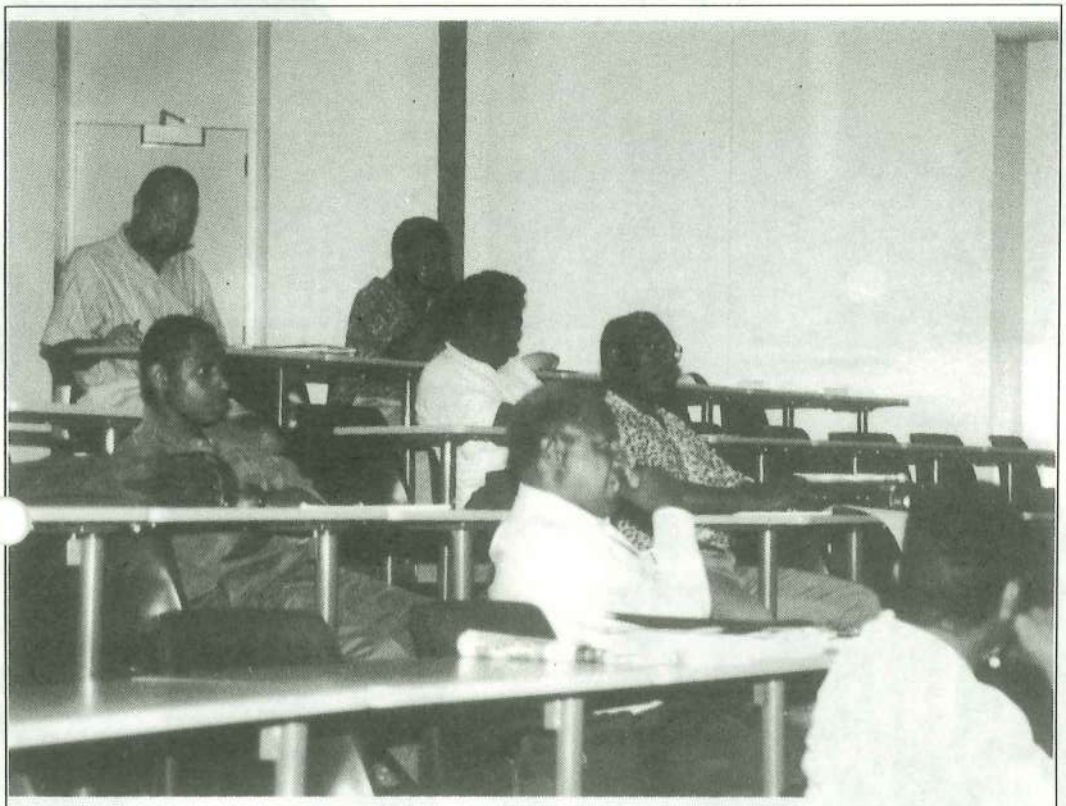
"We have informed the Electricity Commission who are currently prunning those trees."

The Reporter is produced weekly by the Public Relations Office.
Deadline 4pm on Tuesday weekly.
Editor: CORNEY LAHIES
Journalist:STEVEN BUSIN
Admin Officer:JOY SAHUMLAL
Secretary: ANGELA BOROMANA
The Media is most welcome to use stories with due acknowledgement
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Phones: (675) 4734290, 4734291, 4734298 Fax: (675) 457 667

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EMRC conducts one week Environment Impact Assessment Workshop



Participants of the workshop at the Mining Engineering Lecture Theatre

The Environment Management Research Centre (EMRC) is currently conducting a one week workshop on Developing the Environment Impact Assessment which ends today.

The workshop has attracted participants from within Lae and the country.

Topics covered at the workshop were: Introduction to Environment Impact Assessment, Legislation and Environment Impact Assessment, Contents of Environment Impact Assessment, Soils and Agriculture and Environment Impact Assessment, Halla Cement and Environment Impact Assessment.

Workshop participants were also given the opportunity for a field trip to Halla Cement and the Lae Sewarage Disposal, Besta Tinfish Factory, and local forest impact areas to asses environment impact.

Unitech names team for Australasian Public Servant Games

Fifteen Papua New Guinea University of Technology staff have been selected to participate in the Australasian Games in Melbourne in April.

According to PNG Unitech Sports Coordinator, Philip Lavatu, the confirmation of Unitech's participation in the Melbourne Games was received in early December.

"Those 15 selected will join their respective sports in Port Moresby a week before departure date for training sessions.

Unitech would be participating in volleyball, basketball, tennis, and Aussie rules.

The 15 selected participants for the Australasian Public Servants Games are: Agatha Senemau, Lucy Augustine, Gali Kalope, Elizabeth Kundi, Patricia Orere, Karen Anuke, Albert Wangi, Alois Leo, Harry Raku, Samie Issac, Philip Lavatu, Alita Pianga-Sari, Saroa Ilaru and Charlie Levi.

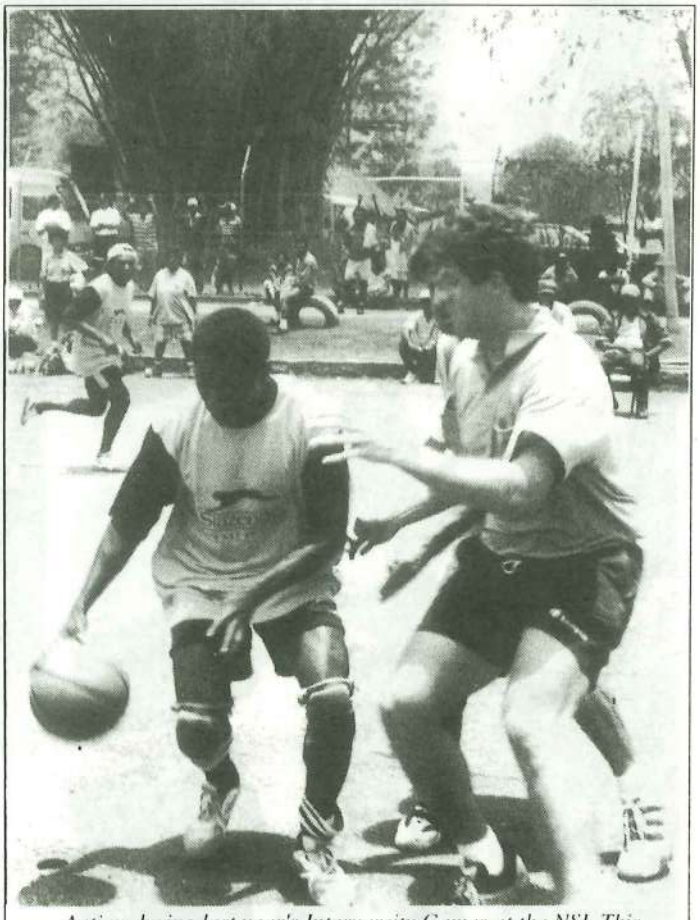
Lavatu urged participants to turn up for compulsory training sessions on Mondays, Wednesdays and Thursdays.

"Failure to attend training will mean that particular player would be dropped from the squad," he said.

"The players would have to pay a levy of K1260 and I appreciate those who have already made some attempts on their payments.

Lavatu said that they have been carrying out fund raising efforts and need about K16,000 to possibly make it to the Games.

As part of their fund raising efforts, the squad would be hosting a dance at the Staff Amenities Centre this Saturday. The gate fee isK5 per person.

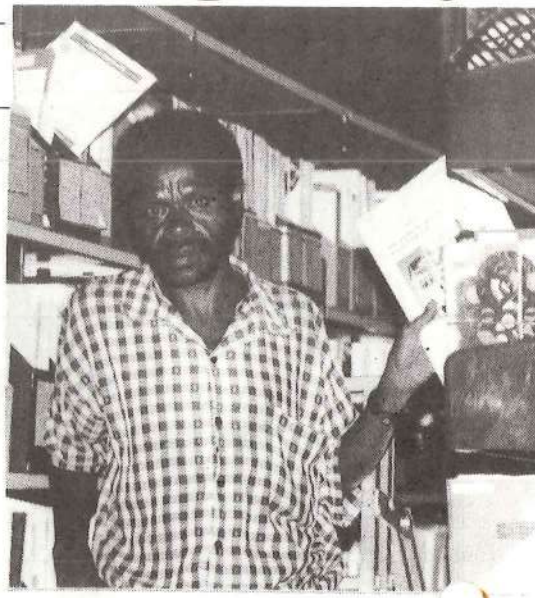


Action during last year's Intervarsity Games at the NSI. This year, Unitech will host the Intervarsity Games

Getting ready for Big Day

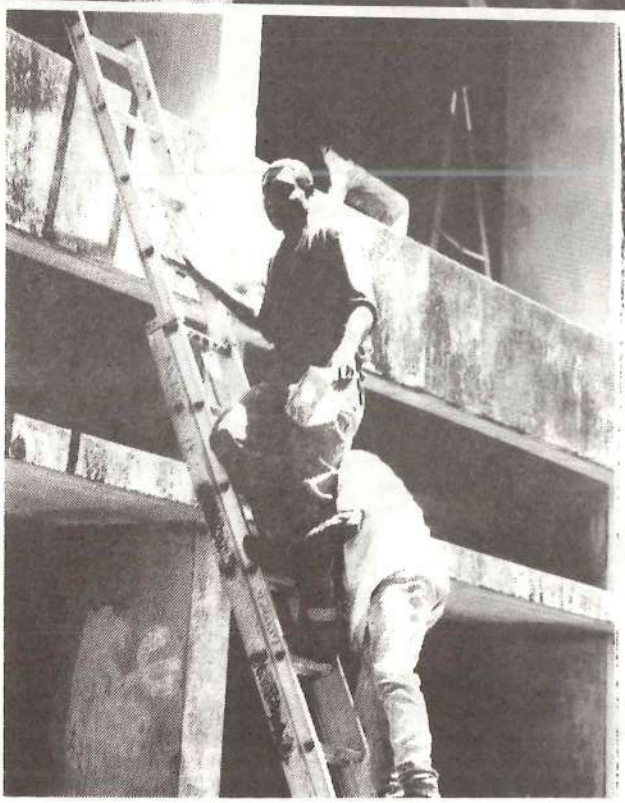
Orientation and Registration leadup preparations













1998 ORIENTATION SPORTS PROGRAMME PLANS

Below are the various sports to be played and plans for organised activities during Orientation Week.

1. **TYPE OF SPORTS ACTIVITIES**

Rugby Touch
Soccer
Netball
Volleyball
Basketball
Table Tennis
Launching of Sports
Presentation of Awards

2. **PARTICIPATION**

(a) All Departments including FYE to nominate one team each for each sports for male and female games.

FUN RUN
Interested individuals, old or young, white or black, male or female to participate. The Fun Run route will be confined to the campus area only (refer to map route). Fun Run starts on 17th February, 1998.

3. Each Department is requested to provide one or two umpires/referees for various sports during elimination rounds. For the finals, outside umpires/referees may be hired if desired.

4. **PRIZES**

The winner and runner-up of each sport in each Department will be awarded. Third place getters may be included, if funds allow.
Presentation will be held at the Union Hall on Thursday 26th March, 1998.

5. **REFRESHMENTS**

Refreshments will be provided only at the following activities.

(a) Fun Run and Presentation after the Run - Union Hall, 21st February, 1998.
(b) Sports Club Open Day (Duncanson Hall), 20th February, 1998.
(c) Launching of Orientation Sports Week, Union Hall, 02 March 1998.
(d) Presentation of Awards, Union Hall, 26th March 1998

6. **SPORTS CLUB OPEN DAY (DUNCANSON HALL)**
These sporting codes will be invited to participate and put up displays are:
(a) Table Tennis
(b) Basketball
(c) Cricket
(d) Darts
(e) Hockey
(f) Badminton
(g) Athletics
(h) Tennis
(i) Soccer
(j) Rugby
(k) Martial Arts
(l) Netball
(m) Boxing
(n) Aussie Rules

Philip Lavatu
Sports Coordinator

NOTICES & CLASSIFIEDS

CONTROL OF UNIVERSITY VEHICLES

I wish to make the following observation on the control of University vehicles:

1. Some University staff use University vehicles to drop off and pick up their dependents in town.
2. Some University staff use the University vehicles for personal purposes on campus and off campus.
3. Some University staff use the vehicles purchased from Trust Account as private vehicles after hours and on week ends.

This is an ongoing problem and the University should address this issue seriously.

The Finance and General Purpose Committee in its 190th Meeting has agreed to the following measures for controlling movements to be implemented in 1998:

1. Pool all University vehicles at the transport yard after working hours except designated vehicles for senior officers and essential services.
2. All University vehicles to have Z plates whether purchased from recurrent funds or trust accounts funds.
3. University vehicles should not be used for personal purposes.
4. Total ban on transporting dependents except for desig nated vehicles for School, Nadzab, Hospital runs and for senior university officers.

The Security staff will be authorised to check all University vehicles at the main gate to ensure that only authorised persons travel in university vehicles out of campus.

A review of the above measures will be provided to the Finance and General Purposes Committee in mid 1998.

I will appreciate it if we could all cooperate in implementing the Finance and General Purposes Committee resolutions.

James V Kaiulo
Vice-Chancellor

Rainfall Readings

Rainfall Readings for 24 hours to 0900 on:

Wed	28.1.98	0.2mm
Thurs	29.1.98	6.0mm
Frid	30.1.98	2.2mm
Sat	31.1.98	25.2mm
Sun	01.2.98	14.8mm
Mon	02.2.98	22.0mm
Tues	03.2.98	77.0mm

Total rainfall for week ending 03/02/98
199.8mm
Total yearly rainfall up to 27/01/98 is 347.2mm
Total yearly rainfall up to 03/02/98 is 347.2mm

Sali Bafinu
Civil Engineering Dept

Local Procument Under JICA Project

To those departments which submitted lists of equipment to be locally procured under the JICA project, please contact Mr Gunn Gunemba at the Planning and Development Unit.

Unitech Preschool

Unitech Preschool will resume classes for children on Monday 9th February 1998.

Any parents wishing to enrol your child/children, please come and see us at the Preschool Centre.

Mrs Miriam Pasanai
Pre School Supervisor

ROOMS FOR RENT
Single Ladies Hostel

1. 1 x one bedroom.
2. 1 x two bedroom.

Location: Aquari Street, behind Lutheran church (East Taraka), 6th house from Unitech bus stop with security fencing and manned by security guard from 6.00pm to 6.00am.Common kitchen, laundry and toilet shower. K170.00 per fortnight. Contact: Mrs Cecilia Watai on telephone: 475 7198

For Sale

Pajero, long wheel base, with AC, radio-cassette in very good condition - K18,000.
Mazda 292 with AC, radio, power steering, very good condition - K11,900. If interested, please call 473 4455 during day or 475 7462 after 5.00 pm. Golf equipment - Tommy Armour 855s graphite irons (3,45,6,7,8,9,PW,GW,SW) -K1,600. Taylor Made metal woods (1,3,4,5), original 'burner' series K320. Tommy Armour golf bag K100. 45 new Top Flite Tour 100 balls K135. 12 new Top Flite XL balls (with logos) K33. 48 new condor S balls K136. 4 new Dunlop 360 MX balls K11. Approximately 150 new golf tees K10. Pul cart K50 or buy all for only K2,250. If interested please, call 473 4455 during day or 475 7462 after 5.00 pm.

****

Bargain. Nissan Patrol 4WD 1989 Model 4.2 diesel. 7 seats, AC, Power steering, power windows, central locking, tinted windows, 9 months registration. Good condition. Call Colin Parmenter during business hours on 472 1488. K17,500 ono.

****

Computer PC, 486 SX, 210 MB hard disc, two floppies, 14" SVGA monitor, epson escape P2 5000 dot matrix printer. Windows 3.1, Netscape, Word 6, Supervoice, etc. Price K750. Telephone 473 4754 (b/h) or 475 7060 (a/h).

Security Information

Excessive noise on campus

Campus residents are hereby informed once again that excessive noise on campus must cease after 11 pm which is in line with the Vice Chancellor's Rules and Regulations on excessive noise.

Re-introduction of visitors application pass

Unitech campus residents are hereby informed that Security Committee decided in 1997 to re-introduce visitors pass commencing 02 March 1998. Visitors will stay/live with staff members for a period not exceeding two months. For further information, please contact Director Security Services on 4888.

Security Services telephone numbers

Following are correct and working telephone numbers to Campus Security/Police in case of emergency

Duty Officer:	**473 4444/473 4209**
Campus Police	**473 4282/ 473 4215**
Main Gate	**473 4299**
Directors Office	**473 4888**
Directors House	**473 4336**
Chief Security Officer	**473 4384**

Eka Pisae
Director Security Services

Notice to All Staff

1997 Statement of Earnings

Staff are advised that 1997 Group Certificates are not available for distribution due to late posting of Group Certificates from Internal Revenue Commission.

Niki Mambere
Asst Accountant - Payroll

Position Vacant

South Pacific Commission has vacancies for the following positions: 1. Cataloguer . 2. Recruitment of Programme, Support, Planning and Evaluation Advisor. 3. Recruitment of Programme, Support, Planning and Evaluation Officer.

Interested persons please, come and collect copies of the application form from the Information Office.

Tender No UB98/2ts

Unitech Tucker Shop

The Papua New Guinea University of Technology is calling for tenders for the operation of the University Tucker Shop.

The Tucker Shop is located on its Taraka Campus in Lae, at Malaguna Drive, Housing Area No 5.

The Tucker Shop sells dry and frozen goods including beverages, toiletries and other consumable items. It is hoped that the lessee will be able to improve the service, quality and variety of food and other items sold.

The lessee will be required to ensure at all times that the prices of goods are comparative to the shops in Lae City.

Tender for the above facility must be clearly marked with the Tender Number and it must also include services to be provided, rental offered and any relevant details such as business references and successful experience in running similar operations and addressed to

Acting Manager - Union Board
PNG University of Technology
Private Mail Bag
Lae Morobe Province

All tender documents must be received by the Acting Manager-Union Board no later than Friday 27 1998.

Any queries regarding the above may be made by contacting the Acting Manager - Union Board on telephone number 473 4239

ADVERTISING RATES WITH THE REPORTER

The Reporter wishes to advise the University Community and the Public that it will start charging all classifieds and public notices.

This would not include official University notices.

Clients are expected to pay upfront in cash in order to have their advertisement published in our weekly issues.

The rates are as follows:

Full Page:	K10.00
Half Page:	K7.00
Quarter Page:	K5.00
1 full column:	K3.00
1/2 column:	K1.00
1/4 column:	K0.50

Deadline for bookings on Tuesday weekly.

Editor

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If unclaimed please return to:

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Private Mail Bag, LAE PNG

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Incorporating campuses at: TARAKA BUMBU BULOLO VUDAL
ISSUE No:1274 ISSN:10119-5354 13 FEBRUARY 1998 WEEKLY

Students petition PM for 100 percent increase in Natschol

By STEVEN BUSIN

Papua New Guinea University of Technology students have petitioned the Prime Minister, Bill Skate for a 100 percent increase on Natschol Sponsorship Programe to tertiary students throughout the country.

In a letter dated February 4 addressed to the Prime Minister, Unitech Student Representative Council President John B Kelly Kaio said: " We have been severely hit by cuts in our yearly budget funding, introduction of the User Pay Policy, and devaluation of the Kina and I believe our tertiary institutions are not receiving the attention they are supposed to have received."

He added: "I wish to formally register our concerns with regard to continuous cut in budget funding, outdated research facilities, increased prices to stationary items, deteriorating food quality and quantity."

He said that the devaluation of the Kina and the 40 percent cut in the first quarter allocation of the University's Supply Bill has placed the University at a difficult situation and cannot start the academic year with that funding.

He also highlighted that the prices of text book and stationary items have skyrocketed, and equally, the prices of goods and services have also dramatically increased.

"For instance, a subject text book in Civil Engineering in 1995 cost about K30.00, however, the price has shot up to K89 in 1997," he said.

"The total book allowance for each civil engineering student is a sum of K245 which cannot adequately pay off all text books required for each subject."

" I believe education is not receiving the attention that it is supposed to receive. Our tertiary institutions including the two major universities are at the brink of collapse due to lack of government support.

"Outdated teaching facilities have not been replaced for a long time and we have not seen any corresponding expansion to cater for the increased number of student intake in this University.

"The consequence of overcrowding and lack of appropriate facilities have made learning very difficult.

"This nation needs quality human resources in order to prosper; it needs highly educated minds to be thinkers and philosophers.

"The quality of human resource in PNG depends on the quality of education we receive and the quality of education needs the support of the government."

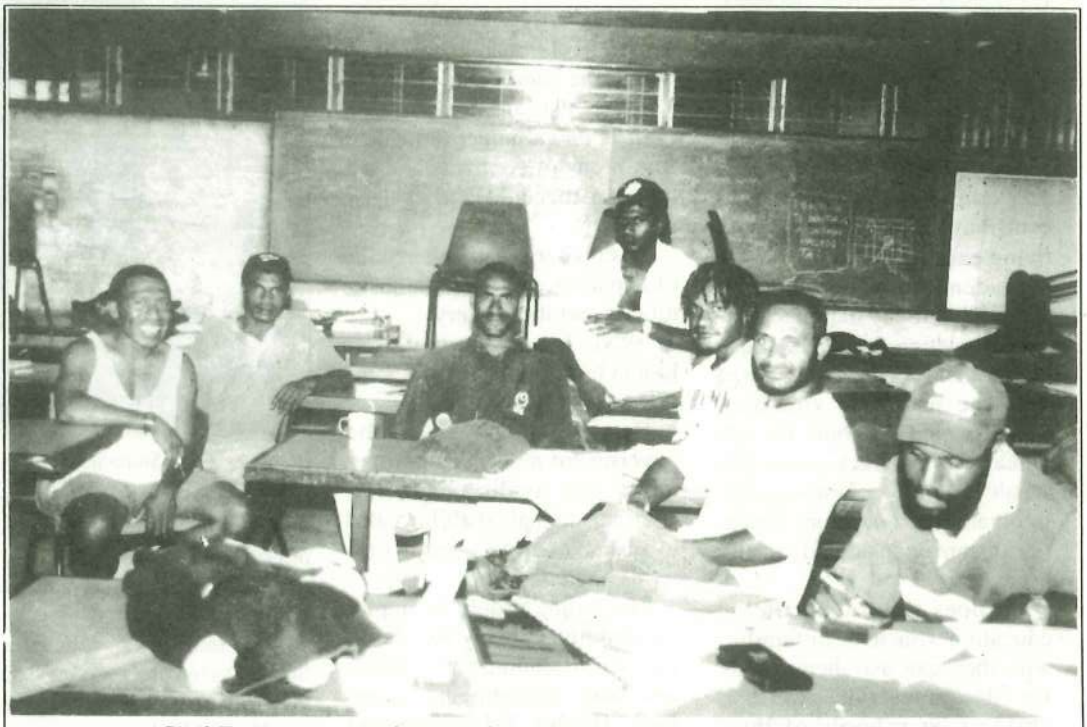
He further said that tertiary students have been hit hard by the User Pay Policy.

Not only students become victims of the policy, he said, but the parents and the bulk of the total population are equally affected due to price increase in tuition and school fees, stationary items and medical fees.

"After a successful survey of people's view on the User Pay Policy and its impact on the future human resource, I now ask your government for a review of this policy.

"I will not hasitate to ask your government for a review of this policy. If this government is for the people, it should make policies to suit the people.

"If this government also believes that the User Pay Policy is here to stay,"



Civil Engineering students studying for their Supplementary Examinations

LOAN/GRANT SYSTEM FOR STUDENTS MOOTED - SRC PRES

The Papua New Guinea Government should consider giving loans or grants to tertiary students rather than the User Pay Policy.

This was one of the alternate methods of funding for education recommended by PNG University of Technology Student Representative Council President John Kelly Kaio in his petition to the Prime Minister, Bill Skate.

Kaio said that the students' loan or grant system allows most students in higher education receive non-repayable grants which cover tuition fees and can make a substantial contribution towards students' living expenses.

Students, he said, would be required to repay their debts after completion of their studies.

Another scheme he suggested was the usage of vouchers which would combine the advantages of a market system that would ensure everyone was able to obtain the min imum education quantity considered socially necessary.

"It does this by allocating education vouchers to families who they can use them to pay for education services for their children at schools of their choosing," he said.

"The school - state funded or privately owned - would then redeem the vouchers from the government for cash.

"Assistance rendered through an education voucher is usually preferred to a straight cash payment to families, because it is possible to ensure that the expenditure is in fact made on education."

The scheme, he said, does restrict consumer choice, alternatively, it encourages people to obtain more education because of external benefits.

Meanwhile, theSRC President while commending the Government on its bold move to create a single line salary for both nationals and expatriates, said, the move would have adverse effects on higher education in the country.

The effects are:

•it is illegal under terms and conditions of contracts and the government could face legal action.

. •it could trigger mass exodus of expatriates leaving the institutions and the country.

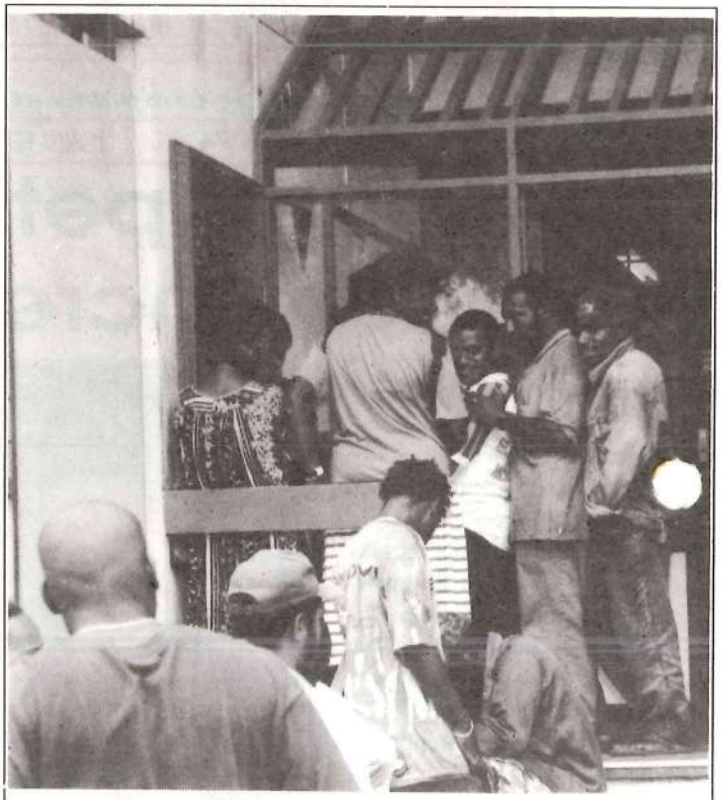
. •PNG is now not in a position in terms of highly qualified resourceful manpower.

He recommended that the government re-establish proper terms and conditions of new contracts and all shall be asked to renew contracts under new terms and conditions.

The policy should be implemented immediately for all expatriates in administrative duties and other departments, apart, from Health, Education and technical departments.

"In future, I will submit to your Government some structured programmes on how nationals can be properly trained within the country to cut down on high spending on expatriates," he said.

"Worse still, successive governments have generated certain policies and statements of intent that could be detrimental and do not offer precise data for educational planning and achievement.



Students cueing up to pay their school fees.

"The inabilities of the educational system to respond satisfactorily to the objectives and targets of educational strategies and policies are not well documented.

"Programmes, facilities and instruction must be altered to fulfil such objectives and targets.

"There is a rapid expansion of enrolments and periods of rapid social change. In effect, high proportion of dropouts, reflects that families, community, economy and value systems are not developing in harmony with the educational system.

"The current educational system may be seen as a bottle necked.

"The real basis of true human development have been completely ignored in tertiary institutions.

"This Government must support higher education, because the country as a whole will benefit from the products of higher educational institutions such as the University of Technology."

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Unitech to undergo Academic re-structure

The Papua New Guinea University of Technology would be restructuring it Academic Departments to enable its management structure to become more responsive and dynamic.

According to the Vice-Chancellor Dr James Kaiulo during his presentation at a workshop consisting of Heads of Departments and Centres, to discuss proposed changes to academic departmental structures, the restructure was a bid to improve management of current system and reorganisation to promote a harmonious working ationship to fulfil the iversity's mission.

"We all have different interests and expertise and we are here today to make a meaningful contribution to the University," said Dr Kaiulo.

"During my seminar presented to Council for this job, I briefly outlined an action plan to project quality and responsiveness."

Dr Kaiulo's seminar paper "My Vision for Papua New Guinea University of Technology" on his action plan to promote quality and responsiveness stated: "Any Government of the day will continue to require higher education institutions to provide evidence that they are positively contributing towards human resource development of Papua New Guinea."

"The purpose is to enable PNGUT to achieve its mission and substance to its strategic priorities."

"The goals are: improve quality; promote responsiveness to the needs of PNG; make PNGUT technological up-to-date; meet pressing capital needs; and substantially improve performance in all areas related to the strategic priorities."

Resources to promote quality and responsiveness could come from internal resource reallocation; external aid donor funding; and private funding, his action plan stated.

"Redesigning academic and administrative functions; reallocating resources internally; improve private fund raising; setting and meeting quality improvement targets; making the University up to date and addressing capital facility needs, are elements of the action plan."

Accordingly, the University has engaged Emeritus Professor Terry Field as consultant to propose a restructure designed to enable the University more readily to address its mission and to achieve the challenging objectives adopted for the period 1994 -2000.



Heads of Departments discussing the proposed academic changes

During the Heads of Departments workshop, Professor Terry Field, based his report on functional divisions of the Universities structure into three areas;

- •corporate - committees supporting the Council
- •management - committees supporting the Vice-Chancellor
- •academic - committees supporting the Academic Board.

According to his proposal the suggested corporate committee structure comprised of four committees.

- •Finance Committee
- •Properties Committee
- •Honary Awards and Ceremonial Committee, and
- •Legislative Committee

Prof Field's report said conveners of these four committees and the ex-officio members of the Council form an Executive Committee to attend to urgent business at times outside the scheduled meetings of the Council.

He said the suggested management committee structure comprises one committee served by two sub-committees:

- •Vice Chancellor's Advisory Committee
- •Staffing Sub Committee and
- •Promotions Sub Committee

Academic Departments would be reorganised into five schools which are:

- •School of Commerce and General Studies
- •School of Engineering
- •School of Built Environment
- •School of Natural Resources and
- •School of Science and Technology

Another option, the report stated, was to have the Academic Departments form into two divisions which are; division of Commerce, Environment, Language and Natural Sciences; and Division of Engineering, Science and Technology.

Accordingly, the suggested Academic Committee Structure to Comprises of five committees

- •Academic Planning and Courses Committee
- •Admissions and Academic Progress Committee
- •Research and Graduate Studies Committee,
- •Teaching and Learning Committee, and
- •Library and Information Technology Committee

The conveners of these five committees and the ex-officio members of the Academic Board to form an Executive Committee to attend to urgent business at times outside the scheduled meetings of the Academic board.

He said, there would also need to be some specialised sub committees - such as the present Foundation Year in Engineering Committee - reporting on cooperative teaching/examination activities to the Admissions and Academic Progress Committee.

1998 ORIENTATION PROGRAMME

THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY

1998 ORIENTATION AND REGISTRATION PROGRAMME - Monday 16th February to Sunday 22nd February

TIME	MONDAY FEBRUARY 16	TUESDAY FEBRUARY 17	WEDNESDAY FEBRUARY 18	THURSDAY FEBRUARY 19	FRIDAY FEBRUARY 20	SATURDAY FEBRUARY 21	SUNDAY FEBRUARY 22
8:00 AM	**New Students-** Introduction by Chairman of Orientation Week Committee, Registrar, Bursar, and Librarian at **Duncanson Hall**	**New Students-** Official welcome by the Vice Chancellor and HODs at **Duncanson Hall**	**New Students- Addresses by a** Chaplain, Medical Officer, Director of Student Services, and Director of Human Resource Development (OHE) at **Duncanson Hall**	**New Students-Computer talk at Duncanson Hall by Staff of** Computer Centre.	**New Students** Welcome by SRC at **Duncanson Hall**	Early Morning (6:00 AM) Fun Run from **Union Car Park**, followed by the Presentation	Free
8:30 AM							
9:00 AM	**Department Registration at Respective Departments**	**Overseas Students -** Orientation at **Duncanson Hall**	Student Disciplinary Procedures by USDC at	**New Students - Introduction by Language & Comm Studies Dept at Duncanson Hall**	**New Students** Sports & Clubs Open Day outside **Duncanson Hall**	Adventist Church Services at **Unitech Christian Centre**	**Combine Church Service at Duncanson Hall**
9:30 AM	**DBS - University Registration at Civil Eng. Foyer & Books Issue at Bookshop**	**DBS - University Registration at Civil Eng. Foyer & Books Issu at Bookshop**	**FYE - Groupings at Duncanson Hall**	**All Students - Address by Director of Central Facilities at Duncanson Hall**			
10:00 AM		**Surveying & Land Studies-University Registration at Civi Eng. Foyer & Books Issue at Bookshop**	**All Continuing Students Registration at Civil Eng. Foyer**	**New Students - Introduction by Dept of Applied Physics at Duncanson Hall**			
11:00 AM	**Arch. & Bldg; Dip. Elect. Comm - University Registration at Civil Eng. Foyer & Books Issue at Bookshop**	**FYE - University Registration at Civil Eng. Foyer & Books Issu at Bookshop**	**New Students - Departmental Orientation - all day**	**New Students - Talk by TLMU staff on Study Habits, Note-taking, etc at Duncanson Hall**		Free	Free
12:00 NOON	LUNCH			**Non-Natschol Students - Books Issue at Bookshop**			
1:00 PM	**FYE - University Registration at Civil Eng. Foyer & Books Issue at Bookshop**	**Natural Resources - University Registration at Civil Eng. Foyer & Books Issue at Bookshop**	**Late and Non-Natschol Students - Books Issue at Bookshop**	**Address by Guest Speaker (Lady Carol Kidu) at Duncanson Hall**		Free	Free
2:00 PM		**FYE - Books Issue at Bookshop**		**New Students - Counselling by Chaplains at Duncanson Hall**	Free	**Cultural Show at Union Car Park.** (If it rains, will be staged at the **Duncanson Hall**)	Free
3:00 PM	**Natural Resources - University Registration at Civil Eng. Foyer & Books Issue at Bookshop**	**Applied Physics, Comp. Sci. and Language & Comm. - University Registration at Civil Eng. Foyer & Books Issue at Bookshop**	Departmental Sports & BBQ	**Late Students - Books Issue at Bookshop**			
4:00 PM	**Late Students - University Registration at Civil Eng. Foyer & Books Issue at Bookshop**	**Late Students - University Registration at Civil Eng. Foyer & Books Issue at Bookshop**	Departmental Sports	Departmental Sports	Departmental Sports		
5:00 PM	DINNER						
7:30 PM	Video Show at Rose **Kekedo Lecture Theatre**	**Female Students - Counselling at Female Amenities Centre**	All **Students - Martial Arts** Demonstration at **Duncanson Hall**	**Male Students - Counselling at MN001** (Mining Eng. Dept)	**New Students -** Educational Films at **Rose Kekedo Lecture Theatre**		Combine Fellowship at **Duncanson Hall**

Note:

All fees and outstanding fines must be paid in full before students are allowed to enrol.

All queries should be directed to Yawai Rapi at the Student Administration Office on Extension 4292 or Dr Anthony Harakuwe at Applied Sciences on Extension 4551.

1998 ORIENTATION SPORTS PROGRAMME

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1. TYPE OF SPORTS ACTIVITIES

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- Soccer
- Netball
- Volleyball
- Basketball
- Table Tennis
- Launching of Sports
- Presentation of Awards

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Fun Run starts on 17th February, 1998.

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Refreshments will be provided only at the following activities.

(a) Fun Run and Presentation after the Run - Union Hall, 21st February, 1998.
(b) Sports Club Open Day (Duncanson Hall), 20th February, 1998.

(c) Launching of Orientation Sports Week, Union Hall, 02 March 1998.

(d) Presentation of Awards, Union Hall, 26th March 1998

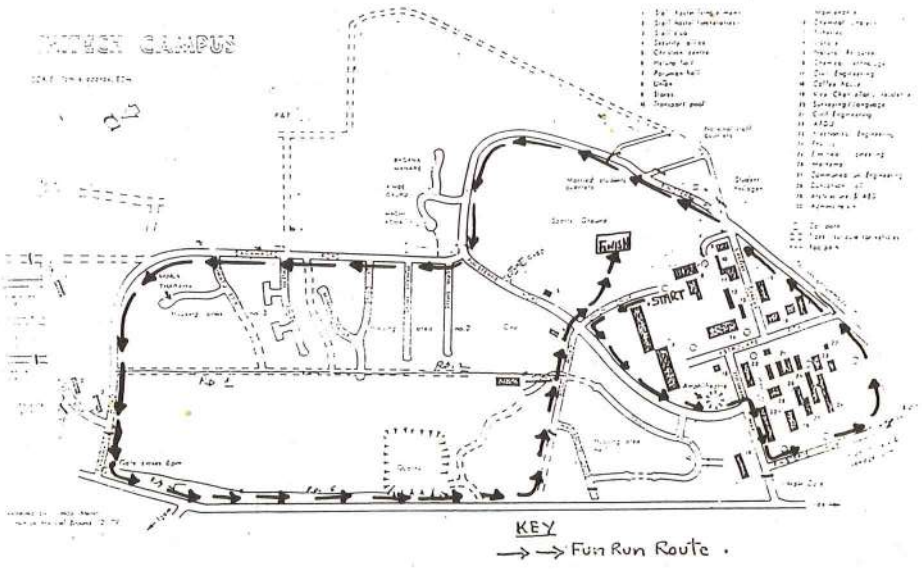
6. SPORTS CLUB OPEN DAY(DUNCANSON HALL)

These sporting codes will be invited to participate and put up displays are:

(a) Table Tennis
(b) Basketball
(c) Cricket
(d) Darts
(e) Hockey
(f) Badminton
(g) Athletics
(h) Tennis
(i) Soccer
(j) Rugby
(k) Martial Arts
(l) Netball
(m) Boxing
(n) Aussie Rules

Philip Lavatu
Sports Coordinator

1998 FUN RUN ROUTE



Matheson Library Borrowing Policy

Due to high demand for library services and also the problems of overdues, the following policies are now in place:

A. Unitech Staff:
Membership fee - free.
Borrow limit - 20 books.
Loan period - 4 weeks.

B. Unitech Students:
Membership fee - free.
Borrow limit - 10 books.
Loan period - 4 weeks.

C. External Borrowers:

Membership fee - K20 per year.
Borrow limit - 3 books.
Loan period - 4 weeks.

D. Institutional Borrowers:
Membership fee - K50 per year.
Borrow limit - 10 books.
Loan period - 4 weeks.

Note:
(1) All students and staff of schools and colleges other than Unitech are urged to use your School Library Inter Loan facility to request for items held at Matheson Library.

There will not be any individual membership from anyone under this category.

We hope that this arrangement will provide better and effective co-operation among libraries here in Lae.

(2) We would like to call for all overdue books currently in your possession to be returned immediately to the Library.

Failure to adhere to this notice will result in your borrowing privilege cancelled and fines on all overdue items under your name.

Polycarp Reu
University Librarian

NOTICES & CLASSIFIEDS

Agriculture Department

Due to a dramatic price increase on all the livestock feed effective as of 3/12/97 from Lae Feed Mills, farm produces have increased by 5% less than supermarket price.

This new price will be effective as from 16/02/98.

Farm Price List

Chickens Sizes

9	K4.89
10	K5.08
11	K5.39
12	K5.60
13	K5.80
14	K6.16
15	K6.32
16	K6.79
17	K7.30
18	K8.17
19	K8.97
20	K9.60

Live Chicken - K8.
Giblets K3.80/2 kgs.

Eggs Sizes
45 - K2 per dozen, K5 per tray
50 - K2.37 per dozen, K5.93 per tray
55 - K2.59 per dozen, K6.40 per tray
60 - K2.96 per dozen, K7.40 per tray
65 - K3.28 per dozen, K8.20 per tray

Animals:

Pig K4 per kg live weight. Goat K2.20 per kg live weight. Sheep K2.20 per kg live weight.

For further inquiries ring 473 4423.

Amos Kairi
A/Farm Manager

International School Buses

The rota for supervision of the junior school bus for the first term is below. The morning supervisor should pick up the bus at one of the bus stops at 7.30. The afternoon supervisor should go to the transport office at 1.40. Supervisors can be dropped off at home on their return. The bus service improved considerably during the last term of 1997. On behalf of the parents, I would like to thank the transport office for their efforts. In order to continue in the same way, I should appreciate it if supervisors could let me know if/ when there are any problems concerning bus times or other difficulties. Could parents who are not on the rota for this term confirm their availability as soon as possible. They will supervise at the beginning of the second term. If supervisors are unable to supervise on any day, they are responsible for finding a replacement.
Parents need to apply for/renew bus passes for their children. The transport office will issue the passes for K1 per child. If your child is using the bus for the first time, you need to inform the pay office. K6 per fortnight is deducted directly from the salary.
If you need to contact me, you can reach me on extension 4756 in the LCS department or at home on 475 7240.

Week 2/2/98 morning Popov, afternoon Corbyn.
Week 9/2/98 morning Majewski, afternoon Tomlins.
Week 16/2/98 morning Moshi, afternoon Maddugoda.
Week 23/2/98 morning Mobiha, afternoon Brooks.
Week 2/3/98 morning Nyondo, afternoon Hossain.
Week 9/3/98 morning Bannerman, afternoon Opata.
Week 16/3/98 morning Bindir, afternoon Miah.
Week23/3/98 morning Powell, afternoon Milani.
Week 30/3/98 morning Wilkins, afternoon Wagih.
Week 6/4/98 morning McLean, afternoon Agyei.

John Tomlins
NCSA Bus Co-ordinator

Rainfall Readings

Rainfall Readings for 24 Hours to 0900 on

Wed	04/02/98	3.0 mm
Thurs	05/02/98	18.6 mm
Frid	06/02/98	36.2 mm
Sat	07/02/98	34.2 mm
Sund	08/02/98	0.0 mm
Mond	09/02/98	0.0 mm
Tues	10/02/98	0.0 mm

Total rainfall for week ending 10/02/98 97.0 mm

Total yearly rainfall up to 03/02/98 347.2 mm

Total yearly rainfall up to 10/02/98 444.2 mm

Sali Bafinu
Civil Engineering Dept

CONDOLENCE MESSAGE

PNG Unitech especially the staff of the security services wish to extend our sincere condolence & sympathy to the family of the late

SAMBI GANDO

who passed away at the Angau Memorial Hospital on Saturday 7-2-98

The late Sambi Gando is survived by his wife and three children.

MAY HIS SOUL REST IN PEACE

Position Vacant

The National Analysis Laboratory

Secretary

The National Analysis Laboratory, the foremost Chemical Testing Laboratory in Papua New Guinea, situated on the Unitech campus, is seeking a Secretary to the Chief Chemist.

Applicants must be skilled in Word Processing have basic accountancy skills. Pleasant telephone manners and the ability to deal with clients are also required. Duties include typing letters, looking after the laboratory's accounts, answering telephone calls, taking messages, attending to time cards, filing and general office duties.

A congenial office environment on campus is provided together with other benefits that will be discussed at the interview.

Please note that accommodation is not provided. Written applications together with a curriculum vitae and references should be sent to:

The Chief Chemist
National Analysis Laboratory
P O Box 79
Unitech
Morobe Province

Applications close on Friday 20 February, 1998.

UDC Veterinary Clinic
Agriculture Farm Unitech

Hours: 4.00 pm weekdays. 9.00 am Saturday mornings.
Emergencies will be seen at other times.
Contact Dr Ian Grant at 475 7316 or at 473 4451 (appointments)

Security Information

Excessive noise on campus

Campus residents are hereby informed once again that excessive noise on campus must cease after 11 pm which is in line with the Vice Chancellor's Rules and Regulations on excessive noise.

Re-introduction of visitors application pass

Unitech campus residents are hereby informed that Security Committee decided in 1997 to re-introduce visitors pass commencing 02 March 1998. Visitors will stay/live with staff members for a period not exceeding two months. For further information, please contact Director Security Services on 4888.

Security Services telephone numbers

Following are correct and working telephone numbers to Campus Security/Police in case of emergency

Duty Officer:	**473 4444/473 4209**
Campus Police	**473 4282/ 473 4215**
Main Gate	**473 4299**
Directors Office	**473 4888**
Directors House	**473 4336**
Chief Security Officer	**473 4384**

Eka Pisae
Director Security Services

TO ALL UNITECH RESIDENTS

Tall Flowers/Hedges

Campus residents are hereby informed that the flowers/bushes around some of the residential areas are well over six feet tall and natural surveillance is difficult due to the height of these flowers/bushes.

All residents are asked to trim the bushes/ flowers down to three feet so that Security personnel can have a clear view of your residential area.

E Pisae
Director
Security Services

POSITION VACANT

REGISTRAR'S DEPARTMENT

SECRETARY I/11

Applications are invited from suitably qualified persons for the above position.

Applications should possess Grade 10 qualification and also hold a Secretarial Studies Certificate from a recognised Secretarial College.

Candidates should have some experience on word-processing using IBM PC and should attain a typing speed of 35 wpm.

SALARY

SECRETARY I/11 K5,178 - K7,269 Per Annum

(The level of appointment will depend upon qualifications and experience)

Detailed applications (two copies) with curriculum vitae including CERTIFIED copies of certificates and the names and addresses of three referees plus telephone/fax numbers should be addressed to: The Registrar, PNG University of Technology, Private Mail Bag, LAE, Papua New Guinea by 23 February, 1998.

Tender No UB98/2TS

Unitech Tucker Shop

The Papua New Guinea University of Technology is calling for tenders for the operation of the University Tucker Shop.

The Tucker Shop is located on its Taraka Campus in Lae, at Malaguna Drive, Housing Area No 5.

The Tucker Shop sells dry and frozen goods including beverages, toiletries and other consumable items. It is hoped that the lessee will be able to improve the service, quality and variety of food and other items sold.

The lessee will be required to ensure at all times that the prices of goods are comparative to the shops in Lae City.

Tender for the above facility must be clearly marked with the Tender Number and it must also include services to be provided, rental offered and any relevant details such as business references and successful experience in running similar operations and addressed to

Acting Manager - Union Board
PNG University of Technology
Private Mail Bag
Lae Morobe Province

All tender documents must be received by the Acting Manager-Union Board no later than Friday 27 1998.

Any queries regarding the above may be made by contacting the Acting Manager - Union Board on telephone number 473 4239

ADVERTISING RATES WITH THE REPORTER

The Reporter wishes to advise the University Community and the Public that it will start charging all classifieds and public notices.

This would not include official University notices.

Clients are expected to pay upfront in cash in order to have their advertisement published in our weekly issues.

The rates are as follows:

Full Page:	K10.00
Half Page:	K7.00
Quarter Page:	K5.00
1 full column:	K3.00
1/2 column:	K1.00
1/4 column:	K0.50

Deadline for bookings on Tuesday weekly.

Editor

AIRMAIL

STAMP HERE

If unclaimed please return to:

The Editor
Papua New Guinea University of Technology
Private Mail Bag, LAE PNG

PRINTED MATTER

The Reporter
30th ANNIVERSARY UNITECH 1967 - 1997
Incorporating campuses at: TARAKA BUMBU BULOLO VUDAL
ISSUE No:1275 ISSN:10119-5354 20 FEBRUARY 1998 WEEKLY

Unitech to foster student based learning culture

The Papua New Guinea University of Technology would be investigating ways of fostering a new learning culture for students according to the Vice Chancellor Dr James Kaiulo.

Dr Kaiulo in his welcoming speech to new students at the Duncanson Hall said: "So far in this University, the learning culture has been teacher centred learning."

"However, I believe that it is time we develop a new learning culture which will be student centred learning.

"The University will investigate ways of fostering this new culture for the next three years.

"The industry and the wider community are looking for young women and men who can do more than score a distinction in a subject while at the University and that is to display problem solving skills in the field."

Also in his speech, Dr Kaiulo said that the decline in the value of the Kina was taking its toll on the economy of the country and the recent drought was also affecting the University.

However, he assured the students of the University's commitment to their education.

"We are been advised that 1998 will be a very difficult year in financial terms," he said.

"The cut in the Supply Bill for the first quarter resulted in this University commencing its academic year two weeks behind schedule.

"However, we treasure your education and we must continue to provide that education even under very trying circumstances until it becomes impossible to do so.

"My senior managers and Heads of Departments are dedicated and committed towards delivering a high standard of education.



Students registering themselves at the Civil Engineering foyer

"The corporate objective of the University is to be established as a top University in Papua New Guinea and the Pacific known for excellence of its teaching, research and community development programmes by the year 2000.

"We must all make a positive contribution towards the achievement of the corporate objective.

"The University administration and the academic community will ensure that courses offered are reviewed for relevance and quality.

"You as students are required to do your part by being dedicated towards your studies.

"In the business of education commitment from both the provider and the receiver are essential to make it worthwhile and meaningful.

"The staff in the academic departments will teach and train you in various disciplines you have chosen to study.

"But the value of education you will derive will depend entirely on what you put and bring into it.

"If you pay little or no attention to your studies then you should not expect to achieve academic excellence."

Dr Kaiulo emphasised to the students that not everything will go as planned during their studies as there would be a lot of interesting activities that would lure them away from their prime purpose of being at Unitech.

However, he said, students should learn to prioritise their activities in a day, a week, a month and a semesters

"You will get more satisfaction in your studies here if you take time to plan your activities," he said.

"There is nothing stopping you or anyone here from enjoying yourselves while you are here.

"However, your freedom should not be used to interfere with the freedom of your fellow students or other University community members.

"The University administration will become interested in your activities once you step beyond the bounds of rules and regulations of the University.

"You have signed a form at the registration which states that there are rules and regulations which governs the behaviour of a student in this community."

The University, he said, would not tolerate students who cannot live by these rules and regulations.

"Students who want to disturb the peace and order on this campus will be dealt with accordingly and swiftly," he said.

"Many of you would be wondering if you have made the right choice in selecting the University of Technology.

"I want to assure you that you have and I am sure that we can all work together to achieve the above aspirations of this institution."

University education is a "privilege" not a "right"

"Studying at the Papua New Guinea University of Technology is a privilege, and not a right, " is a common sentiment,expressed by various speakers rendering counsel to students of this University.

Accordingly, that privilege must not be abused as is the case with many students who upon entering the University do not put their priorities right, subsequently, failing their courses.

The privilege of studying at the country's highest learning institute must, however, be recognised by students as their personal investments as well as for the country's.

"It's a privilege that you really have to look after because there are some people out there in the field who are better than you are, however, did not have the chance to study at a University," said Henry Tokain, a student leader and third year Applied Physics student in Electronics and Instrumentation.

"While studying here, students should make use of all resources that are available in this University.

"There are lecturers who are willing to help, but all that is needed, is for students to approach them with their problems

" In order to survive through this University, you do not expect to be spoon fed all the time.

"I graduated with my Diploma, went out into the industry but have found that it is very competitive out there.

"That is why I am back here to do my Degree to get that extra edge and be more competitive."

The Admissions Officer Leo Fugre revealed that securing a place in this University is becoming very difficult.

"With the government's introduction of secondary schools, there are about 3000 grade 12 school leavers each year, however, there are only 530 spaces offered to these school leavers, excluding non school leavers," he said.

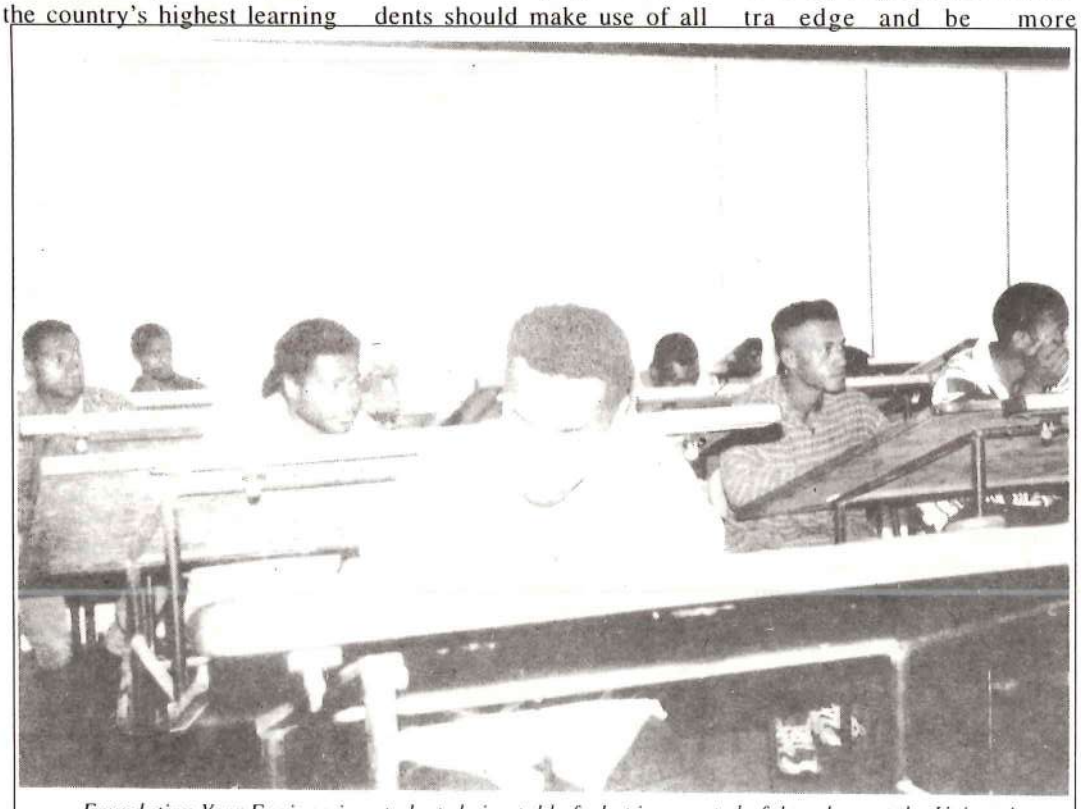
"This has also increased entry requirements for students getting into Unitech.

"Previously, getting a C grade could get you into the University, however, we are now looking at A's and B's students only," he said.

With the hard hitting economic crisis that the country is currently facing, financial aid to the University may decrease over the years forcing students to pay for their own school fees.

"So while on Natschol or company sponsorship it is wise not to let this opportunity go by as the cost of education may increase annually as a result of ever increasing cost of living," he added.

"Most parents can't afford to spend K3000 to send their children to have University education so take your studies seriously and do not add more burden to your parents who have high expectations of you."



Foundation Year Engineering students being told of what is expected of them here at the University

The Reporter is produced weekly by the Public Relations Office.
Deadline 4pm on Tuesday weekly.
Editor: CORNEY LAHIES
Journalist:STEVEN BUSIN
Admin Officer:JOY SAHUMLAL
Secretary: ANGELA BOROMANA
The Media is most welcome to use stories with due acknowledgement
Mailing Address:
Public Relations Office
PNG University of Technology
Private Mail Bag Lae- PNG
Phones: (675) 4734290, 4734291, 4734298 Fax: (675) 457 667

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Students should be grateful for University education

Students should not be "thankless and reckless" but should be grateful for the privilege of receiving an University education, according to Papua New Guinea University of Technology Students Representative Council President John Kelly Kaio.

Kaio made this remark while addressing the student body during this week's Orientation and Registration program.

In his speech he reiterated his stand that as president, it was going to be a year of reconciliation, a year of vision, a year of learning [illegible] the past and improving the [illegible]re.

He said in accordance with the constitution of the SRC, the aims and the responsibilities of the council was to establish the following:

• to afford a recognised means of communication between the student body and the Vice Chancellor;

• to promote in anyway it shall seem desirable the interest of the student body in the University subject to the conditions laid down in the constitution;

• to establish, conduct and carry on within the University activities for the benefit of students.

• to promote the mental, moral, social and physical well being of students generally

• to procure and provide better opportunities of other improvements for the students generally to become active and useful members of the University and the community at large.

"I will at all times uphold the constitution of the SRC without fear or favour during my term in office," Kaio said.

"It is inevitable that you as a student will have associates and you will feel their influence.

"This association may be a blessing or a curse. The student may help and strengthen one another, improving in deportment, disposition, knowledge or by permitting yourselves to become careless and unfaithful in academic work and University rules, they may exert influence that is demoralising.

"The matter of choosing associates is one which students should learn to consider seriously.

"Among the students who attend our University, there will always be found two classes, those who seek to please God and to obey the rules and regulations of the University and those who are filled with a spirit of lawlessness."

He advised students that they were here because of education and the University rules and regulations were just like rules of their society.

The rules, he said, were not to bother them unless they bothered the rules, adding that the rules were tougher and penalties for breaking these rules have increased a 100 percent.

"Young men and women of learning should feel that we must train our minds and take every opportunity to become intelligent and acquire all that is possible," Kaio said.

"It is not true that brilliant young men and women of your time have always made the greatest success.

"How often do men and women of talent and education have this opportunity of having a University education and have proved to be failures.

"Their failure was not because they did not have the chance, but because they were not sober minded.

"We should feel that our education advantages are of value to us, our parents and the society."

Kaio also noted that students who are qualified to do excellent work accomplish little.

He said many students pass through their student life as if they had no objective in life and high standard to reach because they underestimate themselves.

"Good students, you know Christ paid an infinite price for us and according to the price paid, he desires us to value ourselves," he said.

"We should not be satisfied with reaching a low standard of scoring low marks.

"We are not what we might be yet or what is God's will that we should be.

"We should never think that we have entered University and that we have learnt enough and that we may now relax our efforts.

"It rests with you, young men and women to decide whether you will become trust worthy and faithful, and ready to to take your stand for the right under all circumstances."

Room allocations get computerised

The Student Services Unit has moved away from the old system of allocating rooms manually to allocating rooms with the use of c[illegible]uters.

[illegible]s is part of the unit's objective for this year as a year for change, according to Director of Student Services, Allan Sako.

With the current administrative and academic restructure that is in progress, the unit sees this process not as a threat but a rather an opportunity for change, he said.

"While the idea is not new, as it has been mooted some three to four years ago, it did not eventuate due to lack of computer knowledge and skills," Sako said.

"This year, however, the Unit was very fortunate to secure the services of David Horabi, a final year Computer Science student from the Southern Highlands province, who worked tirelessly to generate a simple data base to allocate rooms to students.

Sako said there were many advantages for these systems however, he would like to mention only a few and they are;

• it reduces waste, excess and saves time spent in entering data manually;

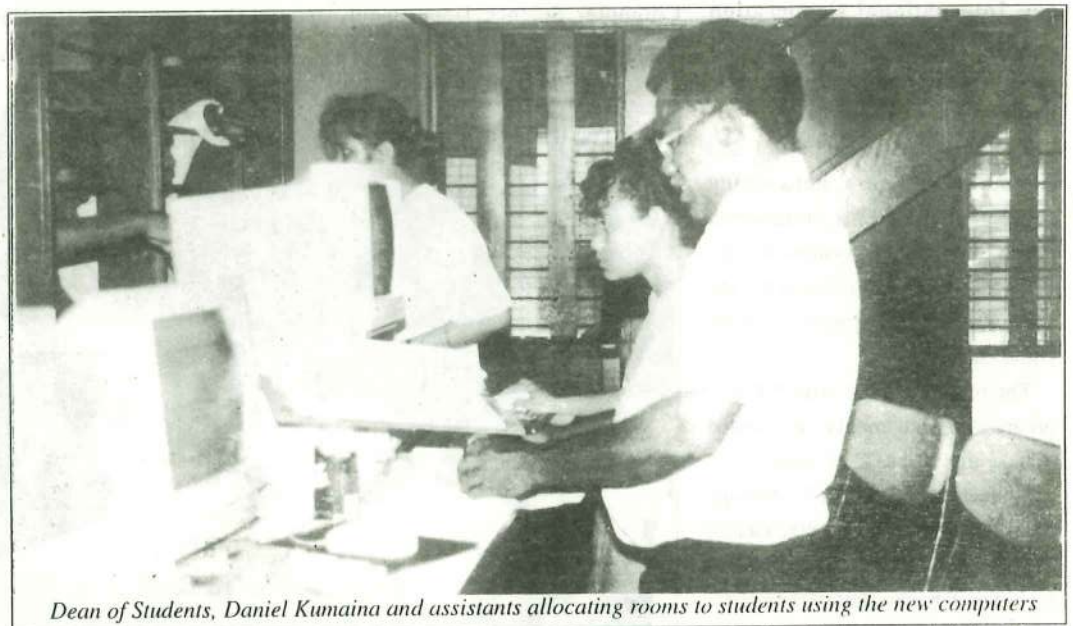
• it avoids long cues, delays and prevents students from cheating - illegally moving into rooms not duly authorised by officers of the unit;

• it helps minimise and avoid problems of over-booking more than one student into the same room ; and

• it clearly tells officers of the status of students - residential or otherwise.

"This system is awesome and brilliant as it has not only modernised the outlook of the Unit but it is in par with changes that are revolutionising and changing old and archaic ways of doing things in all universities across the globe," Sako said.

Finally, he would like to thank Mr Josiah Novulu, then 'over-seer' of the Unit who ensured that this systems be in place before the arrival and registration of students for the 1998 academic year.



Dean of Students, Daniel Kumaina and assistants allocating rooms to students using the new computers

JICA SPONSORED COMPUTER EQUIPMENTS ARRIVE



Zachius Kawambara unloading the computers to be distributed to various designated departments

The Papua New Guinea University of Technology has received its first batch of equipment from the Japan International Cooperation Agency (JICA) this week as part of its K10 million aid to the University.

The shipment consisting of 250 computers, printers, networking equipment and 12 Uninterupted Power Supply (UPS) systems for students which was distributed to the various academic departments of the University.

The rewiring of the large UPSs is progressing well and it is anticipated to be completed by 23rd February.

Unitech's Information Technology Services formely Computer Centre expects most of the existing labs to be re-wired by the start of the semester but new labs may not be completed until after the start of the semester.

The new computers will be installed in the Sandover Building, Mechanical, Tololo and Natres laboratories.

The old ABSCOM laboratory will move to a new room in Mathematics while other laboratories will arrive in ABS, Mathematics and Computer Science Department, Language and Communications, Architecture and Building, Electrical Engineering and Mining Engineering.

The K10 million aid deal between JICA and the Papua New Guinea Government was signed on July 31 1997 by Papua New Guinea Ambassador to Japan Mr Aiwa Olmi and Mr Kasuhiko Koyama, General Manager, Public Supply Department, Marubeni Corporation for improvement of equipment for the Papua New Guinea University of Technology and the Vudal University College.

Marubeni Corporation is contracted on behalf of JICA to supply the equipment until 9 March 1998.

The company would a[illegible]e responsible to deliver equipment from Japan, Australia, United Kingdom, United States of America, Germany, Italy and Papua New Guinea and install the equipments at the University.

The grant component is broken into the following components;

I) Supply of equipment to be imported to PNG Y491, 289, 000 (K6,516, 000)

ii) Supply of equipment to be procured in PNG Y219, 752, 000 (K2, 914,869)

iii) Installation work Y10, 159,000 (K134, 752)



Information Technology Services staff taking stock of the new equipments

UDC project management services retouch Angau maternity ward

Is it true that the colour pink is for girls and blue is for boys?

It is also logical to say that newborn babies are blind, of course, not in the literal sense; they cannot tell colours.

While you try to figure out the psychological effect colour has on the human mind, the Maternity Ward at Angau Memorial Hospital has been transformed into a nice soft pink setting.

In 1995 AusAID donated K1.5 million to Angau Memorial Hospital and part of this money was spent in refurbishing the Maternity Ward.

According to Paul Constable, project consultant of the UDC Project Management Services at the University of ·hnology and lecturer at the Depart-·nt of Architecture and Building, the project started in November 1996.

Mothers and babies have all been transferred to other Wards, the special care nursery is now located opposite Ward 4D under the Pediatric Unit, while postnatal mothers and their babies are now relocated at the old operating theatre.

An extension from the balcony of the old Maternity Ward has been built comprising a new drive way and covered access leading to an admission room for antenatal mothers.

As a mother who had used the Maternity Ward to have two of my children, the first in 1989 and the last child in 1994, I was quite impressed with the 'new look' as I accompanied the consultant and project co-ordinator, Paul Constable to see the Ward early this week.

Those that had used the hospital would agree that the situation of the ·pital then was quite bad, especially ·oilet/shower facilities in the public ward (3B).

But I must admit , my negative attitude changed when I saw the same maternity ward I last used in 1994.

Our tour began at the Labour Ward with the Acting Ward Manager, Sr Alice Misirait. Fortunately, the ward was empty that afternoon.

The main delivery room which previously had six beds lined beside each other was open and often separated by curtains for women in labour, has been partitioned into seven cubicles.

However, the ward needs eight proper delivery beds for women. Currently there are only 5 proper beds and another three are ordinary beds.

Moving down the aisle to the left of the last cubicle was the old laundry room. This room has also been redone. A door on the right leads to the old emergency drive in.

"Mothers in emergency were received through this drive way," Sr Misirait explained.

We returned to the central area and continued up the aisle to the first cubicle. Sr Misirait opened another door on the left where we saw four more cubicles, all with the same kind of touch.

"This is an additional new room," she said.

We moved onto the preparation room and into the Sisters' work station. In front of the work station is the door to the Intermediate Ward. The room which used to take only one mother, has been partitioned into two cubicles.

We came out of the Labour Ward and into the Antenatal Section. The cubilces were quite spacious with eight beds in each cubicle. There were no curtains in the cubicles. It was practically empty, just a few mothers waiting for bed allocation.

Opposite the rooms is the high risk room with four beds for mothers with high blood pressure or are anemic. Beside that are two new rooms for treatment and linen.

Lae being a transit and metropolis city, Angau Hospital receives women from surrounding districts and coastal villages as well as from all over the country, most of whom are village and rural women.

The Maternity Ward receives an average of 20 mothers per day and delivers about 15 babies daily.

In January alone, 349 babies were delivered in the Ward.

"Although the ward is refurbished and looks very inviting to mothers, we are experiencing a shortage of staff and work pressure is very high.

"There would normally be nine nurses, eight midwives and one general nursing officer working in the Ward.

"However, we have one midwife and one nurse aid who take care of the Labour Ward and antenatal," she stated.

We made a brief stop at the Postnatal Wing (3B) which also looked so much different compared to the old look, before we continued to the old theatre where postnatal mothers and children are currently using.

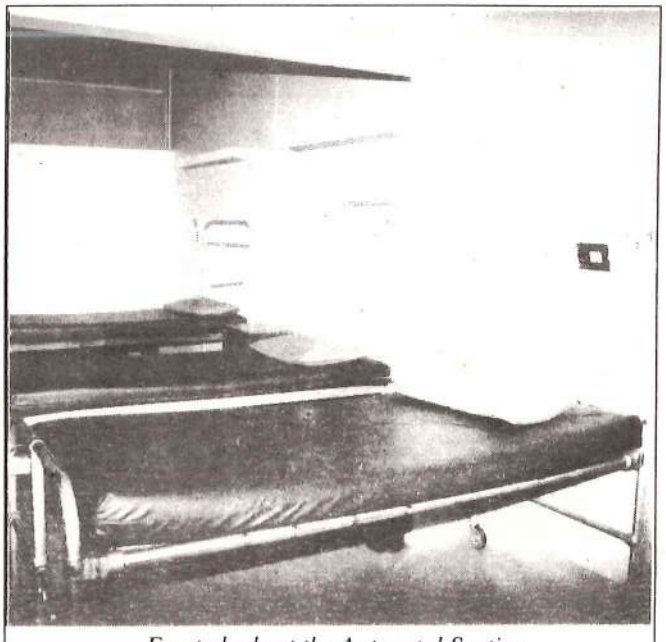
A neonatal warm room is also being built for babies in the Postnatal Ward.

More than K260,000 was spent in renovation.

The Sisters at the Ward are waiting anxiously to be told by authorities when to move mothers and babies back into the rooms.



The 'new look' of the old Maternity Wing at Angau Memorial Hospital



Empty beds at the Antenatal Section

THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY

1998 Almanac: Principal Dates & Committees Schedules

January 1998

Mon	Tue	Wed	Thu	Fri	Sat	Sun
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

1st New Year - Public Holiday
27th Academic Appeals Committee

February 1998

Teach wks	Mon	Tue	Wed	Thu	Fri	Sat	Sun
							1
	2	3	4	5	6	7	8
	9	10	11	12	13	14	15
Reg/Ori/Supp	16	17	18	19	20	21	22
①	23	24	25	26	27	28	

16th Orientation and Registration begins
19th Supplementary Examinations begin
20th Supplementary Examinations end
20th Orientation and Registrations end
23rd First Semester Lectures begin
24th Examinations Committee

March 1998

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
							1
②	2	3	4	5	6	7	8
③	9	10	11	12	13	14	15
④	16	17	18	19	20	21	22
⑤	23	24	25	26	27	28	29
	30	31					

6th Finance & General Purpose Committee
11th Academic Board
20th Exemptions close
26th Council
27th Unitech Graduation

April 1998

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
⑥			1	2	3	4	5
⑦	6	7	8	9	10	11	12
Break starts	13	14	15	16	17	18	19
Break ends	20	21	22	23	24	25	26
⑧	27	28	29	30			

1st Academic Board
10th Good Friday
11th Easter Saturday
13th Mid-Semester Break starts
24th Mid-Semester Break ends
27th Lectures resume

May 1998

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
					1	2	3
⑨	4	5	6	7	8	9	10
⑩	11	12	13	14	15	16	17
⑪	18	19	20	21	22	23	24
⑫	25	26	27	28	29	30	31

6th Academic Board
8th Withdrawals close

June 1998

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
⑬	1	2	3	4	5	6	7
Study Break	8	9	10	11	12	13	14
Exam	15	16	17	18	19	20	21
Break starts	22	23	24	25	26	27	28
Break	29	30					

8th Queen's Birthday - Public Holiday
8th Study Break begins
12th Examinations begin
12th Study Break ends
19th Examinations end
22nd Inter-Semester Study Break begins
29th Courses Exams Committees meet

July 1998

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Break			1	2	3	4	5
Break ends	6	7	8	9	10	11	12
①	13	14	15	16	17	18	19
②	20	21	22	23	24	25	26
③	27	28	29	30	31		

1st Courses Exams Committees end
1st Academic Board
6th Registration (Re-admission) begin
8th Supplementary Examinations begin
9th Supplementary Examinations end
10th Registration for Re-admissions end
10th Inter-Semester Break ends
13th Second Semester Lectures begin
16th Council
20th Provincial Govt. Day _ Public Holiday
23rd Remembrance Day - Public Holiday
31st Finance & General Purpose Committee

August 1998

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
						1	2
④	3	4	5	6	7	8	9
⑤	10	11	12	13	14	15	16
⑥	17	18	19	20	21	22	23
⑦	24	25	26	27	28	29	30
	31						

6th Academic Board
7th Exemptions close
21st F&GPC
31st Huon Seminar begins
31st Mid-Semester Break begins

September 1998

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Break		1	2	3	4	5	6
Break ends	7	8	9	10	11	12	13
⑧	14	15	16	17	18	19	20
⑨	21	22	23	24	25	26	27
⑩	28	29	30				

1st Huon Seminar continue
4th Huon Seminar ends
11th Mid-Semester Break ends
15th Pukman Kafu Lecture Series
16th Independence Day - Public Holiday
23rd Academic Board
25th Withdrawals close

October 1998

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3	4
⑪	5	6	7	8	9	10	11
⑫	12	13	14	15	16	17	18
⑬	19	20	21	22	23	24	25
Study Break	26	27	28	29	30	31	

16th F & GPC
21st Academic Board
26th Study Break begins
30th Study Break ends
30th Examinations begin

November 1998

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
							1
Exam week	2	3	4	5	6	7	8
Holiday Begins	9	10	11	12	13	14	15
	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
	30						

2nd Examinations continue
6th Examinations end
19th UNITECH Council
26th Academic Board
26th Vudal Interim Council
26th Supplementary Examinations begin
27th Supplementary Examinations end
27th Bulolo University College Graduation
27th TFTC Graduation
27th Vudal University Graduation

December 1998

Mon	Tue	Wed	Thu	Fri	Sat	Sun
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

25th Christmas Day - Public Holiday
26th Boxing Day - Public Holiday

Endorsed by the Special Academic Board Meeting of 22nd January, 1998

SP HOLDING SUPPORTS FUN RUN



South Pacific Holdings has again sponsored the 1998 Orientation Fun Run. The company on Wednesday presented SRC executive officer Philip Lavatu six cartons of assorted soft drink and 30 T'Shirts. The Fund Run would be held tomorrow morning.

RAINFALL READING

Rainfall Readings for 24 Hours to 0900 on:

Wed	11/02/98	2.6 mm
Thurs	12/02/98	5.6 mm
Fri	13/02/98	7.0 mm
S	14/02/98	9.0 mm
S	15/02/98	0.0 mm
Mon	16/02/98	0.0 mm
Tues	17/02/98	0.0 mm

Total rainfall for week ending 17/02/98 15.2 mm
Total yearly rainfall up to 10/02/98 444.2 mm
Total yearly rainfall up to 17/02/98 459.4 mm

Sali Bafinu
Civil Engineering Department

POWER DISRUPTIONS

There will be power interuptions on Wednesday 25 February from 8 am to 1.30 pm.

This will allow the Papua New Guinea Electricity Commission to prune trees/branches obstructing over head power lines.

Areas affected will be: Ramu Drive, Warangoi Drive, Kumusi Drive, Staff Club and Security Office.

Buildings &Grounds Office

ROCK & ROLL NITE

Prizes for the Best & Worst Dressed Rockers!

Friday 27th February at the Melanesian Hotel. Rock the night away at a Dinner Dance celebrating the 1st birthday of **YUMI*FM***

TICKETS
K40

Organised by Soroptomist International of Lae
(All proceeds to charity)
Tickets available at the Huon Gulf Pharmacy

NOTICES AND CLASSIFIEDS

Position Vacant

National Analysis Laboratory

Laboratory Analyst

The National Analysis Laboratory, the foremost Chemical Testing Laboratory in Papua New guinea, situated on the Unitech campus, is seeking a motivated chemical analyst who can produce accurate chemical testing results with a minimum of supervision.

Ideally the candidate will be a recent graduate with a Science Degree, possibly some relevant experience in the fields of analytical chemistry, micro bacteriological work and or laboratory quality control.

The main duties include the routine analyses of waters and effluents in our trace metals laboratory. The laboratory is equipped with modern instrumentation.

Salary and level of appointment will depend upon qualifications and experience.

Please forward all applications by Wednesday 4th March 1998 to the following address: The Chief Chemist, National Analysis Laboratory, P O Box 79, UNITECH, Morobe Province

A curriculum vitae together with three referees and their phone numbers are required with the application.

Please note that accommodation is not supplied.

IAEA

The International Atomic Energy Agency (IAEA) has vacancies for the following positions: 1. Senior Auditor, 2. Section Head, 3. Unit Head, 4. Isotope Hydrologist.

Interested persons please, come and collect copies of the application form from the Information Office.

1998 Car Stickers

A reminder for campus residents with cars to collect their safety car stickers from the Security Office.

Neighbourhood Watch Group 1998

The Neighbourhood Watch Groups that were created with such enthusiam at the beginning of 1997 seem to have disappeared through lack of interest and initative.

These groups can play a very important role in the Community and the future of security on campus for all residents. It requires a little more than just an awareness of what is going on around you and your neighbours.

Security on campus has been considerably improved but there are limited resources to cope with the increasing demands of the campus.

I am now inviting staff in housing area 1, 2, 3, 4, 5 and 6 to volunteer becoming co-ordinators for their housing areas.

For those males and females staff interested in becoming Neighbourhood Watch Group co-ordinators, contact the Chief Security Officer on telephone: 473 4888.

Eka Pisae
Director Security Services

ADVERTISING RATES WITH THE REPORTER

The Reporter wishes to advise the University Community and the Public that it will start charging all classifieds and public notices.

This would not include official University notices.

Clients are expected to pay upfront in cash in order to have their advertisement published in our weekly issues.

The rates are as follows:

Full Page:	K10.00
Half Page:	K7.00
Quarter Page:	K5.00
1 full column:	K3.00
1/2 column:	K1.00
1/4 column:	K0.50

Deadline for bookings on Tuesday weekly.

Editor

AIRMAIL

STAMP HERE

If unclaimed please return to:
The Editor
Papua New Guinea University of Technology
Private Mail Bag, LAE PNG

PRINTED MATTER

The Reporter
30th ANNIVERSARY UNITECH 1967 - 1997
Incorporating campuses at: TARAKA BUMBU BULOLO VUDAL
ISSUE No:1276 ISSN:10119-5354 27 FEBRUARY 1998 WEEKLY

Students challenged to change country's "attitude problem"

Papua New Guinea must undergo a "revolution in attitudes" to achieve a better future of the Country Lady Carol Kidu said, while addressing students during last week's orientation program.

In her address, Lady Kidu told students at the Duncanson Hall that she believed Papua New Guinea needed a peaceful, people revolution.

"We need a revolution in attitudes and changing attitudes is one of the hardest things to do," she said.

"But you as the young educated elite could play a major role in this task as it requires systematic education, awareness and development programmes.

"Our rather paternalistic colonial history and our more recent history of 'free' hand out style politics have produced a dependent, gimme type attitude in some.

"We need programmes that will change the attitude from 'We are poor, unemployed grassroots and these are our problems for you to solve' to 'We have a lot of potential to develop and some problems to solve. Let's work on it together." According to Lady Kidu many NGOs and churches have already achieved a lot using participatory development.

"A more coordinated effort is needed with the Government agencies strengthening the work of NGOs and the people themselves participating willingly," she said.

She said that if PNG wanted a better future, its people must critically analyse their customs and modify where necessary.

"Nowadays, we see blatant abuse of the wantok system at the personal level and in the work force," she said.

"We also see justification of unacceptable behaviour by saying 'Pasin bilong tumbuna' 'Ita eda kara'.

"Maybe, we should examine how the essence of the wantok system could be maintained in a modern social security system for the unemployed - no hand out but food, training etc in exchange for labour or work vouchers.

"Nothing was free in traditional Papua New Guinea. Every form of help implied a reciprocal obligation.

"Papua New Guineans were not beggars, and the dignity of the past must be restored.

"It is also time we stopped hiding behind cliches like 'It's our custom'.

"Increasingly, we see threatening behaviour, unreasonable compensation demands, blatant destruction of other people's properties, violence and rape. And people use the excuse that it is 'our custom' so we'll do it our way.

"I say no, it was my ancestor's custom also, revenge, payback, burning and destruction of property, rape - all of these are part of my European tribal history - only a few centuries ago.

"And in war situations, it is still happening throughout the world. But it is not justification for unacceptable behaviour.

"Melanesian customs have many non violent methods of conflict resolution that focus on mediation and reconciliation to use as strategies for social control.

"As we build a better future we must accept that some things from the past must go but we can still maintain our Melanesian identity.

"If we want a better future we must get back to basics."

Many of the problems affecting the majority of our population are very basic - poor nutrition and hygiene, lack of access to education and skills training, poor health services resulting in high mortality rates (particularly for women and children), lack of access to clean water, lack of income opportunities - very basic things, she said.



•Lady Carol Kidu addressing students

She added: "Papua New Guinea has been independent for just over 20 years. In the first 10 years, there were improvements in the general health and education and standards in PNG.

"However, during the last ten years, health standards have gone backwards, particularly in the area of maternal and child health especially in rural areas, and the general quality and accessibility of education has declined as well."

She said PNG needed to have specific strategic planning, and practical and achievable goals.

"We must think macro but act micro and remember that our micro actions fit into a macro picture - we all have a part to play," Lady Kidu said.

"For example, on the macro level we know that import substitution is very important particularly in the field of food production.

"At seminars, we can present learned papers about domestic food supply and import substitution and commercial food production.

"However, without translating the talk into action on the micro level, it is nothing than just talk.

"On the micro level, if every household plants one pumpkin seed. In return for that one seed and effort, we have the potential of green leaves, dozens of pumpkins and thousands of pumpkin seeds - if we all make a small difference than the total difference will be big.

"If we want a better future, we must stop deceiving ourselves as a nation and face reality.

"It's often tempting to try to solve problems by throwing money at them or giving confusing messages that don't address the real issues.

"The real issue in education is that a very large part of our population receive almost no education.

"We must realistically address the issue of non-formal and informal education and how to partner with NGOs etc to reach as many people as possible."

Women must be equal partners in nation building - Lady Kidu

Papua New Guinean women must be empowered to participate meaningfully in the future development of the country, according to national Parliamentarian, Lady Carol Kidu.

In her address to new students at the Duncanson Hall, she told the students that if the future direction of the country was to go back to the basics, hard work and self reliance then, the country should look towards women.

"To deny the importance of women's role in traditional PNG is a lie," she said.

"Think of any traditional activity and you will find that the women's participation was essential to the success of the activity.

"The UNICEF/PNG Government Joint Publication Situational Analysis on Children, Women and Families in PNG points out that "In most Papua New Guinean societies, traditionally women are the 'producers' and men the 'transactors'. Women produced the economic wealth while men negotiated the distribution of the wealth (except in matrilineal groups).

"In contemporary PNG society however, it seems that women are assuming greater economic responsibility without any increase in status, while male dominance is becoming more entrenched."



•Lady Kidu being shown around the Matheson Library by Librarian Polecarp Reu

Development, she said, had made things worse, not better for many women who had to work harder in a situation that was less clearly defined and less supportive."

"We all know that many women do a hard day's work to earn a few kina to help feed their family, then they also do a hard night's work of household and family duties," Lady Kidu said.

"We all know the saying : 'educate a man and you educate an individual but educate a woman and you educate a family and the nation

"It should be a basic principle for development.

"The link between the urgent need for women in terms of opportunities for health services, education and employment, and the nation's need for women as equal partners in economic development and food production is beyond doubt.

"Providing more opportunities for women is necessary for the very survival of our nation.

"If women had more real influence in decision-making and implementation at all levels of society, more attention would be given to the basic needs that are being neglected at present.

"And yet the weight of history and stereotyped thinking still continues to burden women.

"There is a long way to go before girls and women have equal participation in decision making and easy access to new knowledge and skills.

"Women continue to be burdened with too much work which allows no time for them to even dream of, let alone participate in educational and development programmes.

"Programmes must be designed to strike a balance between respecting traditional values while at the same time encouraging change and gender equity."

She said men can also can play a significant role as boyfriends, fathers, husbands and mentors through their encouragement, support and guidance they empower capable women to venture into fields of endeavour and into decision-[illegible]g roles that have been reserved for men.

"It is important that women speak out in no uncertain terms with a calm, logical approach," she said.

"Women can be just as successful as men in whatever they do but they are judged by much harder standards.

"For that reason we must stand as one - in a grand partnership, men and women as one."



•Lady Kidu being shown the women's Tuluan lodge

The Reporter is produced weekly by the Public Relations Office.
Deadline 4pm on Tuesday weekly.
Editor: CORNEY LAHIES
Journalist:STEVEN BUSIN
Admin Officer:JOY SAHUMLAL
Secretary: ANGELA BOROMANA
The Media is most welcome to use stories with due acknowledgement
Mailing Address:
Public Relations Office
PNG University of Technology
Private Mail Bag Lae- PNG
Phones: (675) 4734290, 4734291, 4734298 Fax: (675) 457 667

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

ATCDI to help Rurunat village water supply project

Rurunat villagers in the Madang Province have total confidence in University's community services provided through the Appropriate Technology and Community Development Institute (ATCDI).

Last week small group of Rurunat villagers came to the ATCDI Office and presented a cheque of K9,000 to Charles Nakau, Head of Civil Engineering Division.

ATCDI has carried out feasibility studies for the village water supply following a request by the villagers in 1995.

ATCDI then prepared a report including a design of the proposed system and the project costings of the water project with a total cost of K12,000.

Until November last year, the villagers had collected only K3,000 and delivered it to ATCDI with a further request for the Institute to manage and supervise the project when full funding is provided.

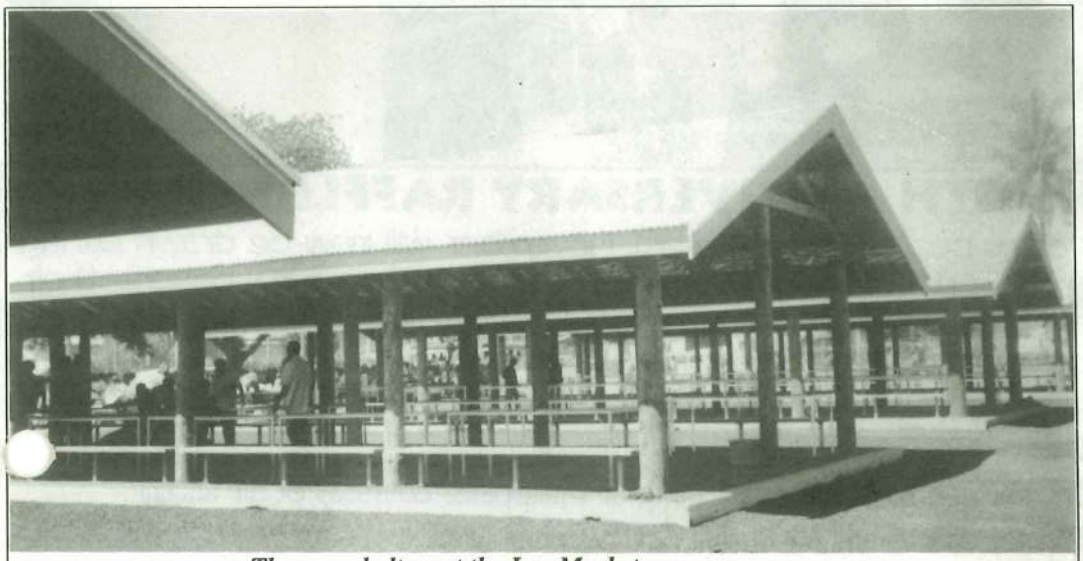


•Rurunat villager presenting the cheque to Charles Nakau

On Thursday, the 19th February 1998 the villagers returned to ATCDI with a cheque of K9,000.00, the balance for the total project cost (K12,000.00).

The Institute will be engaged in supervising the construction of the project with all the labour will be provided by the Rurunat village community.

New Shelters for Lae Market



•The new shelters at the Lae Market

UDC Project Management Services have been assisting Lae city Authority with their plans for improving the environment within the city.

This week four new shelters will be put to good use, by traders who have at recent years had to sit in the open selling their goods.

This is believed to be the first step in a major programme of refurbishment for the market area to provide a better environment for both traders and the public who use the market.

ORIENTATION FUN RUN A SUCCESS

The 1998 Orientation fun run was a success according to Sports Coordinator, Philip Lavatu.

He said this year's event attracted a huge pool and he thanked all the participants for making it a sucesss..

Lavatu also thanked major sponsors SP Holdings and hopes to maintain such mutual ties.

The annual event was witnessed by the Vice Chancellor, Dr James Kaiulo who also expressed that he hopes that next year's event would be bigger and better.

Dr Kaiulo also said that he hopes that there could be such an event like this more on a competitive edge between Universities.



•Winner of the Fun Run receiving his prize from Pro VC (Academic) Dr Philip Siaguru

ORIENTATION IN PICTURES









UNITECH 30TH ANNIVERSARY RAFFLE DRAW

The Raffle Tickets draw postponed from last November will now be drawn during the Graduation Dinner on Friday 27th March, 1998. Those who bought their tickets last year are reminded to keep them and those willing to buy new ones may get them from the following Committee members listed below.

PRIZES INCLUDE:

1st	Trip for one to Japan, Hong Kong or Philippines courtesy of Air Niugini
2nd	Trip for one to any Air Niugini destination in PNG
3rd	Day trip by boat for 2 to Finchaffen plus K50
4th	Family trip to Salamaua plus K50
5th -10th	K100 Shopping voucher

TICKETS COST: K2 **BOOK: K40**

Available from:	Pro Vice Chancellor-	Admin-Secretary
	Council-	Peter Wandau
	Public Relations-	Corney Lahies
	Student Affairs-	Goodnius Aruai
	Buildings & Grounds-	Bernard Tzilu
	Business Studies-	Ken Konafo
	SRC-	Philip Lavatu
	Agriculture-	Luke Wangi
	A/V Unit-	Ezron Dekaetavara
	Students Services-	Rev Wiliong Siawong
	Surveying-	Russel Jackson
	TFTC-	Vagi Lovo
Enquiries:	Corney Lahies-	4734298







Bus Service - Unitech Campus (Area Five (5)) to Main Market

Applications are invited from PMV Bus Operators to run a regular bus service from Unitech Campus (Housing Area 5) to the Main Market via Eriku, Top-Town and Angau Memorial Hospital. It is anticipated that the bus service should run on time schedule at regular intervals.

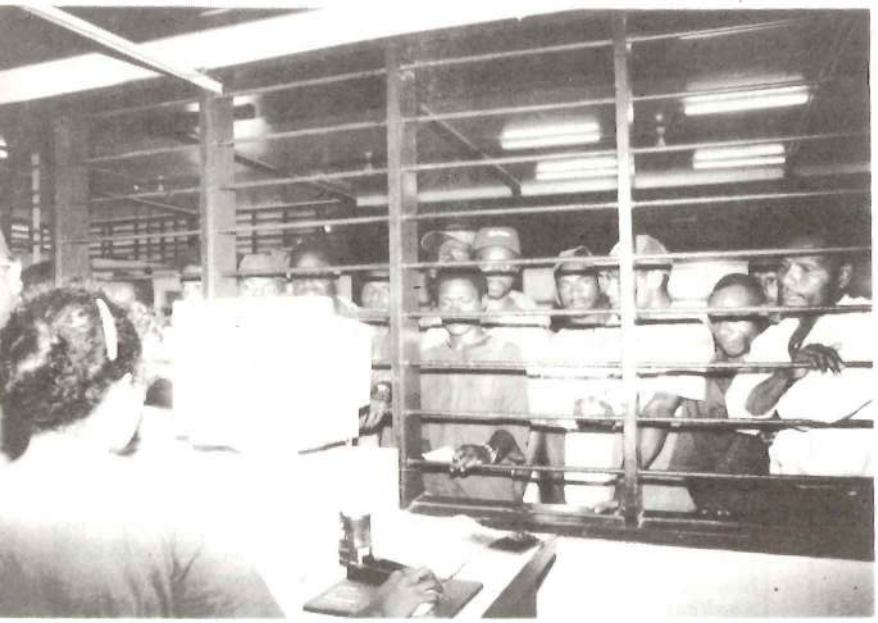
The Unitech Campus has a population of over three thousand (3,000) people inclusive of staff, students and their dependents.

This is a grand opportunity for those who operate or are interested in operating a PMV Bus service. If you are interested, further information may be obtained from the Office of the Pro vice-Chancellor (administration) on telephone number 473 4226 or 473 4249.

Written applications should be forwarded to:

Pro vice-Chancellor (Administration)
PNG University of Technology
Private Mail Bag
LAE
Morobe Province
by Friday 6 March 1998





STAFF CHANGES

This is the information summary of staff changes in respect of, appointments, departures and interdepartmental transfers for the week ending 16/2/98 - 20/2/98.

Appointments	Dept/Section	Position
J Gimiseve	Arch & Bldg	PT teach. staff
Dr Anwar Hossain	Arch & Bldg	PT teach. staff
Mrs Leonie Ninau	Bursary	E/Secretary 1
Tine Ningal	S & L/Studies	A/Lecturer 1
Henry Mune	Housing & Prop.	CE 1
G Langtry	Business Studies	PT teach. staff
G Langtry	Arch & Bldg	PT teach staff
Departures		
Massi Kairo	Bulolo Uni Coll.	CE 1
Simon Kono	Security/Registry	Patrolman 1

Rainfall Readings

Rainfall readings for 24 hours to 900 on:

Wed	18/2/1998	0.8 mm
Thurs	19/2/1998	44.0 mm
Frid	20/2/1998	0.4 mm
Sat	21/2/1998	10.6 mm
Sun	22/2/1998	0.0 mm
Mon	23/2/1998	8.6 mm
Tues	24/2/1998	17.6 mm

Total rainfall for week ending 18/2/1998 reads 82.0 mm

Total yearly rainfall up to 17/2/1998 reads 459.4 mm

Total yearly rainfall up to 18/2/1998 reads 541.4 mm

Sali Bafinu
Civil Engineering Dept

Academic Board

The next Board meeting is scheduled for Wednesday 11 March 1998.

Items that require Board's attention must reach me by Monday 2nd March 1998.

Goodnews Aruai
A/Deputy Registrar (Academic)

Non-citizen Staff Association

Welcoming Function

We are holding our first function for the year at the Vice Chancellor's residence, Thursday 5th March from 4:30 pm - 6:00 pm.

All members, new staff members and their partners are invited to attend. Drinks and snacks will be served.

The AGM of the Association will be held on Thursday, 19th March at 4:15 pm.

Nomination forms for the positions of President, VP, Treasurer, Secretary and Committee will be available from Roy Lewis, Maths & Computer Sciences Department.

The membership fee is K50. subscriptions should be sent to Russell Jackson, Surveying & Land Management.

Malcolm Carrick
President

Unitech Savings and Loans Society

The members are advised that the loan applications will be temporarily closed until further notice.

This action is necessary to allow for accumulation of funds;
(1) to prepare for 1997 divident payout, and
(2) improve on short term investments.

Paul Isan
Chairman
Board of Directors

Single Ladies Hostel for Rent

1. 1 x one bed room
2. 1 x two bed room

Location: Aquarii Street, behind Lutheran Church (East Taraka) 6th house from Unitech bus stop. With security fencing and manned by security guard from 6.00pm to 6:00am. Common Kitchen, Laundry and toilet shower.

K85 per fortnight (two bedroom). K170 per fortnight (one bedroom).

Contact: Mrs. Cecilia Watai on telephone :475 7198

Guest House Manager/Manageress (Part-Time)

A part time position is available for the right candidate to manage the Unitech Guest House. The position requires a mature person who is able to organise and supervise housekeeping tasks. The position involves some knowledge of bookkeeping in order to maintain accounts for guests and monitor the financial position of Guest House operations. Additionally, the manager/manageress must liaise with both the University Administration and company executives.

The manager/manageress must organise and procure Guest House supplies and stocks both at the markets and supermarkets. He/She will be required to be at the Guest House each morning of the week and to do a considerable amount of 'running around in town'.

There is no accommodation provided, however, preference will be given to residents within the vicinity of Unitech Campus. Remuneration will be discussed at the interview.

Please address applications to:

The Executive Manager
Unitech Development and Consultancy Pty Ltd
Private Mail Bag
LAE
Morobe Province
Applications close on 20th March, 1998

Accounts Officer

Applications are invited from experienced personnel who have exposure to pay calculations and other relevant accounting duties.
He or she must have experience in use of PNG Payroll.
The applicant must have a Diploma or a Degree from a recognised institution and at least two years work experience in payroll.
The applications close on 6 March 1998.

Salary Level K9, 149 to K12, 955
Level of appointment will depend on job experience and qualification.
Interested person should submit their applications with names of three referees to the

Registrar
PNG University of Technology
Private Mail Bag
LAE

FOR SALE

Mazda 626 white, recent tyres. Brakes serviced. K5,000. Contact 463 4796 (B/H)

2 curtains, brand new, polyester printed material. Size: 200cm x 115cm and some used curtains in very good condition. contact Phone No: 475 7338.

FOR SALE

1. Mazda 292, Station Wagon. Registered till July, 1998. Very good running condition.

Price K1,950. 2. 2 x 700 ltr deep freezer. Price K900 each.

For further information contact Norbert on Phone: 473 4329 (b/h) or 475 7613 (a/h).

UNITECH PRESCHOOL

To all the parents and guardians of children attending the Unitech Pre School.

On behalf of the Chairman of the Pre School, I would like to inform you all that there will be a Parents meeting on Monday 2nd March, 1998.

Time: 12:00 noon.
This will be our first meeting of 1998.

Therefore your attendance is important as there are many things to discuss in the meeting.

Thank you.

Miriam Pasanai
Pre School Supervisor

Orientation Lightning Sports

All students, staff and the University community are reminded that all Orientation Lightning Sports program will commence next week. The program are as follows:

Launching: Monday 2nd March 1998 starts at 7.00 pm (Union Hall).

Games: commence on Wednesday 4th March 1998 starting at 4.30 pm every afternoon.

Remember the sports afternoons will end on the 24th March 1998. Please everyone is welcome to join the fun.

Thank you.

Sports coordinator

THANK YOU

A big and sincere 'thank you' is extended to every individual, group, department or section, and company who/which contributed to and participated in the Orientation activities.

Special mention: Lady Carol Kidu, the Vice-Chancellor (Dr. Kaiulo) and his Senior Executives (Dr. Siaguru, Mr. Tovirika, Mrs Chan and Mr. Aniong), the Orientation Committee members, all speakers, first year students, Mr. Aruai and the Registration Team, Technical/Administrative/Security Staff, generous benefactors (SHRM, UDC, SP Holdings, Lihir Management Co, Forestry Department, Charlie Levi and Maths Department, and Civil Engineering), Chaplains and religious groups, singsing groups, Bookshop and Clinic Staff, Mr. Reu and Library Staff, Mrs. Young and Central Facilities Staff, all HODs, Messrs Sako and Kumaina and Student Services, Natschol Officers, Transport Section (Manager, Supervisor and drivers), SRC/Sports, and Messrs Wandau, Rapi, Taho, Nugu, Dekaetavara and Yomba.

Thank you all for your input and cooperation which resulted in a trouble-free and relatively smooth Orientation.

Dr. Anthony H. Harakuwe
Chairman, Orientation Committee

THANK YOU

Christian Affairs Committee is grateful and sincerely expresses its thanks for such support and assistance given for the success of the Orientation combined ecumenical church service. Support was great, however, among many we especially would like to mention the following: Dr. A. Harakuwe, being chairman - OWC for his influence and assistance to have all our program being done free of charges, Forestry Department for supply of free pot plants for decoration, Mr Peter Nugu - DH, Mining Department for use of the Conference room (MN001) and Mr Charlie Levi, Mathematics & Computer Science Department for free printing of the service program.

We look forward to your continued support in our endeavour to serve the University in whatever way we might do in future. May God bless you of your giving. It is more blessed to give than to receive (Acts 20:35)

Day and time for various church denominations to use the Christian Centre.

Mon. - United Church 7.30 - 9.30pm
Tue. Anglican Church 7.30 to 9.30pm
Wednes. - Lutheran Church 7.30- 9.30 pm
Thurs. - AOG Church 7.30 to 9.30pm
Frid. - Catholic Church 7.30 to 9.30pm
Sat. - SDA 9.00am to 6.00pm.
Sun. - United Church 8.00 to 9.30am.
Sun. - Catholic Church 9.30 to 12.00noon.

Day and time members would like to see their Chaplains. You can make appointments through the Students Service secretary.

Monday morning, Lutheran (Pr. Zawia) afternoon, CBC (Pr M Russell). Tuesday morning, (Baptist) afternoon, United (Rev J. Toua. Wednesday morning, SDA (Pr. Avou) afternoon, CBC (Pr M Russell. Thursday, Catholic (Fr. Mulderink). Friday, Lutheran (Pr. Zawia).

Rev. W. Siawong
Executive Officer (CAC)

East New Britain Students' Association

The East New Britain Community on campus will have their annual come dinner on the 27/02/98.

Time: 6:00pm to 12:00 midnight.

Venue: Student Union Hall.

Guest Speaker: Dr. Kurapa.

All welcome.

President
East New Britain
Students' Association

Unitech Mama Katolik Klab

Namba wan meeting blong Klab bai ikamap long Sarere 28 February, 1998.

Long Haus 105, Purari Drive (Haus blong M. Panau).

Time: 2.00pm

Agenda bai i redi long taim blong mitin.

Olgeta memba mas kamap long dispela mitin long wanem yumi bai discuss long planti long ol important toktok na activity.

Tenk yu.

Magdalene Panau
President

The Death of Lucy Smith

Lucy had been ill with a form of leukemia for sometime. She had bone marrow transplant last year, but this failed to help.

Lucy leaves a young son, as well as her sister Karen and her father.

I emailed Geoff and Karen to remind them that they have many good friends at Unitech and around PNG who are thinking of them at this time.

I understand that Lucy's last wishes were for her ashes to come back to Lae and Geoff and Karen will be coming to PNG in a few weeks time. I would think that there will be a service of some type at that time.

Mark Leach
Applied Sciences

Farewell Function

Pikah Kohun - SAC Chairman

Venue: SAC
Date: Wednesday 4/3/98
Time: 6 - 8 pm

Snacks provided.

All SAC members are welcome.

Manager
SAC

ADVERTISING RATES WITH THE REPORTER

The Reporter wishes to advise the University Community and the Public that it will start charging all classifieds and public notices.

This would not include official University notices.

Clients are expected to pay upfront in cash in order to have their advertisement published in our weekly issues.

The rates are as follows:

Full Page:	K10.00
Half Page:	K7.00
Quarter Page:	K5.00
1 full column:	K3.00
1/2 column:	K1.00
1/4 column:	K0.50

Deadline for bookings on Tuesday weekly.

Editor

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SRC petitions Speaker over introduction of controversial Bills



• *SRC president John Kaio addressing the forum at DH*

By STEVEN BUSIN

The Students Representative Council (SRC) has petitioned the Speaker of Parliament over two new proposed Bills by the Skate-Nali Government.

The students' call follows a forum staged by the SRC at the D[illegible]nson Hall to gauge students' v[illegible] on two controversial bills introduced by the Government to set up the Independent Commission Against Corruption (ICAC) and the constitutional change that would abolish the no confidence motion.

Consequently, the SRC president John Kaio has petitioned the Speaker of Parliament John Pundari, stating their stand.

The petition read: "Papua New Guinea cannot continue to suffer and experience this political instability and inconsistency brought about by self centred and visionless leaders.

" Politicians and administrators of this country should be aware that the people of the country do not want to talk about their incompetence.

"If they lack vision and no strong principles to lead on, they should vacate their office.

"Too much hesitation and not willingness to respond to public outcry only indicate that such leaders are self centred, and have other personal motives to remain in office.

"We are not worried about these greedy culprits, however, we are concerned about the identity, integrity and dignity of the high offices of this country."

Kaio called on all politicians in the National Parliament to reassess their motives and whether they represented their voters' interests or their personal gains.

He also appealed to all politicians to support the Opposition Leader's call to move a censure motion against the Prime Minister as it was not a call for power but a call of concern.

"The concern is that there is something wrong with the top leadership of this country," Kaio said.

"According to our conscience, it is wrong for the Prime Minister to be the head of the ICAC.

"Why is the Prime Minister scared of the 18 months grace period? Surely if the Prime Minister has nothing to hide or has no other motives, why is he seeking extension of the grace period to five years, and why is he also the Defence Minister?

In a Prime Ministerial Address to the Nation on EM TV on Monday, Prime Minister Bill Skate explained his Government's decision to set up an Independent Commission Against Corruption - ICAC, and the government instability through Motions of No Confidence.

He said in his televised message: "Your Government came to office in July last year. This was a time when the economics, social and political situation in our nation were at an all time low.

"Secret deals by successive governments saw millions of Kina in public money and workers' pensions funds wasted; The K18 million Cairns Conservatory deal, Brisbane Malagan House deal and the Poreporena Freeway contract.

"And we must never forget that K50 million was given to the foreign mercenaries during the Sandline crisis.

"There are several other alleged corrupt deals that have robbed our nation of public money. These deals by the previous Governments are being investigated and exposed."

He said his government had taken a strong stand in its fight corruption by introducing legislation in parliament to create the new ICAC.

"ICAC is based on similar corruption fighting bodies around the world," Mr Skate said.

"In other countries these anti-corruption bodies have proven very successful in fighting corruption.

"While ICAC is similar to other bodies around the world, ICAC is tailored to fight corruption in Papua New Guinea, and will be able to investigate corruption at a deeper level than any other organisation in Papua New Guinea.

"ICAC will be independent of politics and politicians..no matter who the politician, public servant or business person is, they have no special protection from ICAC. If they are corrupt, they will be found out and charged accordingly."

Another piece of legislation prepared for presentation in parliament was to reform the system of electing a Government and stop constant threats of no confidence motions.

According to the Prime Minister, the current political system did not provide stability due to frequent changes in governments and policies due to votes of no confidence.

"Over the past 22 years our politicians have changed the government far too often- we have had too many changes of governments since independence, as a result policies have changed with the change of government," Mr Skate said.

"Our people vote every five years to elect a government, instead they get successive governments which only plan to be around for 18 months and as a result there has never been any long term planning for development of this country.

"This instability does not do anything but cause uncertainty of Government policy. This instability harms investor confidence and harms our economy."

The Prime Minister also made reference to other commonwealth countries where Government Caucus are formed after an election, a prime minister is elected and the government is given the right to rule until the next election.

"If during the five years the Prime Minister has to be removed for what ever reasons... the caucus can replace the Prime Minister," Mr Skate explained.

"Most importantly though, the Government is able to continue with policy not being dramatically changed because the Prime Minister has been changed.

"This form of Government works successfully all over the world and allows people to have confidence in long term Government policy.

"This means investors can have confidence in the political stability of the country.

"No longer will investors in our country face uncertainty of government policy when they invest in Papua New Guinea

"They will know the elected Government Caucus will continue to govern for five years.

"The only reason the Government would change is if there was a serious disagreement between coalition partners."

The Prime Minister also reiterated that with the change, there was no longer any protection for 18 months for the Government and the Opposition can still attempt a vote of no confidence.

The Opposition members have consistently opposed those two proposed bills.

STUDENTS GIVE INDUSTRIAL TRAINING "THUMBS UP" AND CALL FOR OTHERS TO JOIN



• Building final year students who just returned from their year of industrial experience

By STEVEN BUSIN

Twelve months Industrial programme should be made compulsory for all university students prior to their graduation, according to a group of Building final year students.

Fourteen Building course students returned from their one year practical stints with various construction companies through out the country, highly recommended that Academic Departments should let their students go out and experience the real working environment for a year.

"It normally takes a month or two for students to settle into their working environment, also, students can learn a lot of things within a year rather than just a few weeks and trying to learn everything within a short time," they said.

According to Zaze Ombi who did his industrial training with Fletcher Morobe attached to their Tokua Airport development project, the industry was looking for people with experience and that can make a lot of difference.

"After you graduate with your Bachelor Degree, you already have experience behind you," he said.

Jacob Taubuso attached also with Fletcher Morobe at their Jacksons International Airport project reiterated his colleague's comment adding that with that time span, students had more time to learn a lot of things and the chance to implement what they have learnt in theory into practice.

"It gives you the chance for an experience of the industry," said Ivan Wawo, who had his industrial training with Tabubil Engineering.

Working with New Guinea Glass and Aluminum in Port Moresby, Justin Saguar, training on new areas such as Sales, Imports and Supply of Materials.

Mesi Haladei said working for Masurina Construction had given him the opportunity to learn new things and at the same time practice what he had done theory.

Robert Asaka, who had his industrial training with Pacific Building and Fabricators, said being placed in a supervisory role was a new learing experience for him, as subordinates come sought assistance on personnal problems, something he did not learn in the classroom.

"I have found out that if you want your workers to be more productive or perform at a reasonable level, you have to look after them," he said.

During my industrial training, apart from my normal work, I have had people approach me with rather sensitive problems and being their supervisor, they come to me for help or use me as a middle man to talk to the bosses."

John Teine who did his [illegible]ng with Unitech's Building [illegible]nd Maintenance Section said: "I have found out that no matter how big or small the project is, the method that is being used to achieve what you want to do is just the same.

Therefore, it is good to have a year of industrial experience because you put into practice what you learn from the classroom, and once you are back in the classroom, it is easier to understand things.

According to Dion Kurangik, The one year field experience with Kinhill Kramer has given him the opportunity to see which specific area of the industry he would like to specialise in.

"I have worked in a consulting company and have seen how it works however, if I gra[illegible]e, I would prefer working [illegible]r a construction company," he said.

Fellow colleagues, Christopher Vinoko Rawalo Ilagi and Micheal Bailey said they had also leant new things and highly commended the Department for giving them the opportunity to go out into the field for a whole year and see what it was like out in the real world.

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Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

ATCDI ASSIST SETTLERS RESTORE WATER SUPPLY



•A seesaw pump under construction by ATCDI staff at Kiapit

Nationwide drought caused by the Elnino phenomenon has prompted grassroots at the New Camp and surrounding settlements in Bulolo to seek assistance from the University for a reliable water supply.

And in response to their request Appropriate Technology & Community Development Institute (ATCDI) sent two civil engineers from the engineering division to investigate a possible water supply late last year.

According to ATCDI's research engineer, Meninga Memafu, the feasibility report on the Bulolo Water Supply has been sent to the settlements representative who would take it up with relevant authorities.

"Copies of the proposal have been sent to the settlements' representative Mr Mr Joseph Gavien, who will deliver a copy to the district manager," Memafu explained.

"They (settlement communities) will work with the district manager and seek funding from NGOs or from the provincial government .

"The project proposal is estimated at K103,216.86 to implement and work would comment as soon as funding is secured.

"The project when completed will supply reticulation water to about 2,000 people around five settlements scattered around the fringes of Bulolo Town."

According to the engineers' initial finding, the Department of Forests and PNG Forest Products, a private company provide supply water to their own staff housing areas.

During the gold rush the New Camp settlement had a 40,000 litre southern cross tank on a hill which was supplied water from a dam across the Wara Muli creek.

"The system was abandoned due to lack of maintenance over the years," Memafu said.

During the height of the drought last year a single tap outlet was connected from one of the pipe mains on the water reticulation system managed by the Department of Forests.

"Water is piped through gravity to the southern cross tank and from the concrete dam of about 1.5 meters high and 20 meters long."

The feasibility study proposed a reticulated water system connected to the Wara Muli creek which would have 96 stand taps at various locations along the 5 kilometre perimeter.

Some recommendations in the report included community participation in the actual construction phase of the project with a view to "instil a sense of responsibility, pride and respect on the system".

A proposed 40,000 litre southern cross storage tank would be connected to the town's main and supply the New Camp Settlement, Wara Songong village and the Kabrima Settlement areas.

The report also reccommended that a single body be established comprising Department of Forest, PNG Forest Product, District Officers, Business houses and Councillors from the settlements.

Their tasks would be to ensure effective running of the system, that everyone may be happy with the provision of good and adequate supply of water; and ensure regular maintenance to the system. This will involve weekly routine checks on the dams to clear rubbish, logs and silts from causing blockage that may result in the flow distributions.

The Liklik Buk Information Centre and Library. Em Wanem?

Most people probably know what the Centre does but for the benefit of new students and those of you who have forgotten, we are a community development library, publisher, bookseller and book distributor.

Our specialist library focuses on the many different aspects of community development, with an emphasis on technologies that can be used and understood at the community level. The Library has books, journals and leaflets on the following subjects:

Agriculture, Building, Crafts, Development, Energy, Forestry, Health, Industry, Transport and Water Supply.

We are also the publishers of the famous Liklik Buk: a Handbook for Development Workers and its Tok Pisin sister, Save Na Mekim, two of PNG's best selling titles. Between them they have sold over 50,000 copies and not just within PNG. The Liklik Buk is found as far a field as Africa and Nepal. Currently we are working on a new edition and would welcome written contributions. Come and see us at the Centre if you are interested in helping us.

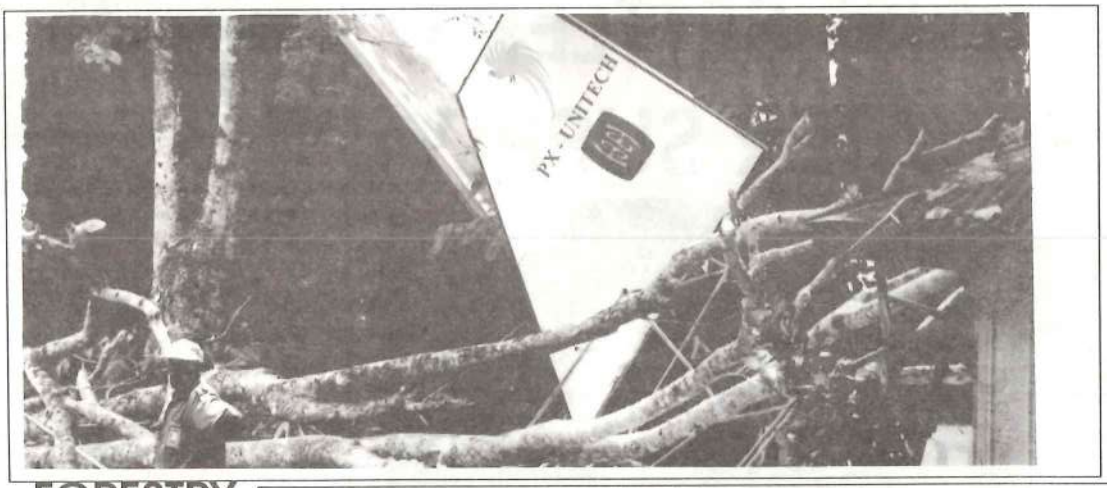
In addition to our own books and booklets, we distribute books from America and Europe such as, Where There Is No Doctor and the Micro-Hydro Power Source book. By selling and distributing books and information we are able to provide a service to the community and generate income.

As part of the on-going drought relief efforts, the Liklik Buk Information Centre has produced fliers, and is currently working on posters, encouraging water conservation and gathering. This work has been sponsored by the Red Cross, Salvation Army, Adventist Development Relief Agency and Soroptimist International. The work has been produced on a computer publishing system paid for by the Canada Fund.

The Centre is open every weekday from 8:00 am to 12 :00 noon and from 1:00 pm to 4:00 pm. It is managed by Andrew Binnie, a volunteer, sponsored and paid for by Australian Volunteers Abroad, with the assistance of Juanita Sabua, Information Assistant and Librarian.

Everyone is welcome to come along and use our facilities. We like to see students, villagers, development workers and academics using the Centre, which is the information-dissemination section of the appropriate Technology and Community Development Institute.

We are located in the wooden ATCDI building between the Student Mess and the blue Mining Engineering Department building



PX UNITECH CRASH LANDS

After six years of faithful service to University, PX Unitech has crash landed.
It was on Monday, 2nd March when a tree crash onto it.
Px Unitech had serviced the University since 1991 to parade through Lae City during Independence Celebrations.

FORESTRY GETS NEW TRACTOR

As part of the Japanese International Coorporation Agency (JICA), the Forestry Department received a New Hollant tractor.
The Tractor would be used by the Department to keep its plantation and nusery. At the same time it would be used by the Department for its engineering course



UNITECH 30TH ANNIVERSARY RAFFLE DRAW

The Raffle Tickets draw postponed from last November will now be drawn during the Graduation Dinner on Friday 27th March, 1998. Those who bought their tickets last year are reminded to keep them and those willing to buy new ones may get them from the following Committee members listed below.

PRIZES INCLUDE:

1st	Trip for one to Japan, Hong Kong or Philippines courtesy of Air Niugini
2nd	Trip for one to any Air Niugini destination in PNG
3rd	Day trip by boat for 2 to Finchaffen plus K50
4th	Family trip to Salamaua plus K50
5th -10th	K100 Shopping voucher

TICKETS COST: K2 BOOK: K40

Available from:	**Pro Vice Chancellor-**	**Admin-Secretary**
	Council-	**Peter Wandau**
	Public Relations-	**Corney Lahies**
	Student Affairs-	**Goodnius Aruai**
	Buildings & Grounds-	**Bernard Tzilu**
	Business Studies-	**Ken Konafo**
	SRC-	**Philip Lavatu**
	Agriculture-	**Luke Wangi**
	A/V Unit-	**Ezron Dekaetavara**
	Students Services-	**Rev Wiliong Siawong**
	Surveying-	**Russel Jackson**
	TFTC-	**Vagi Lovo**
Enquiries:	**Corney Lahies-**	**4734298**

Feature

PREPARING STUDENTS FOR THE 21ST CENTURY

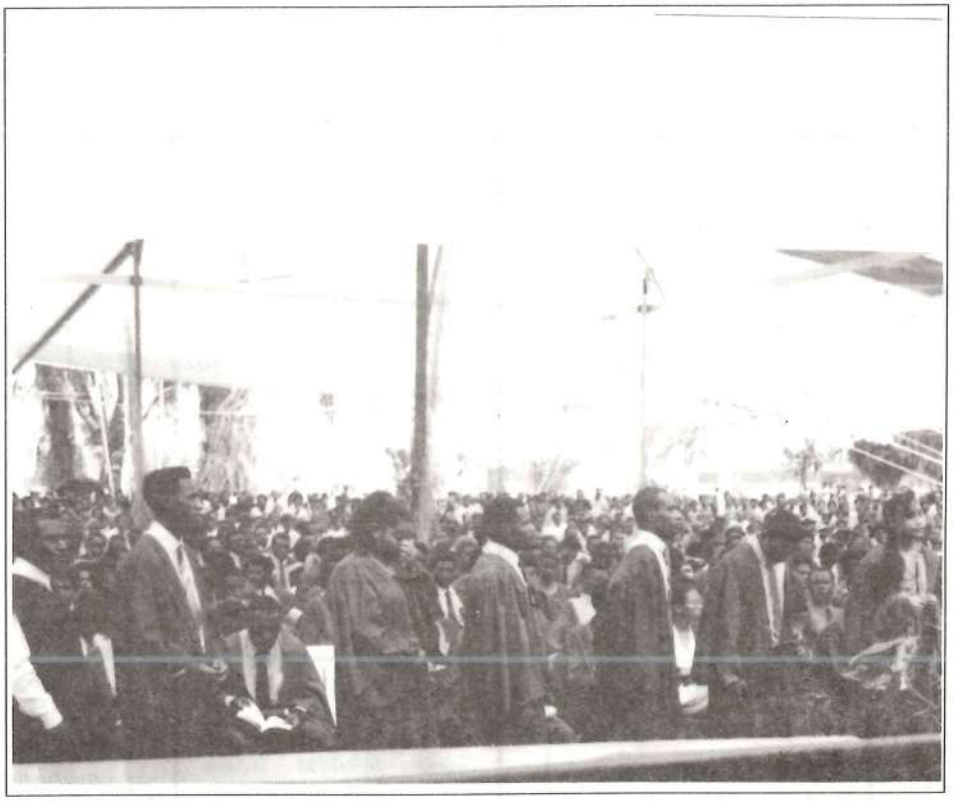
What do employers want from graduates? What are the skills and knowledge that graduates need when they are hunting for a job, and working in a job? Can we generalise here? Everyone has a slightly different spin on these questions, but research on the movement of graduates to work says that, yes, there are common attributes that most employers require and that job-getting and job-doing skills are often different from the skills needed to succeed at university, though that partly depends on the course.

The code words that crop up again and again in research interviews with employers are 'communication skills', especially verbal skills and the ability to present and persuade, and skills of 'teamwork' and 'team-building'. There are exceptions, but work cultures tend to be collaborative cultures and place a great importance on marketing and client relations, whereas university cultures are more individualistic and solitary. Students are really only working for themselves. Marking is o a one-to-one basis and some courses do not even use group projects. After years spent studying and researching in libraries, the highly verbal and interactive character of work environments can be a real shock, though work experience while studying makes the transition easier.

Written communications are important at work, too, but often differ from the kinds of written work required at university. The long essay or analytical report is good preparation in sustaining and focusing effort on a big project-a skill that once learned comes in handy again and again in life-but at work the form of the big project is mostly different.

Some graduates enter technical or professional fields where long reports are an important product of the job, but overall, short written communication skills (marginal to university) are sued more often at work, such as powerpoint and overhead projection, business letters, good sentences and slogans, and page-long summaries with graphics. Nevertheless, the logic is the same as for students at university: the highest marks go to those who present well, get to the heart of the matter and especially to those who avoid mistakes.

The ability to avoid mistakes and to avoid repeating mistakes is a sign that the graduate has become 'enculturated' into the workplace-something that all employers are looking for-and it is vital to success.



The other set of skills that employers tend to emphasise is the capacity to work with information and communications technologies. In many workplaces this has moved beyond the expectation of word-processing skills, to include page layouts, image manipulation, networking and data gathering, homepage design and the use of technologies to improve client communication and to save money.

Interestingly, the skills needed to obtain a job and the skills needed to succeed in a job are not always the same. Job getting is a specialised area of its own. The primary job-getting skill is the ability to sell yourself by concentrating all your effort on the 'technologies' of job getting: networking to create opportunities; preparation of the resume, the key items that create an edge (work experience, extra curricula activities, referees, knowledge of the organisation being applied for-through library and Internet research), and especially, job interview skills which cannot be practised too often. The interview is a process centred on the applicant and her/his career. Once employed, the graduate is rarely again in the spotlight in quite this way. Different kinds of communication skills and team skills are needed, and more elements of learning and character come into play. Graduates who are particularly good at talking their way into a job do not always do as well once they are employed; specialised knowledge, a task orientation and learning from experience are more important than at the interview. By the same token, some graduates who do not interview well turn out be be highly successful employees. A persistent theme in the research is this gap between employer expectations at the point of selection, and their assessment of employees after selection has taken place. For graduates and for the universities responsible for preparing graduates, this means that those graduates need to be prepared in both the skills of job getting, and the skills needed to build a successful, productive and satisfying working life.

Does the gap between the skills needed for university and the skills needed for work mean that universities are fundamentally deficient? The short answer is no, university and work are different places and if university was made the same as work its distinctive contributions to intellectual formation, research and culture would disappear and would have to be re-invented somewhere else. It's often the long-term effects of university education that are the most important - the research shows that new graduates tend to be critical of universities for failing to train them more precisely for work, whereas five and ten-year out graduates of all courses are more inclined to appreciate and life experience they received on campus, which has underpinned everything since.

Nevertheless, universities do need to focus more on certain attributes that are particularly important after graduation, such as verbal skills, teamwork, technologies, and job-search skills. Good universities are now doing this.

•Uni of Melb Gazzete

CAMPUS BULLETIN BOARD

ERMC Presents the Unitech Environmental Seminars

David Wilken - Mainland Holdings Pty Ltd, Lae.

"The Papua New Guinea Crocodile Industry and Environmental Management".

Thursday 12 March 4 pm, Mining Engineering Lecture Theatre (MN001)

All Environmental lecture series seminars are free and open.

DEATH NOTICE

The Department of Surveying and Land Studies regrets to announce the sudden death of Dr. Nyarba Ananga, a former staff member of the Department of Surveying and Land Studies.

Dr. Nyarba Ananga was appointed lecturer in March, 1995. After approximately 11 months, he resigned from the post for personal reasons in February, 1996.

Subsequently, he took up a lecturing position at the University of South Queensland, Toowoomba.

In 1997, he moved to Curtain University, Western Australia as a Senior Lecturer.

Dr. Ananga passed away on Monday 23rd, February 1998.

He is survived by a wife.

The Department of Surveying and Land Studies was saddened to hear of his death.

ID CARDS

As from Monday 9/3/98 ID Cards will done on Mondays, Wednesdays and Fridays, 3:00 to 4:00 pm. As from Monday 16/3/98 ID Cards will be done only on Wednesdays 3:00 to 4:00pm

Principle Technical Officer
Audio Visual Unit

National Staff Association

There is a general meeting of all National Staff during lunch hour on Tuesday 10th March 1998 at the Duncanson Hall. Please attend at 11.50 am.

President
National Staff Association

Unitech 30th Anniversary Mathematics Competition 1997

All students who have received Distinctions and Credits in the Mathematics competition should collect their certificates from Mr. Jasasa Giamukwi, Maths Office.

Dr. Neela Sukthankar
Department of Mathematics and Computer Science

CAR WASH

Get Your Vehicles Cleaned by the Dream Team

Where:
Mobil Oil Station (Milfordhaven Road)
When:
Saturday 7th March
Time:
9:00am to 2:30pm
Who: *Tisol Students*
Why: *Fund Raising*
Prices:
K2 for a car/K5 for a mini bus/K7 for a PMV
Activity for the Basket Brigade Programme

Unitech Craft and Social Club

The Unitech Craft and Social Club is open to all ladies on the campus. The Club meets on alternate Wednesday mornings, and aims to share or introduce new skills among all those ladies who attend. We are a friendly bunch and we extend a special welcome to all new ladies on the campus, small children are welcome.

Our next meeting:
Venue: 130 Sepik Drive
Time: 9:30 am
Date: Wednesday 11th March

This will be a general meeting to give everyone a chance to introduce themselves, suggest new skills and craft ideas, and meet old friends again. Please bring a small plate of finger food to share for morning tea.

See you there.

Unitech Craft and Social Club Team

Rainfall Readings

Rainfall readings for 24 hours to 900 on:

Wed	*25/2/1998*	*6.4 mm*
Thurs	*26/2/1998*	*0.0 mm*
Fri	*27/2/1998*	*4.2 mm*
Sat	*28/2/1998*	*0.0 mm*
Sun	*1/3/1998*	*0.0 mm*
Mon	*2/3/1998*	*8.8 mm*
Tues	*3/3/1998*	*39.4 mm*

Total rainfall for week ending 3/3/1998 39.4 mm
Total yearly rainfall up to 24/2/1998 541.4 mm
Total yearly rainfall up to 3/3/1998 580.8 mm

Sali Bafinu
Civil Engineering Department

Human life is an unfathomable mystery

1998 Car Stickers

A reminder for campus residents with cars to collect their safety car stickers from the Security Office.

Neighbourhood Watch Group 1998

The Neighbourhood Watch Groups that were created with such enthusiam at the beginning of 1997 seem to have disappeared through lack of interest and initative.

These groups can play a very important role in the Community and the future of security on campus for all residents. It requires a little more than just an awareness of what is going on around you and your neighbours.

Security on campus has been considerably improved but there are limited resources to cope with the increasing demands of the campus.

I am now inviting staff in housing area 1, 2, 3, 4, 5 and 6 to volunteer becoming co-ordinators for their hou areas.

For those male and female staff interested in becoming Neighbourhood Watch Group co-ordinators, contact the Chief Security Officer on telephone: 473 4888.

Eka Pisae
Director Security Services

Lack of violence is more than loving one another. Infact it is taking a stand against all injustices, all exploitation, all corruption

Lotu Time

Christian Centre

Saturday Mornings: SDA
Evenings: TSCF
Sunday 8:00 am - United
9:00am - Catholic.

Duncanson Hall

Sunday Mornings
9:00 am - Christian Life Centre (CLC) Church

Unitech Staff Bible Study

The Unitech Staff Bible Study group will resume its Bible Studies on Monday, 9th March, 1998 at 7.00 pm.

...nue: 86 Fly Drive
For discussion: The History of the Christian church.
All interested staff are welcome.

Patrick Afenya, (Tel. 4674)

Fundamental Baptist Fellowship

All staff and students (new and continuing) members of the above Fellowship Group as well as other interested people, are hereby reminded of our Fellowship tonight (Friday).

Come along and sing praises to God and listen to nothing more than the Word of God as it is

...nue: EE123 (2nd Yr Room, ...ectrical Engineering Dept.)
Time: 7.00pm

Publicity Officer

Morobe Students' Association

Members and fans please note that the membership fee for 1998 stand as: Staff - K10, Fans and Students - K2.00.

Dason J Geveken
Publicity Officer

TENKYU TRU

Miss Catherine Natsek
Food Tech grad says Tenkyu to all who helped towards her trip to Brisbane for medical tests.. She' doing just fine at Arnotts Biscuits, Lae

CLASSIFIEDS

Positions Vacant

Vice-Chancellor's Office

Director - Planning

As a result of recent organisational restructure the Planning and Development Unit has expanded its core functions to cover planning, development and analysis of strategic and operational plans of the University. The Unit will be responsible for formulating corporate plans, planning and implementation of development projects, undertake operational efficiency audits and facilities and physical planning.

Director - Planning will be the Head of Planning and Development Unit and report to Vice-Chancellor and be responsible for providing leadership in developing appropriate plans and strategies necessary to accomplish the mission of the University.

Duties:

1) Institutional planning which involves identification of long-term corporate goals, develop fiscal operational plans and budget philosophies, review and evaluate existing strategies for operational efficiency, and undertake annual progress review on University's strategic plan.

2) Planning and Implementation of Development projects/programmes which involves identification and formulation of new projects, liaison and negotiation for funding, creating and managing task forces for specific activities which the University intends to contract out.

3) Undertake analytical work in EFTS resource distribution formula, cost benefit analysis on systems and processes, demand analysis, etc.

Interested applicants should possess a post graduate qualification in Economics, educational administration, planning or related areas and should have at least several years of experience in Educational Planning at a senior management level. He/she should have a very good knowledge of government budgetary systems.

Salary: K23,732 - K29,005 plus DMA PA (Level of appointment depends upon qualifications and experience)

Detailed applications (two copies) with Curriculum vitae including certified copies of qualifications obtained and names and addresses, fax/phone numbers of three (3) referees and an indication of the earliest availability to take up appointment should be received by: The Registrar, PNG University of Technology, PMB. LAE, Papua New Guinea by **20 March 1998.**

Guest House Manager/ Manageress (Part-Time)

A part time position is available for the right candidate to manage the Unitech Guest House. The position requires a mature person who is able to organise and supervise housekeeping tasks. The position involves some knowledge of bookkeeping in order to maintain accounts for guests and monitor the financial position of Guest House operations. Additionally, the manager/ manageress must liaise with both the University Administration and company executives.

The manager/manageress must organise and procure Guest House supplies and stocks both at the markets and supermarkets. He/She will be required to be at the Guest House each morning of the week and to do a considerable amount of 'running around in town'.

There is no accommodation provided, however, preference will be given to residents within the vicinity of Unitech Campus.

Remuneration will be discussed at the interview.

Please address applications to:

The Executive Manager
Unitech Development and Consultancy Pty Ltd
Private Mail Bag
LAE
Morobe Province

Applications close on 20th March, 1998

For Sale

Mazda 626 white, recent tyres. Brakes serviced. K5,000. Contact 473 4796 (h/h)

Suzuki 4wd vehicle. Very good condition. Everything works including the aircon. 76,000km. K7,500. Phone Chris 475 7782.

THURSDAY NITE VIDEO SHOWS AT RKCC& AV UNIT CHECK THEIR NOTICE BOARDS VIDEO LIBRARY- ENQUIRE AT AV-UNIT LIBRARY

Single Ladies Hostel for Rent

1. 1 x one bed room
2. 1 x two bed room

Location: Aquarii Street, behind Lutheran Church (East Taraka) 6th house from Unitech bus stop. With security fencing and manned by security guard from 6.00pm to 6:00am. Common Kitchen, Laundry and toilet shower.

K85 per fortnight (two bedroom). K170 per fortnight (one bedroom).
Contact: Mrs. Cecilia Watai on telephone :475 7198

Boral Gas On Call

We now provide On Call delivery of LP gas direct to customers.

All prices are same as at Boral Gas and a small delivery fee of K2 is charged.

Save yourself time and trouble. Stay safe at your premises and call us. We will promptly deliver, install, do leakage test and remove the empty cylinder.

Trading Hours: Monday to Saturday - 8:00am to 6:00pm. Sundays - 1:00pm to 6:00pm

Call us on 475 7198 (h/h) or 475 7030 (a/h).

Cylinder	Refill	MPG S/Tax	Total
45 kg	98.31	2.95	101.26
13 kg	28.93	0.87	29.80
9 kg	20.77	0.62	21.39
4.5 kg	10.69	0.32	11.01
Others (per kg)	2.46	0.07	2.53

Your gas is our business and your well being, the heart for service.

Authorised Boral Gas Dealer: Retailer of LP Gas, Gas Appliances and Home Supplies.

Fun with Maths

Fun With Mathematics

Welcome back to Unitech. In this feature, I hope to provide you with some interesting Mathematical facts & problems .

NUMBER PATTERN

$\sqrt{11-2} = 3$

$\sqrt{1111-22} = 33$

$\sqrt{111111-222} = 333$

$\sqrt{11111111-2222} = 3333$

And so on...

Problem1 Tom had no money so he went to the bank and cashed a cheque. He put the money into the wallet without counting it and went shopping. He spent K 5.72 and then noticed that he had exactly twice the amount of the cheque he had cashed. The bank teller had switched the figures for Kina and Toea. What was the amount of the cheque?

K5 Prize for the first correct entry.

Please send your detailed solutions to **Dr. Neela Sukthankar**, Dept. of Maths and Comp. Science before 16th March 1998.

AIRMAIL

STAMP HERE

If unclaimed please return to:
The Editor
Papua New Guinea University of Technology
Private Mail Bag, LAE PNG

PRINTED MATTER

The Reporter
30th ANNIVERSARY UNITECH 1967 - 1997
Incorporating campuses at: TARAKA BUMBU BULOLO VUDAL
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JICA hands over laboratory equipment to Mining Engineering

Japan International Cooperation Agency (JICA) officially handover the Inductively Coupled Plasma Atomic Emission Spectrometer (ICPAES) equipment to the Mining Engineering Department, Unitech, last week.

During the Ceremony, Head of Mining Engineering Department, Professor Surek Bordia expressed the Department's deep sense of gratitude and thanks to the people of Japan, Government of Japan and Embassy of Japan for the donation of this very important analytical instrument, which costs over K200,000.

The donation of the ICPAES Instrument together with earlier assistance include the X-Ray Fluorescence Instrument, deputation of three experts from Japan to the Department; and training of 10 national staff and three students of the Department in Japan ranging from four months to four years during last seven years - totals to K2 million in monetary value to the Mining Engineering Department.

While officially handing over the ICPAES, Japanese Embassy First Secretary, Mr Makino said that PNG was endowed with rich mineral resources and Unitech had played an important part in the development of these resources by training students as well as in research and analysis.

"However, the research staff and students have experienced difficulties in conducting quantitative and quantitative analysis of minerals, and therefore PNG Government requested assistance from the government of Japan to improve the analytical capabilities," he said.

"In response to this request, the Japanese government committed a grant for the purchase of ICPAES.

"Then, in March last year, the exchange of notes were signed and exchanged between our two governments for the implementation of the project for improvement of Unitech.

"It is envisaged that the new equipment will enable students to conduct rapid, precise and quantitative analysis of various mineral samples from all over the country.



JICA representatives and Unitech staff members at the presentation of Lab equipment

"On behalf of the government of Japan, I wish to express my sincere appreciation to the Government of Papua New Guinea, and the many other organizations and people who have been involved in this programme for their efforts and dedication.

"I sincerely hope that the equipment will in some way assist the development of the mining sector in Papua New Guinea and that today's hand-over ceremony may further strengthen the friendly relations already existing between the people of Papua New Guinea and Japan."

At the ceremony, Associate Professor Patrick Afenya explained the functions and capabilities of the ICPAES.

Dr Afenya said that the ICPAES can analyse particles and metals in any solution with a very low dilution of 1 part per million (1ppm) to fully saturated solutions.

"Therefore, it is a very useful instrument for teaching, research, consultancy and analytical work in the area of Mineral Processing, Slurry Transportation, Waste Disposal, Environmental Impact Studies, etc," Dr Afenya said.

"As far as we know, it is the second such type of Instrument in the country, the first being at Ok Tedi Mine."

Pro Vice Chancellor (Administration), Mr Wilson Tovirika conveyed the thanks on behalf of the University to Mr. Makino, First Secretary of the Japanese Embassy and Mr Kobayashi, Resident Representative of JICA for the donations to the Mining Engineering Department.

He said that the donations valued at K4 million represented a very large amount of money, which was very difficult to obtain.

"As our Government is not able to fund these types of capital assets we are most grateful to the people of Japan and Government of Japan for this very appropriate help and assistance," he said.

Mr Tovirika urged the students and staff to take care of these very delicate instruments so that they can give service to the University and the country for many years to come.

Resident Representative of JICA, Mr. Kobayashi later told the gathering of a of a seminar on Instrumental Analysis organised by Dr Ito in October 1997, which attracted speakers and participants from all over PNG.

He was pleased that the Mining Engineering Department of Unitech had given excellent cooperation to all JICA Experts and had enthusiastically supported the work of JICA in the training of PNG staff and students in Japan.

Mr Kobayashi also assured the gathering that JICA would continue to help and support Mining Engineering Department for its equipment and training needs in the future.

The Japanese support program to the Department started in 1991 with the arrival of Dr. Y Maru who initiated the Grant in Aid Project, through which Unitech and Vudal University have received equipment worth K10 million.

Dr K. Ito, who succeeded Dr. Maru,was instrumental in getting the ICPAES and he personally saw to it that it was installed and operational before he left for Japan in January. Dr. Ito's successors, Dr S. Okada and Dr. Okada were now looking after the installation and staff training on the new equipments.

Top Computer Science students awarded



Present at the ceremony were Sponsors' representatives, staff and the prize winners

Eight top students from Mathematics and Computer Science received their end of year prizes for 1997 early this week.

At a small presentation, Professor Phythian described the occassion as the "coming of age" of the Department.

"At this stage the Department I think, has come of age" Professor Ted Phythian said.

"Eleven students graduated last year and all were virtually snapped up, and I now have several people wanting other good graduates.

On the question of good grades, he responded:

"That is always the question."

"At this stage, for the prize winners who are here, we undoubtedly have got good grades, and so in that sense I congratulate them."

As a course introduced about five years ago, the Department has so far produced 14 degree and 80 diploma graduates.

According to Professor Phythian the Department has focussed its courses to make its offering more relevant to students in PNG, and who will join the workforce.

There are currently six different prizes awarded annually by the Academic Board on the recommendation of the Head of Department in accordance with the University's Rules for the Award Prizes.

Remington (PNG) Pty Ltd and Business Solutions also sponsor prizes for the students.

The Remington First Year Computer Science Prize was won by Ian Hans Peter.

The Colland prize for First Year Engineering Maths was awarded to Mr Thomas Ume.

Ms Mildred Were was awarded the Kathleen Colland prize for Best Female First Year in Mathematics.

Meanwhile Mr Moses Hami and Miss Winifred Kula were joint winners of the Business Solution Second Year Computer Science Prize.

The Departmental Prize for the Best Third Year Computer Science Student was awarded to Miss Delma Kila.

Former academic gets K3 million for logging firm

A former academic turned businessman, Dennis Kivung, has secured a huge sum of K3 million from PNGBC's Nambawan Finance to start his own timber company - Devai Investments.

The loan, the first of its kind, will be used by Nambawan Finance as a pilot project, and should the project proves to be successful, it would pave the way for similar funding from the bank to assist home grown entrepreneurs.

According to Kivung, many multi-national companies in the forest industry use banks as transition points only, as most of these companies send back whatever they have earned from country's resources to service their loans overseas or business interests.



Businessman Dennis Kivung takes delivery of some of his new equipment from Lae

The bank would like to make business, and would like to see revenue earned from the country's resources kept or circulated within the country because so very little was being spent in the country, Kivung added.

He said such multi-national companies would argue that they intitiate development, however, he pointed out that those operations do not last bec[illegible] there were no [illegible] going maintenance to projects.

Kivung who was a former assistant lecturer with the Forestry Department at Unitech, speicalised in forest engineering and timber

cont on page 4...

The Reporter is produced weekly by the Public Relations Office.
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Editor: CORNEY LAHIES phones 473 4298
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Secretary: ANGELA BOROMANA 473 4291
The Media is most welcome to use stories with due acknowledgement
Mailing Address:
Public Relations Office
PNG University of Technology
Private Mail Bag Lae- PNG
Fax: (675) 4757 667
email: reporter@unitech.ac.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Unitech to stage 30th Graduation next Friday

University of Technology would host its 30th Annual Graduation on Friday, 27th March, breaking a long tradition of staging the ceremony at the end of each academic year in November.

The graduation next Friday followed a decision from the academic board to Council last year, recommending that annual graduation ceremonies be conducted in March the following year.

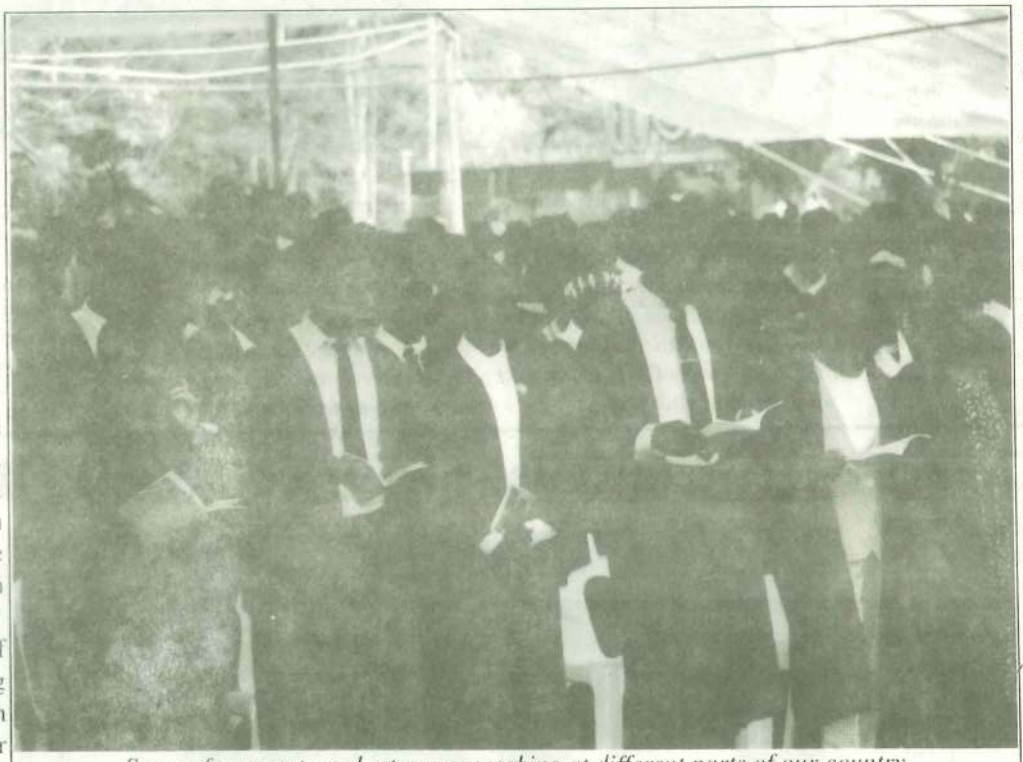
Viewed as one of its cost saving measures, Unitech administration over the years has spent a lot of money in students upkeep costs alone while they wait for their graduation.

The move will enable potential graduants to sit for their supplementary examinations in February before the graduation ceremony in March.

All students on campus will also for the first time witness the ceremony.

Meanwhile, 53 students who did not graduate last November will receive their degrees and diplomas at the ceremony.

Unitech's move to state its graduation at the beginning of a new academic year follows another tradition practised by Universities world wide, received overwhelming support



Some of our past graduates now working at different parts of our country

Civil Engineering professional service gains new client

The newly established human resource sub unit of the Civil Engineering Professional Services (CEPS) signed a contract last month with consultants for an AusAID funded project known as the PNG Bridge Replacement and Upgrading Project (BRUP).

This project is being managed by Cardno & Davis who are Australian Consulting engineers based in Port Moresby.

The CEP (HRD sub unit) are, over the next two years, to provide specialist post graduate short courses for twenty sponsored BRUP delegates. All twenty ex graduates from the Civil Engineering Department at Unitech are are based at offices all over the country.



Photofile: The signing of aggreement between the University, Dept of Works & Transport and EU last year

The contract is worth K160,000 to the Department. The first course is being run next month between the 20th-24th April in Port Moresby on the subject of Civil Engineering Contract Procedures.

"My ultimate aim is to show that we Papua New Guineans can run such businesses" - Kivung

from page 2...

harvesting, left the University in 1995 to do private consultancy work.

"I was doing a lot of proposals for business within the forestry industry when, I realised what was the use of doing proposal for other people when I can do one for myself," Kivung said.

"So I decided to take the challenge and I submitted a proposal, but I had to get all the other information ready, so I went over to Thailand, got contract signed with a sawmill, then signed an agreement with the land owners, and then submitted everything to the bank."

Kivung said he had an area in his home province, East New Britain, however, could not get a developer because the resource area was about 35 kilometre inland.

"It took about six months for the bank to go through the proposal to realise how important this project was," Kivung said.



Showing a keen interest in the new venture were the final year forestry students

"So the bank looked at somebody who can really carry on a pilot project, so Devai Investment were selected.

"The Forestry Department and the Government are also keeping close observations on its progress.

According to Kivung, K2.1 million was spent on equipment while the balance will be used for operating costs as the company goes into production next month.

"My ultimate aim is to show the Government and Bank that Papua New Guineans were competent to running such businesses," he concluded.

Insight Communication: How to Walk the Talk

Employees often show concern about the quality and quantity of communication at work.

Some claim that management gives only lip service to open communication but does little to really communicate with them.

Others contend their organizations believe that posting notices on bulletin boards and sending out memos provide adequate communication.

"Don't just tell an employee to "show more interest" in his or her work. If an employee spends too much time chatting with others, be specific about it."



Business Solutions 2nd year best student Winifred Kula congratulated by Business Solutions B/Manager Jimmy Ngosei

Still others say they receive vague instructions that are difficult to follow.

Ineffective communication often results in poor cooperation and coordination, lower productivity, undercurrents of tension, gossip and rumours, and increased turnover and absenteeism.

Experience shows there are many ways managers can improve internal communication. Here are some things they should do:

•**Understand** that communication is a two-way street. It involves giving information and getting feedback from employees. It isn't finished when information is given.

•**Put more emphasis** on face-to-face communication with employees. Don't rely mainly on bulletin boards, memos and other written communication.

•**Ask themselves**, each time they give an instruction, if the message is clear. Most vagueness is caused by failing to be specific. Example: Don't just tell an employee to "show more interest" in his or her work. If an employee spends too much time chatting with others, be specific about it.

•**View information** as "service to" employees and not "power over" them.

•**Listen to employees;** show respect for them when they speak. They'll feel part of the team and will tend to be more dedicated and productive. One way: Ask questions to show interest and clarify points.

•**Don't just talk** open-door policy. Practice it by walking around and talking to employees. Allow people to disagree and to come up with new ideas.

•**Conduct** one-on-one meetings. Ask each employee to tell the manager how the manager can help the employee to do a better job. Then share those things employees can do to help the manager do a better job.

•**Concentrate** on building credibility with employees. Managers who lack credibility and fail to create a climate of trust and openness aren't believed-no matter how hard they try to communicate.

Feature

A day in the life of a volunteer at the Liklik Buk Information Centre, ATCDI

by Andrew Binnie

Across the wet grass a narrow gravel path leads to the ATCDI office. We work in a wooden building with shakes for the roof (a type of wooden tile). Inside, it's dark and cool, the desk has a few drops of water from the downpour the night before and there is gecko pek pek on my chair. Our roof is beginning to leak after 20 years in the sun and rain.

I switch everything on and check the fax for overnight arrivals. There's nothing in the box, so I start work on a funding proposal for a desk-top publishing system to produce our books and booklets. There are many potential donors and each one has different application forms and criteria.It's a matter of sending them off and seeing who is interested. (As it turns out the Canada Fund agree to one of our proposals and a few months later a cheque arrives.)

At about 9 o'clock four 'bigmen' come in from a village along the coast, to talk to the head of our Civil Division and a water supply volunteer from England - who is taking two years out from his career as a construction project manager. The men look as if they have been at sea for days. They want to know when their water supply project will be completed. We want to know if they have completed the tank and tap stands as instructed.

The Civil Division's head gives a Tok Save in Tok Pisin, which seems to do the trick. There is much head nodding and agreement. We give them some pipes and fittings to finish the last stage. Everyone leaves contented, knowing what has to be done. Another water supply project moves closer to completion. Community support is vital to their success.

The morning mail arrives. There's a letter requesting information on soap-making, a letter requesting details of available coffee-millers and a letter from an aid organisation promising funding for small community projects. I pass the offer of funding on to the relevant section and begin to gather information for the other requests. Villagers can use our library as a distance resource centre, or come in and find the information they require on the shelves.

Later I leave for the local library, to deliver some complementary development books for their collection. Council libraries have very little money to spend but can do a lot to get development ideas out to local communities. They agree to shelve our books under a special section on village development and to put-up some of our comic strip health posters. We talk about the idea of getting people to donate books to libraries.

While I'm in town I visit local bookshops. In the past some of them have stocked our titles. We need to establish our distribution outlets again. Two of them agree to take a selection of our books. Getting bookshops to stock the books you publish, even when they are very well known, as are the Liklik Buk and Save Na Mekim, is always difficult. Papua New Guinea is very like Britain and Australia in that respect, though being a book publisher in those countries was a far more mercenary business.

I come back to the office on a PMV with cracks through its windscreen. A man says hellow as I get off and tells me he just wants to say that Jesus loves me. I don't know why he tells me that, but it makes me feel good, somehow - or does he mean that only Jesus loves me? PNG makes you think.

Suitably enlightened, I get back in time for lunch at the Student Mess, which as always, has something interesting on the menu. Today there's what students call moon-meat, or the alternate vegetarian dish. I opt for the latter and wash it down with a mug of lime cordial, all for only K2.20.

In the afternoon my main task is to prepare a booklet on the use of Pipe Wells and Pipe gutters for the Salvation Army in Port Moresby. This is part of their drought relief programme. The booklets will also be distributed through our bookshop. It's the sort of practical community information that we are concentrating on and which will also go into the new edition of the Liklik Buk.

When it's completed and the draft is faxed to the Salvation Army for their comments, there is time to do some staff training on the computer. A big part of my job, as a volunteer, is to pass on skills that can be used when my two year contract is over and I've left.

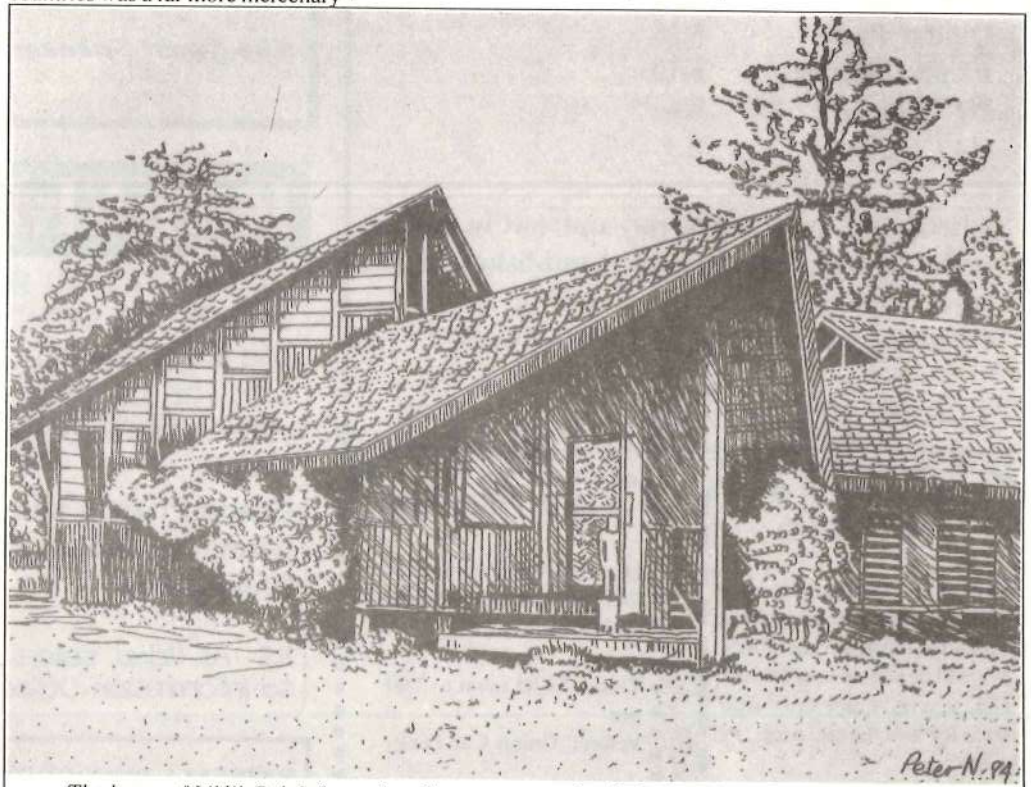
After work there is a drought meeting and NGO Kibung, which goes on for about an hour. The NGOs in Morobe are trying to become more co-ordinated, so that they make better use of each other's resources and communicate more effectively with local government.

The big issue is still the drought and what must to be done to help villages replant. It's agreed that the Soroptimists will fund the printing of a booklet prepared by the Baptist and Lutheran churches. The boy Scouts will distribute the booklets. This is the sort of co-operation that can make a difference.

The booklet describes how to make the most of the drought situation and how to ensure that gardens make a good recovery. It also explains that the drought was not caused by God wanting to punish us, but by natural forces.

A lecturer from another department at the university gives me a lift home. He's recently returned from a conference on forestry in PNG and the use of Wokabout Sawmills, which ATCDI helped to develop. The newspapers and other media reported things negatively and failed to see that a 50% plus, still-in-use rate, was a good result.

He points out that it's easy to imagine that PNG is not doing well compared to its neighbours, when the reality is that a high percentage of small businesses also fail in Australia and other western countries. PNG is not doing so badly. It's a positive thought to end the day.



The home of Liklik Buk Information Centre- appropriately designed using traditional materials

Andrew Binnie is a volunteer sponsored and financed by Australian volunteers Abroad, a Melbourne based NGO.

Campus Bulletin Board

NEW ADVERTISEMENT RATES

Due to the rising production costs, The Reporter wishes to advise the University Community and the Public of its new rates for all advertisements.

All advertisements and notices deemed as commercial will be charged except for all official university notices.

The new rates are as follows:

Half Page	K30
Quater Page	K15
1 Full Column	K10
1/2 Column	K6
1/4 Column	K3

Clients are expected to pay upfront in cash in order to have advertisement published in our weekly issues.
Deadline for bookings on Tuesday weekly.

EDITOR

30th Annual Graduation

The Papua New Guinea University of Technology will conduct its 30th Annual Graduation Ceremony on Friday 27th March, 1998 commencing at 8:30 am inside the Duncanson Hall.

The Chancellor of the University Sir Alkan Tololo will preside over the ceremony, while the Vice-Chancellor Dr James Kaiulo will deliver the occasional address.

The Guest Speaker will be Mr Lalatute Avos

RAFFLE TICKETS

Last chance to get yourself a ticket before the draw next Friday... Call in at the Information Office NOW and try your luck for K2 only, or better your chance with a book of ten tickets for K40
TASOL
Grand Prize is an overseas trip for the lucky winner to Japan, Hong Kong or the Philippines.

PS All ticket sellers please hand in your tickets to Information Office by next Wednesday. C Lahies

Unitech Craft and Social Club

Our next meeting will be a cooking demonstration from IndiA by one of our members. We will be shown how to cook Dal, a simple and tasty dish so why not come and try some.

Date: Wednesday 25 March
Time: 9:30 am
Venue: 130 Sepik Drive

Flea Market

Our first Flea Market for this year will be on Sunday 29th March, 1998.

Time: 12.00 noon to 2.00 pm
Venue: Union Car Park

Campus residents are all welcome to come as a buyer or a seller.

NATIONAL STAFF ASSOCIATION

The Lae Electoral Office will conduct polling for the post of President of the association from 10:00 am to 12:00 noon in front of the Duncanson Hall (foyer) on the 24th March 1998. All National Staff are reminded to take a few minutes between 10:00 am and 12:00 noon to cast a vote for your President.

Your candidates are:

1. Charles Nakau
2. Ben Isom
3. Jackson Numbi

RAINFALL RECORDING

Rainfall Readings for 24 hours to 0900 on:

Wed	11.03.98	0.0 mm
Thur	12.03.98	0.0 mm
Fri	13.03.98	0.0 mm
Sat	14.03.98	15.2 mm
Sun	15.03.98	0.0 mm
Mon	16.03.98	0.0 mm
Tues	17.03.98	0.6 mm

Total rainfall for week ending 17.03.98 15.8 mm
Total yearly rainfall up to 10.03.98 631.8 mm
Total yearly rainfall up to 17.03.98 647.6 mm

Sali Bafinu
Senior Technical Officer

POETRY CLUB

Please be reminded that the above 'would be' club would soon convene its first meeting at a date to be decided. Those of you who have shown interest by giving me your names are urge to keep your spirit high as I have urgent official task to accomplish first.

I will announce the meeting soon so meantime consult the Reporter closely. Any interested persons are urged to forward your names to me as we still have enough room for you.

Ring Paula on 473 4222,
TLMU Unitech.

John Sari

Hindhi and English films for Overnight Borrowing

Following films can be borrowed for overnight viewing only.

HINDHI FILMS

1.Madumathi
2.Akele Hum Akele Thum
3.Qaymat Se Tak
4.1942 Love Story
5.Prem Pratigya
6.Radha Sangam
7.Dimini

ENGLISH FILMS

1.Dr. Bean *(This is not Mr Bean) When British are asked to send their greatest scholar to oversee the unveiling of American most treasured painting, they sent Dr. Bean.*
2.The English Patient - *The best film in 1997. Won 7 Academy Av...*
3. ...pendence Day
4.Volcano - *A Volcanic eruption of mid of Los Angeles City.*
5.The Lost World-Jurassic Park Two. *Jurassic Park Animal still live and they are brought to the city.*
6.Deadly voyage-*Strictly for mature audience*
7.Anaconda-Anaconda *is 40 feet long snake that lives in the Amazon river. She is a high voltage killing machine. If you have a weak heart, do not watch this film.*
8.ConAir-*A world famous bunch of terrorist hijack a plane. Action movie.*
9.The Fifth Element.
10.Kama Sutra. *So far the best film about love and its foundation.*
11.Ace Ventura-*When Nature Calls. Starring academy nominee for best actor, The Hollywoods comedy sensation Jim Carrey.*
12. Ace Ventura-*Pet Detective Starring Jim Carrey.*
13.Liar Liar-*Comedy-Starring Jimy Carr*
14.Si... Act. *Starring Whoopi-A Comedy*
15.Coming To America-*An African prince coming to America looking for a wife-first class comedy starring Edie Murphy*
16.God Must be Crazy
17.Babe-*A pig becomes the best actor.*

Films 1 - 14 not shown in PNG. They are among the Top 20 in Australia and New Zealand. Please note: Films are not for Public Shows but can be arranged. Only for home use and not supposed to be copied. Please contact 473 4407 (office) and 575 7235 (a/h). All proceeds for Angau Hospital patients welfare.

Dr Asoka S Seneviratne
Department of Business Studies

Food for thought:
The inner pollution, the spiritual pollution of mankind is the result of the continual litering of the human environment

UNCLAIMED MAIL

Could the following persons please collect their letters from Student Services.

Mark Anau, N Arey, Rima Bau, Albert Duberry, Tony Horale, Patrick Gumba, Timil Kama, Ring Kamari, Jimmy Kata, M Kepu, Joshua T Kobal, Peter Lat, Elijah Luke, Seluia Mabone, Gamun Maho (2), Eko Maiguo, David Robert Martin, J J Mas, A Mungalu, George Naunun, Joe Ngaina, Andrew Pai (2), T Palpali, Bill Peter, Cosmas H Rangei, Nancy Kapao Sagu, John Sam, Jack Samuel, Michael Seruapa, Morgan Tamaga, Albert Teko, J Togilgil, Rogert Tukana, Chris Waninara (2), Henry Wasis, Gordon Willie, Mathias Voi

Unitech Citizen Women's Association

There will be a meeting for UCWA on Sunday 29th March 1998.
Time: 2:00 pm
Venue: Union Hall

New members are most welcome to attend.

Please be there on time.

Vice-President
UCWA

LOTU TAIM

Unitech Staff Bible Study

The next meeting of the Unitech Staff Bible Study group is scheduled for Monday, 23 March, 1998 at 7:00 pm.

Venue: 86 Fly Drive
For Discussion: The History of the Christian church

All interested staff are welcome.

Patrick Afenya (Tel: 4674)

SECURITY

Campus Residences

This is to draw to your attention the following Security Measures that staff and students should be aware of and undertake for the best interest of all campus residents.

1.That Security Personnel have been adivsed not to release any information to any unidentified persons from outside who enquire either at the main gate or the Security Office about personal particulars and residences of staff and students.

2.That staff and students who have visitors must inform the Security and Dean of Students respectively, of the identity of their visitors.

3.Without the information in point (2) above, Security will not allow any visitors to proceed to the staff and students residential areas.

4.That staff members proceeding on weekend trips off-campus or going away from campus for an extended period must make alternative arrangement for someone to look after their residences. It is also advisable for staff to inform the Security if they go out of campus for functions, dinner, etc., so that mobile patrol can be informed to make regular checks on unattended residences.

To minimise break and enter and unexpected guests, campus residents are advised to comply with these measures.

Wilson F Tovirika
Chairman - Security Committee

CLASSIFIEDS

POSITION VACANT

Registrar's Department

ADMINISTRATIVE CLERK/SENIOR ADMINISTRATIVE CLERK

Applications are invited from suitably qualified persons with 2-4 years Postal and Clerical work experience. The applicant must posses some experience on report writing and be able to conduct financial transactions.

High standard of work, honesty and consistent performance are required for this position.

A current driver's licence would be an advantage, but not essential.

Salary Admin Clerk
K4,527 - K7,269 PA
Snr Admin Clerk
K6,866 - K9,676 PA

(The level of appointment will depend upon qualifications and experience)

Detailed applications (two copies) with curriculum vitae including Certified copies of certificates and the names and addresses of three referees plus telephone/ fax numbers should be addressed to:

The Registrar, PNG University of Technology, Private Mail Bag, LAE, Papua New Guinea by 31st March, 1998.

The Rainforest Habitat

The Rainforest Habitat is looking for a young, well presented female with good manners, an outgoing personality to act as tour guide and shop assistant at their Unitech project site. The applicant should be available for weekend work and need not have previous experience with handling cash registers. Minimum education level should be Grade 10.

Phone 475 7839

FOR SALE

MAZDA 323 STATION WAGON

White: includes, radio & Cassettee Player and air condition. Registered until 5/12/98. Going for K7,000 or nearest offer. Genuine enquires contact rapi on 473 4292.

****

PUSHCHAIR (child 0-3 yrs) K40 ono. Highchair, converts to rocker (3-18 months) K40 ono. 2 Double Cassettee players K100 each ono. Contact 473 4453 b/h only.

****

1. **SETS OF CURTAINS.**

2. VCR 'Protect' K250. 3. Iron 'National' K30. contact 475 7235

Fun With Mathematics

Solution to Problem1

Let the cheque to be cashed in toeas is 100X + Y and amount given is 100Y + X. Then we have 100Y + X -572 = 2 (100X + Y). Hence 98 Y = 199 X + 572, which is the same as Y = 2X + [(3X + 572)/98]. Both X and Y here have to be natural numbers between 1 and 99. Hence,N(X)=(3X+ 572) / 98 has to be an integer. N(x) is an increasing function of X.
N(1)= 5.9 and N(99) = 8.9
Looking for the solutions, when N(X) = 6,7,8, N(X)=7 is the only valid answer for X =38, hence Y= 83
The amount in the cheque was K38.83

Congratulations!
This innovative proof is due to **Xin Luo, BSCS 3** who wins the first correct entry prize this week. Consolation prize is also awarded to Dr. J. Kumar, Civil Eng. Dept.

Problem2

From four numbers, select three, then average them and add the fourth number. The four possible operations give 17,21,23 and 29.
What are the numbers?

Problem 3

A man has nine children born at regular intervals. The sum of the squares of their ages is equal to the square of his own age. What are the ages of the children?

K5 for first correct entry.
The solutions to these will be published on 3/4/98. Please send your detailed solutions before 30/3/98 to **Dr. Neela Sukthankar**, Dept. Of Mathematics and Computer Science.

AIRMAIL

STAMP HERE

If unclaimed please return to:
The Editor
Papua New Guinea University of Technology
Private Mail Bag, LAE PNG

PRINTED MATTER

The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1288 ISSN:10119-5354 22 March, 1998 WEEKLY

Unitech research on rice pests key to reducing import bill

Reducing rice imports to Papua New Guinea and the Solomon Islands remains a major concern for successive governments in the two countries.

According to a researcher on rice production, several attempts in both countries to reduce import bills have produced disappointing results, .

Under a Government directive, Unitech has been collaborating with Mr Roger Clough of Trukai Industries since 1997 on a set of rice variety trials in Bugandi High School Demonstration Farm to address the issue.

This has culminated in the research by Dr Kevin Powell, an entomologist in the Agriculture Department of the University of Technology, who is ploughing along collecting important data which is critical for the future development and sustainability of locally produced rice.

"The trials looked specifically at the population balance between the rice brown planthopper (BPH) and its natural enemies, which include the mirid bug and a range of spiders - including the wolf and lynx spiders," Dr Powell said.

"The monitoring exercise involved collecting the insects and spiders from rice plants in the trial at weekly intervals and identifying and counting the insects back in the laboratory."

And to assist in finding a solution to this dilemma, as well as gaining experience from the only entomologist is PNG, are Ansalem Saleu a 4th year student and Steven Nake, a postgraduate student.



Steven Nake and Anslem Saleu currently conducting research studies under their mentor Dr K Powell

By CORNEY LAHIES

So far 28 rice varieties have been examined for resistance to BPH and natural enemy monitoring has been carried out to examine whether in the absence of insecticide sprays BPH could be effectively controlled by natural enemies.

"The results to date clearly show that when insecticides are used, natural enemies suffer more damage than the pest itself and they cannot recover from insecticide used, but BPH can recover relatively quickly, this phenomena is known as pesticide induced resurgence," Dr Powell said.

"In the absence of insecticide, natural enemies can develop a natural balance with BPH and control it effectively, thus avoiding the use of chemical control.

"Insect pests are not the only constraint to rice production in PNG, but they are a factor which must be carefully considered."

BPH is not only a problem in the Pacific, but also throughout China and South East Asia as the major pest of rice.

According to Dr Powell, insect pest problems have been the major contributors of failure and heavy yield losses in the Solomon Islands.

"The Solomon Islands being one of the closest neighbours, has similar growing conditions for rice and similar pest problems," Dr Powell said.

"During the 1965-1985 period in the Solomons large-scale commercial mechanised rice production was attempted on Guadalcanal Plains, near Honiara, first using dry or rain

fed rice and eventually changing to irrigated rice.

"But throughout these periods significant yields losses occurred due to weeds and two major pests, the armyworm and the rice brown planthopper (BPH)."

The findings revealed that due to a combination of factors, BPH remained as one of the prominent yielding-reducers throughout the period.

"Firstly, this insect has an ability to develop biotypes which can become resistant to so called BPH-resistant rice varieties which in a layman's terms mean that you can grow resistant variety for a while, and eventually the insect overcomes the resistance attacking it with a vengeance and a different variety would need to be introduced," D Powell said.

"Secondly and more importantly is the use of insecticides.

"In the Solomon Islands highly toxic insecticides were used on a large scale often by aerial spraying to control not only BPH, but other pests like the armyworm."



Anslem Saleu spends the early part of the day collecting various types of insects for the research

The pest control problem was aggravated by the use of chemicals due to the following reasons.

"Firstly, BPH itself can become resistant to insecticides in a relatively short period and secondly, the insect sprays actually killed beneficial insects and spiders, which normally feed on BPH as part of their normal daily diet, thus destroying a natural form of control," Dr Powell said.

"The problem was population explosions of BPH and devastating crop losses, and this highlights a potential problem for PNG if the Country wishes to increase rice production."

According to Dr Powell, the research was very important and he is at present seeking funding outside the University to further develop the research.

He warned that without properly addressing the problem of BPH, the industry could be dealt a devastating blow in future.

He was also equally proud of the two students who have committed themselves to their research programmes.

Post Graduate student Steven Nake is conducting biotechnology examinations on rice to identify compounds which are toxic to insects, while 4th year A[illegible] Saleu is monitoring the effects of planthoppers and rice bugs at the demonstration farm.

Dr Powell worked under the auspices of the Rockerfeller Foundation Rice Biotechnology Program for six years developing new methods to control this insects prior to his arrival in PNG.



In the middle of a Trukai Industries rice plot, Steven Nake sets out to collect his insect samples

The Reporter is produced weekly by the PUBLIC RELATIONS UNIT.
Deadline 4pm on Tuesday weekly.
Editor: CORNEY LAHIES phones 473 4298
Journalist:STEVEN BUSIN 473 4290
Secretary: ANGELA BOROMANA 473 4291
The Media is most welcome to use stories with due acknowledgement
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email: reporter@unitech.ac.pg or ckl @global.net.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

BUSINESS STUDENTS GO ELECTRONIC MAIL FOR LECTURES

The Information Systems Section in the Department of Business Studies has pioneered an electronic mail system to improve communication between staff and students.

According to the Section Head, Dr Stewart Fleming, the network would be used by staff and students to provide course notes and tutorial information and for students to submit their work directly.

"Staff can use the network facility to gather assignments from students, mark them and hand the work back to the students without involving a single piece of paper," Dr Fleming said.

"The last three years have been ...me of change for the Section, ... the change was inevitable in the fast moving world of computers and business.

"Both staff and students are looking forward to a changing future where they can use their practical skills in their development and of the Country."

Amongst changes in the Department, the Section now has the most up-to-date computing facilities and a modern curriculum for the education of graduates in Commercial Computing.

The new curriculum, Dr Fleming said, stressed the importance of practical skills and a broad understanding of business issues.

"There is less emphasis now on programming and more emphasis on systems analysis, design and implementation as the Section aims to produce highly computer-literate graduates who can apply their skills to solving complex business problems in a changing society," he said.

The Section offers Diploma and Degree programmes in Commercial Computing and a Diploma in Computer Programming.

The facilities within the Department are modern with the bulk of the computing equipment installed over the last three years.

The Department operates three computer laboratories for use by all students which service Computing, Accounting, Economics and Management courses.

All laboratories are networked to connect staff and students to important network resources for sharing and communication of information.

Staff from the Section have advised and assisted Information Technology Services staff with the development of the whole campus network and associated services.

In addition to its own programmes, the Section provides support teaching for other Sections in the Department and service teaching for students from other Departments.

Staff in the Information Systems Section act as support managers for the Departmental networks and aim to train other staff to develop computing skills to enhance teaching, learning and administrative capacvities of the Department.



Business Studies students using the modern computer facilities available at the Department

By STEVEN BUSIN

SRC to conduct Sexual Health and HIV/AIDS Workshop

Student Representative Council (SRC) in conjunction with the Papua New Guinea/ Australia Development Cooperation Program would be hosting a two day Sexual Health and HIV/Aids Workshop next month.

The two day Sexual Health Awarness Workshop scheduled for June 22 -23 would involve various speakers from the Health Department, PNG/Australia Development Cooperation Program Sexual Health and HIV/Aids Care Project Unit, Institute of Medical Research, Morobe Provincial Aids Committee, and the Salvation Army.

The Workshop, the first of its kind to be staged at the Papua New Guinea University of Technology, has so far attracted 71 participants including student leaders, student counsellors, medical staff, various church group representatives, women groups and academics. The Workshop would be held at the Mining Engineering Lecture Theatre.

During the Workshop, various speakers would give talks on the following topics: Epidemiology, Overview of HIV/AIDs Infection in Papua New Guinea, Common Sexual Transmitted Diseases in PNG, HIV/AIDS infection, Prevention Strategies, Social and Economic Impact, Statistics on PNG Aids, Community Care on HIV Positive Clients and Case Studies.

SRC Chairman for Student Character Rehabilitation Committee and Vice President, Henry Takoin said that it would be the first time for the SRC to arrange such workshops as the SRC felt that there was a need to educate students on the deadly disease.

Tokain said similar workshops have been carried out in various communities within the city of Lae.

Wilfred Peter from the Papua New Guinea Institute of Medical Research, Lae Branch, said the deadly aids disease was spreading throughout the country at a very alarming rate and there was a great need to increase people's knowledge the disease.

He said that Papua New Guinea currently has the highest number of full blown cases in the South Pacific with 1032 reported aids cases, however, he added that the number of people infected was much higher than that.

Mr Peter said one of the contributing factor to the dramatic increase in the number of aids cases was people's don't care attitude towards the disease.

"80 to 90 percent people in the country eventhough they know of the disease don't wear condoms whenever engaged in sexual activities," he said.

Another contributing factor, he said, that there was no proper sex education taught at schools and it was the young generation that are at greater risk.

He also mentioned that there was a great need to educate people on how they could take care of aids people as currently there are no social services to provide such care to infected persons.

Sports Office plans for bigger contingent in 2000 Games

The Unitech Sports Office would be working towards sending a huge contingent og playerd to the next Australasian Public Servants Games in Sydney in year 2000.

This move by the Unitech Sports Office follows a successful trip by 10 Unitech staff who joined the Papua New Guinea contingent to the inaugural games in Melbourne last month.

Unitech Sports Coordinator, Philip Lavatu, in his post-game report, said that the Games was planned for all recognised Public Service Departments within the Oceania Region.

"The purpose of this carnival was not only to play games but to socialise with public servants from other countries," Mr Lavatu said.

"The Games was also organised for participants to see and experience the type of environment with emphasis on creating good relationship between one another from different departments, states and countries involved."

At the Games, Papua New Guinea took out seven gold medals with athletics topping the medal haul with three gold medals, while mixed touch footy, basketball, netball and volleyball took out a gold each.

PNG's volleyball team two took out a silver medal, while the athletics team again won two silver medals.

As part of preparations for the next Games, Mr Lavatu has recommended that a steering committee be appointed hold meetings every month, for the first eight months or so to coordinate all preparatory work. The committee would also work on establishing and securing official team sponsors for Unitech teams for the Games.

He said that the steering committee should also seek some advance funding from either the University or elsewhere to kick-start funding raising efforts for the Australasian Games.

Among his recommendations, Mr Lavatu pointed out that staff sports programs should now look into ways in which they could be more financially self reliant with less assistance from others.

He also recommended that respective sports coordinators, managers, presidents and players, establish an understanding on who they can have, their own fund raising activities, and moneys collected, would be kept by the respective sporting codes.

He also urged all Unitech staff to participate in sporting programs organised on campus to maintain physical fitness and form.

"Preparation for such games must start now as it is only two years before the next games, and for a huge contingent to participate, it would involve a lot of money," Mr Lavatu said.

"I believe that the time-span is sufficient for us to look into long-term planning strategies for the next public servants games."

Respective staff sports, Lavatu said, should now work on their own resources and funds, instead of depending entirely on the University Administration and corporate sponsorship.

"To correct the situation of proper planning and self-reliance, the steering committee must get on top of its responsibilities and provide the lead in policy development, decision-making, co-ordination and funding," he said.

Meanwhile, Lavatu extended his sincere thanks to the Vice-Chancellor, Pro Vice-Chancellor (Admin), Pro Vice-Chancellor (Academic), Regi , Deputy Registrar (Admin), Deputy Registrar (Academic), Senior Assistant Registrar (Academic), Lae City Lord Mayor, Executive Manager -UDC, Bursar and his staff, Director Student Services and staff, Director -ATCDI, Transport Manager and all Unitech staff who have assisted in one way or another.

He said that he would be looking forward for the support of staff for the next games.



Unitech staff Agatha Sinemau(left) Alita Pianga (right) and friend at the Inaugural Public Sector Games in Melbourne.

FOOD PRESERVATION IS BEST

If the recent drought is any indication of what the future holds for this country, then our people better get ready for the worst.

One of the basic problems we have is the eating and food preservation habits in the society.

Generally, people like to eat greens that are fresh from gardens, and as far as time immemorial, food storage for long periods is either non existent in most societies or only allowed for certain perennial food crops.

But the changing weather patterns and global warming should be enough warning for people to adapt their approach to life.

In that regard, Dr Umar Bindir of the Agriculture has designed a small easy to build solar drier with a capacity to store sufficient food for the whole needs of the household

"If you look at the drought effects some months ago, people got bogged down with nothing to eat, especially in areas hardest hit," Dr Bindir said.

"It was very surprising because in this country you can produce anything you want and you can produce it about three to four times in a year.

"The only problem in my observation is that most food are consumed fresh as there are very few strategies to preserve and to store.

"This could be cultural or traditional so when the drought hit, there wasn't anything fresh and so people were in very serious trouble.

"This drier at the household level encourages people to dry a reasonable amount of their production from time to time."

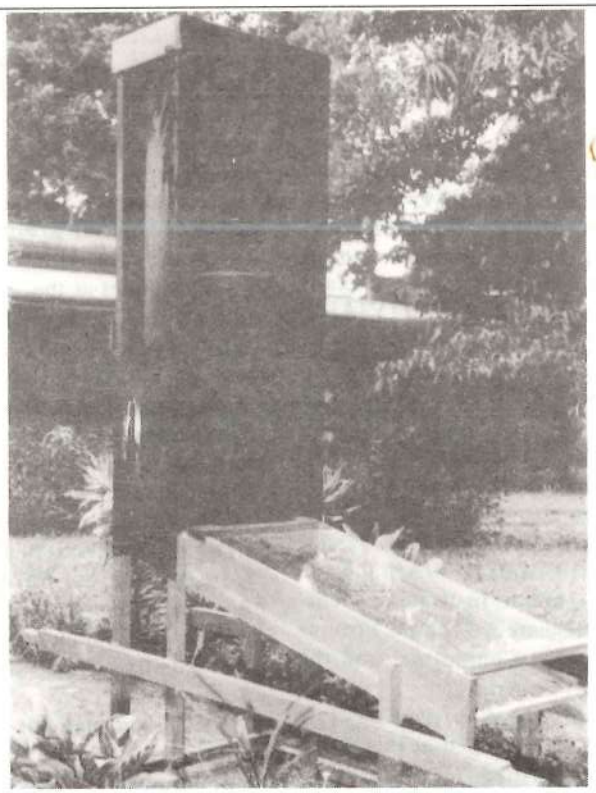
The solar drier is made of locally available materials like light weight timber, plastic, would not cost much and certainly does not need too much technical knowledge to make and maintain.

According to Dr Bindir the only treatment required is the slicing of crops and vegetables before they are dried over the next few days.

Dried food can than be packed in sealed plastic and stored for periods up to 6 months.

Through this simple method of drying and conserving food, people in the rural areas have a better chance of surviving the next attack of the El Nino effect, if it returns.

Currently, a postgraduate diploma student, Mr Aivan Aeno is reassessing the drier to simplify it further to make it more acceptable for the rural people.



The solar drier which could be a life-saver

Let's talk about corruption, committee urges public

The Parliamentary Select Committee on the Independent Commission Against Corruption (ICAC) held a three hours session with a small campus audience last Friday, following an invitation from the National Academic Staff Association.

Despite a day's notice, the Parliamentary Select Committee was given plenty of food for thought by staff and student leaders, as well as members of the community on the proposed establishment of ICAC.

The Terms of Reference of the Parliamentary Select Committee were to receive and assess submissions from all interested parties in respect to the proposed constitutional amendments and the organic law establishing the Independent Commission Against Corruption; and reporting to the National Parliament at its next meeting in June.

Despite a low key visit and rate of attendees, the meeting generated a lot of interest from the floor and received submissions for the Committee's consideration.

Chairman of the Select Committee and Eastern Highlands regional member, Peti Lafanama urged the public to help the National Parliament address the problem of corruption in the Country.

"This is your one in a lifetime opportunity to air your views and to help us address this problem," Lafanama said.

"If you want the Government to be transparent, then this is your opportunity to speak to the Government about the issue.

"We have to keep politics out of it, because corruption is a household issue and we talk about it everyday, and the Government has set up a neutral body representing both sides of Parliament to look into it."

Former MP and member of the Task Force, Sir Barry Holloway explained at the meeting the different levels of corruption and its effects on countries if allowed to erode it at large scales.

Sir Barry said the task force had looked at similar institutions including Singapore, CJC in Queensland, and ICAC in New South Wales, Australia to come up with a version which best suits PNG's situation.

On a global scale, more less developed countries are becoming

By CORNEY LAHIES

targets for more serious corruption, and corrupt leaders were turning good investments away, Sir Barry said.

He said corruption was costing the Country about K200 million a year and also contributed to the growing deterioration of infrastructure, bad influences by some companies when procedures were not followed.

Commenting on the role of the Ombudsman Commission, Sir Barry said the Ombudsman Commission only handled complaints against companies and governments under the leadership codes and was not a 'crime fighter'.

"ICAC would be a 'one-stop-shop', and would have power to investigate special crimes, and have the power to direct procedures to be put in place or followed," Sir Barry said.

"ICAC has the power and needs teeth to do its job."

According to Sir Barry, PNG had the opportunity to show the rest of the world it was serious about good and transparent governments through the establishment of ICAC.

Meanwhile, submissions from individual staff and students reflected the general call for a halt on duplication of responsibilities through the creation of more institutions, and good management of the Country's limited resources.

A submission from a lecturer, Gomi Gipe, highlighted a summary of the costs and benefits analysis of the proposed changes.

The main thrust of his submission to the Parliamentary Committee was the kind of society PNG would like to have, and whether the existing institutions were serving the society, and whether their outputs or outcomes were acceptable.

Commenting on the Constitution from a spiritual perspective Gipe offered his opinion on how to address the issue of corruption in the Country.

"Firstly, if we accept the proposition that PNG is a Christian Country, (as the Constitution suggests it is) I envisage a PNG society that is close to being heavenly-like, in the sense of she being free from bribery and corruption, with everyone earning their living from an honest day's work," Gipe told the Committee.

"However, freedom from bribery and corruption are spiritual concepts about a spiritual society.

"We are basically talking about a place like Heaven, a place where beings exist with a Holy God, where bribery and corruption are never heard of.

"Secondly, if we accept the proposition that all humans have fallen from the original perfect state, that this world is co-existed by the fallen angels (demons), then it must follow that no amount of legislation will free PNG from bribery and corruption, however tough the legislation are made to be, including the proposed ICAC.

"PNG will be like a dog chasing its tail without ever arriving at the state of being free from bribery and corruption."

The possible solution available to the Country according to Gipe, was to minimise bribery and corruption and their damaging effects, not eradicate them, and by adopting two broad options.

"PNG could produce new tougher laws via the proposed ICAC, and then do away with institutions and laws that are duplicating the ICAC's functions and roles," Gipe said.

"Secondly, PNG could study the existing laws in order to make the existing laws tougher, and or amalgamate the roles and functions of the proposed ICAC, with the existing laws and institutions."

A National Academic also argued that the defective system was being exploited by leaders when refered to the Ombudsman Commission under the leadership code.

"With the stroke of a pen, they go scotch free by resigning from office," Novulu said.

"We also have to look at efficiency of other organisations in the Government instead of wasting the people's money by creating another bureaucracy.

"The Ombudsman Commission right now, is like a dog without teeth, and with a stroke of a pen in Parliament it could be given the power to bite."

The Vice-Chancellor in his closing remarks also put in perspective for the leaders and the audience where the source of corruption was, by quoting a piece of wisdom from the Bible.

"The love of money is the root of all corruption," Dr James Kaiulo said.

"We need to live within our means, from the Prime Minister to the grassroots in the villages."

He further reminded the Government of it fundamental role of serving the people, while urging it to seek the best mechanism to continue to check corruption.

Section 46 of the proposed Organic Law of ICAC which dealt with shifting of burden of proof was also raised, as a matter of concern by Michael Kiap.

Section 46 states in any proceedings against a person for a relevant offence, the burden of proving a defence of lawful authority or reasonable excuse shall lie upon the accused.

"I am no a lawyer and stand to be corrected, but it appears that the message the proposed Organic Law is sending out is that any person accused by ICAC is already guilty of that offence until he or she can prove his or her innocence," Kiap said.

Chairman of the Committee, Peti Lafanama said the Committee would take note of the concerns raised, and later thanked the University for its contributions from various sectors despite the short notice.

The SRC president in a submission to the Parliamentary Select Committee reminded the panel of a very important question that will need soul-searching answers both the voters and the elected.

"Who is Corrupt?- The Giver or the Receiver,"

"Both" was a silent response from a member of the Panel.

If the Committee's publicity has so far failed to attract multitudes to attend their sessions and express their views on the proposed ICAC, it surely found an interested audience at Unitech.

CAMPUS BULLETIN BOARD

Satellite TV Users

The mandated new channels have still not been incorporated into the system as a result of a number of factors:

1.Primarily, whole satellite TV distribution industry is presently in a considerable state of flux, brought about by a whole-scale move or conversion to digital delivery. This process involves most channels relocating to different satellites with different receiving equipment requirements and has been ongoing since the middle of last year.

2.Investment before the above changes are complete, will be wasted, due to the revised equipment requirements in as little as a few weeks. The present advice is to hold off until July when it is anticipated that more of the issues will have been resolved.

3.Some of the changes pose considerable problems because there is the likelihood of continued reception or decoding of the signal becoming impossible in Lae. This has already been demonstrated for the Apstar satellite and some channels from other satellites.

4.The effect of the changes described is compounded or complicated by pending similar changes to the channels presently available on the campus network.

5.There were also complications arising from the distribution network charges payable to Pangtel for the network and the deemed status of this system. These matters were quantified and resolved in April, producing an annual premium of approximately K4,974.84. This charge will increase slightly according to the square of the membership subscription rate x 0.012 plus K1.00 per subscriber per additional channel x 12.

OBO Management Committee.

RAINFALL READING

Rainfall Readings for 24 hours to 0900 on:

Wed	13.05.98	22.0 mm
Thur	14.05.98	64.0 mm
Fri	15.05.98	1.0 mm
Sat	16.05.98	30.0 mm
Sun	17.05.98	45.0 mm
Mon	18.05.98	18.6 mm
Tue	19.05.98	5.8 mm

Total rainfall for week ending 19.05.98 186.4 mm
Total yearly rainfall up to 12.05.98 1414.0 mm
Total yearly rainfall up to 19.05.98 1600.4 mm

Sali Bafinu
Civil Engineering Dept.

HELP APPEAL

This is an appeal for assistance towards the medical expenses of my son STEVEN MALLE FUGRE AMBALE.

Steven was referred to the Tusa Private Hospital for specialist treatment by our clinic on 18/05/98, due to the unavailability of facilities at Angau.

Donations can be made to me at the Unitech Stores Section or at our home at Madang Compound.

Thanking you in advance for your kindness.

KIMSON AMBALE
PAPA

Termites

It has been discovered that due to aging and weather condition, termites have attacked timbers of both residential and academic buildings.

If you notice any wood dust on the floor of your house or place of work and suspect termites, please contact the Office Manageress or the Secretary of Buildings and Maintenance Office. We will arrange with the Pest Control people to have your house/building treated with anti pest spray.

Norbert Angale
Housing and Property

SEMINAR

Department of Agriculture

Speaker: *Dr Jim Goodwin*

Subject: Blood-feeding flies of the family Tabnidae of the New Guinea Subregion with comments on their actual and potential importance as vectors of diseases of man and animals.

Venue:
AV-Theatre
(Matheson Library)
Date:
Thursday 4 June 1998
Time:
11.00 am

All welcome.

Bugandi Secondary School Fresh Vegetable Market

Venue:
Front of School Canteen
Date:
Saturday 23rd May 1998
Time:
8:00 am - 12:00 noon

Fresh Vegetables from the Highlands

Carrots, Potatoes, Cabbages, Broccoli and Highlands Kaukau.

All selling for K1.00 per kilo and Fresh Reef Fish from the Islands selling at K5.00 per kilo.

Unitech Citizen Women's Association

Female staff, students and spouses are all invited to attend our meeting on 24/5/98.

Venue:Union Hall
Time:2.00 pm

Agenda

1.Election of new Office Bearers
2.National Council of Women AGM Report
3.Convention

Please come along so that we can plan the National Council of Women's Convention next year.

President

PNG Banking Corporation

Please note that our Operating Hours from Monday the 1st of June will be 8:45 am to 3:00 pm Monday to Thursday and 8:45 am to 4:00 pm on Friday.

Your assistance in conveying our new hours to your staff is appreciated.

B M Hutchinson
Manager

ORIGIN FIVA TUNAIT
Wear you colours and watch the clash tonight.
GET YOUR MAROON OR BLUE CAP FROM Public Relations Unit
Cotton Brush: K15,
Plain Cotton: K12

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday:**UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF
Sunday
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

Sunday
.00 **CLC CHURCH**

Fundamental Campus Bible Fellowship

Tonight's fellowship will include a quiz in the Bible. Quiz will highlight main events and characters in the first 5 books of Old Testament.

Come and enjoy the fellowship of God's people.

Venue: HLT (Civil Dept)
Time: 7:30 pm
Date: 22/05/98

Unitech Catholic Community

This Friday night rosary prayer will be at the Tzilu's residence. House No. 51 Sogeri Drive. Time: 7:30 pm

Please do come along.

Thank you.

CLASSIFIEDS

Positions Vacant

THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY

Applications are invited for these positions in the following departments at this University:

DEPARTMENT OF BUSINESS STUDIES

ASSISTANT LECTURER I/II

The Department requires an enthusiastic candidate for an Assistant Lecturership to assist in the undergraduate teaching programme. The successful candidate would have over four (4) years of appropriate Industrial experience and the ability tc start post graduate research programme in the Department, and who would like a career as an academic.

DEPARTMENT APPLIED SCIENCES

TECHNICAL OFFICER/SENIOR TECHNICAL OFFICER

The Department of Applied Sciences requires Technical Officers and Senior Technical Officers in Applied Chemistry and Food Technology.

Candidates must have a minimum qualification from Lae Technical College (CHTE - Science Technology) or hold a B.Sc. Degree in either Food or Chemistry.

The appointees will be responsible to the Laboratory Manager.

Main duties are: to set up undergraduate lab requirements, assist academic staff whenever required, assist in the set up and use of scientific instruments such as AAS, GC, UV-VIS etc during lab classes and assist in Research activities.

Person sought must have a pleasant character, be sober at work, hard worker and self starter.

OFFICE OF THE PRO VICE-CHANCELLOR (ADMIN)

PRINTING SERVICES

TECHNICAL ASSISTANT I/III

Applications are invited from suitably qualified person to the position of Technical Assistant in the University Printery.

The successful candidate will be required to work in the pre-press section and the darkroom. He must have a minimum of five years experience in this.

SALARY

ASSISTANT LECTURER II
K12,288 - K15,017 PA. Plus DMA OF K1,500 and AA 20% of Base Salary

ASSISTANT LECTURER I
K10,599 - K12,955 PA. Plus DMA OF K1,000 and AA 20% of Base Salary

SENIOR TECHNICAL OFFICER II
K12,288 - K15,017 plus DMA OF K1,500 PA

SENIOR TECHNICAL OFFICER I
K10,599 - K12,955 plus DMA OF K1,500 PA

TECHNICAL OFFICER I/II
K7,933 - K11,179 plus DMA of K1,000 PA

TECHNICAL ASSISTANT I/III
K5,947 - K6,696 PA

(Level of appoint depends upon qualificdtions and experiences)

Detailed applications (two copies) with curriculum vitae including certified copies of qualifications obtained and names and addresses, fax/phone numbers of three (3) referees and an indication of the earliest availability to take up the appointment should be received by: **The Registrar, PNG University of Technology, Private Mail Bag, LAE, Papua New guinea by 12 June, 1998.**

For Sale

SHARP TV

Sharp 20 inch colour TV. 10 months old. Selling for K550.00. Contact Jim Jarabi on Phone 473 4275.

VDO CAMERA

1.Sony Video camera with carrying bag and 2 spare batteries - K1200.
2. Toshiba VCR with 3 systems PAL/NTSC/ SECAM - K500. Contact 473 4606 b/h or 475 7207 a/h.

TOYOTA STARLET

Toyota Starlet 1990 model in excellent condition, 1300 cc, colour gunmental registration up to February 1999. Price K6,700.

TOYOTA COROLLA

Toyota Corolla in perfect condition, air conditioned, radio/ cassette player, low mileage. Come and have a look at it at 36 Warongoi Drive, Unitech, anytime between 4:00 pm and 7:30 pm weekdays and after 10:00am weekends. Offers

Single Ladies Hostel For Rent

1. 2 x one single room
2. 2 x two double room

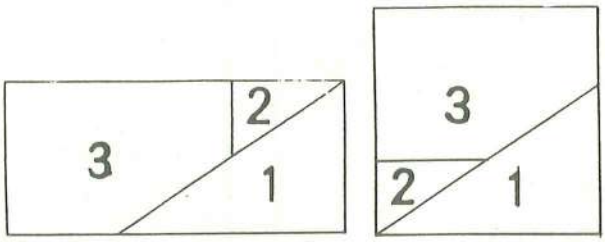
Location: Aquarii Street, behind Lutheran Church (East Taraka) 6th house from Unitech bus stop. With security fencing and manned by security guard from 6.00pm to 6:00am. Common Kitchen, Laundry and toilet shower.

K170 per fortnight (single room). K85 per fortnight (double room). Contact: Mrs. Cecilia Watai on telephone: 475 7198

FUN WITH MATHEMATICS

Solution to Problem 6

Let ABCD be the rectangular sheet of paper and. let the lengths of AB = a cm and BC = b cm. Let AB > CD and $x = \sqrt{ab}$.



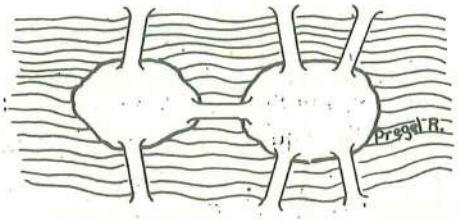
Along the length CD, cut off CP = x and along AB, cut off AQ = x. Join $\overline{AB}$ at Q meet $\overline{PB}$ in R. Then cut the paper with scissors along PB and QR. We will get the three pieces which can be rearranged to make a square as shown in the second figure above.

K5 for first correct entry.

Problem 7

Konigsberg Bridges

In the Pregel River in Konigsberg (Germany) there are two islands which are connected by a bridge and they are connected with the mainland by six other bridges, as shown in the figure. Can you show a way by which one can walk over each of the seven bridges once only, starting from any point on land and ending at the same or any other point?

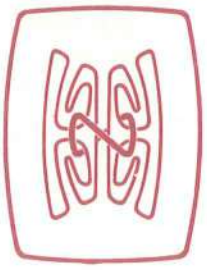


Please send your detailed solutions before 25th May 1998.

Dr Neela Sukthankar, Department of Mathematics & Computer Science.

Air Mail

STAMP



If unclaimed please return to:

The Editor
Public Relations Unit
Papua New Guinea University of Technology
Private Mail Bag
LAE 411, MOROBE PROVINCE
PAPUA NEW GUINEA

PRINTED MATTER

The Reporter

30th ANNIVERSARY UNITECH 1967 - 1997

Incorporating campuses at: TARAKA BUMBU BULOLO VUDAL

ISSUE No:1280 ISSN:10119-5354 27 March, 1998 WEEKLY

Unitech celebration spirit marks return of March graduations

"In all my life, as a student here, I had never witnessed a University Graduation, until it was my own turn to graduate," said Dr Philip Siaguru, Pro Vice Chancellor (Academic).

"Therefore holding one in March this year is an ideal opportunity for the whole University Community to participate in such a special event.

"Generally, it ignites a flame of excitement in the new intakes and what it is like to be part of the University community which is making a significant contribution to the progress of the nation.

"It also motivates students to commit themselves to their studies, so that one day, they too can be part of the group of students receiving their Degrees, Diplomas and Certificates."

According to Dr Siaguru, the whole system would change as of this graduation.

Dr Siaguru said the University had realised that the adoption of the change would cater for a back log of students, especially the final year students who have passed their supplementary examinations.

"It would not be fair on them to wait until next year to graduate therefore, there was a need to stage a graduation so that these students and others who missed out last year could participate," he said.

In seperate interviews various students have also expressed similar sentiments adding that graduations in March would be a real motivation for the whole student body.

Final year building student, Johannes Yanaga, said: "I have not witnessed a single graduation until it was my own turn to receive my Diploma.

"I was surprised when I was told that we would be wearing gowns to participate in the graduation, because as was the practise in graduations in high school and national high school, students normally wore their best clothes to graduate.

"Most of the new and continuing students have not witnessed a graduation so it is good that we have graduations at the beginning of a school year so that all students can participate in these special events."

He also said that staging graduations at the beginning of the year also gave enough time to graduating students to inform their relatives, friends or for students to shop around for their graduation clothes.

"I am thinking of graduating in traditional clothes, and usually it takes time to look for such things and now I have enough time to look around for traditional bilas." he said.

John Anuma, Business Studies fourth year student said that when graduations were held in November, it was normally a final year event, but now new and continuing students can witness the graduation.

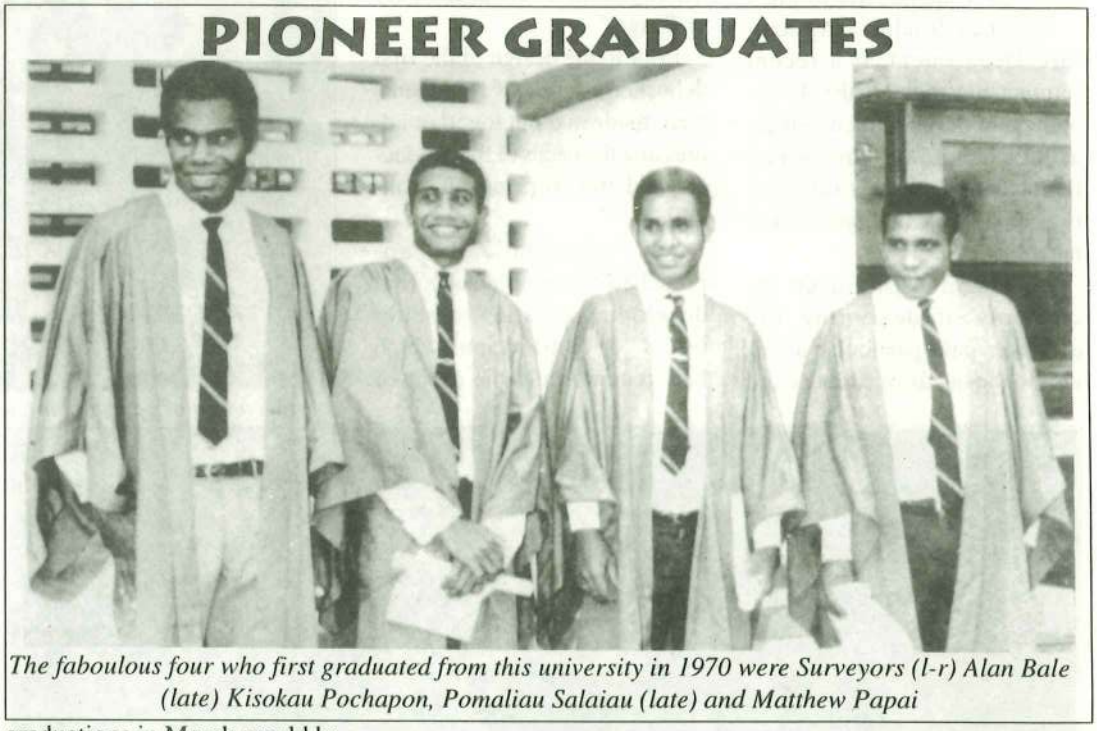
Nisia Lykasia, said nearly all graduating students had good friends in their first, second or third year of studies and it was a good thing to graduate in front of friends and celebrate your graduation with your best mates.

However, he also expressed concern over overseas students and whether they would have the money to pay for their fares to come back for graduation.

Today's graduation ceremony sees 55 students receive their Degrees and Diplomas.

The Guest Speaker Mr Lalatute Avosa, Managing Director of Telikom would also present to the Vice Chancellor Telekom's sponsorship contribution of the chair of Communication Engineering.

-by S Busin



The faboulous four who first graduated from this university in 1970 were Surveyors (l-r) Alan Bale (late) Kisokau Pochapon, Pomaliau Salaiau (late) and Matthew Papai

SEARCH FOR PERFECT COCONUT DEHUSKER CONTINUES

The world's first coconut dehusker took a step closer to its perfection following structural changes to the latest model, according to one of its principal designers.

By Corney Lahies

From humble beginings this equipment which could influence a lot of people's working attitude and turn the labour intensive industry into a high-tech production line milling out prime products such as, coconut oil, desiccated coconut and other offerings from the "tree of life".

Dr Umar Bindir of Agriculture Department at a recent seminar highlighted the development of the coconut dehusker as an example to demonstrate the techniques used to designing and developing agricultural machinery.

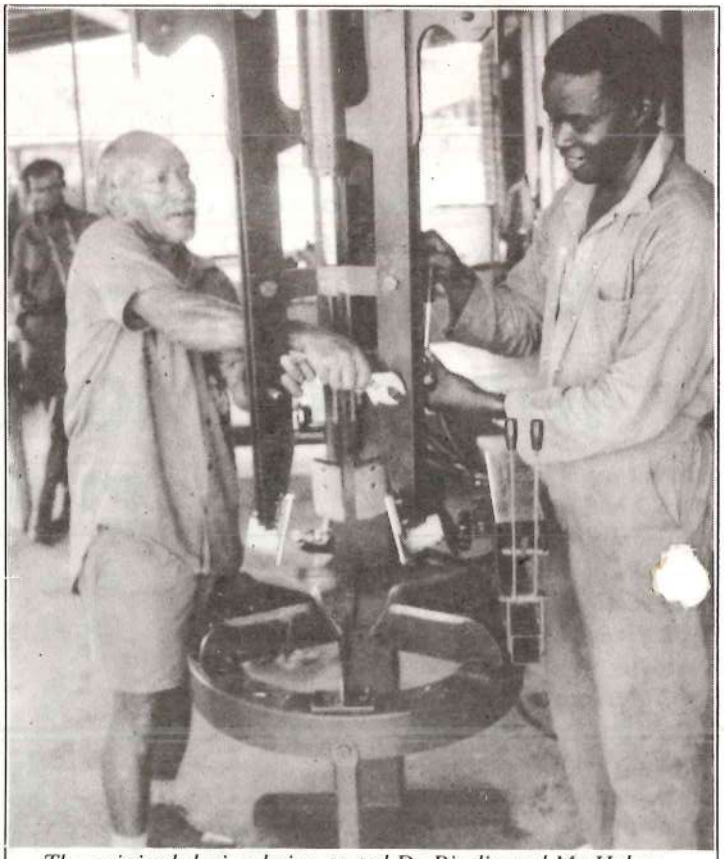
According to Dr Bindir, the concepts of designing the dehusker paid particular attention to the needs of farmers and entrepreneurs in the developing countries.

"We started from the need of a dehusking mechanism or tool in PNG, so we went and visited all the plantations and the farmers to see and better understand the problems of dehusking coconuts," Dr Bindir said.

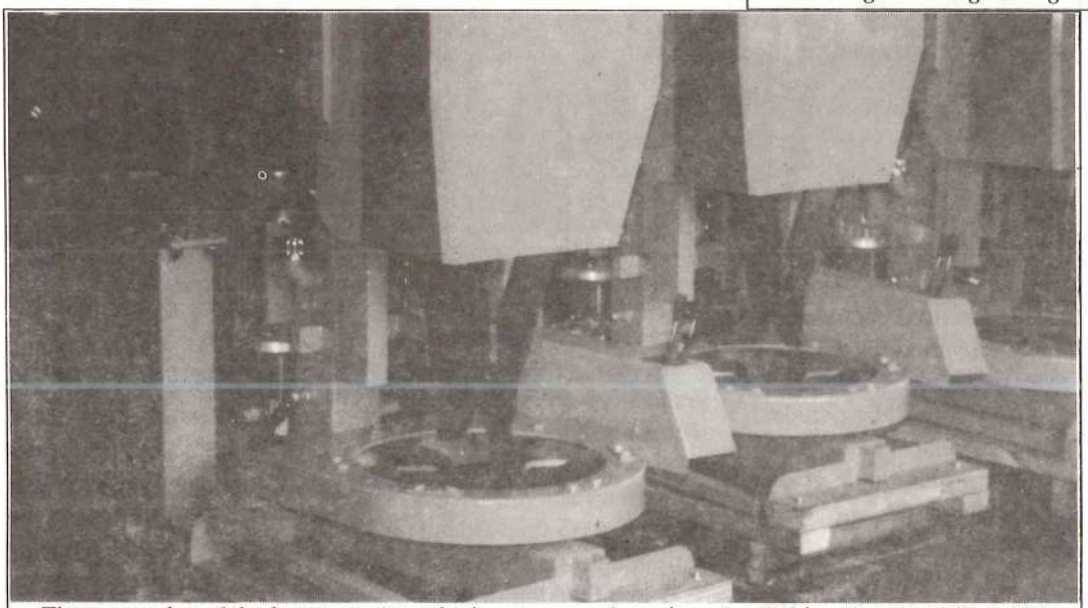
"I also told them on how the problem of dehusking alone had destroyed the coconut industry in Tonga."

Prior to the design of the first dehusker a series of statements were made and put together addressing the needs of the producers and the working environment.

"We systematically approached the problem by first developing a series of statements or certification- which had to conform to the needs of the producer and then we put our sketches into engineering design," Dr Bindir explained.



The original design being tested Dr Bindir and Mr Hebou



Three samples of the latest version which are currently undergoing field testing in PNG & Fiji

"We used several testing devices or rigs to experiment on the idea before we selected a particular design and developed a prototype."

The initial design was later developed by Fletcher Engineering, an Australian company which has experience in designing agricultural machinery, and was trialed in PNG early last year.

The dehusker mostly made of mild steel and operated by a hydraulic system can be driven by a 4kw power source and has the

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The Media is most welcome to use stories with due acknowledgement
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Public Relations Office
PNG University of Technology
Private Mail Bag Lae- PNG
Fax: (675) 4757 667
email: reporter@unitech.ac.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

capacity to dehusk one coconut in 5 seconds or about 720 coconuts in one hour.

Meanwhile, the release of the latest model which includes more safety features is about to make an impact on the copra industry.

According to Dr Bindir 10 new machines were already manufactured in Australia, three of which are currently being tested by coconut producers in Karkar Island, Madang Province, Rabaul in East New Britain Province and in Fiji.

After its launching last year, enquiries on the equipment came from Fiji, one of the major coconut producers in the Pacific, requesting for the purchase of a coconut dehusker.

"After reading the Unitech profile article in the Post Courier, someone in Fiji contacted the PNG High Commission in Fiji and they directed him to us," Dr Bindir said.

"At present he is helping us to assess the new design, and from the response we have received from the three users, they have identified the same problem of dehusking coconuts smaller than 100 millimeters in diameter.

"We have come up with a way to solve that problem as part of an ongoing development, as we are also trying as much as possible to accommodate the widest range of coconuts sizes."

Since coconut plantations were first introduced to PNG and the Pacific in the last century by the colonial masters, this humble labour intensive family occupation has taken the back seat in the wake of the new and more attractive industries such as mining.

The long weeks of collecting coconuts and painstakingly dehusking and cracking them, before they are dried under flaming driers and sold at depressing commodity prices, have led to the decline in business activity in the industry

But according to Dr Bindir the introduction of the coconut dehusker and an integrated copra drier design would change that by freeing labourers to focus their skills on other coconut produce instead of concentrating all energies on copra.

"Under the current situation, as coconuts freely fall after maturity the producer is not able to dehusk them on time and the longer you leave them the more value you lose as they geminate," Dr Bindir said.

"If you use this machine, it means you are going to produce prime copra or prime desiccated coconut, and that translated in money terms will pay for the machine in two years.

"And the machine has a life span of 10-15 years so you are getting a free helping hand for more than 10 years.

"As a copra producer, the labour input is stabilised using the apparatus and you can divert manual labour to weed the plantation, harvest cocoa and attend to other activities which used to obstruct all the quality production."

He said a particular plantation owner in Fiji, Sir Adrian Tarte, who is one of the most positive coconut producers that he came across in the course of the programme uses a fully integrated system to produce copra.

"He uses the coconut husks to produce electricity for his whole plantation, a steam boiler and turbine system which produces 9kw of electricity, and uses heat exchangers to day and produce prime copra," he said.

Dr Bindir really hopes that some or all of PNG plantation owners and coconut producers will emulate his enthusiasm and concentration.

He pointed out that producers in PNG could easily come up with similar systems but the major problem is lack of commitment and entrepreneurial spirit to get up and go.

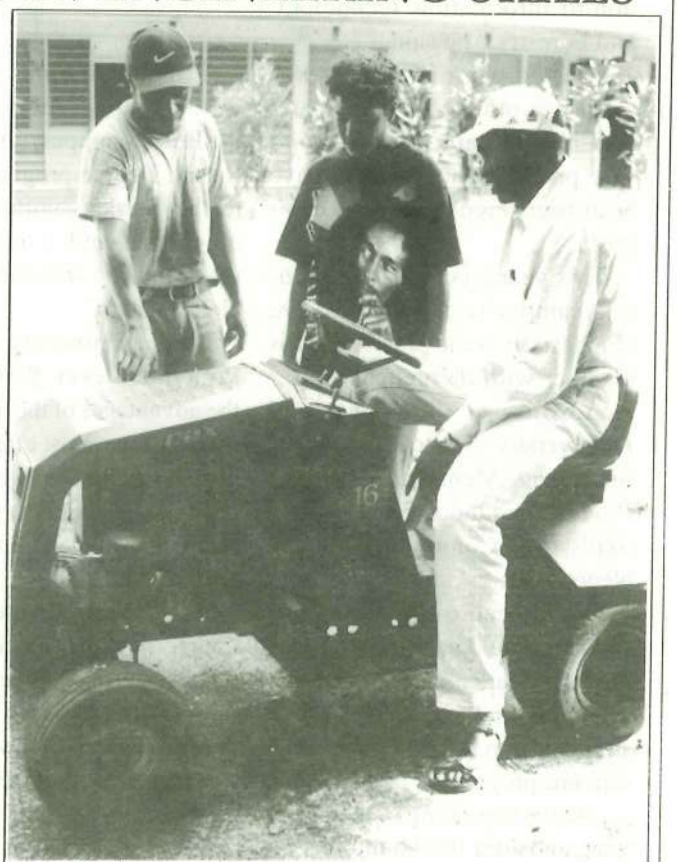
Meanwhile a proposal for funding to continue the machine development had been sent to organisations such as Copra Marketing Board, PNG Growers Association, AusAID and the European Union.

AGRICULTURE STUDENTS LEARN ENGINEERING SKILLS

IT'S ALIVE AGAIN!!!... this mean Vox machine was resurrected after parts were cannibalised from other written off mowers as part of the students learning skill in agricultural machinery. Dismantling and assembling the mower gave students an ideal training opportunity on repair and maintenance of the types of machinery they are likely to face when they finish university. According to Dr Bindir, students undergoing such training will confidently handle farm machineries when they graduate.



Confident driver.. Amasi Ume gives the old machine some driving practise



Dr Bindir gives 3rd yr students Billy Fenny & Amasi Ume a crash course on the revived sit on lawn mower

Bulolo University College receives first students under integrated program

The Bulolo University College has received its first batch of second year students under the new Integrated Forestry Studies Unit program.

' This is part of Unitech Forestry Department's revised curriculum's endeavour to produce professionals, with necessary skills, and at the same time, provide them with a liberal based education.

According to the Acting Head of Department Kulala Mulung, under the integrated studies program, students were required to do their first year of studies at the Taraka campus.

Whilst at the Taraka campus, studies would be devoted to basic science courses - Biology, Chemistry, Physics and Mathematics, and the Principles of Geology, including Study and Communication Skills, Introduction to Information Technology and Forestry," he said.

The first phase of the new program was initiated last year, and currently, as part of their second year program the students have been transfered to Bulolo campus."

This year's course at the Bulolo campus is designed to give emphasis at basic practical skills together with theoretical work - Dendrology; Ecology and Biodiversity; Silviculture, Soils, Surveying, Mensuration, Forest Products and Industries, Business Skills, and Communication and Negotiation.

"At the end of this year, the students would be screened based on their academic performance, aptitudes and interest, and be streamed into separate degree and diploma programs," Mulung said.

"At the beginning of their third year, and after their 6 months Industrial Training, students slotted into their Diploma program would continue their studies at the Bulolo campus, while those for the Degree program return to the Taraka campus for another year and a half before they graduate with their Bachelor Degrees."



New look of the Bulolo University College enterance

By Steven Busin

Bulolo University College Principle Steven Sangau said the advantages of the integrated program was cost effective.

"Instead of having two separate programs, the Forestry Department has made it into one," Sangau said.

"The length of the Degree course has also been reduced by a year. The Degree program previously was a five year program, however, with the changes it is now reduced to four years.

"The second year program also gives the students more exposure to the real bush life rather than being classroom students," he said.

"The objective is to have these students in tune with the present and future needs of the forestry industry in the country."

He said as part of their program students would have field trips to Madang, West New Britain, Eastern Highland and Western Highlands Provinces and also visit various sites within Morobe.

To complement the second year program, several administrative measures were taken to make sure the student's study environment was reasonable, he said.

Among the measures taken are: upgrading of library facilities to meet modern standards, security fence being erected around the college, more security personnel to be recruited, recruitment of a student counsellor and sports coordinator and more staff houses to be built.

Meanwhile, under the AusAID Human Resource Development, most of the college staff have under gone training or work attachment with various Australian Universities and Institutions.

As part of the program, supervisors would visit those staff undergoing training in Australia to see how they progress, Sangau said.

Unitech's Teaching and Learning Methods Unit had also conducted programs to further upgrade the college's staff performance.

INSIGHT

Credibility- how to lose it

Based on surveys of more than 15,000 people, which of these traits do you think was selected as the key to effective leadership:

•Being fair-minded ?
•Being cooperative ?
•Being honest?
•Being imaginative?

If you guessed 'honest', you get a high mark. The top four traits of admired leaders and the percent of people who selected them are:

•Being honest - 87 %
•Being forward-looking - 71 %
•Being inspirational - 68 %
•Being competent - 58%

If these qualities alone were running for office, they are the ones that would achieve consensus victory, according to authors of the book-*Credibility; How leaders gain and lose it, and why people demand it by J M Kauze and B Z Posner*

Honest people have credibility- and that's what gives leaders the trust and confidence of their people.

High credibility leaders foster such things as greater pride in the organisation, a stronger spirit of cooperation and teamwork, and more feelings of ownership and personal responsibility.

What are some of the other characteristics of credible leaders?

They do what they say they will do. They keep their promises and follow through on their commitments.

Their actions are consistent with the wishes of the people they lead. And they learn 'how to discover and communicate the shared values and visions that can form a common ground on which all can stand.'

They are capable of making a difference in the lives of others- and liberating the leader in everyone.

They admit their mistakes. They realise that attempting to hide mistakes is much more damaging and erodes credibility. But when they admit to making a mistake, they do something about it.

They arouse optimistic feelings and enable people to think positively about the potential for success.

They create a climate of learning characterised by trust and openness.

Campus Bulletin Board

RAINFALL RECORDING

Rainfall Readings for 24 hours to 0900 on:

Weds	18.03.98	70.0 mm
Thurs	19.03.98	0.2 mm
Frid	20.03.98	56.4 mm
Sat	21.03.98	0.0 mm
Sun	22.03.98	0.0 mm
Mon	23.03.98	0.0 mm
Tue	24.03.98	0.0 mm

Total rainfall for week ending 24.03.98 126.6 mm
Total yearly rainfall up to 17.03.98 647.6 mm
Total yearly rainfall up to 24.03.98 774.2 mm

Sali Bafinu
Senior Technical Officer

Flea Market

Our first Flea Market for this year will be on Sunday 29th March, 1998.

Time: 12.00 noon to 2.00 pm
Venue: Union Car Park

Campus residents are all welcome to come as a buyer or a seller.

ALL GRADUATING STUDENTS

THIS NOTICE SERVES TO ALL GRADUATING STUDENTS THAT THE GRADUAND'S LUNCHEON WILL BE HELD AT THE UNION HALL STRAIGHT AFTER THE GRADUATION ON FRIDAY 27 MARCH, 1998.

P. LAVATU
SRC EXECUTIVE OFFICER

STAFF CHANGES

Summary of Staff Changes in respect of Appointments, Departures and Interdepartmental Transfers for the week ending 9/3/98 - 13/3/98

Name	Dept/Section	Position
Appointments		
Paul Itiogen	Mining Engineering	Lecturer I
Mary Kama (Ms)	Mining Engineering	PT Teach Staff
Janet Yagur (Ms)	Surveying	Research Asst.
Departures		
Peter Remgai	Agriculture	Temp Res. Asst.
Esongke Waurang	Registry/Clinic	Nursing Officer
Andrew Pinda	Accounts Section	Accts Clerk I
Lambian Kindupa	Mining Engineering	CE III

Lawrence Yaum
Staff Officer

CORRECTION...

The Reporter on Controversial Bill.. The Secretary of the Speaker has written to the SRC denying that the Office of the Speaker had received the formal petition from the SRC regarding the Controversial Bill as reported on March 6th issue of The Reporter. The Secretary, however received a "copy "of the petition

ADMIN SOKA PLAYERS

All Admin Soccer players are requested to return the uniforms you are holding onto by Friday 3 April, 1998.

Failure to do so will result in automatic salary deduction to cover the cost.

Team Management

UNITECH CITIZEN WOMEN'S ASSOCIATION

There will be a meeting for UCWA on Sunday 29th March, 1998.

Time: 2:00 pm
Venue: Union Hall

New members are most welcome to attend.

Please be there on time.

Vice-President
UCWA

Morobe Students Beer Night

This toksave goes to all Morobeans, both staff and students that our Beer Night will be on this Friday 27 March.
Venue: Warangoi 37 (Mr F G Gumembi's residence)
Starting time: 7.00 pm

All are urge to come and support our club.

Non Academic Staff Representative on Council

1.Please note that Mr B Alusi who was elected unopposed to represent the above categories of staff on the Council, had since resigned and creating a vacancy.

2.Fresh nominations are once again being called.

3.Staff who are eligible to vote are those on Level 8 and above from the two categories of staff mentioned above.

4.Nominations will be open from 30/03 to 3/4. Nomination forms are available from the Council Secretariat.

5.Please refer any queries to my Secretary, Miss F Yagi on 4253.

Peter M V Wandau
Executive Officer - Unitech Council

SECURITY INFORMATION WATCH

Below are some information that staff, students and residents are kindly asked to observe for the security, peace and harmony of everyone on campus.

Tall Flowers/Hedges

Flowers/bushes and food gardens around some residential area are well over six feet tall and natural surveillance is difficult due to the tall height of these bushes/flowers and gardens. This has also allowed plenty break & enter and stealing. Everyone is kindly asked to trim down their hedges to three feet so that security personnel can have clear view of your house area.

After this notice, if no action is taken by residents, grounds workmen will clear the flowers/bushes and gardens without further notice.

Neighbourhood Watch Group 1998

The Neighbourhood Watch Groups that were created with such enthusiasm at the beginning of 1997 seem to have disappeared through lack of interest and initiative.

These groups can play a very important role in the Community and the future of security on campus for all residents. It requires a little more than just an awareness of what is going on around you and your neighbours.

Interested residents in becoming Neighbourhood Watch Group coordinators, are invited to contact the Chief Security Officer on telephone: 473 4888.

Eka Pisae
Director Security Services

SECURITY
Campus Residences

This is to draw to your attention the following Security Measures that staff and students should be aware of and undertake for the best interest of all campus residents.
1.That Security Personnel have been adivsed not to release any information to any unidentified persons from outside who enquire either at the main gate or the Security Office about personal particulars and residences of staff and students.
2.That staff and students who have visitors must inform the Security and Dean of Students respectively, of the identity of their visitors.
3.Without the information in point (2) above, Security will not allow any visitors to proceed to the staff and students resi' areas.
4.That staff members proceeding on weekend trips off-campus or going away from campus for an extended period must make alternative arrangement for someone to look after their residences. It is also advisable for staff to inform the Security if they go out of campus for functions, dinner, etc., so that mobile patrol can be informed to make regular checks on unattended residences.
To minimise break and enter and unexpected guests, campus residents are advised to comply with these measures.

Wilson F Tovirika
Chairman - Security Committee

Anglican Family

The Anglican family members of Unitech - students, staff and families are most cordially invited for our special church service this coming Sunday 29 March, 1998.

After the service we will meet at the chaplain's resident for introduction and refreshment.

Fr. Oscar Konova

NATIONAL STAFF ASSOCIATION

PRESIDENTIAL ELECTION RESULT

The result of the election of the president of NSA as received from Lae Electrol Commission Office is as follows;

1	Charles Nakau	123
2	Ben Isom	39
3	Jackson Numbi	56
Informals		4
Total		222

r Charles Nakau was declared the president by the Returning Officer

OPEN AIR MUSICAL CONCERT

The PNG Adventist Tertiary Student Association presents An Open Air Musicial Concert with Benson Topatiliu as master of ceremony.

Solo artists to perform include: Loujaya Dunar, Celsius of West Papua, and others.

Gospel groups to perform include:
The Exalts of Kainantu, The e Country, The Friends of ae, The Morning Dews of Unitech, and many others.

Choir groups to perform include:
The Lae Adventist Male choir, Top Town I & II Choirs, Sawdust Choir, The Murat Choir, and plenty more.

Venue:
University Basketball Courts
Date:
Saturday11 April, 1998
Time:
6:30 - 10:00 pm

Transport pick up points will be advised later. Refreshments will be available, and a free-will offering will be taken up during the concert, and proceeds will go towards the PNGATSA convention to be held in Wewak.

SRC FILM SHOW

ANACONDA

(1997 Film, First time in PNG)

Warning (If you have a weak heart, please do not watch this movie).

Anaconda is a South American snake. She is 40 feet long, and a high voltage killing machine. She is terrorising a group of people who have gone to Amazon river. They are being swallowed one after the other by Anaconda. Does anybody escape death? (May be it is only you because you did not go to Amazon).

Warning (No doubt that you will be thrown away from your seat).

Money back guarantee. This is the ultimate terror film you may have ever watched. Your eyes wouldn't believe it.

Date:28/03/98 (this Saturday)
Place:Rose Kekedo Hall
Time:7:30 pm
Tickets: K1.00 students:
K3.00 staff
Short Film:A Magic Show.

CENTRAL FACILITIES MOVIES IN APRIL

APRIL	RKCC	AVU T/THRE
2	GHOSTBUSTERS	SHINE (PG)
9	FLIRTING (15)	
16	THE SHINING (18)	
23	THE GOLDFINGER (PG)	SECRETS & LIES (15)

MOVIES BRIEFS..

1 Shine: Director-Scott Hicks. 1997 Academy Award for the Best Actor- Jeffrey Rush.

2 Ghostbusters. 1984 A comic golden oldie with Dan Aykroyd and Bill Murray. Good dialouge and good acting and good music.

3 Flirting. We are showing this film for the second time-many people wanted to see it again. Starring Noah Taylor and Nicole Kidman.

4 The Shining. Directed by the very famous Stanley Kubrick. Starring the very famous Jack Nicolson. Stylish, terryifying and full of suspense.

5 Goldfinger. James Bond, secret agent 007 is played by Sean Connery. One of the most entertaining of all the Bond films.

6 Secrets & Lies. Directed by Mike Leigh- a British director who shows quirky lives of the ordinary people. In this case an adopted black woman decides to find her real mother with amazing result.

CLASSIFIEDS

FOR SALE

Pushchair (child 0-3 yrs) K40 ono. Highchair, converts to rocker (3-18 months) K40 ono. 2 Double Cassettee players K100 each ono. Contact 473 4453 b/h only.

Computer, IBM PC, 4862X, 210 Megabyte hard disc, two floppies, SVGA colour monitor, Windows 3.1, Word software, Epson ESC 2000 printer. K500. Telephone: 473 4754 (b/h) or 475 7060 (a/h).

POSITION VACANT

Appropriate Technology Community Development Institute (ATCDI)

Scientific Officer (Food Technology Graduate)

Applicants are invited for the above position with the Appropriate Technology and Community Development Institute.

Candidates should posses a degree in Food Technology with at least three years work experience and demonstrated interest in community/rural development. A post graduate diploma would be an advantage. Areas of interest should be traditions of PNG and appropriate technology, project management, research and development of food products and communicating food technologies.

The successful candidate would be located at the Unitech campus in Lae but would be expected to spend a substantial amount of time in the field.

Salary:
Scientific Officer I
K9,148 -K11,179 per annum
Scientific Officer II
K12,288-K15,017 per annum
Scientific Officer III
K14,273-K17,445 per annum
Scientific Officer IV
K16,231-K19,840 per annum
Scientific Officer V
K17,700-K23,700 per annum

Applicants should apply in writing no later than 10 April 1998 giving full details of qualifications and experiences plus names, addresses and telephone or fax numbers of three referees. They must also indicate clearly their contact address and telephone number address to: The Registrar, PNG University of Technology, Private Mail Bag, LAE.

Fun With Mathematics

Solution to Problem1

Let the cheque to be cashed in toeas is 100X + Y and amount given is 100Y + X. Then we have 100Y + X -572 = 2 (100X + Y). Hence 98 Y = 199 X + 572, which is the same as Y = 2X + [(3X + 572)/98]. Both X and Y here have to be natural numbers between 1 and 99. Hence,N(X)=(3X+ 572) / 98 has to be an integer. N(x) is an increasing function of X.
N(1)= 5.9 and N(99) = 8.9
Looking for the solutions, when N(X) = 6,7,8, N(X)=7 is the only valid answer for X =38, hence Y= 83
The amount in the cheque was K38.83

Congratulations!
This innovative proof is due to **Xin Luo, BSCS 3** who wins the first correct entry prize this week. Consolation prize is also awarded to Dr. J. Kumar, Civil Eng. Dept.

Problem2

From four numbers, select three, then average them and add the fourth number. The four possible operations give 17,21,23 and 29.
What are the numbers?

Problem 3

A man has nine children born at regular intervals. The sum of the squares of their ages is equal to the square of his own age. What are the ages of the children?

K5 for first correct entry.
The solutions to these will be published on 3/4/98. Please send your detailed solutions before 30/3/98 to **Dr. Neela Sukthankar**, Dept. Of Mathematics and Computer Science.

AIRMAIL

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Papua New Guinea University of Technology
Private Mail Bag, LAE PNG

PRINTED MATTER

The Reporter
30th ANNIVERSARY
UNITECH
1967 - 1997
Incorporating campuses at: TARAKA BUMBU BULOLO VUDAL
ISSUE No:1281 ISSN:10119-5354 3 April, 1998 WEEKLY

University must be innovative to survive in the next century

The University must be innovative in addressing its problems as it enters the next century, the Vice-Chancellor told graduation Ceremony.

"Before any organisation can travel into the future, it is important for current problems to be identified and appropriate strategies developed for resolving them," Dr James Kaiulo said in his 30th Graduation address.

"With this approach the Institution can adopt innovative ways of addressing these problems as special challenges."

The Vice-Chancellor identified the following important issues for the University to address:

•difficult fiscal realities in Papua New Guinea.

•competition with other public and private tertiary institutions in Papua New guinea for able students;

•Competition with other public tertiary institutions in Papua New Guinea for National Government funding;

•merger of public training colleges (such as PNG Forestry College and TFTC) without adequate additional funding support;

•implementation of the University's Development Objectives and Strategies 1994-2000 Plan; and

•security and social concerns on University campuses.

He stressed that in order to progress the University needed to:

•face up to external realities and accept the need for fundamental change and purposeful restructuring of the University;

•secure commitment from Government to provide adequate funding for recurrent activities and additional funding for developing transferred colleges to the University;

•provide appropriate leadership for the implementation of University's Development Objectives and Strategies 1994-2000 Plan; and

•convert mission and planning into practical action that will provide resources to support needed improvements in quality and responsiveness.

"Any higher education institution cannot be managed successfully in this century and the next without an appropriate vision, mission, strategic priorities and promotion," Dr Kaiulo said.

"The current vision of the University is to be established as a top University, known for excellence of its teaching, research and community development programs for meeting the changing needs of Papua New Guinea society in the 21st century."



Witnessing the return of March graduations are some of the 55 students who missed out last November

By CORNEY LAHIES

In order to achieve the objectives of the University, the Vice-Chancellor also outlined values to foster the spirit of innovation and creativity in staff.

These values include leadership, innovation, transcending disciplinary boundaries, responsibilities to society, learning, dedication to work, commitment to quality and partnerships.

It was also critical that the University undertook strategic planning in order to be more effective in its overall operations.

Areas identified included University wide campus-based and program-based strategic planning; implementation of approved restructuring initiatives at Taraka, Bumbu, and Bulolo campuses; develop strategies for promoting private fundraising activities, develop strategies for capital improvement program; and involve the University Community in a process of institutional change through appropriate consultation process.

"Any Government of the day will continue to require higher education institutions to provide evidence that they are positively contributing towards the human resource development in Papua New Guinea," Dr Kaiulo said.

"This situation will become more critical as the national re-

sources for distribution decline over time.

"It is important to redesign academic and administration functions if the current ones are ineffective and inefficient.

"The objective of redesign or structure is to undertake a comprehensive study of all University academic, fiscal and administrative systems in order to improve services and create significant cost saving efficiencies."

Meanwhile the University Council also approved the establishment of the Unitech Foundation, a non-profit organisation aimed at improving the fundraising status of the University over the long term.

In his final remarks to the graduating students, the Vice-Chancellor reminded them of their potential as change agents in society.

"John Maxwell stated that leadership is influence, it's a simple straight forward, one word description that places leadership within everyone's reach," Dr Kaiulo said.

"All of us can exercise a certain degree of influence on someone, at some point in some place.

"Henry Ford, said: Failure is the opportunity to begin again, more intelligently. Henry Ford expected failures on the way to success. It was all part of the learning process, he allowed failure to tutor him, then he continued on down the path that much more smarter and wiser.

"Lastly, don't do something simply because everybody else is doing it, you should consider yourself an agent for a good positive change for our society."

Thanks for the fond memories-Bele

"Unitech has not been just a place of study, but a sweet and loving home, the place of growth and maturity, the place of meeting new friends and establishing life time friendship; and changing and shaping of vision and dreams of life and occupation."

These are the words of Student Respondent, Ms Bele Guragu, during the 30th Graduation ceremony of the Papua New Guinea University of Technology last Friday.

"We have all come to this place as strangers, however, this place has made us one with a common purpose, to be the ambassadors of the Papua New Guinea University of Technology," said Ms Guragu.

"It is my belief that if by God's grace that we have come this far, then it is proper to honor and thank God our Maker, and serve him and his people in our various trained fields and contribute to the development of this beautiful nation."

While delivering her response on behalf of the graduands, Ms Guragu said that they were honored to be given the opportunity to graduate at the beginning of a new academic year.

Ms Guragu thanked the University Council and Administration for being considerate in staging the graduation last Friday instead of having students wait until 1999 to graduate.

"We commend you for your consideration, it gives us joy and we are satisfied of your timing to see our achievement and fulfilling our dreams.



Student respondent Ms Bele Guragu

By STEVEN BUSIN

" Your timing of the graduation in the early part of the year has also made it possible for us to have our certificates that will guarantee us the possibility of early employment."

She also thanked the Student Services for making their stay at Unitech comfortable and enjoyable.

"I sincerely thank you for providing an environment that had been conducive for our livelihood and studies here."

She finally thanked the SHRM management, the University Clinic, Security Services, and the whole University community, who have one way or another contributed to their well being at the University.



Engineering graduate being congratulated by the Chancellor

The Reporter is produced weekly by the **PUBLIC RELATIONS UNIT.**
Deadline 4pm on Tuesday weekly.
Editor: CORNEY LAHIES phones 473 4298
Journalist:STEVEN BUSIN 473 4290
Secretary: ANGELA BOROMANA 473 4291
The Media is most welcome to use stories with due acknowledgement
Mailing Address:
Public Relations Unit
PNG University of Technology
Private Mail Bag Lae- MOROBE 411 - PNG
Fax: (675) 4757 667
email: reporter@unitech.ac.pg or cklahies @globalnet.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Forestry gets K11m aid for infrastructure

The University has secured an AusAID funding of K11.03 million for its public investment programme for 1998.

"This is earmarked for the HRD Forestry project components at the University which include the construction of a Forestry Building at Taraka and the upgrading of facilities at Bulolo University College," Dr James Kaiulo said.

He added that the University was currently negotiating with the Department of Planning and Implementation, for outstanding PIP projects for the University to be put in the pipeline for fund-consideration.

Meanwhile one of the major exercises undertaken by the University in 1997 was the integration of the diploma course offered at the Bulolo University College, with the University's Forestry degree and diploma programmes.

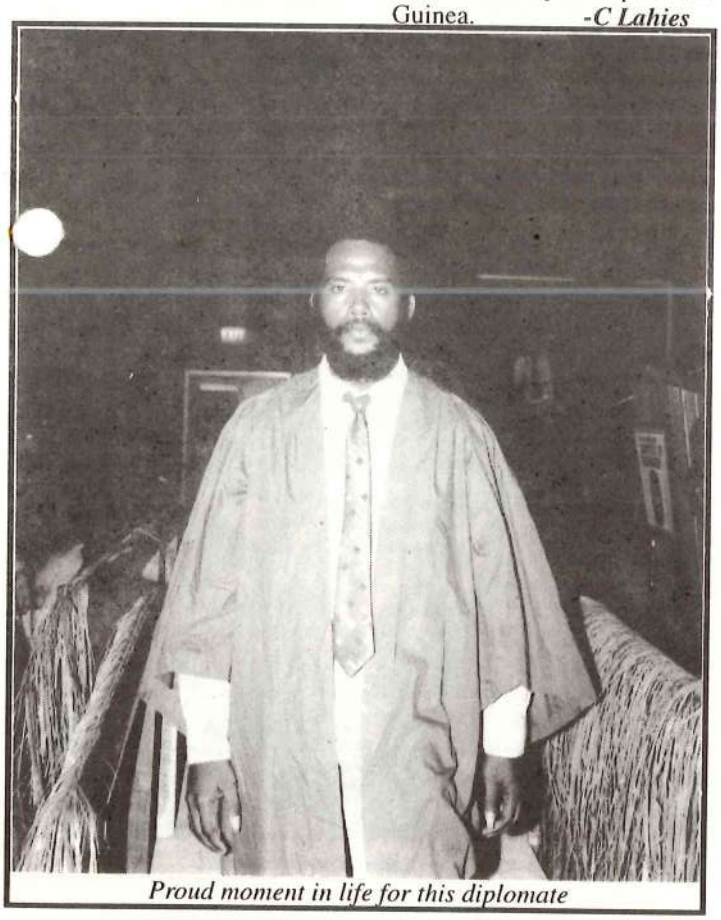
"The integration will serve as the driving force for upgrading the teaching facilities for second and third year students in 1998 onwards at the College," Dr Kaiulo said.

"In addition, this College will also serve as the University Centre for the Bulolo/Wau area in distance learning and for other University activities."

Under the Integrated Forestry Studies Unit, Timber and Forestry Training College (TFTC) would continue to provide pre-employment technical training (PETT) courses, and also provide the practical training for students undertaking the undergraduate diploma and degree studies in Forestry.

TFTC offers about 25 general trade courses, PETT and Apprenticeship courses in saw doctoring and wood machining extension courses.

The College plays a vital role in implementing the Government's policy on log harvesting and downstream processing in the Country, and continues to provide valuable input into the major changes and development affecting the timber industry in Papua New Guinea. *-C Lahies*



Proud moment in life for this diplomate

FUNDING HOLDS THE BALANCE-MD



Guest Speaker at the Graduation Ceremony Mr Lalatute Avosa

Funding constraints will continue to affect the success of education in the Country according to the Managing Director of Telikom PNG Ltd.

Mr Lalatute Avosa sounded this warning as he addressed the 30th Graduation Ceremony last Friday at the Duncanson Hall.

"Funding constrains seem to be the most single factor that holds the balance of success," Mr Avosa said.

"Coupled with this are inadequate staffing levels and the perceived ambiguity on the status of the Commission of Higher Education Sub-sector.

"These issues continue to be the prevailing major deterrents to the progress in producing the expected quality output, such as the 55 who are graduating today."

He also cited the 1996 report of the Commission for Higher Education which "recognised the limited success and outright failures in achieving the main objectives of the 1990 Higher Education Plan and attributed this to some of the major constraints."

He said the same report also highlighted action plan which would target dates for the completion of major tasks.

"It highlighted the areas of systems development, academic quality assurance, regional and sectoral co-operation, student financing and information sharing and planning and management of the budgeting and resource allocation system," Mr Avosa said.

"Don't ask me about the success of this action plan, because I don't know.

"These are the issues we can not avoid, if we are to produce quality graduands at the end of a four year learning cycle or learning experience.

"I know those who are present today at this graduation would no doubt support me that these issues are essential and critical means to achieving the end product (out-put)."

Mr Avosa drew an analogy between the production of a graduate and the process where raw materials were fed through different stages of the production line.

"This process is of significant importance to today's occasion, because having taken time to reflect on the past four years of institutionalised learning, we realise that we have just completed another learning cycle today," Mr Avosa said.

"To the graduating students, you have just graduated and are transiting into the next phase of the learning cycle, which David Golb, one of the 'gurus' of learning calls experiential learning." *- C Lahies*

He urged the graduating students to take the moment to reflect on their past performances before they ponder their future.

"By asking the right questions we will be able to have better insights on issues confronting our education system and process, which will then enable us to do better next time," he said.

"Perhaps we will be more focused in our education and learning processes."

In trying to define Education from Training he said: "Education has been referred to as an end in itself, while Training is regarded as a means to an end.

"Education is defined in the Oxford dictionary as "systems of instruction and development of character and mental power ie knowledge.

"Training is defined as acquition of requisite skills, knowledge and attitude, both are believed to take place in two different environment and settings- one long term and the other short term.

"The most significant concept which challenge and link these two differing metaphors is the concept of learning.

"Learning takes place in both environments, educational institution or university and a training centre or classroom situation."

He said however, because of the strong belief that education is an end in itself, rather than means to an end, may have been led to believe in an education system that has negative connotations that learning stops at grades 6, 8, 10, 12 or at graduation at university.

"Even today, most graduating students, if not all would be thinking that this is it, I have made it !" Mr Avosa said.

"In fact, most of the students might be thinking that learning ends here with graduation.

"No, you have just successfully completed learning in an institutionalised environment."

Meanwhile Chancellor Sir Alkan Tololo urged students to look beyond their new qualifications and develop an interest in learning.

"Learning does not stop when you graduate and becomes a professor or director, as the Guest Speaker said, this is not the end of the formal part of education, there is more to learn in life," Sir Alkan said.

"You must also congratulate yourselves in achieving what you have set to achieve."

Telikom and Ericsson are joint sponsors of new chair

The University of Technology has secured a major sponsorship of the Personal Chair in Communication Engineering with Telikom PNG Limited and Ericsson Business Communications.

The Managing Director of Telikom PNG Limited, Mr Lalatute Avosa, who was the guest speaker at the 30th Graduation ceremony last Friday, hailed the sponsorship as a special partnership in developing PNG's human resources between the concerned organisations.

"The invitation by the Vice Chancellor of Unitech signifies the mutual understanding and relationship the University and Telikom PNG Limited have in the process of developing our most important resource, the human resource," Mr Avosa said in his opening remarks.

"Telikom PNG Limited recognises the importance of the existence of this University, and other tertiary institutions and the role they play in the development of our human resource.

"This is further signified by our input into the progress of this University, and as a token of sponsorship of the chair of communication engineering, it's a great pleasure to announce that I will be handing over the 1998 sponsorship of K62,000 to the University."

A formal presentation of the sponsorship by the two communication companies would be held later this Month.

The Vice-Chancellor described the new sponsorship as another milestone which supported one of the objectives of the University - to develop further strategic alliances with industry, commerce and the community.

"The sponsorship will enable the Department to appoint a senior academic in the area of communication engineering for the next three years commencing in 1998," Dr Kaiulo said.

"This arrangement will enable Telikom and Ericsson to have a direct input into the development of the communication engineering curriculum at this University."

Meanwhile, the Vice Chancellor also paid tribute also to the Mineral



Managing Director Lalatute Avosa announces the sponsorship

By CORNEY LAHIES

Resource Development Corporation's (MRDC) sponsorship of the Chair of Mining Engineering which ends this year.

"It is pleasing to report that the MRDC sponsorship of the personal chair in Mining Engineering will be in its third year in 1998," Dr James Kaiulo said.

"The assistance from MRDC has enabled the University to use its limited resources in other needed areas of its operations which were not funded in 1997 and 1998."

The sponsorship deal is a culmination of several years of negotiations between the University, Telikom PNG limited and Ericsson Business Communication.

The Vice Chancellor also said the University and industry must develop symbiotic relationships which would enable mutual benefits to both parties.

"The University will identify programmes the industry is prepared to support in terms of personal chair sponsorships or other suitable funding arrangements to cover the immediate shortfalls in the University operations du[illegible] declining budget support, [illegible] Kaiulo said.



Class of '98..about to be named...

VC pleads for Government action over Natschol funding

The Vice Chancellor Dr James Kaiulo has called on the National Government to urgently address the Natschol budget situation before the end of the first semester.

He made the call last Friday during the 30th graduation ceremony, where 55 students graduated in the ceremony which sees the return of the March graduation ceremonies.

The Vice chancellor also raised concerns over the level of funding of the University budget by the National Government which was the same as last year's allocation.

"The Government has appropriated K25 million for 1998 which in essence is the same as 1997," Dr Kaiulo said.

"However, the real value of the budget support for 1998 will be less than that for 1997 because of the declining value of the Kina.

"This will have a significant effect on the operational areas especially in teaching and research, since 80 per cent of educational resources are imported.

"Funds from the Office of Higher Education are earmarked for covering the direct student costs eg tuition, boarding and lodging, and book and equipment allowances, and the maintenance for academic plants, student and staff accommodation; the major set back in this area in 1998 is the shortfall of K8 million in the Natschol budget," Dr Kaiulo said.

"It is crucial that the Government addresses this shortfall urgently before the end of the first semester in order to minise disruptions to the academic programmes of the University."

In reviewing the activities of the University, Dr Kaiulo pointed out that the funding deficiency would affect the infrastructure maintenance of staff housing and academic buildings of the three university campuses.

"These funding issues continue to take up a great deal of time, creating uncertainty of our cash flow and is most inappropriate when attempting to operate well planned long term structured academic and research programmes," Dr Kaiulo said, adding that those programmes were essential for meeting Government's planned growth in student intake from secondary schools and output for the workforce.

The Vice Chancellor also raised what has been an ongoing problem in the University in recruiting academic and specialist support staff to replace those who leave for long term studies (PhDs) or other government agencies and the private sector.



Academic procession at the graduation... proceeding into a future of uncertainty in higher education

"The University has identified 15 senior academic positions in various academic departments which have not been funded over the last couple of years," Dr Kaiulo said.

"It is important that these positions be funded in 1998 and beyond in order to address critical staffing levels in certain academic departments.

"Senior academics are required to provide critical leadership in the various academic programmes at the University."

In other related issues, the University has experienced an increase in 1998 students intake with 82 overseas students, and 433 female students out of 1,872 registered full-time students.

Meanwhile, the University is continuing to address the gender imbalance in the student population.

The University will also continue to consolidate its new academic programmes in Computer Science, Applied Physics with Electronics, Business Economics, Forestry Management and Communication for Development.

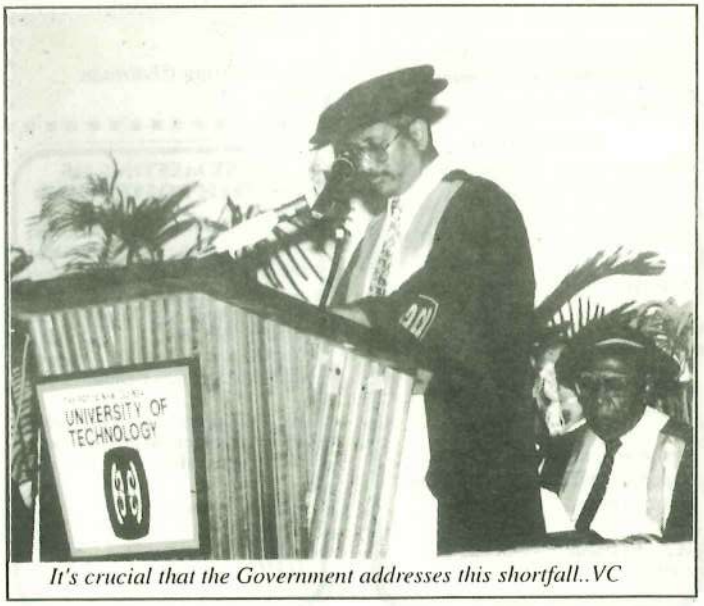
According to the Vice Chancellor, the University will be also seeking funds from external sources to fund the new Postgraduate Scholarship Scheme aimed at attracting promising young graduates from this University to work on various research projects at the University as part of its research and development programme.

"The University Research Centres, namely the PNG Environmental Research and Management Centre, Unitech Biotechnology Centre, and the Architecture Heritage Centre of PNG have made initial developmental progress in terms of research and development activities, as well as the archival of architecture heritage of Professor Mac Ruff," Dr Kaiulo said.

"However, there is a need for identifying suitable citizen academics to understudy the current non citizen directors of these centres for the long term."

The Distance Education Programme of the University was another area which received a boost in the appointment of Mr A Koigiri formerly of the Mathematics & Computer Science Department as its new director.

-CLahies



It's crucial that the Government addresses this shortfall..VC

CAMPUS BULLETIN BOARD

RAFFLE TICKETS APOLOGIES

Due to poor sale of tickets, the drawing of the 30th Anniversary tickets has been moved to the next Council Meeting in July. We apologise for any inconvenience caused by this delay. Tickets will be available soon from the Committee members.

Corney Lahies

NOTICE

Easter Long Weekend

This is to advise that the University will be closed for business on Thursday 9 April 1998 at 4.06 pm and will re-open for business on Tuesday 14 April 1998 at 8.00 am. All essential services areas however will remain open and operating as usual.

Happy Easter

Tess Chan
REGISTRAR

SEMINAR

Department of Business Studies

STAFF SEMINAR
"1998 Budget, Kina and the Economy"

Speaker: Dr. Asoka Seneviratne (Head of Economics)

Venue: L3

Date: 8/4/98 (Wednesday)

Time: 12.00 to 1.00 pm

Snacks will be provided. All are welcome

Associate Professor Anthony Agyei
Seminar Co-ordinator

THANK YOU

The SRC is grateful and wishes to thank the following person(s) or group for assisting in its fundraising movie show last Saturday (28/3/98).

1.Dr Asoka Seneviratne for donating the film.
2.Central Facilities Department Staff.
3.SRC Fundraising Committee
4.Security Group
5.The Reporter
6.Valued Customers

We had to show our movie on ANACONDA twice that evening due to customer demand. We have collected K606.08 for the SRC.

We have more thrilling movies that worth your money coming your way so don't miss one of them.

Keep watching for our advertisement. Thank you for your assistance.

Fund Raising Chairman
SRC

SECURITY NOTICE

Campus Residences

This is to draw to your attention the following Security Measures that staff and students should be aware of and undertake for the best interest of all campus residents.

1.That Security Personnel have been adivsed not to release any information to any unidentified persons from outside who enquire either at the main gate or the Security Office about personal particulars and residences of staff and students.

2.That staff and students who have visitors must inform the Security and Dean of Students respectively, of the identity of their visitors.

3.Without the information in point (2) above, Security will not allow any visitors to proceed to the staff and students residential areas.

4.That staff members proceeding on weekend trips off-campus or going away from campus for an extended period must make alternative arrangement for someone to look after their residences. It is also advisable for staff to inform the Security if they go out of campus for functions, dinner, etc., so that mobile patrol can be informed to make regular checks on unattended residences.

To minimise break and enter and unexpected guests, campus residents are advised to comply with these measures.

Wilson F Tovirika
Chairman - Security Committee

UNITECH CRAFT AND SOCIAL CLUB

NEXT MEETING: WEDNESDAY 8 APRIL
TIME: 9:30 AM PROMPT
VENUE: MEET AT 130 SEPIK DRIVE

THIS WEEK WE WILL VISIT THE RAINFOREST HABITAT. THE CHARGES ARE ADULTS ON CAMPUS K2.50, OUTSIDERS K5.00, CHILDREN UNDER 15 YEARS K1.50. DRINKS ON SALE K1 EACH. IT MAY BE POSSIBLE TO BUY HIBISCUS CUTTINGS FROM K2.50 EACH. WE'LL MEET AS ABOVE THEN WALK TO HABITAT.

EVERYONE WELCOME

Unitech Citizen Women's Association

The meeting for UCWA on Sunday 29th March, 1998 has been deferred to Sunday 12th April, 1998 at 2.00 pm at the Union Hall

Agenda

Election of Office Bearers.

New members are encouraged to attend.

Please your attendance is very important and ensure that you be there on time.

Vice-President
UCWA

FIRST MEETING OF UNITECH POETRY CLUB

This is to inform all interested persons that the first meeting of the proposed Unitech Poetry Club would be held on the 15th April 1998 starting at 4.00 pm in the TLMU/Student Services Conference Room. It is next to the Girls Amenity Centre.

We will appoint our office bearers and other important issues will be discussed also.

See you all there.

John Sari
TLMU

National Staff Association

Notice to those National Staff in various Departments/Sections who have not submitted the names of their representatives to be on the NSA Management Committee to do so as soon as possible. We would like to meet with the representatives as early as possible and look at our (NSA) representation on the various relevant University Committees.

LOTU TAIM

Unitech Staff Bible Study

The next meeting of the Unitech Staff Bible Study group will be held on Monday, 6th April, 1998 at 7.00 pm.

Venue: 86 Fly Drive

For Discussion: The History of the Christian church.

All interested staff are welcome.

Patrick Afenya (Tel: 4674)

Unitech United Church Weekly Program

Sunday service: 8:00 am to 9:30 am. At the Christian Centre.

Monday Night Fellowship: 7:00 pm to 9:00 pm. At the Christian Centre.

You are most invited in Jesus name to attend the service and the fellowship night. God Bless.

Publicity Officer

Fundamental Baptist Fellowship

Interested staff members, friends and students that our proposed Coffee Night is on tonight, so you are cordially urged to show up for another great time of fellowship.

Venue: HLT (Civil Engineering Dept)
Time: We wish to begin at 7.30 pm
Preacher: Mr Y Mazzewin

Not forsaking the assemblying of Believers - Heb 10:25

Publicity Officer

CLASSIFIEDS

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SPORTS

Bulolo Uni College backs students team in city soccer competition

The Bulolo University College after nine years of absence from any sporting activity has entered a soccer team to participate in the Lae Football Association (LFA) competition.

And to show the College's support for the team, the administration presented the soccer club with two sets of uniform that students would use at the LFA competition.

"Sports at the college went in for holidays and a lot of our students played for outside teams, however, most of them have been harassed whenever participating in local competition here in Bulolo," said Bulolo University College Principle Steven Sangau.

"It was through this experience, that the College decided that we should have sporting teams from the College participate in sporting activities in Lae, for we believe they are a lot safer for our students.

"Sports is part and partial of the integral development of a human being and students need some sort of physical activity."



Principle Steven Sangau presents the set of uniforms to students

Sangau said that students at the main campus were participating in various sporting activities in Lae and it would be only fair on the students at the college to also go into sporting activities.

The soccer team would be coordinated and coached by Artis Vinas and Timothy Sawaraba.Steven Kalate would act as manager. S.B

Fun With Mathematics

Solution to Problem2

Let the numbers be denoted by a,b,c &d.
Then we have,

$(a+b+c)/3 + d = 17$
$(b+c+d)/3 + a = 21$
$(c+d+a)/3 + b = 23$
$(d+a+b)/3 + c = 29$

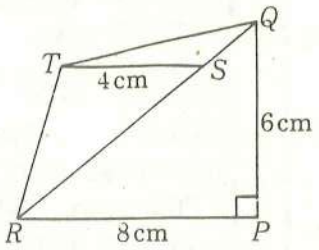
Adding all the equations, we get $a+b+c+d = 45$. Using this equation to substitute into the four equations above gives the answer a=9, b=12, c=21 and d=3

Solution to Problem 3

Let the ages of the children be x-4y, x-3y, ...x+4y and the man's age be z.
Solving equations with given conditions, we have $9x^2 + 6y^2 = z^2$
x, y, z are integers and z is man's age.
Therefore, y should be either 2,3 or 4. After substitution and checking, we can get x=14, y= 3 .

Problem 4

In the figure RPQ is a right angle and ST is parallel to PR. The lengths of PQ, PR, ST are shown.
What is the area in square centimeters of triangle RQT ?



Congratulations!

Xin Luo, BSCS 3 wins the first correct entry prize this week also.

K5 for first correct entry.

Please send your detailed solutions before 13th April 1998
to **Dr. Neela Sukthankar**, Dept. Of Mathematics and Computer Science.

AIRMAIL

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Building course accreditation to give students world opportunities

The Building course of the Papua New Guinea University of Technology was formally presented its accreditation certificate from the Australian Institute of Building last Tuesday.

In a brief presentation ceremony, the Vice Chancellor, Dr James Kaiulo presented the accreditation certificate to Head of Department of Architecture and Building Professor Rahim Milani, witnessed by both staff and students of the Department.

Dr Kaiulo said he was proud that the Department of Architecture and Building was able to gain recognition from an international body.

"I am impressed by the D[illegible]rtment and acknowledge t[illegible]dedication of the staff and the dedication of the past, present and future students," Dr Kaiulo told staff and students gathered for the presentation ceremony.

"I am sure with the skills we have of cooperation and understanding, we can take your program to new heights in the next century."

Professor Milani in response said: "Indeed, it is a great achievement for the Department to receive accreditation for its Building course from the Australian Institute of Building.

"The achievement of accreditation of the Building course has been a long and sometimes cumbersome process.

"It began with the vision of the Department to develop its courses and facilities to a level equal to those of the best universities anywhere in the world."



Vice Chancellor Dr James Kaiulo presenting the Accreditation Certificate to Head of Architecture and Building Professor Rahim Milani

The accreditation followed a review by the Department of its Building course and, in consultation with the Australian Institute of Building, a revision of the curriculum to bring it in line with similar courses offered by Australian universities.

The facilities of the Department also had to be reviewed and improved in order to implement the new course.

Professor Milani said that for four years the development of the students undertaking this course was carefully monitored.

He said when the Department felt that the time was right, a visiting panel of the Australian Institute of Building came and inspected all aspects of the

By STEVEN BUSIN

course including;

- curriculum and syllabi
- lecture notes
- marked examination papers
- student projects
- and the facilities of the University and the Department that support the course.

"To carry out this process a harmonious working relationship was required amongst staff in order to maintain a high level of collaboration on all aspects of the preparations," he said.

"It took strong commitment to this shared goal, perseverance and endurance to see the process through, and at times a lot of patience with one another.

"We can all rejoice that our efforts have borne fruit and been rewarded, and I would like to extend our gratitude to everyone who has contributed towards this achievement.

"Firstly, we extend our sincere appreciation to the University Administration for their on-going support and encouragement throughout this process of accreditation.

"We also have to thank businesses in the community, such as Papindo Trading, Boinamo Enterprises, James Hardie and Company, for their generous support of the Building course.

"A very big thank you is due to the academic and support staff of this Department, including those who are now on study leave overseas and cannot be with us here today.

"I would particularly like to acknowledge the hard work and commitment of Paul Constable, the Director of the Building course, and the long hours which

the core staff of the building course have invested in this process.

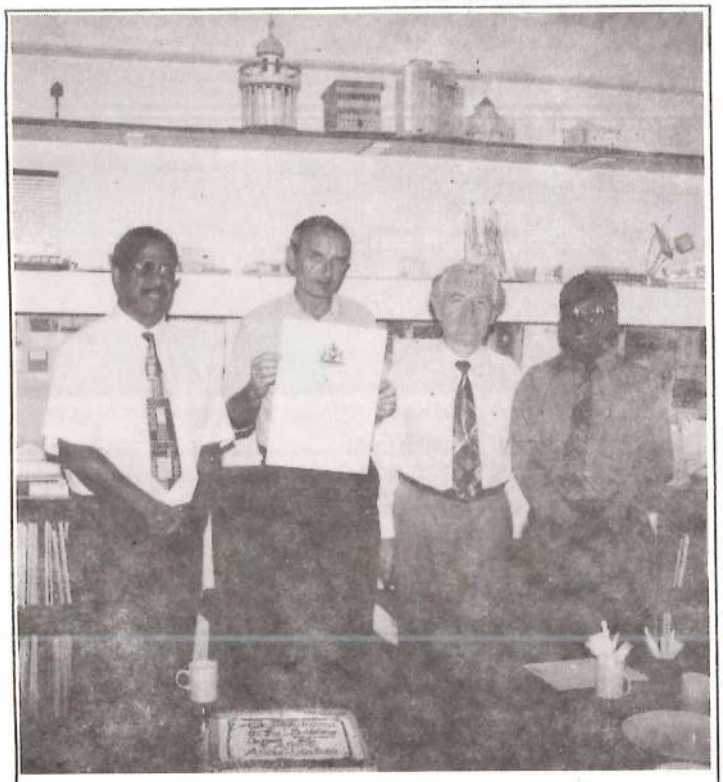
"We owe our thanks to the students of the Building course who have been involved in this process and for whom this achievement is the most beneficial.

"We sincerely hope that this accreditation by the Australian Institute of Building will open many doors of opportunity for the students who graduate from this University with the Diploma or Bachelor in Building, not only in PNG but also overseas.

"It is only through the united efforts of everyone involved, both individually and collectively, that this vision of the Department has now become a reality, and we all can be justifiably proud of this achievement."

Professor Milani also revealed that to ensure that high standards were achieved in the future, both the diploma and degree programmes would be monitored on an annual basis by a representative of the Australian Institute of Building.

"The Department is confident that the changes recently implemented in the courses will better develop the students' ability to face the challenges and changes in the construction industry in PNG into the next century and also allow them the freedom to engage in employment or further studies in PNG or elsewhere in the world."



Building Coordinator Paul Constable with the accreditation certificate flanked by Dr James Kaiulo, Prof Milani and Pro VC (Academic) Dr Philip Siaguru.

Security supervisors complete course



Pro VC (Admin) Wilson Tovirika presenting Romio Sunam his certificate at the Staff Amenities Centre.

Six supervisors of the Campus Security recently completed a surpevisory course as part of their ongoing in-house training.

At the certificate presentation ceremony at the Staff Amenities Centre, the Chief Security Officer, Patrick Sakail said training was very important in improving the knowledge and skills of security personnel on campus.

Mr Sakail said it was important for security supervisors to perform their tasks effectively and meet the safety requirements and satisfaction of the public.

As part of the Security Section's on going training program, several Security Officers have already attended courses conducted within the university, and at the Guard Dog Security Training Centre outside Lae city.

Under the new training program, the Director of Security would conduct the first phase of the course, and at the same time he would also be conducting other phases of the training program for other security personnel.

Pro Vice Chancellor (Administration) Wilson Tovirika during the certificate presentation ceremony, assured the security supervisors of the administration's support in such training programs.

Mr Tovirika said security personnel should go through training of such sort to better understand what is required of them, and how they can effectively and efficiently perform their tasks.

He also said there was a need for security personnel to know what risks they would be involved [illegible] techniques on how to avoid such risks.

He said that it was unfair for the University to expect security personnel to perform at a higher level if there was no training.

Mr Tovirika also urged the course participants to apply whatever they had learnt to enhance their performance in the overall operation of security on campus.

The Reporter is produced weekly by the PUBLIC RELATIONS UNIT.
Deadline 4pm on Tuesday weekly.
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The Media is most welcome to use stories with due acknowledgement

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Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Unitech Savings & Loans declare increased profit

The Unitech Savings and Loans Society maintained its performance record by registering an audited net profit of K191, 226 for 1997.

The profit is a 22 percent increase from 1996 profit of K41,466.

According to the Unitech S&L Treasurer, Francis Gumembi, the society earned K114, 952.58 from interest charged to members on loans and interest earned from short term investments with commercial banks collected K86, 069.54 for the society.

Gumembi said in his report that in 1997, the society realised the benefit of buying shares in the Orogen and Investment Corporation which paid out a total dividend income of K15, 291.32.

Gumembi said that the annual service fee of K15,000 to the Bursars Department continues to be the major expense for the Society.

Board of Directors Chairman, Paul Isan in is report said that out of the gross profit of K191, 226, the board approved the transfer 20 percent of the profit - K38, 245 to the General Reserves leaving K152, 980 to be distributed to members as dividend for the year 1997.

He said that the board recommended that members be paid 6 percent dividends for 1997.

The Savings and Loans savings as of 31st December 1997 was K2,487,147.18.

Investment committee chairperson Joy Sahumlal said almost 50 percent of the Society's total income was generated from investments last year.

"In 1996, the Investment Committee made its first bold move to purchase 20,000 shares in the Orogen for K1.75 per share, netting by the end of the Society's financial year a total amount of K600 in dividend," Sahumlal said.

"Again mid last year, the Board made another major investment by purchasing 66, 700 shares from the Investment Corporation worth K199, 998.

"By 31st December, 1997, the society made a total revenue of K101, 360. This amounts represents 39.8 percent of total income earned from both investments in IBDs from commercial banks and 7.1 percent from the Orogen and ICPNG investments valuing a total of K15, 291."

Loans committee chairman, Ham Wallum in his report stated that the loans considered and processed a total of 1466 loan applications during the year with a total value of K2, 031, 525.

He said the committee has continued to emphasise on educational oriented loans together with funeral related costs because of their nature.

"It is also pleasing to note that members were using the society for their well being and it is evident in items such as purchase of vehicles, building materials, family and medical related expenses, and household items loans," Wallum said.

"Due to the effects of the El Nino in PNG in the later part of the year, the Society also assisted members applications for drought purposes.

"The Loans Committee, considering the burden and sacrifices members go through in repaying their loans and considering our current economic situation, strongly advice members to borrow wisely.

"Members are advised to plan, budget and seriously consider the implications of what loans can have on their family before applying for them. It is wise to ask for what you can repay is within your means."

Manual for national staff training and development reviewed



Pro VC (Admin) Wilson Tovirika being presented the training manual from Ila'Ava Pat at the Council Room

A revised Policy and Procedures Manual for National Staff Training and Development was presented to the Pro Vice Chancellor (Administration) Wilson Tovirika last Friday.

The policy and procedures manual was presented by Mr Ila'ava Pat, acting President National Academic Staff Association (NASA).

Mr Pat describe the process of reviewing the procedures manual as a challenge for him and also as a positive contribution the University.

As part of the review process, a two day workshop was conducted to gauge the view of national academics and non academics on the old manual.

According to Mr Tovirika, the policy and procedures manual was developed by the Training Office, and sent to the Localisation and National Staff Training Committee which at that time thought it was adequate, and approved it.

However, it was later discovered that in certain areas, the manual still needed improvement, therefore, it was decided that the manual be revised.

"When Pat returned from studies overseas, he was given the task to critically look at the document, and I am glad that he took the challenge," Tovirika said.

Mr Tovirika thanked Pat for the work he put into the manual and called on members to abide by the guidelines specified in the document.

"My view was to always involve the NASA to come up with policies and comments that are best for the University," he said.

Acting Career Development Officer, Geno Kila said the training manual was now more simplified.

"It's like a 'bible', it has everything from book allowance, settling allowances as it is more or less like the Public Service General Orders," Kila said

According to the manual the training of national staff at the University of Technology involves academics and non-academics, the former are teaching staff and the latter are professional and Library staff.

"The training of national staff at Unitech requires input from staff under training, the various departments/centres at Unitech, the Government, industry, sponsors or training institutions both within and outside of PNG," Mr Pat said in the manual.

"The trained staff may impact on the activities of his/ her Department at Unitech, the Unitech community outside his/her department, Papua New Guinea or even internationally.

"Indeed, the responsibility of Unitech is to ensure that (upon successful completion of studies) national staff contribute positively to life at Unitech and to the wider community.

"Consistent with this aspiration, and also with Unitech's vision for excellence in tertiary education, the mission of the Localisation and National Staff Development Committee (LNSDC) is to put in place a framework to produce and retain high quality and highly motivated national staff."

Computer Spot backs 2nd International Huon Seminar

The Second International Huon Seminar has received its first lot of sponsorship.

Computer Company, Computer Spot, and Office of the Pro Vice-Chancellor (Admin) as part of their sponsorship to the Huon Seminar, both presented a computer each valuing more than K10,000 to the Chairman of the Huon Seminar and Pro Vice-Chancellor (Academic), Dr Philip Siaguru recently.

Dr Siaguru thanked both Computer Spot Company and Office of the Pro Vice-Chancellor (Admin) for responding to the University's call and added that it was a timely donation as it would greatly assist in the planning of this year's Seminar.

He said the computers would play a vital role in the planning, programming and the dissemination of information to interested participants of the Second International Huon Seminar.

The Seminar's organizing committee is anticipating about 300 participants, both within the country and abroad, to participate in the week long seminar scheduled from 7 - 11th September.

The Seminar theme for this year is "Resources for Science and Technology in Development" with a focus on signifying the importance of appropriate resources needed to expand knowledge.

The Seminar's specific goals are to review the current human and fiscal resources base and identify its major weaknesses; discuss and debate the availability of these resources in enhancing development processes.

The Seminar would also discuss the importance of quality research and propose improvements to link research to education/industry/training; and identify sources and develop performance indicators for Higher Education competitive funding.

The Seminar's first announcement and call for papers is already out and abstracts of papers from prospective authors are expected to be received by 15 May, 1998 for reviewing.

The final announcement and registration brochure which would include full details of the programme, social activities, accommodation and registration forms will be distributed at the end of July.

Deadline for papers are as follows:

•Abstracts of Papers are to be received by 15 May.
•Review of Papers to be made by 29th May.
•submission of Papers for final reviewing to be received by 15 July.
•Notification of acceptance of Papers to be made by 31 July.

Seminar registration fees are:

•External (Overseas) K250
•Internal (PNG) K200
•Unitech Staff K100
•Students K20.

Further information could be obtained by contracting the Huon Seminar Executive Officer on Phone 473 4244 or fax 475 7667 or 473 4220 or email: hsem@unitech.ac.pg

UNITECH CONSIDERS COLLEGE PROPOSALS

The Technical Division of the Department of Education has submitted accreditation documents to the University on behalf of Lae Technical College and Port Moresby Business College.

The accreditation proposal when approved would enable diploma graduates of the Lae Technical College and Port Moresby College to continue to pursue degree courses at Unitech in Architecture and Building, Business Studies, Civil Engineering, Electrical Engineering and Mechanical Engineering.

At the presentation of the Accreditation documents the First Assistant Secretary of Special Education Services for the Department of Education, Winsley Degoba told the meeting of the purpose of the meeting .

He said: "Sometime last year, a meeting was held between the University Administration and some Officers of the Department of Education, Technical Division regarding the articulation of graduates from the two colleges into the University of Technology.

"In that lengthy discussion it was agreed that the Technical Division will pursue the preparation of the Accreditation Documents prior to the articulation of its graduates into the University Degree Programme.

"It was indeed a big challenge and a mammoth task for the Division.

"Technical Education Division has responded positively to the central objectives set forth in the National Higher Education Plan, by preparing its facilities and resources for accreditation of its diploma programmes to the University.

"Through consultation and cooperation with the University, the Division expects to promote and ensure the quality and relevance of its Diploma programmes.

"We sincerely appreciate the encouragement and coopera given to us by the University on their project and we hope that the documents will meet the relevant criteria established by your Academic Board."

In his response, the Vice-Chancellor, Dr James Kaiulo thanked members of the Top Management Team and the Technical Education Division of the Department of Education for the preparation of the accreditation documents.

He said the documents would be distributed to the respective University departments for their response, as well as the relevant University Committees over the coming months.Comment d suggestions would be considered before the final documents are finalised.

-CLahies



VC Dr James Kaiulo receiving the copy of a proposal from Winsley Degoba while Professor Young looks on

Safety No 1 priority for Timber and Forestry Training College



Staff member demonstrates the use of Dust mask as part of the TFTC's safety requirements.

The Timber and Forestry Training College (TFTC) is treating safety as its number one priority and is keen to promote safety awareness in the forestry industry.

According to TFTC Principal, Frank Corin, the college has embarked on an aggressive educational campaign to foster safer working practices for employees within the forestry industry in Papua New Guinea.

The Principal's comments came after a story in The Reporter Issue 1278 attributed comments from Neville Hampton of the International Building and Woodworkers [illegible]n that safety standards of the forestry industry in PNG were poor.

His comments attracted strong responses from the PNG Occupational Health and Safety Association and the Timber and Forestry Training College who countered that such statements were misleading.

According to Mr Corin, the college in conjunction with the Papua New Guinea Occupational Health and Safety Association and the AusAID Forestry Human Resource Development (HRD) Program have embarked on a vigorous campaign arranging courses, seminars and general meetings for those involved with the industry.

Through the established links with the industry, TFTC's safety officer has been running safety management courses.

The college has also established links with National Forestry Trade Training Board whose responsibility was to give direction and setting standards for the industry.

"There are also several advisory committees for each section of the industry whose work was to decide on standards, training and give advice on how the college could further help in developing national standards for the industry," Mr Corin said.

"Through the college's involvement with the industry, we are establishing the standards that the industry and us agree that should be in place.

"The college conducts training for the industry and we have got people from all over Papua New Guinea and the Pacific attending courses at the college, and one thing that we strongly instil into them is the importance of safety in their working environment.

"We make a very strong priority in safety in every area of our training, and our students are thought safety right at the beginning of their courses.

"That is true also for the AusAID HRD program with their harvesting training unit which is currently carrying out chainsaw training throughout the industry all over the country.

"There is a strong move from the Papua New Guinea Occupational Health and Safety Association, Forestry HRD Project and TFTC in promoting safety and at the same time, develop it."

Mr Corin admitted there was still a lot needed to be done however, he said, there had been a lot of change regarding safety practises in the country.

"I believe we have been very successful," Mr Corin said.

The college, as part of its safety promotion has formulated a standard set of safety rules and procedures for both staff and students whenever they are within the industrial area.

Timber and Forestry Training College has also employed well trained safety officers who are required to carry out first aid classes, hearing tests for students, and ensuring that all safety requirements or practises are being done by both staff and students.

"We have also done noise tests around the college, and we know what the sound levels are in different areas and what kind of hearing protection is required for those areas," he said.

"Every body in our industrial area is required to wear safety footwear, steel capped shoes, a requirement for everybody in the industrial area.

"We are working hard towards ensuring that all of our staff and students here wear safety footwear.

"It is for our operation and for students benefit, so when they come they can learn what is required of safety."

Mr Corin said the college also provides breathing gear, ear muffs or plugs, safety glasses, gloves and helmets whenever they are required.

It was also a standing college requirement to inform short course students that they would be required to provide themselves with safety gear prior to attending any course at the Timber and Forestry Training College.

The college also has in place a system on accident reporting and follow -ups.

"If anybody has an accident, we have accident report sheets that staff have to complete, and a system to follow, if there are any accidents," he said.

"They are followed up with the details recorded and corrective measures are taken to prevent future accidents.

"In fact, we have very few accidents and a very good record."



Students wearing ear muffs for protection. They are given hearing tests twice a year.

CAMPUS BULLETIN BOARD

RAFFLE TICKETS
ON SALE

Due to poor sale of tickets, the drawing of the 30th Anniversary tickets has been moved to the next Council Meeting in July. We apologise for any inconvenience caused by this delay. Tickets are NOW available from Public Relations Unit or the Committee members.

Corney Lahies

NOTICE

Easter Long Weekend

This is to advise that the University will be closed for business on Thursday 9 April 1998 at 4.06 pm and will re-open for business on Tuesday 14 April 1998 at 8.00 am. All essential services areas however will remain open and operating as usual.

Happy Easter

Tess Chan
REGISTRAR

Condolence Message

The President of National Staff Association, Mr Charles Nakau, the Executive and National Staff members of Unitech sincerely convey their heartfelt condolences to Mr Joel Baite and family on the untimely passing away of their beloved wife and mother, the late

Mrs Elizabeth Baite.

We sympathise with you at this time of sorrow, the staff of Unitech NSA will surely miss her cheerful loving and kind personality.

May her soul rest in peace.

Mr Charles Nakau
PRESIDENT NSA

Condolence Message

Mrs Margaret Bagasi, children: Mino, Elizabeth, Rarua and Gegory and relatives of the late John Bagasi, we convey to you our sincere condolence for the untimely loss of your beloved husband and father. He was truly a man of humility and kindness. We share your greatest loss and pray that you will seek and find comfort in the almighty God in this time of grief. May his soul rest in ever lasting peace.

Sepik Community and Friends of Unitech

Condolence Message

Late Mr John Bagasi

The staff and students of the Department of Surveying and Land Studies wish to convey our condolences and heartfelt sympathy to the family of John Bagasi. John was a highly valued member of staff for more than 15 years and contributed greatly to the development of the Department and many students over the years as a Senior Technical Officer in charge of the Cartographic Laboratory. His untimely passing brings much sadness to the Department and he will be sorely missed. His memory will live in the skills he has imparted to students who are now professionals in all parts of Papua New Guinea.

May his soul rest in peace.

Staff and Students
Department of Surveying and Land Studies

SECURITY NOTICE

Campus Residences

This is to draw to your attention the following Security Measures that staff and students should be aware of and undertake for the best interest of all campus residents.

1.That Security Personnel have been adivsed not to release any information to any unidentified persons from outside who enquire either at the main gate or the Security Office about personal particulars and residences of staff and students.

2.That staff and students who have visitors must inform the Security and Dean of Students respectively, of the identity of their visitors.

3.Without the information in point (2) above, Security will not allow any visitors proceed to the staff a students residential areas.

4.That staff members proceeding on weekend trips off-campus or going away from campus for an extended period must make alternative arrangement for someone to look after their residences. It is also advisable for staff to inform the Security if they go out of campus for functions, dinner, etc., so that mobile patrol can be informed to make regular checks on unattended residences.

To minimise break and enter and unexpected guests, campus residents are advised to comply with these measures.

Wilson F Tovirika
Chairman - Security Committee

Unitech Citizen Women's Association

The meeting for UCWA on Sunday 29th March, 1998 has been deferred to Sunday 12th April, 1998 at 2.00 pm at the Union Hall

Agenda

Election of Office Bearers.

New members are encouraged to attend.

Please your attendance is very important and ensure that you be there on time.

Vice-President
UCWA

FIRST MEETING OF UNITECH POETRY CLUB

This is to inform all interested persons that the first meeting of the proposed Unitech Poetry Club would be held on the 15th April 1998 starting at 4.00 pm in the TLMU/Student Services Conference Room. It is next to the Girls Amenity Centre.

We will appoint our office bearers and other important issues will be discussed also.

See you all there.

John Sari
TLMU

There will be a memorial service for the Late Lucy Smith (daughter of Geoff Smith, former staff member - Department of Language and Communication Studies) on the 18/4/98 at the Coronation School Hall at 2.00 pm.

LOTU TAIM

Lutheran Church

Church of Hope Easter Church Program

Maundy Thursday night 10/4/98, 7.30pm to 9.00pm, service with the Holy Communion

Friday 10/4/98, 9.00am to 11.00 am, main church service. 3.00pm to 5.00pm, get together for prayer.

Sunday 12/4/98, 5.00am to 6.00pm, am dawn service. 10.00am to 1200 noon, main church service.

All Lutheran church members are cordially welcome to attend these church services.

verend Taiye Zawia
Lutheran Chaplain

Easter Bible Stadi, Fuaba Parish, Lutheran Church

There will be series of Easter bible Study base on the Acts of the Apostles in Fuaba Parish, Lutheran church, at the back of Unitech.

Theme: The work of the Holy Spirit in establishment of church and its growth.

Time & Duration: the study will begin on Thursday evening (9/4/98) to Monday afternoon (13/4/98).

Invitation: All who seek the fullness of life of the gospel of the risen Lord are cordially and sincerely welcome.

Come and see for yourself; we have found the Messiah (John 1:39,41,46).

Reverend W. Siawong

Sandaun Students' Association

Drinks Night

Our Drinks Night will beheld on Saturday 11th April 1998.

Time: 6:00 pm
Venue: B Amol's Residence [2nd street opposite Lae Tech when approaching from Bumbu Barracks - Green house with fence].

We extend our invitation to the general Sandaun Community as well as interested friends.

Publicity Officer
Sandaun Students Association

CLASSIFIEDS

FOR SALE

Isuzu Trooper 4WD, Family Wagon excellent condition. Turbo Diesel A/C, power steering, towbar, stereo cassettee radio, tinted windows K17,000 ono.

Queen size bed ensemble, inner spring mattress and base K700 ono. Sharp 14" Colour TV, remote, K150 ono. Please contact 475 7632.

Single Ladies Hostel For Rent

1. 2 x one single room
2. 2 x two double room

Location: Aquarii Street, behind Lutheran Church (East Taraka) 6th house from Unitech bus stop. With security fencing and manned by security guard from 6.00pm to 6:00am. Common Kitchen, Laundry and toilet shower.

K170 per fortnight (single room). K85 per fortnight (double room). Contact: Mrs. Cecilia Watai on telephone: 475 7198

PUBLIC RELATIONS UNIT.

-Unitech Souvenirs-
•T'Shirts
•Caps
•Laplaps
•Neck ties
• Umbrellas

Please call into the Public Relations Unit for price list.

DEPARTMENT OF ELECTRICAL & COMMUNICATION ENGINEERING

ASSISTANT LECTURER

Applications are invited for the above position at this University.

The Department of Electrical and Communication Engineering offers Degree programmes in Power and Communication Engineering. In addition a Diploma course is offered in Communication and Electronics Engineering. The Department offers postgraduate programmes by research work leading to MPhil & Phd. Master programmes by course work in Power & Communication Engineering are being developed & will be offered in 1999. The Department is moving rapidly to introduce from 1999 a new stream, i.e., Computer Engineering Stream.

The Department requires an enthusiastic candidate for an Assistant Lectureship to assist in the undergraduate teaching programme.

The successful candidate should have over four (4) years of industrial experience and the ability to start postgraduate research programme in the Department and who would like a career as an academic.

SALARY:
ASSISTANT LECTURER II
K12,288 - K15,017 plus DMA of K1,500 and 20% of Base Salary per annum.

ASSISTANT LECTURER I
K10,599 - K12,955 plus DMA of K1,000 and 20% of Base Salary per annum.
(Level of appointment depends upon qualifications and experience)

Detailed applications (two copies) with curriculum vitae including certified copies of qualifications obtained and names and addresses, fax/phone numbers of three (3) referees and an indication of the earliest availability to take up the appointment should be received by:

The Registrar,
PNG University of Technology,
Private Mail Bag,
LAE
Papua New Guinea by 17 April 1998

SPORTS

Sepik Soka Competition

The 1998 season of the Sepik Soka Competition will begin after the mid-semester break, on Saturday 2nd of May.

The teams (Male & Female) who took part in the competition last year are urged to confirm your participation if you are still interested, so that the draws can be made in time.

The participating teams are also required to submit the name of a representative to the Sepik Soka committee. The affiliation fee for this season is K10 per team and is due on 2/05/98.

The affiliation fees can be paid to Ben Samson (Lands Dept/Lodge 6, Rm 7), Scholar Maru (DBS/Toluan Rm 1) or Kenneth Koyama (Mech Eng/Duak 20).

Ben Samson
Sepik Soka Chairman

Fun With Mathematics

Solution to Problem2

Let the numbers be denoted by a,b,c &d.
Then we have,

$(a+b+c)/3 + d = 17$
$(b+c+d)/3 + a = 21$
$(c+d+a)/3 + b = 23$
$(d+a+b)/3 + c = 29$

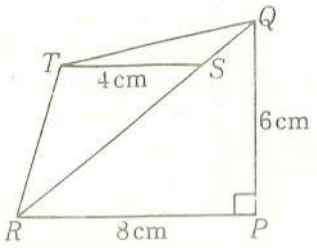
Adding all the equations, we get $a+b+c+d = 45$. Using this equation to substitute into the four equations above gives the answer a=9, b=12, c=21 and d=3

Solution to Problem 3

Let the ages of the children be x-4y, x-3y, ...x+4y and the man's age be z.
Solving equations with given conditions, we have $9x^2 + 6y^2 = z^2$
x, y, z are integers and z is man's age.
Therefore, y should be either 2,3 or 4. After substitution and checking, we can get x=14, y= 3 .

Problem 4

In the figure RPQ is a right angle and ST is parallel to PR. The lengths of PQ, PR, ST are shown.
What is the area in square centimeters of triangle RQT ?



Congratulations!

Xin Luo, BSCS 3 wins the first correct entry prize this week also.

K5 for first correct entry.

Please send your detailed solutions before 13th April 1998
to **Dr. Neela Sukthankar**, Dept. Of Mathematics and Computer Science.

AIRMAIL

STAMP HERE

If unclaimed please return to:
The Editor
Papua New Guinea University of Technology
Private Mail Bag, LAE PNG

PRINTED MATTER

The Reporter
Incorporating campuses at: TARAKA BUMBU BULOLO
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PNG's first Biotechnology Centre poised to attract world class research

PNG entered an elite group of countries following the University of Technology Council's approval of U[illegible]n Biotechnology Centre (UBC).

...e proposal for an Agricultural Biotechnology Centre was initiated in 1993 by Dr Mohamed Wagih and mooted by then Vice-chancellor Misty Baloiloi with support from Dr James Kaiulo who as Pro Vice Chancellor (Planning & Development) was directly involved with the developmental stages of the Biotechnology Centre.

The proposal was pursued further by the Department of Agriculture under the leadership of Prof I Onwueme.

The raw materials for biotechnology development are genes in plants, and Papua New Guinea is one of the wealthiest countries in the world in its plant genetic resources, according to Dr Wagih.

"The wealth of PNG in plant genetic resources now will be conserved and utilised using biotechnological means to pro[illegible] them from extinction under the fi[illegible]nditions due to diseases, pests, land tenure, management, funding and etc.." Dr Wagih said.

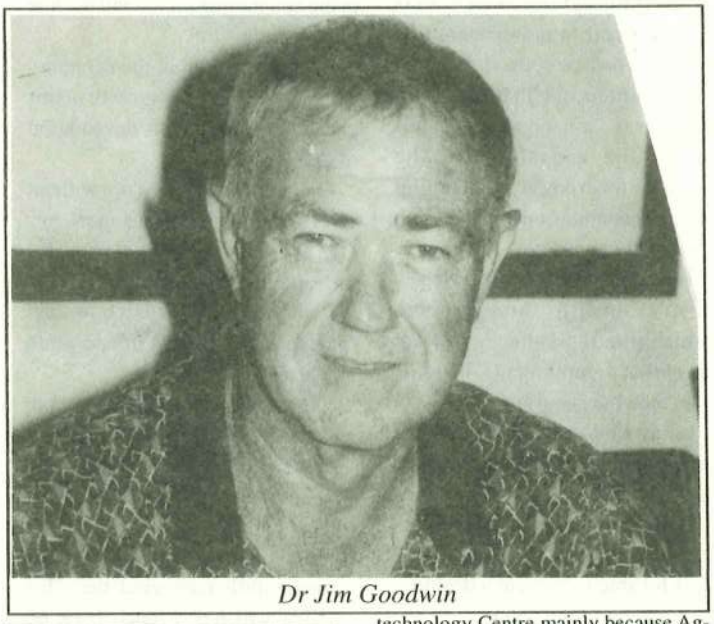
"Crops and horticultural plants indigenous to PNG would be a good asset for the country when biotechnology added value is considered.

"Taro, yams, sweet potatoes are examples of crops which can be produced in tissue culture free of diseases to serve the need of our farmers."

Last year the University Council considered and reviewed the proposal and emphasis of the Biotechnology Centre from a strictly agricultural bias to more general approach to biotechnology involving other disciplines.

Prof Goodwin the Director arrived in 1996 from Texas A&M University, US on a two years secondment under the OHE/MUCIA programme, to help establish the Biotechnology Centre and to provide leadership in this new development.

"The idea of an Agricultural Biotechnology Centre did not reach Council early for approval, so much of any early effort was related to not only seeking approval from Council, but a lot of discussion related to the whole concept of Centres" Professor Goodwin explained.



Dr Jim Goodwin

By CORNEY LAHIES

"We have on campus an Environmental Research Monitoring Centre, Architectural Heritage Centre and Non Destructive Testing Centre, so in general the idea has been that centres are units of individual departments.

"What we've decided following our discussions was to modify the original documentation and change the Agricultural Biotechnology Centre to Unitech Biotechnology Centre.

"Currently the Department has one PhD student from Indonesia, two postgraduate students and about seven undergraduate students undergoing special work on biotechnology under the supervision of Dr Wagih."

The Biotechnology Centre will be housed at its present location in the Agriculture Department and will primarily focus on the biosciences as well as collaborate with other departments to develop their resources and research capabilities.

"The Department of Agriculture will provide initial home for Unitech Biotechnology Centre mainly because Agriculture is probably the department that has most interest in the whole concept of biotechnology up until now, but we hope that will change," Professor Goodwin said.

As his contract is nearly over, Dr Goodwin hopes that a new Director will be appointed soon, as well as an Advisory Committee to develop plans for the Centre.

Through the Advisory committee, Unitech Biotechnology Centre would identify key biotechnology related issues and priority needs.

These areas would be proposed as the subject of feasibility studies, research topics and pilot projects for staff and post graduates students.

According to Professor Goodwin space facilities for the Biotechnology Centre would be renovated to meet stringent regulations, while funding of equipment has been included in the Unitech assistance programme from JICA.

Biotechnology is a new term defined by the United States Office of Technology Assessment (OTA, 1991) as any technique that uses organisms to make or modify products, to improve plants and animals, or to develop micro-organisms for specific uses.

Biotechnology is not an industry in itself, but a set of enabling technologies that are being applied to research and product development in several existing industries.

Such industries include pharmaceutical industry based on medicinal plants, agriculture, forestry and good processing and in the conservation of environment.

The impact of modern biotechnology in the world economy is becoming increasingly evident.

Over the past two decades investment in biotechnology are now resulting in a wide range of products, processes and services in a diversity of broad disciplinary areas.

In the Pharmaceutical Industry, sales of human therapeutic reached about $13 billion in the United States, mainly products from medicinal plants, gene therapeutic and new vaccines.

Biotechnology has an increasing commercial application in agriculture and food production and trade, and utilisation of valuable medicinal resources.

There are also new market products with modern traits, eg cotton with insect resistance, potatoes with disease and insect resistance, or extended storage life.

According to the report compiled by Dr Goodwin and Dr Wagih, there are about 284 potential new pharmaceuticals in clinical trials in the United States, 40 percent of which are being tested for cancer and 10 percent are being tested against AIDS/HIV.

Other products in the market include new diagnostics for plants and animal diseases, biopesticides, biofertilizers and vaccines to prevent animal diseases.

Many of these and other areas of application are likely to be considered by the new Biotechnology Centre.

Meanwhile, the Director emphasised the need for upstream links with reputable Biotechnology laboratories, universities and institutions around the world.

The University is also proud to take a lead in biotechnology transfer to Papua New Guinea through this achievement.

Leaders must agree on common platform for basic services:academic

The economic problems experienced now in PNG cannot be solved unless they are addressed on a common platform and all political parties agree on policies to ensure basic needs are provided.

Moreover, if this consciousness is not reached by the leaders of Papua New Guinea then there would not be any future for the country.

These are the warnings from Business Studies Department, head of Economics, Dr Asoka Seneviratne in his seminar paper titled "1998 Budget, Kina and the Economy."

In his paper Dr Seneviratne said the Government budget should be an economic development budget in which many economic problems were addressed and solutions sought through fiscal and monetary policies.

A country like PNG where the role of the private sector involvement in the economy was very little or their reluctance to invest was across the board, the Government budget should be used to accelerate economic growth and fare income distribution, he said, adding that the budget should be instrumental in expanding and not contracting the economy.

However, since 1995 budgets have been presented in line with conditions of the Structural Adjustment Programme (SAP) of International Monetary Fund and the World Bank, and not to fulfil the expectations of the people of PNG, Dr Seneviratne said.

"Cutting down of government expenditure and contraction of the public sector involvement in the economy, privatisation, gradual introduction of user pay policy in education and health, strengthening the government tax basis, wage freezing and limitation of government employment are some of the main conditions of SAP," Dr Seneviratne said.

By STEVEN BUSIN

He also said the pegging of the kina against three foreign currencies was contradictory to the SAP conditions.

Prime Minister Bill Skate yesterday confirmed in newspapers that the Kina won't be pegged.

His pointed out that the 1998 Budget was "a hand wash" blaming for the bad shape of the economy to drought, weakening Kina and economic turmoil of South East Asian countries.

"Freezing public sector wages, cut in health budget and restructuring the public sector are part of that commitment," he said.

"In fact, the government does not have any option but to follow the conditions enforced by the World Bank and IMF.

"In this context, I have my doubt that any government in future will never be able to present a development budget in the country.

"Restructuring the public sector means eventually government will look after only the law and order, defence and other few service and it will be the private sectors responsibility to look after the rest of the economic activities.

"At the same time, foreign debt burden will be increasing, natural resources will be depleting, literacy and health will not be improving and only god knows what would be the future of PNG."

He said PNG has hit the worst economic crisis since independence in 1975.

"Expected inflation this year is 11.5 percent, last year it was 4 percent while wages of public servants and employment have been frozen this year," he said.

"Frozen wages mean further devaluation of the Kina and rising unemployment.

"After Value Added Tax is introduced next year, prices will increase by at least 10 percent and the growth in the non mining sector will decline by 1 percent.

"It is doubtful that the economy can achieve 6.2 GDP growth in this year due to continuous devaluation of the kina.

"Economy cannot be run without foreign aid which means more foreign aid should be utilised in the future and the next generation has to pay for it as you pay for it now having experiencing cuts in education and health.

"To pay more foreign loans, more cuts in the public expenditure such as education, health and other essential services can be seen in the future."

He predicted that even if the economy fully recovered, the value of Kina will never reach US$. 65 this year (assuming free play of demand and supply of Kina in the foreign exchange market) and, the government would be asked to tighten belts not only in this year but also in coming years.

He said since independence, PNG did not follow consistent and continuous economic policies to give better life to its people, adding that the current turmoil in the country, was partly a result of that lack of insight.

"PNG should not accept everything offered on a golden plate, but to be selective in the specific programs for proper implementation for the sake of the nation," he said.

"Grassroots need development but the irony is that being born on a gold mine, they have to beg the rest of the world for survival.

"The present economic crisis in PNG will continue until rulers of this country are free from corruption and are devoted to the country on a common policy package that ensures providing for the basic needs of the people.

"PNG should have its own vision and insights into its problems.

"PNG should not allow foreign elements to dictate terms and conditions and twenty years of experience after independence must be enough for PNG people to make out what outsiders are in this country for.

"They seem to exploit your resources for their own benefit and now the time has come for you to go far in economic independence too.

"Otherwise after all natural resources are exhausted, four million people will be left only with land in this country and if this continues, people at grass roots will never benefit from the country's wealth."

Meanwhile, Dr Seneviratne also predicted that the Government i[s] impossible for the governm[ent] .o peg the kina as long as the SAP was there.

The Prime Minister, Bill Skate yesterday came out in the media stating that the government would not peg the kina to the Australian dollor. However, the Prime Minister said that they will instead let market forces determine the value of the kina.

The Reporter is produced weekly by the **PUBLIC RELATIONS UNIT.**
Deadline 4pm on Tuesday weekly.
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Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Homegrown genetic diversity to boost Biotechnology Centre development

Unitech Biotechnology Centre (UBC) would benefit greatly from a wealth of genetic diversity already available in the country.

By CORNEY LAHIES

This was highlighted in a paper promoting the capability of Unitech in Biotechnology and Biosafety and Risk Assessment authored by Dr Mohamed Wagih and Dr Jim Goodwin Director of the newly established Unitech Biotechnology Centre.

According to the authors, there was little traditional venture capital in PNG, and some reluctances to invest in new technologies and start-up activities, but the benefits of developing PNG's biotechnology were enormous.

Universities in Australia and their Biotechnology Centres have assisted more than 150 companies presently using biotechnology in their business.

"These include large companies who use biotechnology in the production of their products for domestic and export markets, for examples in pharmaceuticals and agribusiness," the authors said.

"There is increasing importance being attached to the successful commercialisation of new scientific discoveries.

"Given the fact that Australia now represents approximately one percent of the global market place, calculated on the basis of gross domestic product, and PNG represents zero percent of that market.

"There is little traditional mixture capital in PNG and some reluctance to invest in new technologies and start-up activities.

"Nevertheless, there is great potential for the development and growth of biotechnology in PNG.

"PNG's strength in relation to biotechnology lies in its wealth of genetic diversity of plants, animals and micro-organisms and its strong scientific will and belief in biotechnological applications to solving practical problems in Agriculture, Forestry, Conservation of the environment, and human health care.

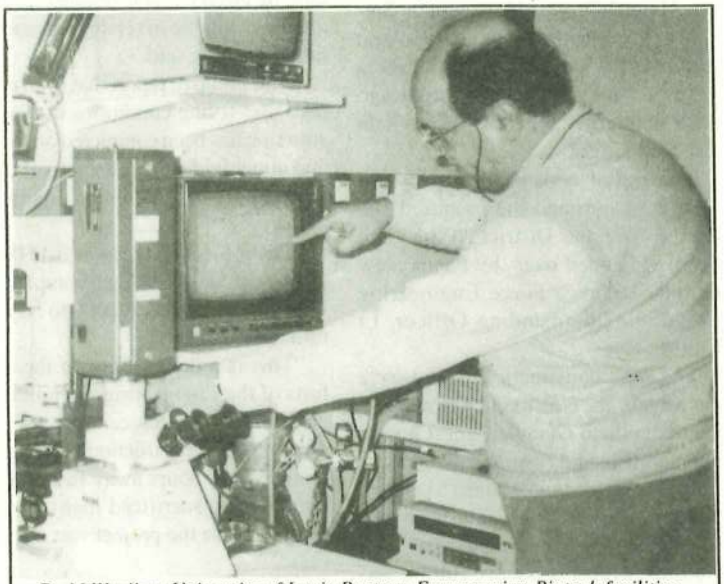
"PNG Unitech has demonstrated capacity for research related education and training in the bioscience and related disciplines and has first class research and technology facilities which should meet the stringent inspection requirements of the United States Food and Drug Administration."

Other features which add to its commercial and scientific advantages are PNG's location in the Pacific, the wide climatic and biological diversity and proximity to rapidly growing markets in the region.

"Another major strength of Unitech is education and training, which demonstrate capacity to provide formal graduate and post-graduate, research-based training in biotechnology-related disciplines, as well as short courses and specifically tailored training for individuals," the report said.

"Unitech is a major source of innovation in PNG and is a potential source of a wealth of intellectual property which can lead to the development of products processes which could gain significant share of local and global markets.

"In line with the University's Development Objectives and Strategies, UBC will strive to accomplish research with entrepreneurial characteristics that emphasise the potential of biotechnology in addressing courses of problems and their solutions and thereby contribute to development in PNG and the South Pacific."



Dr M Wagih at University of Louis Pastuer, France using Biotech facilities

Unitech Biotechnology Centre already has major tasks ahead such as negotiating for a specific role for the Biotechnology Centre in the forthcoming South Pacific community (SPC) project on preservation of taro biodiversity using biotechnology.

Unitech Biotechnology Centre will play a key role in another project being developed at Unitech related to preservation of PNG orchid biodiversity (and marketing of PNG orchids).

Unitech Biotechnology Centre will also undertake a mass propagation of disease-free potato for the FAO Seed Potato program in PNG; contribute to tissue culture of rice to speed up the rice breeding program, play a leading role in the production of secondary metabolises from cell suspension culture of medicinal plants.

The objectives of the Unitech Biotechnology Centre will be to:

•Prepare Capability Assessments: To prepare and disseminate in PNG and overseas informed and integrated assessments of PNG capabilities and facilities of the commercial, scientific and education and training aspects of biotechnology, with the view to identifying new opportunities for partnerships with the investments in PNG biotechnology.

•Identify and Promote Products: To identify and promote a suite of new products and processes of biotechnology and markets where these have local and export potential.

•Promote Investments: To promote additional investments from PNG private, public and overseas sources into biotechnology and management expertise into Research & Development (R&D) institutions to enable further commercial produce development for domestic and international markets.

•Promote Research Services: To promote the conduct of additional contract R & D, clinical trails and contract manufacturing in PNG and abroad through strategic alliances between PNG and overseas investors.

•Promote Education and Training: To promote PNG as a preferred location for biotechnology education and training and the greater use of UNITECH expertise overseas, including facilitating the development of short courses on commercial and scientific aspects of biotechnology-related business.

Unitech project managment services hands over Wampar Health Centre project

By STEVEN BUSIN

The Unitech Project Management Services through the Architecture and Building Departmcnt handed over a health centre development project to the Wampar Local Level Government last Wednesday.

The initial construction phase of road works around the proposed site for the Wampar District Health Centre was handed over by Papua New Guinea Defence Force Engineering Battalion, Commanding Officer, Lt Col M. Osi.

The road construction would pave the way for the construction of a health centre, council chamber, guest house, and sporting and commercial areas.

Due to its location, Project Manager, Ken Polin said, it was envisaged that the health centre would serve the Nadzab Airport residence (future satellite township of Lae) and the general travelling public and commuters of Lae City.

The project was under the new Department of Health plan and policies for the decentralisation of basic health services and subsequent closure of the Angau Memorial Hospital Outpatient.

The K1.3 million project would be developed in two stages depending on the availability of funds.

The first stage includes: an outpatient building, an external services building, two 12 bed patient wards, a maternity ward, two ablution block, one staff residence and access roads and security fence. The first phase is estimated to cost K600,000.

Stage two of the project would include: two 12 Inpatient wards, a kitchen and ration store, a mortuary and laundry, one medium cost residence, one low cost residence, a chapel and health education hall, and remaining site works and other improvements. The stage two developments are estimated to cost K700,000.

During the hand over ceremony, PNGDF Engineering Battalion Commanding Officer Lt Col Osi told local leaders and guests witnessing the event that civic action projects were undertaken by the Battalion to assist the community as one of their roles in nation building.

Lt Col Osi said, however, that due to Government budget cut-backs, the Engineering Battalion had not received any funding for the past two years and only undertook projects that were fully funded by the client.

"This has resulted in much of the Engineering Battalion's equipment becoming unserviceable because funds are not available to repair and maintain them," he said.

"I am proud to report that even under these trying conditions the construction has been completed on time and under budget at a fraction of the cost required by a civilian contractor.

"The project budget was K35 000 and works have now been completed with approximately K1000 to be returned to the client.

"This is a direct result of the efforts of the Engineering Battalion's personnel who have managed to overcome all construction problems, worked long hours away from their families and sacrificed many luxuries to ensure the project was a success."

Meanwhile, Mr Polin said that they had engaged the PNGDF Engineering Battalion to help reduce overall costs for the road construction.

He said that if they had engaged a private contractor, the road construction would have cost about K100,000 however, the Engineer Battalion did the project for K35,000 only.

Morobe Province Deputy Administrator Manasupe Zurenouc said the construction of the Wampar Health Centre was part of the new local level government reforms.

He said under the new reforms, provincial governments were tasked to set up local level government centres, and he was pleased that the provincial government reforms were progressing ahead despite financial and manpower difficulties.

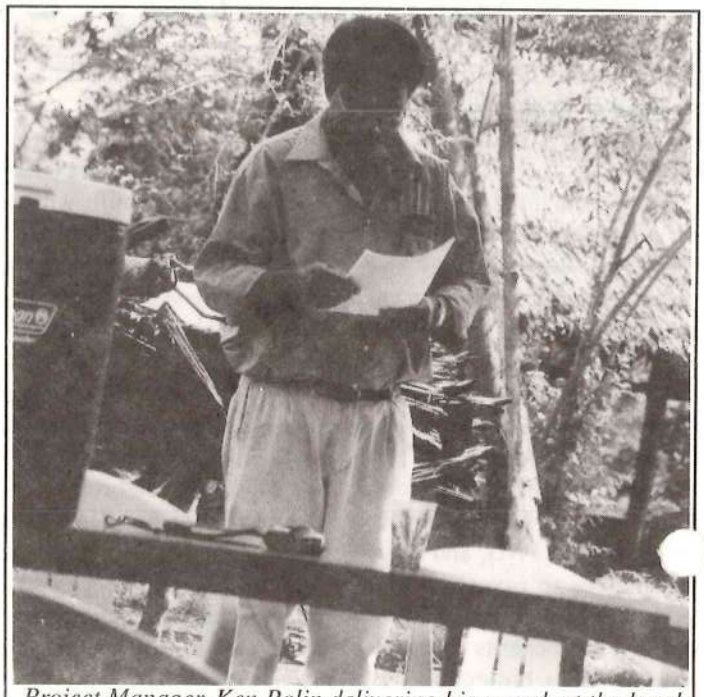
He said Morobe Province had 10 different local level governments and the task to set up each local level government centre was enormous.

Mr Zurunouc said six local level centres had already been completed while the provincial administration was yet to establish four more.

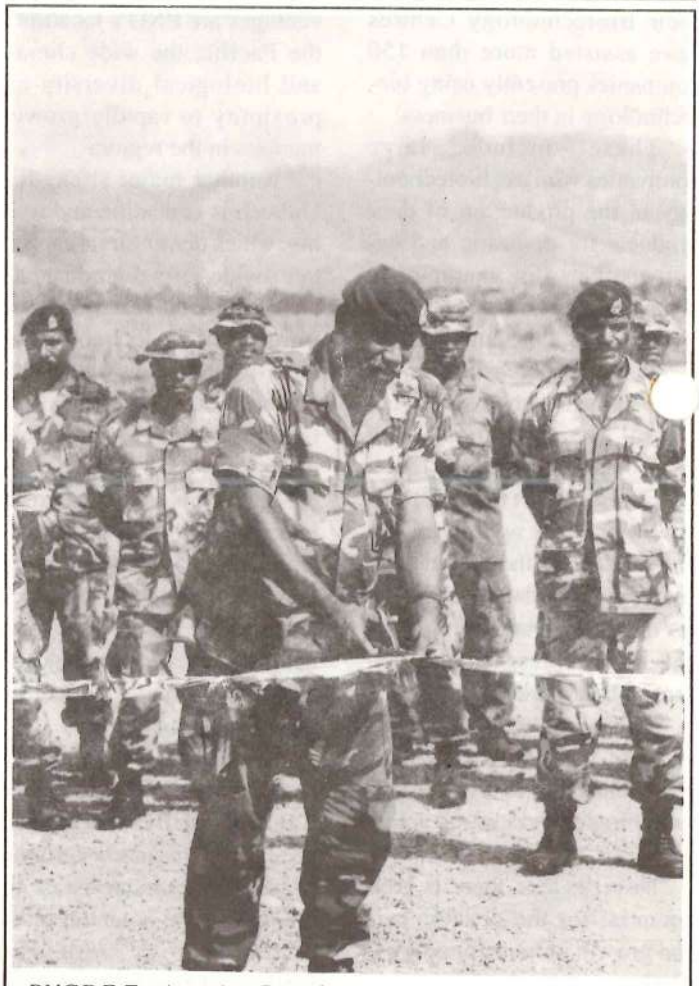
Meanwhile, Wampar Local Level Government President, Titus Epof praised the local land owners of Wancef village for giving their land for the construction of the road.

He said Wampar local level government was a big area to look after and this was creating a lot work for the council.

He called on the council leaders and members to cooperate and provide the service to the people.



Project Manager, Ken Polin delivering his speech at the hand-over ceremony.



PNGDF Engineering Battalion Commanding Officer, Lt Col Osi declaring the road open

Unitech farewells the Late John Bagasi

By STEVEN BUSIN

The Late John Gregory Bagasi was farewelled by staff and students of the University during a memorial mass at the Rose Kekedo Convention Centre on Tuesday.

The late John Bagasi, 40, from the East Sepik was a senior technical officer with the Department of Surveying and Land Studies when he passed away at the Angau Memorial Hospital on 6th of April.

Speaking on behalf of the University, Acting Vice Chancellor, Dr Philip Siaguru told those who gathered there that the death was a tragic loss shared by the University.

"We feel the loss of a good University staff member, someone who was dedicated to his work and un- whose technical direction many professionals have passed through," said Dr Siaguru.

"As a professional, the late John Bagasi has contributed tirelessly to his Department and to his profession.

"His work will live on in many students trained under him and who are now practising in the country."

Dr Siaguru said the late John Bagasi would be remembered for his simple and quiet character adding that he was someone who would not raise his voice unnecessarily.

He said the late John Bagasi was a quiet achiever and someone who believed in accomplishing his tasks in a professional manner.

The late John Bagasi began his pr- -ry education at the Mongniol P- -ry School from 1965 to 1971.

He later pursued his high school education at the Brandi High School in Wewak and later proceeded onto Madang Technical College in 1974.

He enrolled at Unitech for the Diploma in Cartography course in 1976.

In 1979, he joined the Office of Forests as a cartographer, after graduation.

He returned to the University as a technical officer in the Surveying and Land Studies Department, in 1983.

He was promoted to senior technical officer in 1989, a position he held until his untimely death.

He is survived by his wife, Margaret and children Maino, Elizabeth, Rarua and Gregory. His body will be laid to rest at his Balam Village, Wewak, East Sepik Province.



Mrs Bagasi views the body of her late husband at the funeral



Mourners at the Mass



Acting Vice Chancellor, Dr Philip Siaguru, Department of Surveying and Land Studies Head Prof Little pay their respect to the Late John Bagasi.

CAMPUS BULLETIN BOARD

RAFFLE TICKETS ON SALE

The drawing of the 30th Anniversary tickets has been moved to the next Council Meeting in July. We apologise for any inconvenience caused by this delay. Tickets are NOW available from following committee members: Philip Lavatu, Luke Wangi, Peter Wandau, Esrom Dakaetavara, Corney Lahies, Ken. Konafo, Patrick Sakail, Benard Tzilu, Rev Siawong, Henry Konaka, Vagi Lovo.

Executive Officer

RAINFALL RECORDING

Rainfall Readings for 24 hours to 0900 on:

Wed	9.04.98	30.0 mm
Thur	10.04.98	10.0 mm
Fri	11.04.98	15.4 mm
Sat	12.04.98	20.0 mm
Sun	13.04.98	11.0 mm
Mon	14.04.98	8.2 mm
Tues	15.04.98	2.8 mm

Total rainfall for week ending 15.04.98 97.4 mm

Total yearly rainfall up to 8.04.98 924.0 mm
Total yearly rainfall up to 15.05.98 1021.4 mm

Sali Bafinu
Civil Engineering Dept.

Unitech Citizen Women's Association

The meeting for UCWA on Sunday 29th March, 1998 has been deferred to Sunday 19th April, 1998 at 2.00 pm at the Union Hall

Agenda

Election of Office Bearers.

New members are encouraged to attend.

Please, your attendance is very important and ensure that you be there on time.

Vice-President

Unitech Craft and Social Club

Next Meeting Date: Wednesday 22nd April
Time: 9.30 am
Venue: 130 Sepik Drive

This is a general meeting to enable us to come up with some ideas for subsequent meetings. Everyone welcome.

President

Bus Rosta: TISOL Junior School

The rota for supervision of the junior school bus for the second term is below. The morning supervisor should pick up the bus at one of the bus stops at 7.30. The afternoon supervisor should go to the transport office at 1.40. supervisors can be dropped off at home on their return. Supervisors should let the coordinator know if/ when there are any problems concerning bus times or other difficulties. If supervisors are unable to supervise on any day, they are responsible for finding a replacement. Some supervisors were noticeably absent from the bus last term.

A new NCSA Bus Coordinator will be appointed at the next NCSA meeting.

Week	Morning	Afternoon
24.4.98	Hartemink	Goon
27.4.98	MacLaurin	Wallum
4.5.98	Nonie	Michalik
11.5.98	Corbyn	Kalate
18.5.98	Majewski	Popov
25.5.98	Moshi	Tomlins
1.6.98	Mobiha	Maddugoda
8.6.98	Nyondo	Brooks
15.6.98	Bannerman	Hossain
22.6.98	Bindir	Opata

John Tomlins
NCSA Bus Coordinator

At The SAC

WEDNESDAY APRIL 22ND, 1998 "THE LAE JAZZ BAND" WILL ADD EXTRA FLAVOUR TO YOUR NORMAL WEDNESDAYS HAPPY HOUR AND THE KEY DRAW.

ALL WELCOME.

SAC MANAGEMENT

SECURITY NOTICE

Campus Residences

This is to draw to your attention the following Security Measures that staff and students should be aware of and undertake for the best interest of all campus residents.

1.That Security Personnel have been adivsed not to release any information to any unidentified persons from outside who enquire either at the main gate or the Security Office about personal particulars and residences of staff and students.

2.That staff and students who have visitors must inform the Security and Dean of Students respectively, of the identity of their visitors.

3.Without the information in point (2) above, Security will not allow any visitors to proceed to the staff and students residential areas.

4.That staff members proceeding on weekend trips off-campus or going away from campus for an extended period must make alternative arrangement for someone to look after their residences. It is also advisable for staff to inform the Security if they go out of campus for functions, dinner, etc., so that mobile patrol can be informed to make regular checks on unattended residences.

To minimise break and enter and unexpected guests, campus residents are advised to comply with these measures.

Wilson F Tovirika
Chairman -
Security Committee

Thank You

The Natural Resources Soccer Team Volunteer Committee set up by the Natress Soccer Team supporters to raise funds for Natress Soccer Team's MVP (Most Valuable Player), Donney Baite, whose mother passed away at their Sogeri Dive home recently, announces that a total of K126 was raised from donations by staff members of Applied Sciences, Agriculture, National Analysis Laboratory and Forestry.

We thank the following for their kind donations.

Applied Science:
Professor Khan, Dr M. Carrick, Dr P Sopade, Dr D Omoloso, Dr A Miah, M Kiap, E Mobiha, S Bulu, P Aiwa.

Agriculture
Professor Onwueme, D K Powell, Dr U Bindi, Hartemink, L Anota, H Gindo.

National Analysis Lab
F. Grieshaber, G Kumo, J Jack, H Elijah.

Forestry
O. Betilani

From the Volunteer Organising Committee.

Peter Kelmga, Micheal Lui, McQueen Maimo, Peter Keliaga, Micheal Lui.

LOTU TAIM

Unitech Staff Bible Study

The next meeting of the Unitech Staff Bible Study group is scheduled for Monday, 20 April 1998 at 7 pm.

Venue:86 Fly Drive

For Discussion: *The History of the Christian Church*

All interested staff are welcome.

Patrick Afenya
(Tel: 4674)

Unitech United Church Weekly Program

Sunday Service: 8:00 am to 9:30 am. At the Christian Centre.

Monday Night Fellowship: 7:00pm to 9:00 pm. At the Christian Centre.

You are most invited in Jesus name to attend service and the fellowship nights.
God Bless

Publicity Officer

CLASSIFIEDS

FOR SALE

Isuzu Trooper 4WD, Family Wagon excellent condition. Turbo Diesel A/C, power steering, towbar, stereo cassettee radio, tinted windows K17,000 ono.

Queen size bed ensemble, inner spring mattress and base K700 ono. Sharp 14" Colour TV, remote, K150 ono. Please contact 475 7632.

Single Ladies Hostel For Rent

1. 2 x one single room
2. 2 x two double room

Location: Aquarii Street, behind Lutheran Church (East Taraka) 6th house from Unitech bus stop. With security fencing and manned by security guard from 6.00pm to 6:00am. Common Kitchen, Laundry and toilet shower.

K170 per fortnight (single room). K85 per fortnight (double room). Contact: Mrs. Cecilia Watai on telephone: 475 7198

PUBLIC RELATIONS UNIT.

-Unitech Souvenirs-

- **TSHIRTS**
- **CAPS**
- **LAPLAPS**
- **NECK TIES**
- **UMBRELLAS**

Please call into the Public Relations Unit for price list.

SRC FILM SHOWS

NOW YOU CAN WIN BIG PRIZES TOO:

The Fundraising Committee has arranged the following raffle prizes for viewers starting Saturday (11/04/98).

There will be two prizes drawn every show. First prize may include one of the following; room fan, iron, jug, wall clock, wrist watches, cameras, CDs, Rugby Boots, soccer boots, and many more. Charlie Eros won a camera from our first draw (11.04/98).

Second prize comprises 2 x bathing soap, 1 x klina cut, 1 x 200g cold power and 1 x 70g tooth paste

Important

You can purchase the tickets in advance from the following persons, to be a lucky winner in our next show on 25/04/98.

1. Jimmy Drekore, Ok Tedi Rm # 6 or A/Sciences Dept. 2. Michael Areke, (BSAG3) Gold Rm # 22 or Dept of Agriculture. 3. Gunua Ulka, (BECV 4) Civil Eng. Dept. 4. Dorcas Patrick (Hetura Rm # 7). 5. Monica Kua (Hetura Rm # 44). 6. Yawo Davis (Blue Rm # 4 or Dept of Language and Communication. 7. John M Wemin (Brown Rm # 1) or Dept of Agriculture. 8. SRC Secretary (SRC Office).

Tickets: Students - K1.50. Staff - K3.50. Children over 12 - K1.00. Others K2.00.

SPORTS

Sepik Soka Competition

The 1998 season of the Sepik Soka Competition will begin after the mid-semester break, on Saturday 2nd of May.

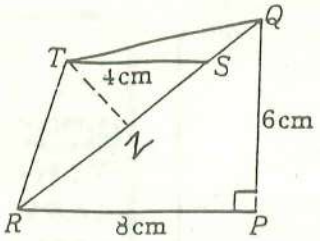
The teams (Male & Female) who took part in the competition last year are urged to confirm your participation if you are still interested, so that the draws can be made in time.

The participating teams are also required to submit the name of a representative to the Sepik Soka committee. The affiliation fee for this season is K10 per team and is due on 2/05/98.

The affiliation fees can be paid to Ben Samson (Lands Dept/Lodge 6, Rm 7), Scholar Maru (DBS/ Toluan Rm 1) or Kenneth Koyama (Mech Eng/Duak 20).

Ben Samson
Sepik Soka Chairman

FUN WITH MATHEMATICS



Solution to Problem 4

Area of $\Delta RQT = \frac{1}{2}(RQ \times TZ)$ using pythagoras, RQ = 10.

$\angle RST = \angle QRP = \tan^{-1}\left(\frac{6}{8}\right)$.

$\therefore TZ = 4.\sin^{-1}(36.87^0) = 2.4cm$. Hence Area $(TRQ) = 12cm^2$.

Correct Solutions to Problem 4

Francis	Wayambo	BSAP 3
Gilbert	Kapi	BELV 3

Problem 5

If three persons are inter-related or if they are totally unrelated, they will be said to form a special triplet. In a set of six persons, show that there is at least one special triplet.

Congratulations!

Douglas Pora, BECV III wins the first correct entry.

K5 for first correct entry.

Please send your detailed solutions before 27th April 1998.

Dr Neela Sukthankar, Department of Mathematics & Computer Science.

AIRMAIL

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The Editor
Papua New Guinea University of Technology
Private Mail Bag, LAE PNG

PRINTED MATTER

The Reporter

30th ANNIVERSARY UNITECH 1967 - 1997

Incorporating campuses at: TARAKA BUMBU BULOLO

ISSUE:1284 ISSN:10119-5354 24 April, 1998 WEEKLY

Morobe Governor allocates K300,000 for students hall

The Morobe Provincial Government has allocated K300,000 as part of its budget t[illegible]d a student residential hall for the Papua New Guinea University of Technology.

Morobe Governor, Luther Wenge when handing down the provincial budget said that his government had decided to allocate the K300,000 to the University because the University was in the Morobe Province.

He said in his budget speech that the allocation for the new student residence would help provide students from Lae City area accommodation on campus.

Mr Wenge said currently, there was a policy in place w[illegible]tated that students from Lae would not be accommodated on campus because of their close proximity to the campus.

However, it is understood that the provincial government would like to see Lae based students also enjoy the same privileges and services that students from other parts of the country were enjoying at the University.

Meanwhile, Vice Minister for Tourism and Member for Kabwum, Ginson Saonu has commended the provincial government's initiative.

" I am pleased to say that as a member of the University Council of Unitech and as member of the Morobe Provincial Assembly, I am proud of the governor of Morobe, Mr Wenge and his government for allocating the K300,000 to Unitech to build a dormitory for students at the Taraka campus, " he said.

"We have come to rescue some of the project plans of the University in light of current financial problems experienced by the University as a result of the Government's budget cut to all Natschol allocations to our colleges and universities in the country."

According to Mr Saonu, the Papua New Guinea University of Technology was a national institution and its was the National Government's responsibility to fund it.

However, he said since it was located in the Morobe Province, they as leaders of the province were proud of Unitech.

"Perhaps it a good example for other provinces to do the same to any existing national institution that are in their province at this time of downside economic situation," he said.

Building "Quality" Graduates

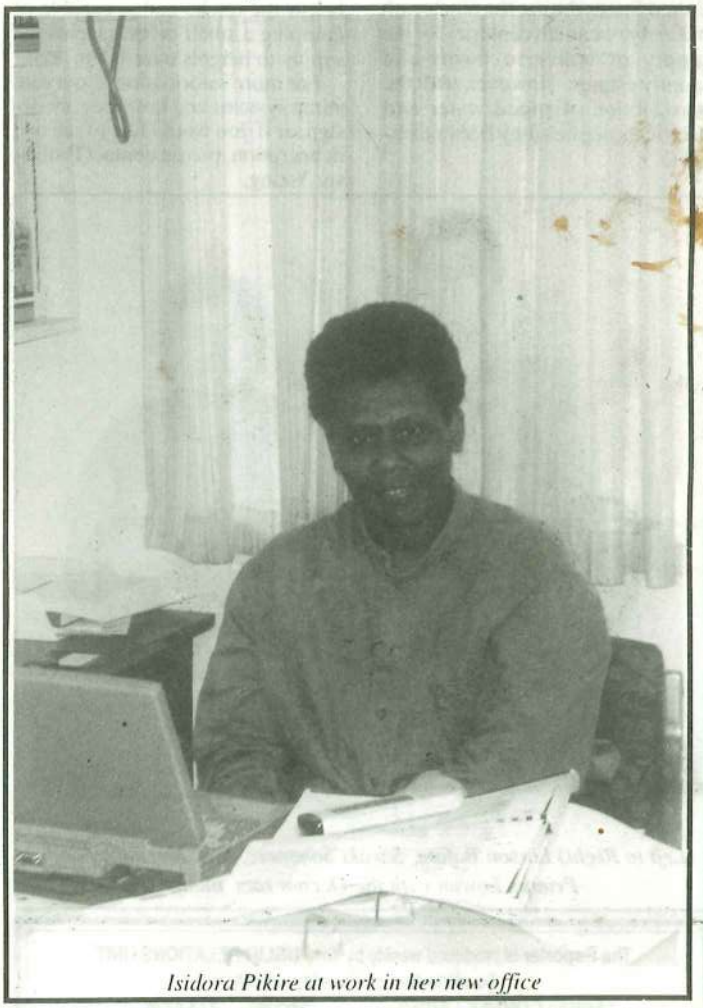
Isidora Pikire who graduated in Building last year has broken through the male barrier when she was appointed as quality assurance engineer with the largest construction company in Papua New Guinea, Fletcher Morobe.

Isidora has full responsibility for quality assurance implementation on all construction projects undertaken by the company in Papua New Guinea.

Isidora recently took the company through a successful quality assurance audit, undertaken by overseas consultants.

Isidora was among the second batch of female graduates trying to break through the male dominated construction industry in the country.

In 1996, she did her one year field experience with the company and upon completion of her Building Degree, joined the senior management position of the company making her one of the few Papua New Guineans holding a senior management position in the company.



Isidora Pikire at work in her new office

By STEVEN BUSIN

LOW COST PUMP FOR VILLAGE WATER SUPPLY

Pictured alongside are four Central engineering Workshop staff with the 2 inch Occam ram pump they built under the direction of Professor Brian Young (Civil Engineering Department and ATCDI).

The pump is made entirely from materials available in Papua New Guinea. Although specialised machining is required for the valves, the 2 inch pump is expected to retail at under K1000 and the 3 inch version for less than K1500 (traditionally, ram pump sizes are quoted in British Imperial units). Imported pumps of the same size would cost from two to five times as much.

The automatic hydraulic ram pump, which requires no external power source, was invented more than 220 years ago and was used mainly in Europe, Australia and the United States during the nineteenth and early twentieth centuries for the supply of water to farms and country estates. However, with the introduction of piped water and electrical supplies they became obsolete.

Recent enthusiasm for low cost, low maintenance, environmentally friendly devices using a renewable energy resource has rekindled interest in the ram pump for water supply in remote regions not served by public utilities.

These pumps are particularly appropriate for use in Papua New Guinea as their construction is basic and robust and they are relatively inexpensive and easy to install and maintain.

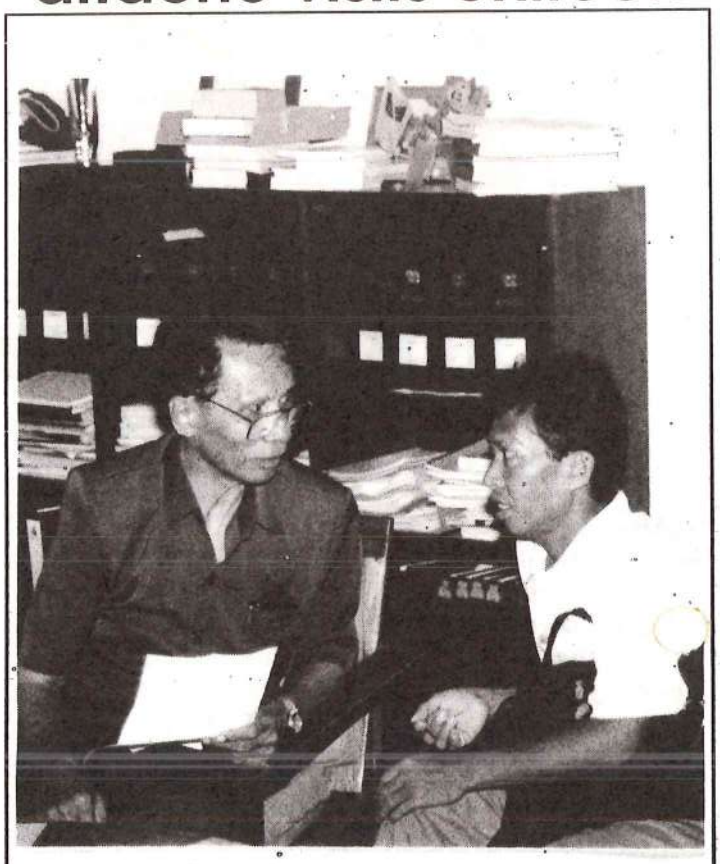
Other pumping systems, employing renewable energy directly from the wind the the sun, may be used for pumping ground water. The ram pump however, pumps surface water and requires a fall of the same water to make it work. A fast flowing mountain stream or small waterfall providing a plentiful supply of clean water is ideal. Typically, a pump would be sited a few metres below the intake and is capable of pumping a small percentage of the supply to heights over 100m

For more information about ram pump systems and how they are design, or if you would like to see one in operation, please contact Professor Young.



(Left to Right) Linson Bafinu, Saraki Sommers, Alex Mesualisy and Primus Lowun with the Occam ram pump.

New Indonesian attache visits Unitech



Indonesian Embassy Education and Cultural Attache, Dr Muhammad Renur (left) exchanging a few words with Indonesian PhD student Yunus Musa

The new Indonesian Education and Cultural Attache, Dr Muhammad Renur visited the Vice Chancellor, Dr James Kaiulo, on a familiarisation tour.

Dr Muhammad Renur from the Indonesian Embassy, Port Moresby, met with the Vice Chancellor and briefed him on the development of the administration change of Unhas University.

Dr Renur replaces Dr Andi Lolo as the Indonesian Education and Cultural Attache to Papua New Guinea.

Dr Renur also briefed Dr Kaiulo on a planned visit by the Chairman of the Eastern Indonesian Consortium and the Rector of Unhas to Unitech in May.

One of the purposes of the trip was to finalise the development of a Memorandum of Understanding (MOU) between Unitech and the consortium.

During his short visit, the Indonesian Education and Cultural Attache also discussed with the Vice Chancellor on the funding status of their PhD student Yunus Mus[illegible].

The current Ph.D prograi[illegible] of Sydney Suma from Ramu Sugar to do his study under sandwich programme between Unhas University and the Unitech Biotechnology Centre was also discussed.

The new Attache was later taken on a guided tour around the University before returning to Port Moresby.

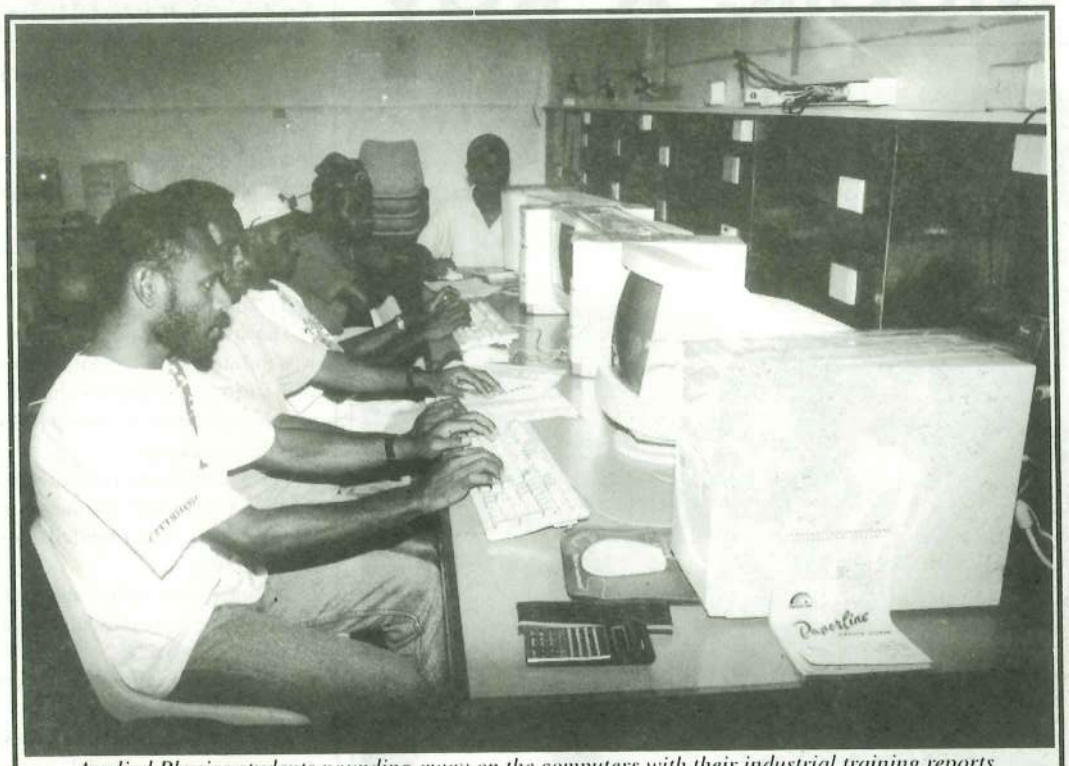
The Reporter is produced weekly by the **PUBLIC RELATIONS UNIT.**
Deadline 4pm on Tuesday Weekly.
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Journalist:STEVEN BUSIN 473 4290
Secretary: ANGELA BOROMANA 473 4291
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email: reporter@unitech.ac.pg or cklahies @global.net.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Applied Physics course boosted through students industrial training

The Department of Applied Physics conducts Industrial Training as an integral part of its new degree program in Applied Physics with Electronics and Instrumentation.



Applied Physics students pounding away on the computers with their industrial training reports

By CORNEY LAHIES

According to the Departmental Training Coordinator Dr. Nonie, the students were engaged in a number of projects over the past Christmas vacation.

Nineteen 3rd and final year students carried out a survey of "Measurement Standards and Calibration" in use in PNG with National Institute of Standards and Industrial Technology (NISIT) at the end of last year

This exercise was conducted in four major centres including Port Moresby, Lae, Mount Hagen, and Madang.

The survey covered the current status of all measurement standards in use by Industry in the country, and the calibration methods used by personnel.

Information collected in this survey would be used by NISIT to set up a policy on Units, Standards and Calibration in line with international practices.

Mr Henry Takoin a diplomate in Electrical Engineering was one of the students participating in the exercise, was working in the Industry before returning to Unitech to undertake the new degree course.

He was sent to Madang Province where he conducted the survey in various Government departments as well as business organisations.

"I conducted the survey by door to door visits, talking to people and filling out the questionnaires for them," Takoin said.

"During the survey I have discovered that many industries don't check the level of accuracy of the instruments they use."

He also encountered a number of business houses who refused to be interviewed due to lack of awareness programme, but on the other hand he found staff from the Department of Health very helpful and eager to know more about the survey.

"I spent about half a day with staff at Madang Hospital and they were really interested in the survey I was conducting," he said.

"They rely heavily on instruments to monitor their patients with critical conditions and it is important that their instruments are functioning correctly, and that they are providing accurate information.

"Some of their technical members responsible for the hospital equipment were also very interested in the course.

"This was the first time they learnt that such a course is available in the country."

In addition to the Instrument Survey project, the students were also involved with the determination of a temperature standard at NISIT using the triple point of water.

This project brought into operation a temperature standard to be employed by NISIT in their Industrial Temperature calibration.

Mr Victor Gabi, a final year student was attached with NISIT in Port Moresby.

"I was involved with their staff members with the determination of temperature standards at NISIT by using the triple point of water, which is the temperature standard used internationally" Gabi said.

"I found training very interesting and very practical, it gave me an opportunity to apply theories in thermodynamics to practical situation."

The Department of Applied Physics currently maintains a strong collaboration with NISIT, a collaboration towards joint research and developmental projects.

This in turn will translate into future jobs for the graduates.

The new degree program in Applied Physics with Electronics and Instrumentation has also attracted the attention of some industries lately.

One of the latest attracted the National Weather Service, an establishment that is currently sponsoring one of its technical staff on the degree program.

Mr Hilbert Luke, a 3rd year student was engaged in Industrial Training at the National Weather Service at Jackson's Airport in Port Moresby.

According to Luke the industrial training at the National Weather Service gave him the opportunity to understand more about the nature of work undertaken by staff.

The National Weather Service is very important to the country and the region in providing weather information to the public.

Sectors of the Community such as pilots require information from the National Weather Service for the safety of the travelling public, as well as, those who rely on the weather forecast for their operations.

According to Luke, the National Weather Service (NWS) should send staff to upgrade their knowledge and employ graduates.

"I think staff would improve their qualification by going for further training and also NWS consider new graduates in the service," he said."I know that they will benefit greatly from this course in Applied Physics with Electronics and Instrumentation, as the training they will receive is relevant."

The Acting Head of Department, Dr. W. H. Drake has mapped out a new course in Physics for the Environment, a new subject for the final year students.

This course will, among other things, cover aspects of Meteorology which will further enhance Applied Physics Department's cooperation with the National Weather Service.

Also, as part of Industrial Training, a couple of students were on attachment to computer firms in Lae assisting in various computer jobs - assembly, fault diagnosis and repair, networking, etc.

Final year student Ian Semer worked for two months with Computers and Communications in Lae, said the experience exposed him to other areas as well.

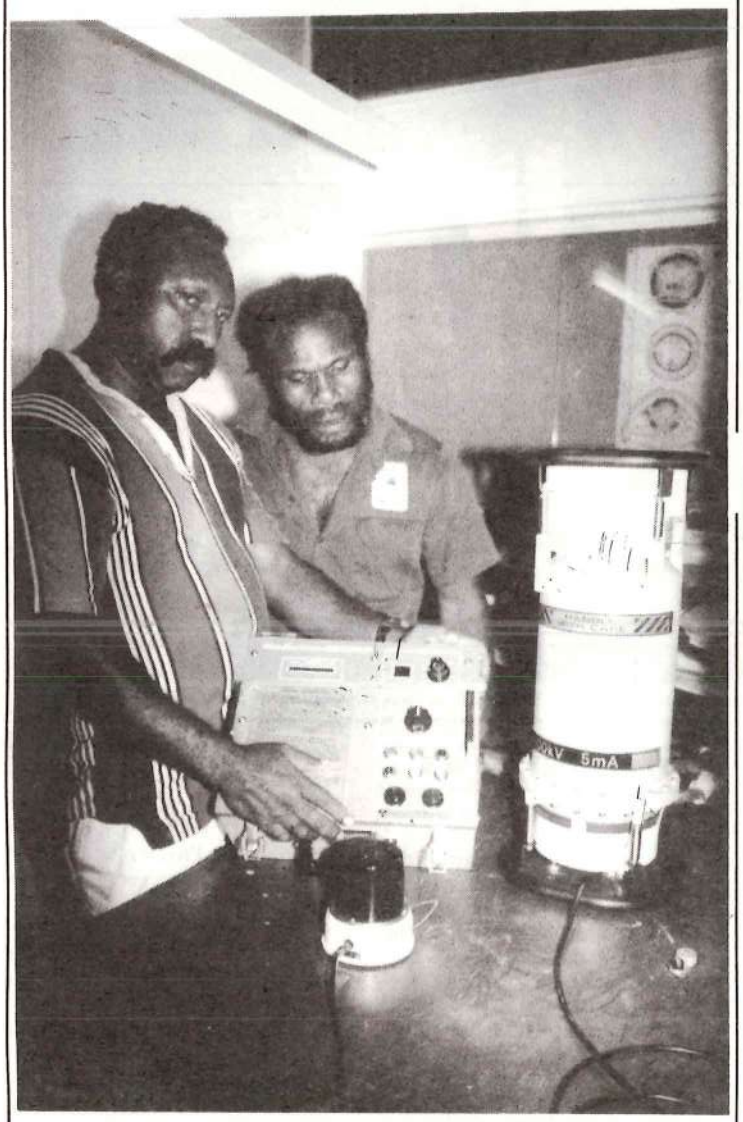
"I was involved with both sales and technical aspects of computers," he said.

"Part of my training involved servicing and fixing of computers and computer printers, digital cameras, networking of computers, as well as helping customers with Internet connections.

"I was also involved in preparing quotation for customers.

"I actually learnt a lot of things from this industrial training and would recommend other departments to provide such training for their students during the study breaks."

JICA Donates Mobile X-Ray



•Applied Physics Technical Officers Joshua Beraro and Benson Deckson with the X-Ray Machine

The recent campus wide JICA equipment donations brought to the Applied Physics Department some very needy pieces.

One of those is an Industrial X-Ray Set.

The transportable Unit can be used in field, as well as bench-top material examinations.

A hard X-Ray set with tube voltages which can be set at values ranging from 70 KV to 250 KV, in steps of 5 KV, this set gives out X-Rays with energies dependent on the selected tube voltage.

It is hence capable of investigating a wide range of materials.

Dr. Nonie, the initiator of this and other projects on X-Ray studies in the Department, is already on preliminary work for use of the set for Non-Destructive Evaluations.

When fully commissioned, this set will provide capabilities for the examination of industrial materials.

Developing a learner centred approach

Academic Staff at Vudal University recently completed a one-week in-service training course in 'Interactive Learning'.

The course was conducted by John Tomlins from the Department of Language and Communication Studies at Unitech.

The participants were Daniel Apina, Andrew Judah, Cletus Tepaiyan and John Kuso.

The overall aim of the course was to familiarise the participants with various interactive techniques which could then be incorporated into their pedagogy.

The academic staff are now in a position to consider alternatives in addition to the rather limited traditional lecture.

The interactive lecture and backwards lecture were presented as alternative approaches. Attention was also paid to various techniques for pair, group and class work.

These included the information gap, opinion gap, parallel, jigsaw and pyramid discussion techniques which greatly enhance student involvement in the learning process.

Feedback techniques and self and peer-evaluation were also introduced ways to encourage greater student involvement.

Finally, course participants were given the opportunity to begin integrating the techniques into their courses.

The training methodology involved participants in first experiencing the technique as learners, then analysing this experience through discussion and finally assessing ways in which the technique could be applied to the various disciplines taught at Vudal University.

In order for the techniques to be integrated into courses at Vudal, Mr Tomlins suggested for formation of a development group to meet at regular intervals.

The group would coordina[illegible]e implementation of the techniques, assess their suitability in light of classroom experience and make adaptations accordingly.

The involvement of the academic staff and their willingness to learn interactively contributed greatly to the success of the week.

A further course in 'Advanced Speaking Skills for Academics' is planned for the end of June.

STUDENTS CLEAN UP ACT

On study break, students had no better way of using some of their energy than to clean up the campus in preparation of the Mayors' meeting with urban reps on campus yesterday. About 20 student groups took part in the exercise which will also earn them some cash.



A group of ENB boys did a clean job raking dry leaves near the admin car park as part of the campus clean up



Owesome threesome heave the newly cut trunk out of the way

SRC Pres condems "backslidden" leaders

Unitech Student Representative Council (SRC) President, John Kaio has called on the National Union of Students (NUS) president to resign.

This is a result of a bid by tertiary student throughout the country to revive student power, claiming that the current NUS was inactive and mismanaged.

In a copy of a media statement released last week, the SRC president Kaio said that the power, integrity and dignity of the NUS office have been compromised by political interest from both student leaders and politicians.

"For too long the leading roles of the office of the NUS have been misrepresented," Kaio said.

"Successive student leaders have been driven by selfish thoughts and short term benefits that sensitive national issues of this country have gone unnoticed.

"The office of the NUS was seen as some money generating source for some student leaders, and a comfortable ride into politics for some politicians.

"Political parties and politicians have manipulated the student leaders and made them disabled to air the views of the student body and the bulk of the rural population.

"I believe that time has come to learn from past and make improvements for the better future with student power.

"It is about time the politicians pull their hands from students organisations, like the NUS.

"It is about time the student leaders don't mix their political interest with the responsibilities of any student representative office."

He cited as an example the involvement of NUS and some tertiary institution student representatives in the recent political turmoil in the country about allegations against the Prime Minister.

He said the aims and objectives in accordance with the NUS constitution had been totally ignored.

According to Kaio, students and the rural population have been very quite on national issues.

He asked: "Does this mean that we understand and are equally aware of the political, economic and social crisis of our beautiful country."

"Does this mean that we are humble and law abiding people.

"I believe some people in very responsible positions are being irresponsible and ignorant that the student body and the bulk of grassroots population are badly disadvantaged.

"I was told that there would be a luncheon with the Prime Minister including the NUS president and SRC presidents of the Universities.

"I believe all luncheon and round table negotiations should be organised as media conferences when we the student leaders have a subject to present to the Prime Minister.

"I also call on the Prime Minister to pull his hands off the students organisations.

"I also call on the NUS secretary to call a special NUS Congress for a vote of no confidence against the NUS president, if he can not willingly resign.

"Equally I call on all student leaders of all tertiary institutions who have political and other motives who occupy office to resign.

"It is no use having a title to the student offices and fail responsibilities and allow politicians to use us as mere machines.

"I am now looking at reviving the student body unity and reviving the so called student power or the political power.

"We are future leaders and we are today's mouthpiece of the disadvantaged people of Papua New Guinea.

"I call on all fellow students to stand with me to address corruption and make awareness campaigns on all national issues through out the country."



Doing the right thing, Richard Lalai and Yanding Tonda



Another group clean up underway near the Architecture Building

CAMPUS BULLETIN BOARD

RAFFLE TICKETS —— ON SALE ——

The drawing of the 30th Anniversary tickets has been moved to the next Council Meeting in July. We apologise for any inconvenience caused by this delay. Tickets are NOW available from following committee members: Philip Lavatu, Luke Wangi, Peter Wandau, Esrom Dakactavara, Corney Lahies, Ken. Konafo, Patrick Sakail, Benard Tzilu, Rev Siawong, Henry Konaka, Vagi Lovo.

Executive Officer

RAINFALL RECORDING

Rainfall Readings for 24 hours to 0900 on:

Wed	15.04.98	231.0 mm
Thurs	16.04.98	17.0 mm
Fri	17.04.98	0.0 mm
Sat	18.04.98	0.0 mm
Sun	19.04.98	6.0 mm
Mon	20.04.98	19.0 mm
Tues	21.04.98	19.0 mm

Total rainfall for week ending 21.04.98 276.4 mm
Total yearly rainfall up to 14.04.98 1021.4 mm
Total yearly rainfall up to 21.04.98 1297.8 mm

Sali Bafinu
Civil Engineering Dept.

SEMINARS

ERMC Presents The Unitech Environmental Seminars

Harry Sakulas - Wau Ecology Institute

Community Participatory Process in Natural Resource Management: A Case Study of 4 ICAD Projects in PNG.

Thursday 30 April 4.00 pm, Mining Engineering Lecture Theatre (MN001)

All Environmental Lecture Series Seminars are free and open.

Contact: Professor F L (Rick) Bein
Phone: 473 4686

TLMU Workshops 1998

The Teaching and Learning Methods Unite (TLMU) will be conducting 3 Workshop Series. A session of a series will be conducted on a Wednesday of each week beginning the 29th of April, 1998. Each session is 2 hours: 2.00 pm - 4.00 pm and each series is 3 Wednesdays in duration. The following are the Workshop Series titles:

1) Lesson Planning and Presentation
2) Course Planning
3) Curriculum Design

Detail workshops descriptions should by now be with HODs for distribution to staff.

Academic staff, including part-time lecturers/ tutors, who wish to participate in any or all of these workshops should register by contacting Paula on ph. 473 4222 ext. 4222.

Robert Songan
Director TLMU

SECURITY WATCH

Home Owners-Stop the Thief

Making your home secure against thieves has never been more necessary. The following are some simple, easy to follow precautions you can take to protect your home.

1. Keeping Thieves Out

• Lock all outside doors and windows, without failing, before you go out. Many would-be thieves will open an unlocked door and window. They often will not risk or do not have the tools or skill to break into a properly locked up house.
• Make sure to have first class locks on doors and windows. Many ordinary locks are almost useless against even an amateur burglar. Many sliding metal windows and doors are particularly easy to open as they can be lifted out or spring off their catches with a light push. Fit them with bolts, top and bottom. If you are not sure which locks are satisfactory, ask your local locksmith.
• Always take house keys with you or leave them with a neighbour. Thieves soon find out popular hiding places. If you must hide keys, make sure you put them in such an unlikely place that you can hardly find them yourself.
• If you are watching TV or out in the garden, lock up the parts of the house that you can't see as people have had possessions stolen by failing to carry out this simple precaution.
• Lock away ladders or garden tools that could help a thief to climb in a window. Lock away bicycles and any other valuable items for safety too.
• If your home contains any quantity of valuables, consider some form of burglar alarm.

2. Avoid Signs That Your Home Is Unoccupied For a Brief Period

• Draw the curtains and leave the living room light on when you go out at night. A porch light by itself is a great signal for a would-be thief.
•Day or night, a radio playing reasonably is a good method.

3.While You Are Away on Holiday

• Cancel all papers etc.
• Also tell your neighbour(s) where you will be staying and when you will be back or provide them with an itinerary.
• Never leave notes for anyone, they are an open invitation to theft and don't tell strangers that nobody will be home.
• Leave blinds and curtains open. A shut up looking house usually is shut up and unoccupied.
• Time switchers are relatively cheap and can be set to turn living room lights and radios on and off.
• If possible, ask you neighbour(s) to keep an eye on your place while you are away and to report anything unusual to security/police.
• It is always the best option to take by simply asking trusted friends/relatives to live in your house as caretakers while you are away than having your house cleaned out by thieves.
• The "Neighbourhood Watch" programmes proved very successful before. All that is necessary for every one in the immediate area where you live, is cooperation in keeping an eye on each other's houses and properties when it appears to be unoccupied even if you are asked or not. Getting such a programme going is very simple as it merely involves suggesting to every one concerned that mutual help in burglar protection is for everyone's own advantage, or if your are interested in a deeper involvement, consider initiating a "Local Neighbourhood Support Group".
• Trim flowers/plants growing near your windows and around your premises. If they are above your window level, they will make handy shield for a thief.

Patrick Otto Sakail
Chief Security Officer

Council Election

Election of Non-Academic Staff Representative on Unitech Council

Following the voting on Monday 20/4/98, the following are the results:

2 contestants:
Mr Francis Gumembi and
Mrs Naomi Wilkins

Total number of votes: 80

Total valid votes:
F. Gumembi - 25
N Wilkins - 51

Informal Votes: 4

Mrs N Wilkins is therefore the winner of the election and is the new non-academic staff representative on the Council for 1998/ 1999.

Peter M V Wandau
Returning Officer

LOTU TAIM

CLASSIFIEDS

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE
EVENING SCHEDULES:
Monday:UNITED CHURCH
Tuesday: ANGLICAN
Wednesday: LUTHERAN
Thursday: AOG
Friday: CATHOLIC

WEEK-ENDS
Saturday
AM -SDA
PM-TSCF

Sunday
8:00 UNITED
9:30 CATHOLIC

DUNCANSON HALL

9:00 CLC CHURCH

"When a person dies spiritually no wealth can save him"

FOR SALE

COLOUR TV
21 inches
Hitachi
Colour TV
K350 ono.

Call 473 4600 (b/h)
or 475 7752 (a/h)

Single Ladies Hostel For Rent

1. 2 x one single room
2. 2 x two double room

Location: Aquarii Street, behind Lutheran Church (East Taraka) 6th house from Unitech bus stop. With security fencing and manned by security guard from 6.00pm to 6:00am. Common Kitchen, Laundry and toilet shower.

K170 per fortnight (single room). K85 per fortnight (double room). Contact: Mrs. Cecilia Watai on telephone: 475 7198

PUBLIC RELATIONS UNIT.

-Unitech Souvenirs-

- T'Shirts
- Caps
- Laplaps
- Neck ties
- Umbrellas

Please call into the Public Relations Unit for price list.

Tupperware Announcement

This is to announce to the University Community that we have a Tupperware Dealer on campus. For all your tupperware orders, you don't have to go to Town and give in your order, it is there at your doorstep. You are guaranteed, you will get your money's worth just at your doorstep.

Book now or attend one of the tupperware parties. If you do not get an invitation, just ring Ms Joy Samumlal on Ext. or 475 7059.

Tupperware Recruiting Team

TUPPERWARE PARTY

There will be a Tupperware Party on Sunday 26 April, 1998

Where: 180 Markham Place
Time: 2.00 pm - 4.00 pm
Tupperware Dealer: Ms Joy Sahumlal

CENTRAL FACILITIES INFO

KODAK SUPPORTS PROJECTS

This month we received a donation of 100 films and & 500 from Kodak in Victoria. The sponsors are interested in supporting two of our projects: 1. An exhibition of Lae Photography; 2. Teaching photographic art to youth. Many thanks, Kodak.

PROGRESS WITH THE DRAMA GROUP

Attention students (represented by Maxwell Chiru) who approached us to help them with a drama club. We contacted Goroka and Dua-Dua Theatres and three potential drama teachers: we have now found an enthusiastic organiser: Freda. She is expecting a call from all people interested in acting, stage management, costume design, choreography. Call her on 472 4824.

VISIT OF AN ITALIAN DESIGNER

Sharon Brissoni, an Italian graphic designer from Milano is coming to Lae in May to have fashion workshops and debates with students. The Italian consulate is sponsoring her trip in response to our request to support cultural events in Lae. We have a large number of interested participants. Those who would like to come to the workshops, please contact Dianne on 4364

Selling of Coca Cola Products during Lahi Soccer Games

This is to inform all individuals and groups selling refreshments during the Lahi Soccer association games at the Unitech Ovals that the selling of coca cola products is not allowed due to the sponsorship agreement with SP Holdings through its brand name PEPSI and Lahi Soccer Association. Individuals or Groups selling coca cola products will be asked to remove them items.

TOKSAVE

Toksave igo long man na meri isave salim ol samting long taim Lahi Soccer Association using ol pilai graun blong Unitech long wiken, olsem, itambu tru long salim ol samting where Coca cola iwokim. dispela ol samting em olsem ol coke drinks insait long ol plastic, botol na ken. Sapos yupela i salim ol dispela samting bai mipela i askim yupela long rausim ol dispela samting.

Yowat Pulas
Lahi Soccer Association

Fun With Mathematics

Solution to Problem2

Let the numbers be denoted by a,b,c &d.
Then we have,

$(a+b+c)/3 + d = 17$
$(b+c+d)/3 + a = 21$
$(c+d+a)/3 + b = 23$
$(d+a+b)/3 + c = 29$

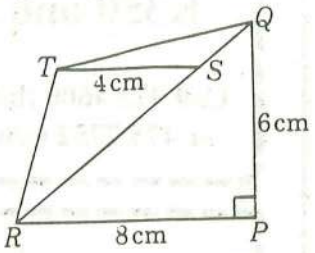
Adding all the equations, we get $a+b+c+d = 45$. Using this equation to substitute into the four equations above gives the answer a=9, b=12, c=21 and d=3

Solution to Problem 3

Let the ages of the children be x-4y, x-3y, ...x+4y and the man's age be z.
Solving equations with given conditions, we have $9x^2 + 6y^2 = z^2$
x, y, z are integers and z is man's age.
Therefore, y should be either 2,3 or 4. After substitution and checking, we can get x=14, y= 3 .

Problem 4

In the figure RPQ is a right angle and ST is parallel to PR. The lengths of PQ, PR, ST are shown.
What is the area in square centimeters of triangle RQT ?



Congratulations!

Xin Luo, BSCS 3 wins the first correct entry prize this week also.

K5 for first correct entry.

Please send your detailed solutions before 13th April 1998
to **Dr. Neela Sukthankar**, Dept. Of Mathematics and Computer Science.

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The Reporter
30th ANNIVERSARY UNITECH 1967 - 1997
Incorporating campuses at: TARAKA BUMBU BULOLO
ISSUE No:1285 ISSN:10119-5354 1 May, 1998 WEEKLY

Minister hails Unitech's contribution to national development during visit

The National Minister for Local Level Government Simon Kaumi has hailed the Papua New Guinea University of Technology's contri-tion to national human re-rces development despite insuffecient funding.

On his first visit to the campus, the Minister was accompanied by the Governor of Morobe Province Luther Wenge, Lae City Mayor Toffy Mionzing and Council presidents from Urban Local-Level Governments in Papua New Guinea.

"Papua New Guinea is going through financial difficulties and we are aware of the situation faced by the universities throughout the country," Kaumi said, at a welcome luncheon at Unitech hosted by the Unitech Catholic Community.

"But we must say that Unitech has produced so many Papua New Guineans who are now holding senior management positions in both te and public sectors, and your contribution to the development of the Country will continue to be appreciated.

"You are our future, our hope, our vision of future development into the next century.

"Having called here for the first time, to be able to see the facilities and type of accommodation that you and students have here, I am sure what I have seen have given me some indication which I would present to the Prime Minister."

On the subject related to his ministry, Mr Kaumi said his meeting with the urban local-level government delegates was to examine the progress of the reforms into the provincial and local level governments.

"We have come here to examine our position on the reforms and to say whether we have succeeded or we have failed," Kaumi said.

"That is why we have come to listen to the views of the delegates and report to the National Government."



Minister Simon Kaumi chats with Dr James Kaiulo before lunch

He said amendments to the organic law on the provincial governments and local governments were rushed in order to set up the local level governments.

"Now we find that our hands are tied because of these laws, and we want to make amendments to make them workable and understandable to many Papua New Guineans," Kaumi said.

"In order for the reforms to be implemented effectively, the laws on local level governments must be amended and understood at the grassroots level."

In welcoming the Minister and his delegates to the University, the Vice-Chancellor called on the Local-Level Governments to deal with the social and economic problems affecting the rural sector of the community.

"The local-level government

By CORNEY LAHIES

should address the law and order situation as it is eating away the future of the Country," Dr Kaiulo said.

"I think one of the main reasons that we are having this law and order problem is because we don't have the economic facilities to provide employment at the local-level of government.

"I believe that the local level governments can play a prominent role in encouraging the micro economic activity which was something that was missing for the last two decades.

"I am sure with this reforms, the local level government councils can take us into the next century."

Meanwhile, the Vice-Chancellor also thanked Morobe Provincial Government's allocation of K380,000 towards the construction of students' accommodation on campus.

"We have about 1800 students on this campus and our major problem is, that apart from limited teaching facilities on campus, accommodation provided to students to undertake different courses has been constraining.

"Under the education reforms and the increasing number of grade 12s from top-up schools, there will be a lot more demand from the community for university education.

"I am sure we could work closely with local level governments in order to address this outstanding issue.

"If we believe in providing a developed and learned human resources for the future, then I think it is only right for the local level governments and provincial governments to cooperate with national institutions like universities to address that."

Morobe Province Governor Luther Wenge also reiterated his government's decision to provide funding towards students' accommodation at Unitech as part of his contribution towards development.

"It is of vital importance that this university and UPNG continue to train our intellectual people, and as a government we must provide the necessary support," Wenge said.

"As a government trying to be practical, we must house the students.

"A lot of members of Parliament challenged me, but I must be seen to be delivering services to show the people that we have the heart for our intellectuals.

"This year we will construct a dormitory to serve students who have gone through high schools and senior high schools.

"I am sure next year we will decide whatever assistance to give to the University in whatever means or capacity."

Teachers gain from environmental experts

The Rainforest Habitat and the Environmental Research & Management Centre (ERMC) sponsored an exciting environmental studies workshops for two groups of Primary and Community School Teachers in early April.

The workshops were jointly funded by the New Zealand High Commission and the Wildlife Conservation Society Bronx Zoo of New York.

Peter and Diane Clark of the Rainforest Habitat and Dr. Rick Bein of the Unitech ERMC were the principal collaborators in arranging the workshops.

With the assistanct from the Morobe Department of Education, the National School Inspectors selected 52 schools from all over Morobe Province to participate in the landmark effort to infuse environmental consciousness into the schooling process.

A total of 46 Community School Teachers came from as far away as Kabwum, Siassi, Morobe, Wau and Kaiapit to participate in the five day intensive workshops which commenced on 5th April.

Each school was represented by one fourth grade teacher and one sixth grade teacher.

Most of the teachers completed the environmental studies workshop full of enthusiasm and eagerness, enriching their teaching with many new techniques associated with this exciting topic.

The Bronx Zoo sent three environmental educators, Tom Naiman, Anne Robinson, and Alison Ormsby to conduct the workshops and the Zoo donated a large environmental teaching package containing video tapes, lesson plans, and program units to each of the teachers.

Morobe Province is a test case for Papua New Guinea showing how environmental education can enrich the curriculum in language, maths, art, social studies, and science.

Follow-up work and reports by the teachers will dictate if the workshop will be repeated for more teachers next year.

The following poem expresses the feelings of one of the teachers.

RAIN FOREST

When I was young, I could hear my father talking proudly about his environment, his life

He knew the name of every tree, every bird and tree kangaroo living up in the canopy. Every bird and animal in the under story was called by a name.

Everything that moved and lived on the forest floor was his speciality. For he was one of the creatures that walked the forest floor.

Just like a bandicoot could go looking for food and shelter, my father would go looking for his family's food, medicine, firewood and materials for shelter.

When he was young, the forest floor was his play-ground, it was his classroom, was his training ground through which he was initiated into manhood.

Now there is a school a mere 200 metres away from the rain forest. In the school, I learn about things which are 3000 to 4000 kilometres away. Things that have nothing to do with my rain forest, which was my forefathers' environment, my parents' environment, which is my environment and has to become my children's' and their children's' environment, their life

I am now told by expatriates that PNG has 43 species of Bird of Paradise, 38 of which are endemic. Also nearly 100 species of bat and the list goes on. I am told by them that I need the forest and the forest needs me.

Now I am told to teach my class of 32 about my rain forest and its inhabitants with a handful of books and notes given to me.

Do I know my rainforest.?

Can I do it?

Long gone are the experienced teachers who had once walked the forest floor. Here I am in a classroom with books, pens, chalk and the chalkboard telling my children, UNLESS....

Dedicated to the Bronx Zoo

BY Duaro Embi
Nanduo Primary School,
Finschafen,
Morobe Province Papua New Guinea



A group of teachers attending a session at the Rainforest Habitat

The Reporter is produced weekly by the **PUBLIC RELATIONS UNIT.**
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Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Freda gains MBA despite road blocks

Self determination and sacrifice paid off handsomely for a woman who fought against the odds to gain her Masters in Business Administration from James Cook University (JCU) Townsville.

Mrs Freda Siaguru a Council Medal winner of Papua New Guinea University of Technology in 1995 completed in record time her Masters from JCU and received her Degree during the graduation ceremony in Townsville last month.

Her research dissertation was "Implications of gender difference for participation by women in management and administration of Universities in Papua New Guinea."

Her intentions to pursue studies abroad also had its own complications and ultimately came with a high price.

"I was not employed by the Uni-y at the time I was accepted by JCU for the MBA programme in 1997 and hence, did my scholarship," said Freda as she reflects on her achievement.

"Administratively, I was simply stuck, so I discussed this position with my husband, and eventually decided to apply for the Open Scholarship programme.

"To my surprise it came through,



Big day for Dr Philip & Freda Siaguru and children

and all my final arrangements at the time were made in three months.

"My employer at that time, Unitech Development and Consultancy Company could not guarantee me a job on my return or even part sponsor.

"Eventually, I applied for leave without pay and left to begin my studies."

According to Frieda, the next 10 months were most difficult and stressful as she took on extra courses in order to complete her programme on time.

"I had no choice but to settle for a 10 months MBA programme with a dissertation, given the scholarship situation and lack of support from my employer at the time," she said.

"It was tough, since I had to attend lectures during the day and also at night to meet the requirements of the normal two year MBA programme.

"I guess, when I look back over it now, I owe this success to my husband and two daughters.

"Without the strong backing from those nearest to me, it could have been much tougher.

"I also thank my Supervisor for allowing me the flexibility to complete the programme."

Meamwhile, Frieda urged the women in PNG to be competitive in their profession.

"I urge other females to make that break, indeed, I am mindful about family commitments, but to begin the process of securing a place is a personal initiative and they must make that move," she said.

"Hopefully things will fall into place, but that initial move must be taken alone.

"Of course, it is more straight forward for young single female graduates, and they should take advantage of this situation now."

The University will now benefit from her service as a lecturer in the Department of Business Studies.

Field day for communicators for development

Two students from the Language and Communication Studies Department were sent to work for Conzinc Riotinto - Australia, at Wau as part of their field work experience in Communication for Development.

e town was renowned in the s for its huge mining activities in the area and during the boom period, it was known for having the busiest airfield in the country.

Office hours were from 7.30 am to 5.00 pm however, the students were hardly in the office as much of the work was practical and involved liaison in the field.

There were two senior liaison officers working for the company, each representing two major groups of landowners in the area, the Biangai from the Wau area and the Nauti from the Watut area.

Language is a barier between the two groups and so Tok Pisin is the common language used to settle disputes and other land issues arising from the activities of CRA in the region.

The daily routine involved either carrying out tasks as requested by the liaison officers or visiting a landowner village to meet with the elders.

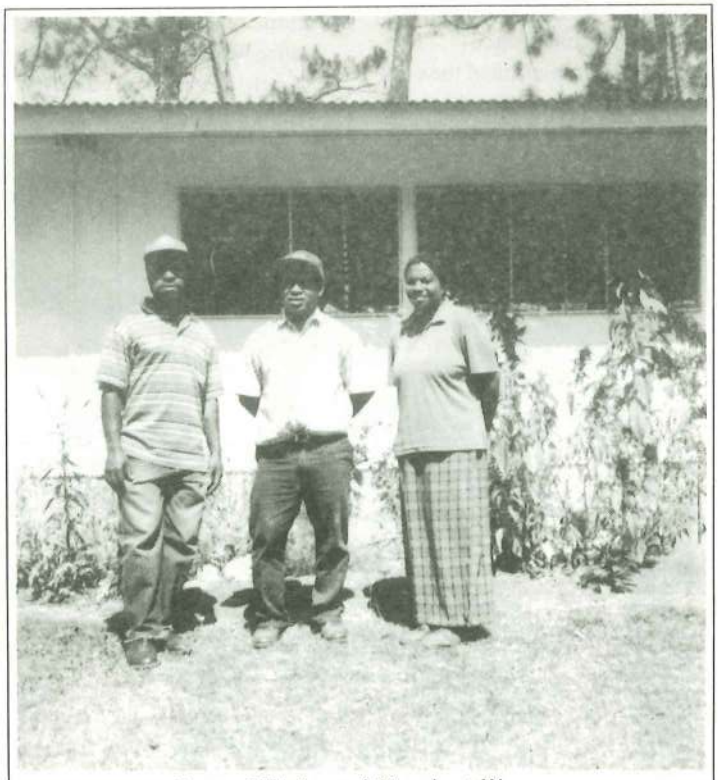
They would be informed about an upcoming meeting or discuss the company's stand on certain issues which concerned the landowners.

The students were really fortunate to work in these areas as they were able to put what they learned from their course into two weeks of hands on experience.

Meeting the "Papa bilong Graun" and listening to and evaluating the views of both sides in a dispute were very challenging and demanding at the same time.

The students look back on the field work with fond memories and look forward to another similarly challenging field working replacement in the future.

NB: At the end of our field work, the company was taken over by Australian Gold fields. While CRA is no longer operating in the area, it has contributed a lot to the development of the people of Wau and Bulolo.



Jenny Hilinke and friends at Wau

TLMU conducts courses for technical staff



At the presentation Robert Songan, Director of TLMU presents a certificate to a participant

The Teaching and Learning Methods Unit recently conducted a short course on instructional strategies for staff members from Timber & Forestry Training College (TFTC).

According to the Staff Training Officer, John Sari, the aim of the course is to equip academics and technical instructors the basic skills, knowledge and their appreciation for Teaching and Learning in Higher Education.

"Upon completion of the course, participants should be able to plan, organise information, and choose the appropriate teaching strategies depending on their predetermined learning objectives, and as a result, increase their students learning outcomes," Sari said.

"The Teaching & Learning Methods Unit (TLMU), as part of its in-house staff training program, has been conducting in-house training on the Practice of Teaching and Learning in Higher Education (PTLHE) in PNG since 1987 for the academics of Unitech.

"However, since the amalgamation of the three colleges - Vudal, Bulolo and TFTC to Unitech, the Units' tasks and responsibilities have increased.

"TLMU now caters for these colleges plus Unitech and others as and when required."

The PTLHE course is divided into four compulsory modules including other optional ones, Sari explained.

"They include Course Planning & Design; Instructional Strategies; (Teaching Methods), Assessment & Evaluation; and the Use of Media in Teaching; (A.V equipment as teaching aids).

"Optional modules include Psychology in Classroom Teaching and Educational issues and current research."

Currently, ten TFTC Instructors (6 cadet trainees who will become trainers in Industries and 4 Instructors) have passed the second module successfully and have each received a certificate of participation.

The module was covered in one week by the Training Officer at Unitech. (The time frame is short as there is a great deal more to be covered).

TLMU has graduated 10 senior instructors from TFTC who have successfully passed the four required modules between 1996 and 1997.

"All academic staff of Bulolo University College have completed the first module-on Course Planning and are now taking the second module arranged over four weekends and have one more weekend to complete it," Sari said.

"This was made possible through the auspices of the Forestry Department and the HRD Section under the Au[illegible] project.

"The above initiative is a direct response by TLMU to the Vice Chancellor's and University Vision for 2000 and in participation, TLMU's 'revised' terms of reference 5.1-5.6 as stipulated in the Development Objectives and Strategies.

"TLMU would like to congratulate those TFTC staff members who have sacrificed their study break for this worthwhile course and in particular, commend Ms Laelin Kuk the first female to attend this course from TFTC."



The first female participant and trainee at TFTC Ms Laelin Kuk recieves her certificate

Computer kid notches Remington prize

Remington has taken delivery of its 1st prize commitment of the 1st Year Computer Science Top Students' Award.

The Winner of last year's prize was Mr Ian Hanspetter, who is now a 2nd year thanked the sponsor for the prize, and urged other students to put more effort into their studies.

"This type of incentive encourages students to work hard," Hanspetter said.

"A lot of students seem to have the attitude that as long as they pass their subjects that is good enough.

"But getting prizes is an incentive to make students work even harder."

The prize was a portable typeer.

Hanspetter, 21, from Gulf Province, grew up with a lot of interest in Mathematics and during the latter years at high school, became increasingly interested in computer technology.

His ambition is to spend the rest of his working life in the new technology.

Meanwhile, the new Head of the Open and Distance Learning Centre Atawe Koigiri, suggested that future prize presentations be done in the presence of all First and Second years students.



Proud winner of the First prize Hanspetter (right) receives the present from Remington Branch Manager Sam Ario (left) witnessed by Prof Ted Phythian of Mathematics & Computer Science

"This will give them inspirations to work harder and get better results" Koigiri said.

The Branch Manager for Remington, Sam Ario, at the presentation also thanked the Department of Maths and Computer Science .

He said that Unitech was one of its major customers hence the company was pleased to be associated with the new degree program since it was launched four year ago.

"We want to show our appreciation to the University by providing this incentive to students who do very well in their studies," Ario said.

In closing, the Head of Mathematics and Computer Science Department, Professor Phythian said that the Department hoped to take in more graduates as trainee lecturers in the future.

He said also that the demand for graduates in Computer Science continued to increase as reflected in the vacant positions advertised in the national media.

Well woman clinic under construction



Providing a helping hand on the clinic from PNGDF Engineering Battalion are Cpl Anton Gombara and colleagues

Following on from last year's success, with the design and construction of a timber framed building as a teaching aid for practical construction applications, this year the students are to construct a "Well Woman Clinic" at Angau Hospital.

The Clinic, the first of its kind in PNG will provide the women of Lae and the 6 Provinces served by the Hospital with a primary health service.

The Project Week will be another milestone in the cooperation between Industry and Education, with an added dimension of active involvement from the PNG Defence Force.

The project is being funded jointly by BP Oil, Seeto Kui and the Cancer Relief Society.

Building students will work side by side with members of the Engineering Battalion from Igam Barracks, to try to accomplish the construction of the clinic during a five day period.

Initial preparation began this week with personnel from the Engineering Battalion commencing the fabrication of the frames at the Departments Workshop here on campus, while others set out the foundations of the clinic at the hospital site.

Good luck to the Building Students next week, your contributions to the local community are welcomed by all.

Further details of the project will be provided soon.

CAMPUS BULLETIN BOARD

RAFFLE TICKETS FOR SALE

The drawing of the 30th Anniversary tickets has been moved to the next Council Meeting in July. We apologise for any inconvenience caused by this delay. Tickets are NOW available from the following committee members:

Philip Lavatu, Luke Wangi, Peter Wandau, Ezron Dekaetavara, Corney Lahies, Ken Konafo, Patrick Sakail, Benard Tzilu, Rev Siawong, Henry Konaka & Vagi Lovo.

Executive Officer

RAINFALL RECORDING

Rainfall Readings for 24 hours to 0900 on:

Wednesday	22.04.98	0.0 mm
Thursday	23.04.98	0.0 mm
Friday	24.04.98	18.6 mm
Saturday	25.04.98	0.0 mm
Sunday	26.04.98	8.2 mm
Monday	27.04.98	2.4 mm
Tuesday	28.04.98	2.2 mm

Total rainfall for week ending 28.04.98 — 31.4 mm

Total yearly rainfall up to 21.04.98 — 1297.8 mm

Total yearly rainfall up to 28.04.98 — 1329.2 mm

Sali Bafinu
Civil Engineering Dept.

Unitech Poetry Club

This is a reminder to those interested person that the above club meeting will convene on 12th May 1998 at 12.00 noon in the TLMU Conference Room next to the Girls Amenities Centre/Student Services.

Invitation is extended especially to students.

Election of office bearers and a lesson or two on poetry will be offered.

All Welcome
John Sari
TLMU

SECURITY WATCH

Home Owners-Stop the Thief

Making your home secure against thieves has never been more necessary. The following are some simple, easy to follow precautions you can take to protect your home.

1. Keeping Thieves Out

• Lock all outside doors and windows, without failing, before you go out. Many would-be thieves will open an unlocked door and window. They often will not risk or do not have the tools or skill to break into a properly locked up house.

• Make sure to have first class locks on doors and windows. Many ordinary locks are almost useless against even an amateur burglar. Many sliding metal windows and doors are particularly easy to open as they can be lifted out or spring off their catches with a light push. Fit them with bolts, top and bottom. If you are not sure which locks are satisfactory, ask your local locksmith.

• Always take house keys with you or leave them with a neighbour. Thieves soon find out popular hiding places. If you must hide keys, make sure you put them in such an unlikely place that you can hardly find them yourself.

• If you are watching TV or out in the garden, lock up the parts of the house that you can't see as people have had possessions stolen by failing to carry out this simple precaution.

• Lock away ladders or garden tools that could help a thief to climb in a window. Lock away bicycles and any other valuable items for safety too.

• If your home contains any quantity of valuables, consider some form of burglar alarm.

2. Avoid Signs That Your Home Is Unoccupied For a Brief Period

• Draw the curtains and leave the living room light on when you go out at night. A porch light by itself is a great signal for a would-be thief.

•Day or night, a radio playing reasonably is a good method.

3.While You Are Away on Holiday

• Cancel all papers etc.

• Also tell your neighbour(s) where you will be staying and when you will be back or provide them an itinerary.

• Never leave notes for anyone, they are an open invitation to theft and don't tell strangers that nobody will be home.

• Leave blinds and curtains open. A shut up looking house usually is shut up and unoccupied.

• Time switchers are relatively cheap and can be set to turn living room lights and radios on and off.

• If possible, ask you neighbour(s) to keep an eye on your place while you are away and to report anything unusual to security/police.

• It is always the best option to take by simply asking trusted friends/ relatives to live in your house as caretakers while you are away than having your house cleaned out by thieves.

• The "Neighbourhood Watch" programmes proved very succ before. All that is necessary for everyone in the immediate area where you live, is cooperation in keeping an eye on each other's houses and properties when it appears to be unoccupied even if you are asked or not. Getting such a programme going is very simple as it merely involves suggesting to every one concerned that mutual help in burglar protection is for everyone's own advantage, or if your are interested in a deeper involvement, consider initiating a "Local Neighbourhood Support Group".

• Trim flowers/plants growing near your windows and around your premises. If they are above your window level, they will make handy shield for a thief.

Patrick Otto Sakail
Chief Security Officer

LOTU TAIM

The next meeting of the Unitech Staff Bible Study group is scheduled for Monday, 4 May, 1998 at 7.00 pm.

Venue: 86 Fly Drive
For Discussion: This History of the Christian Church

All interested staff are welcome.
Patrick Afenya
(Tel: 4674)

THANK YOU

The family of the Late Mr John Gregory Bagasi would like to convey their heart felt thank you to the following:

The Vice-chancellor - Dr James Kaiulo, Pro Vice-Chancellor (Academic) - Dr Philip Siaguru, Pro Vice-Chancellor (Admin) - Mr Wilson Tovirika, Acting Registrar - Mr John J Fainame, Unitech Surveying Department Staff and Students, Unitech and Sepik Community, The Ministers and the Members of Taraka, Malaita, Cassowary and Unitech United Church, Unitech SDA Congregation, Christian friends from all denominations, friends and relatives.

Without your presence, your kind deeds, both in cash and kind, we would not have pulled through in this time of grief and sorrow, for our beloved father.

May our living Lord Jesus Christ, bless you in every way you have contributed towards us.

Mrs Margaret Bagasi, Maino, Elizabeth, Rarua and Gregory.

Thank you all.

CLASSIFIEDS

POSITION VACANT

Open and Distance Learning Centre

Applications are invited for the positions of Temporary Admin Clerk and Senior Storeman in the Open and Distance Learning Centre.

Applicants must be Grade Ten or higher with at least 2-4 years work experience in similar environment and a self-starter.

High standard of work, honesty and consistent performance are required for these positions:

1) **Administrative Clerk (Temporary)**

Duties: Assist Administrative Officer with all administrative duties. Other duties as directed by the Director.

2) **Senior Storeman**

Duties: Manage storeman, order and arrange printing of modules, dispatching, stocktaking help with registration and student queries, other duties as directed by the head.

Salary
Admin Clerk I
K4,527 - K5,530 PA

Admin Clerk II
K5,178 - K6,327 PA

Admin Clerk III
K5,947 - K7,269 PA

Snr Storeman
K4,527 - K5,530 PA

(The level of appointment will depend upon qualifications and experience)

Detailed applications (two copies) with curriculum vitae including Certified copies of certificates and the names and addresses of three referees plus telephone/fax numbers and an indication of earliest availability should be received by: The Registrar, PNG University of Technology, Private Mail Bag, LAE, Papua New Guinea by 15 May, 1998.

SRC FILM SHOW

Yes now, the Long Awaited film is with us.

Now you can sink with TITANIC.

Warming: Come early to grab a seat.

Day and Date: Saturday 02 May 1997

Time: 7.30 pm
Place: Rose Kekedo Hall

Short film: Michael Jackson's New Zealand Tour.

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❄ Video (Sharp) hardly used, playback/ recorder K300

❄ Video Camera, new Sony Handicam, 8 mm, NTSC system in hard case and spare batteries and accessories K1,000

❄ Hifi Teak System with Phono, CD and twin tape K250

❄ Cassette Player (Sony) K75

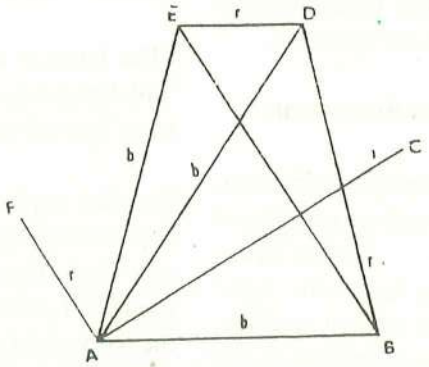
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FUN WITH MATHEMATICS



Solution to Problem 5

Represent the six persons by six points. If any two persons are related, join the corresponding points by a black line, otherwise, by a red line. Thus, join all the six points in pairs by 15 lines, some of them coloured black and some red. We have now only to show that there are always three points among the six whose three joins are of the same colour.

Let ABCDEF be the six points. Consider any one point, say A and the five lines from A, namely AB, AC, AD, AE, AF. In whatever way these may be coloured, it is obvious that atleast three of them are of one colour.

For definiteness, let us say that AB, AD, AE are black and AC, AF may be red or black: Now if the sides of the traingle BDE are all red, then we have proved the proposition. If they are not all red, at least one of them will be black, say BE. Then, ABE will be a triangle all of whose sides will be black. So, in any case, whatever may be the scheme of colouring the lines, red or black, there will always be a unicolour triangle and this completes the proof.

Problem 6

Can you cut a rectangular sheet of paper into three pieces which can be rearranged, without overlapping, to form a square?

K5 for first correct entry.

Please send your detailed solutions before 11th May 1998.

Dr Neela Sukthankar, Department of Mathematics & Computer Science.

AIRMAIL

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The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1286 ISSN:10119-5354 8 May, 1998 WEEKLY

Unitech research on crops and soil trials alternative farming for villagers

A collaborative research on soil and entomology, conducted on a farm plot at Hobu village, 17 kilometres from the campus is an unprecedented step in subsistence farming.

To the villagers the garden provides an innovative alternative to shifting cultivation and managing of soils nutrients, as well as a solution to increasing demand on land and population increase.

As for the students and their lecturers, the farm is a living laboratory of matchless research opportunities into the most valuable asset of society.

The project was initiated by Dr Alfred Hartemink, a soil scientist in the Department of Agriculture, in October 1996, as an attempt to provide a research laboratory which would reflect as close as possible the real environments of a typical agricultural setting in the lowlands of Morobe Province.

After the location was identified and months of negotiation with the villagers, work began on clearing the land which had been cultivated about seven years prior.

"We were looking for an on-farm site as the campus site does not present that opportunity to the grassroots farmers and it took quite a while before we found this area which was in fallow for 6-7 years," Dr Hartemink said.

"Initially we cleared this area and focused on three methods of planting sweet potato, taro and maize with the use of inorganic sources such as nitrogen and potassium fertilisers, use of chicken manure and different fallow vegetation.

"We are using kunai grass and piper as these vegetations are predominant in the fallow grounds on Morobe province.

"Piper and kunai are very much widespread in the Morobe province, and they may have different aspects, the main effect ofcourse, is as we look at sweet potato yield and we also look at the process in the soil, what is the effect of different fallows.

"The location of the site is about 400 meters above sea level, and the environment represented the typical conditions in the province."

As part of this research, Dr Hartemink will present a paper on soil degradation in France in August and hopefully try to establish some links with other institutes with similar research focus.

He said the University Research Committee has generously helped in funding the project over the last couple of years, but he hopes that the research will attract international funding agencies.

"This research is relevant not only to PNG but also worldwide, so we should be able to draw some attention also to PNG which we haven't achieved so far," Dr Hartemink said, adding that the Department would hope to see NARI's interest in the research programme.



Awepsta Seka on a weekly visit to the research farm at Hobu Village . The gardens at the site are maintained by villagers who will benefit from this research.

By CORNEY LAHIES

As an ongoing research programme, each year a student is allocated a plot on the farm to conduct his area of research interest.

Under the research arrangements, two post-graduate students and three final year students are currently undertaking soils and entomology studies on the farm.

Spencer Poloma, a research assistant and post-graduate student is in-charge of the day to day management of the farm.

Rauke Buimeng, a final year student is collecting data on the effect of sweet potato yield on fallow plants such as gliricidia, piper and kunai grass, while Awepsta Seka is conducting research on the effect of different levels of inorganic fertilisers on sweet potato yields.

Meanwhile, entomology research on the site is also underway since it commenced last year and Dr Anthony Powell and his students have undertaken the arduous task of looking for and identifying weevils that are present in the research plot.

According to Poloma, one of the reasons why the entomologist was invited to join in the research was to try and widen the scope of the research programme in the farm.

Mr Joe Egenai, a post-graduate student and Craig Walo, a 4th year student are conducting their researches on the nutrients effect of the local variety on sweet potato weevil.

cont next page

TRIAL FARM

As Dr Powell explained, the focus of the research is on nutrient effect on the local variety on the sweet potato weevil.

"You cannot determine the effect of weevil until you have a look at what's underneath - you cannot see any obvious damage on the leaves, but on the vine it can show weevil damage," Dr Powell said.

"After the harvest you can see to what extent of damage the weevil has done to the sweet potato, but our main concern is to see whether these nutrients have any effect on the sweet potato weevil and signs on the vines can tell us if there are weevil attacks.

"What Alfred noticed from the previous harvest was that there appears to be quite a low level sweet potato weevil attack here.

"What we are trying to identify here is which factor is affecting attack by sweet potato weevil

"Sweet potato weevil is the main pest in sweet potato around the world and not just in PNG so no one has come up yet with a perfect resistant variety.

"In PNG I've been told there are more than 4000 varieties of sweet potato weevil, and what we are hoping to see here is if this sweet potato variety is actually resistant to sweet potato weevil, or is it a combination of fertiliser effect which may attack weevil attack, so we are looking at fertiliser, and we are also looking at host plant resistance.

"We are also looking at a possibility that rain fall is having an effect because if you have very dry soil and low rainfall, you get increased weevil attack, but if you have a lot of rainfall you have low weevil attack.

"In the next few months, students will be counting weevils, so when we harvest we chop off the tubers and look for weevil damage, then we will be able to say what is causing the effect of weevil attacks."

The students will also be working with staff from Applied Science to see if there is any chemical components in the plant which are causing less weevil attack.

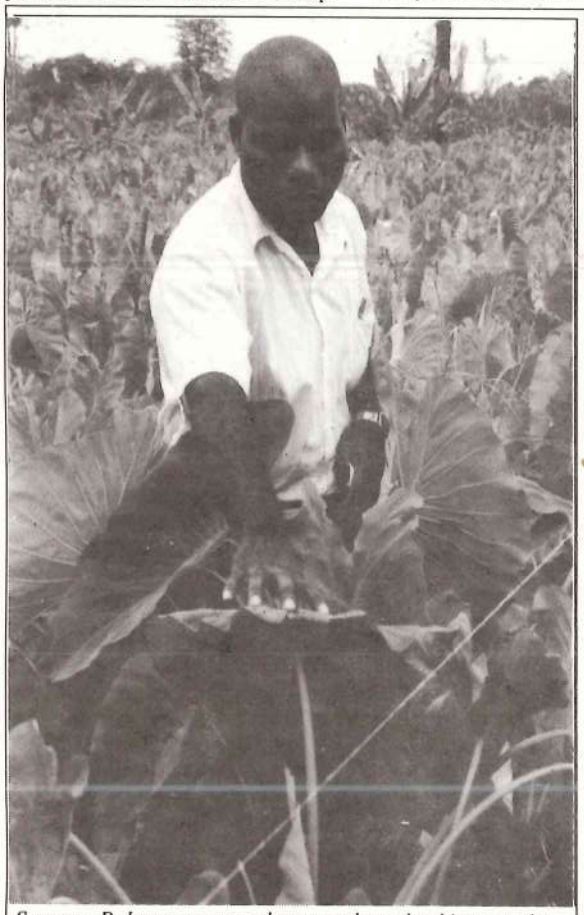
"There are a number of components and if we can identify that particular component, then we may have found a resistance factor which could be used in other trials," Dr Powell said.

"Joe is looking at nitrogen and different levels of nitrogen fertiliser and Craig is looking at nitrogen and potassium.

"I have a feeling that it may probably be nitrogen as the major factor, because if you add nitrogen to sweet potato it can affect the level of chemical compound in the sweet potato."

According to Dr Hartemink support on the project from the villagers has been very positive and the local member in the National Parliament has also shown interest in the project.

Plans are underway to have a field day at the farm, similar to one staged last year, at the end of the month.



Spencer Poloma post graduate student checking out the taro plot at the Hobu research farm.



Students Craig Walo and Joe Egenai investigating potato weevil attacks on the crops.



The students and villagers at the Hobu farm site

The Reporter is produced weekly by the **PUBLIC RELATIONS UNIT.**
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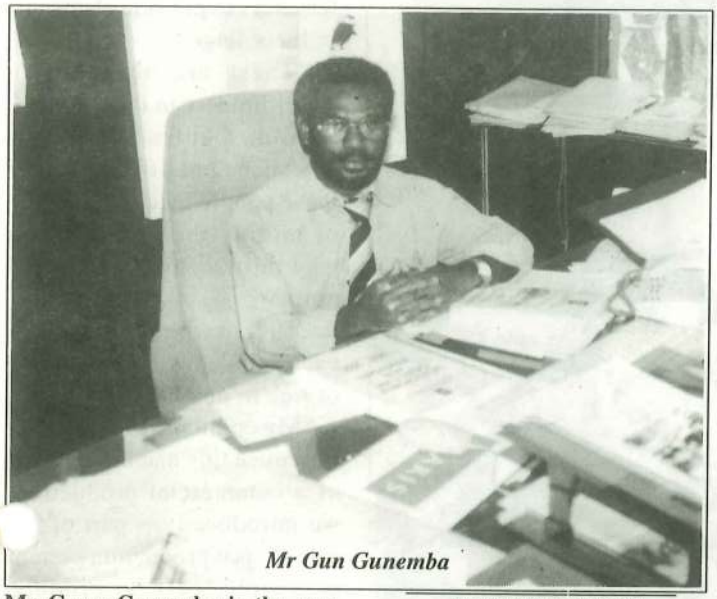
The Media is most welcome to use stories with due acknowledgement

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email: reporter@unitech.ac.pg or ckl @global.net.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Unitech first to achieve full university administration localisation in PNG



Mr Gun Gunemba

Mr Gunn Gunemba is the new Director of Planning and Development of the Papua New Guinea University of Technology.

His appointment signifies a historical moment for the University administration as all the senior management posts of the University are now fully localised.

Mr Gunemba, was the planning officer until the former Director Mr Kevin Clapperton decided not to renew his contract and went finish to New Zealand last year.

Last year he successfully completed his Master of Arts in Organisation Planning and Management at the University of Reading, United Kingdom and upon return, he had been acting on the post until his recent appointment.

Mr Gunemba, 33 who hails from Kwaneng Village, Finshafen District, began his primary education in Finschafen and completed his secondary education at Dregahafen High School in 1982.

He later completed his senior high school education at Kerevat National High School in East New Britain in 1984.

By STEVEN BUSIN

He further pursued studies at the University of Papua New Guinea and obtained his Bachelor of Economics in 1988, and upon graduating was employed by the Department of Finance and Planning as a Project Monitoring and Evaluation Officer.

In 1990, he transferred to the Economic Policy Unit as a Research Officer until his appointment later that year as Unitech's Assistant Accountant - Budget and Computers.

During his term in the Bursary Department, Gunemba was also instrumental in computerising the Accounting System in the Bursary Department.

In May 1994, he was appointed as Planning Officer to understudy Mr Clapperton and in 1996 went to sit for his Masters at Reading University

Gunemba has also attended numerous courses in finance and planning related fields both abroad and within the country.

He is married to Anna and both have three children.

In the interview for the Director's position, Gunemba outlined some of his goals to make the University become more financially self sufficient in its operation.

The shift in trend follows continuous budget cuts from the Government, and the University's venture into adopting marketisation of University services and products, Mr Gunemba said.

He said the University must have a gradual transformation from being cost orientated to revenue generation orientated, and the adoption of corporate practises was pivotal in Unitech becoming a self financing institution.

He said this vision was also shared by the Vice Chancellor and the senior management of the University, as the University prepares to move into the next century.

"I can't see any improvement in government support to universities in the Country and it is a global trend whereby universities are looking for other revenue generating means," Gunemba said.

Accordingly, one of the areas of the University being targetted is to make the Student Service Section a self financing entity.

Amongst the possible changes are:

- the students services will focus on the development and maintenance of physical infrastructure which include catering, accommodation, recreation and amenities and other specialised services such as pastoral and personal tutoring.
- provision of student services be based on income and affordability. Those who wish to use the University's student facilities will have to pay for the use of the service. The facilities are not restricted exclusively to students but all other users as well.
- student facilities will operate as a revenue centre responsible for raising and retaining income generated from the use of facilities and services. All its operational costs will be met by the income generated and reinvest surplus into the development of high standard value added service.

New initiatives planned for the implementation are:

- Residential College for female students which would see the conversion of the existing three halls of residences, Peroman, Hetura and Tuluan into a single college exclusively for female students.
- relocation of male students currently occupying South Wing of the Hetura Hall.
- construction of a student accommodation block sponsored by the Morobe Provinsel Gavman.
- plan to convert the existing male student lodges into residential college is being developed.
- plan for the relocation of existing Student Services Office be developed immediately. A proposal for the construction of a new Union Plaza should include office space.

Mr Gunemba said that plans were also in the pipeline to make other services provided in the University become more self financing, which in the long run would also involve Academic Programs.

"The recent higher education reforms on the global scene towards marketisation brings a greater challenge to the established norms and values of traditional universities, especially those institutions which are concerned with research and development," Gunemba said.

"The overriding priority on the vocationalisation to meet the needs of the economy will continue to undermine the role of the traditional universities in producing knowledge and research based professionals.

"Nevertheless, it remains a major challenge for the future universities to strike a balance between the needs of the society and the economy."

Computer Science students start careers in computer consultancy

Two computer Science students combined their expertise to solve a distributed database/internet problem for the Fisheries Department.

Momase Coastal Fisheries Development Project is embarking on hooking-up the region's four offices through a computer network system.

The project comes under the Department of Fisheries.

The German Government, under its technical aid organisation, GTZ, has financed the project at more than K100,000 for the four offices, at Madang, Wewak, Vanimo and Lae.

The set-up involves hooking-up the computer system onto a network. Intranet, and Internet, plus the upgrading of the programs to go onto a web site.

Installing the new system in Morobe Province was carried out by two University of Technology computer Science students, Oleg Kachirski and David Horabi.

Project coordinator Dr. Horst Salzwedel, attached to the Fisheries Project, said that the installation of the computer network would give the region better communication and ensure that pricing of fish and other data records would be uniform.

The data on the fisheries computers will also be accessed world-wide through the Internet.

Dr. Salzwedel said that this was the first Provincial level modernisation and computerised service for a Government Department.

Professor Ted Phythian
HOD - Mathematics and Computer Science

Micro ricemill developed to help rural rice producers

Micro rice mills could help small-scale rice producers towards self sufficiency and reduce the import bill of rice, according to an expert in agricultural engineering.

Dr Umar Bindir, a senior lecturer in the Agriculture Department at the University of Technology said, while there were thousands of small scale producers involved in rice planting throughout the Country, milling of rice continued to be the major setback in rice production.

"Technically, to produce rice the labour requirement is very high, especially if you compare it with traditional food crops like taro, kaukau, tapioca, fruits and vegetables," Dr Bindir said.

"To put this programme of encouraging Papua New Guineans to produce their own rice in order to reduce the importation bill, there has to be a strategy to cope with the labour problem.

"So one of the ways to encourage this is to look towards Southeast Asia and see what they do with their small-scale farm production and then import some of the compatible technologies into PNG that we can adapt where appropriate."

And picking up the technology from the Southeast Asian counterparts and making the appropriate changes to suit the local environments is the challenge the University in conjunction with the national Department of Agriculture & Livestock and Trukai are pursuing.

"The way Unitech is involved is that the Engineering Section of the Agriculture Department undertook the responsibility to help the Department of Agriculture & Livestock with most of the engineering input in this program," Dr Bindir said.

"First we started off with the micromill, a small milling machine which helps to dehusk and polish the rice.

"That means you harvest the rice with the husk from the field, dry it to the right moisture content and put it in the machine, the machine processes the rice and at the end of the process, you get white rice ready for the pot."



Dr Bindir demonstrates the use of mirco rice mill at the farm

DAL recently obtained a portable micromill from the International Rice Research Institute (IRRI) in Philippines, and in the University, Dr Bindir and others have commenced functional and performances tests on the equipment.

"What this test involves is, to run the machine and process a number of candidate varieties of rice produced in PNG and record the performance of the machine on the basis of acceptable quality rice ," Dr Bindir said.

"We should then be able to advice DAL and farmers on what rice variety works better or what is an acceptable quality level on the machine.

"We've done a lot of work on two Taiwanese-Chinese rice varieties from Bubia, two varieties from rice produced by Trukai and four varieties from DAL at Markham valley.

"So far, some rice varieties have worked well while others have not, and we have changed some operation parameters of the machine like the input rate of rice, rotation speed of the huller, fan speed, the gap between the huller and the screen and so on, in order to get the required outcomes."

By CORNEY LAHIES

After determining the acceptable setting of the machine, the next phase would be to consider the possibility of manufacturing this machine locally.

"We will have to encourage small manufacturers to manufacture the hullers, the fans, and all we need is to import small diesel engines to power the micromills," Dr Bindir added.

"The supply of spare parts and availability of the units to the farmers are very important to the success of the machine and rice production in this country."

According to Dr Bindir, the machine is a good lightweight device, which requires two people to transport to the farm, and one engine could also be used on water pumps or on alternators to provide electricity in the village .

"There are hundreds of small-holders in the Momase region, Central Province, Markham and 100 percent of these people face the problem of milling their rice, that is why this machine is very important.

"This machine has the capacity to dehusk up to 200 kg of rice in one hour.

"My opinion is that we don't introduce this machine as part of a commercial production, we introduce it as part of subsistence production system so people learn to produce their own rice to eat first.

"That way, they will see the benefit quickly and just like any other subsistence program, excess from their production for consumption might be sold at the market.

"The machine will cost approximately K2000, but if the National Government supports the development of this initiative, the machines could be subsided below this value."

Under the current arrangement in the development of the machine Dr Bindir is collarborating with Mr Charles Nakau an engineer from Appropriate Technology & Community Development Institute, grain scientists with DAL and Mr Roger Clough from Trukai Industries Pty Ltd.

Dr Bindir concluded that one of the benefits from this was that students get the opportunity to work on real life farm inputs as part of their final year projects.

Mr Eugene Saiho of Mechanical Engineering Department is an example who worked on the rice mill under my supervision and Dr Martin Benson of Mechanical Engineering Department.

Academic departments must develop diploma and degree courses for distance education - Koigiri

Academic Departments must now focus their resources to develop Diploma and Degree courses for distance education, says the new Director for the Open and Distance Learning Centre, Atawe Koigiri.

The recently appointed Director, made this remark due to the increased number of Grade 12 students coming out from top up schools, and the Centre's plan to gradually phase out its matriculation program.

Koigiri said that there were enough top up schools to cater for matriculation studies, and the Open and Distance Learning Centre must now shift its attention and c ıtration to providing tertiary education to the country's populace.

Having served as acting Director for a short term last year, Koigiri expressed his opinion about the Centre's needs and called on the University to allow Academic Departments to accommodate the needs of the Centre.

He also stressed the Centre can not operate on its own due to difficulties in finance, staffing and office space, to effectively and efficiently carry out its programs.

To have the Centre operate independently without any support from Academic Departments would to be costly for the University as as he would have to recruit pe nnel to prepare and run the di nt courses that would be offered by the University, he said.

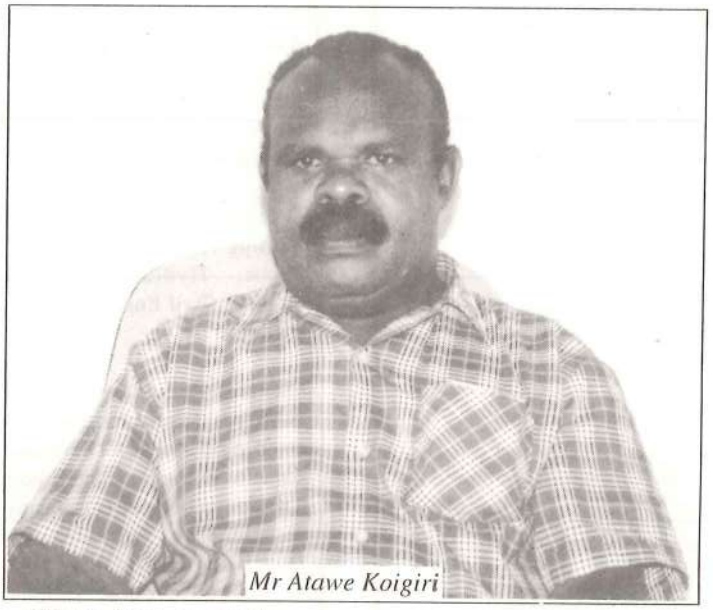
"We would end up with another gigantic organisation or another mini university within a university," Koigiri said.

"It does not make sense so my approach would be to use the existing Academic Departments to make an input into the Centre so the Centre becomes a facilitator for them.

"The Centre's main objective must be to market and administer programs on behalf of the different academic departments within the University.

"It must be seen as a facilitator and not another department."

Koigiri was also critical about the current structure between Academic Departments and the centre.



Mr Atawe Koigiri

"There is no connection, or no sourcing to look after the needs of this Centre," Koigiri added.

"The current set up cannot allow me to utilise the services of University personnel because we have to pay them for their services.

"Unfortunately, this Centre does not have any money to pay for their services, however, what they demand is worth it, because they spend a lot of time to provide their services.

"This centre will not go anywhere, unless there is a change in policy so that Academic Departments can accommodate the needs of this Centre.

"There needs to be a change in the direction and policy from the University Administration, and if we do not seriously look into these pressing issues then it is a waste of resources, time and money."

Looking into the future of the Centre, he said it was important to develop at the long term and plan on distance education which should also include the different delivery modes for courses programs offered.

"At the moment, we are using print materials from books which students learn from and we run tutorials," he said.

"This method is alright as long as students are within the proximity of the University but

By STEVEN BUSIN

what about those other students from other centres, how can we teach team?

" So we have to look at different mediums readily available such as internet, television, radio, etc to teach students from other centres."

He said materials would have to be developed for each of the respective medium and that would also involve training of personnel to prepare materials for specific delivery modes.

However, it could also be expensive for the University as was also the case of having to run university centres nationwide.

For University Centres, there might not be qualified graduates to teach the different courses at some parts of the nation, he said.

"However, the question is, are we going to remain static, or are we we going to expand the programs by taking in more enrolments from students nationwide?," he asked.

Koigiri who hails from one of the remotest areas in the Country, Marawaka, become the first person in his area to receive an education when the Lutheran Church took him under its arm and paid for his school fees from primary school in 1964 to Asaroka High School in 1970 to 1974.

Upon completion of his high school education, he enrolled at the Goroka Teachers College (University), however, found it not challenging for him.

He then applied to study science at the University of Papua New Guinea and graduated with a Bachelor of Education majoring in Mathematics in July of 1979.

Upon graduation, Koigiri joined Unitech as a trainee lecturer in the Mathematics Department and later in 1982, enrolled to do his Post Graduate Diploma in Engineering Mathematics at Unitech.

During his term with the Department,he also served as Assistant Director to the Mathematics Education Centre before it was abolished, which was responsible for research into Mathematics education.

At the beginning of 1984, he went to the University of Papua New Guinea to do his Honors in Mathematics and two years later (1986) went to sit for his Masters in Mathematics at the Auckland University, New Zealand which he completed in 1988.

In 1991, he attended Waikato University, New Zealand, to attend a six months course on Applied Statistics to gain a Certificate in Biometrics. At the same time, he was attached to the University's Agriculture Research Centre, working on part-time basis while attending classes at the University.

In 1993, he was promoted to Senior Lecturer, and at the same time, he was appointed Deputy Head of Department, a post he served until his resignation to contest the 1997 elections.

He served for a short time before resigning from the University to contest the national elections. Dr Andrew Nyondo was acting head until Koigiri's recent appointment.

CAMPUS BULLETIN BOARD

Our Mother's Day Dedication

The Hand That Rocks The Cradle

Let the nation stand to its feet,
Let the children raise up the flag
Let the army march on parade,
For the pioneering mothers of this land.
They're the unsung heroes,
Who've made this country great
For the hand that rocks the cradle rules the world.

Let the choir sing out a song,
For the ones who have gone on before,
Whose unfailing courage won through,
Let's pay tribute to the mothers of this land.
They're the unsung heroes
Who've made this country great
For the hand that rocks the cradle rules the world.

May each family who dwells within these shores
Be strengthened by God's mighty hand,
May each child be raised up in truth,
Let us pray for the mothers of this land.
They're the unsung heroes
Who MAKE this country great
For the hand that rocks the cradle rules the world.

The hand that rocks the cradle rules the world.
The hand that rocks the cradle rules the world.
Without pioneering mothers,
Where would we be today,
For the hand that rocks the cradle rules the world.

The hand that rocks the cradle rules the world.
The hand that rocks the cradle rules the world.
Without pioneering mothers,
Where would we be today,
For the hand that rocks the cradle ,
The hand that rocks the cradle
The hand that rocks the cradle rules the world.

RAINFALL RECORDING

Rainfall Readings for 24 hours to 0900 on:

Wed	29.04.98	0.0 mm
Thur	30.04.98	0.4 mm
Fri	01.05.98	0.8 mm
Sat	02.05.98	44.4 mm
Sun	03.05.98	15.0 mm
Mon	04.05.98	0.0 mm
Tues	05.05.98	0.8 mm

Total rainfall for week ending
05.05.98 61.4 mm
Total yearly rainfall up to
28.04.98 1329.2 mm
Total yearly rainfall up to
05.05.98 1390.6 mm

Sali Bafinu
Civil Engineering Dept.



NATSCHOL RENEWAL

Eligible students are requested to apply for Natschol renewal for Semester 2, 1998.

There is no formal application form from Office of Higher Education. You need to write a formal letter and attach your Examination Results for the period you sponsored yourself. Also attach your self-sponsored fee receipts. Note that students who have self-sponsored for two consecutive semesters, are eligible for Natschol.

Priority will be given to students who withdrew on medical grounds.

Address all applications to: Scholarships Officer, (OHE), Student Support and Scholarships Division, P O Box 5117, BOROKO NCD.

Applications close on 19 May 1998

Return/drop in all applications to the Scholarships Officer, Unitech, at Students Affairs Office.

Yawi K Rapi
Student Affairs

NASA Meeting

All National Academic Staff (regardless of financial membership) are asked to attend the first general meeting for 1998. The main aim is to give members an update and to plot strategies and identify achievable priorities for the Association. Your input in this regard will be valuable.

Date:Friday, 15th May.
Starting Time:12.00 noon sharp
Venue: Hydraulics Lecture Theatre, Civil Engineering Department

•Several Committees require NASA representation. If interested, nominate or forward your name to the undersigned soon. The Committees are (1) Finance & General Purpose, (2) Duncanson Hall Management, (3) Localisation & National Staff Development, (4) Medical Services Management, and (5) Security. Other Committees requiring the President or his nominee are not shown.

•Where more than 2 names are received, votes will be taken.
•Forward agenda items to the undersigned by Wednesday, 13th May.

Dr Anthony H Harakuwe
Secretary - NASA

Unitech Catholic Community

Friday Night Rosary will be at the PANAU's residence, 105 Purari Drive.

Time: 7.30 pm

If you're free this Friday evening, please come along.

Unitech Women's Basketball Association

The Annual General Meeting for UWBA is scheduled for 11 May, 1998.

Venue:Unitech Basketball Courts
Time:4.30 pm

Any items for the agenda must be submitted to the Secretary, Merilyn Daniel at the Bursar's Office by Thursday 12:00 noon.

Further queries can be directed to Geua Meda on Ext: 4360.

Geua Meda
Vice-President - UWBA

Unitech Craft & Social Club

Our next meeting:

Venue: 130 Sepik Drive
Time: 9.30 am
Date: Wednesday 13th May

A member will demonstrate the preparation of a Polish salad.

This meeting is open to all ladies on campus.

Staff Amenities Centre

THE NORTH SOLOMONS 'BAMBOO BAND' WILL PLAY ON FRIDAY 8TH MAY 1998.

"MOTHERS DAY" 10TH MAY, 1998

THE BAR WILL OPEN FROM 10.00 AM TI... 4.00 PM. BBQ OUTSI... THE LAWN. BRING YOUR FAMILY AND CELEBRATE YOUR MOTHERS DAY AT THE CENTRE.

SAC MANAGEMENT

NZODA Sponsored Students

All NZODA sponsored students are advised that the Training Manager Mr. Lesley Bola will leave the New Zealand High Commission as of Close of Business on Tuesday 5 May 1998.
You will be be informed of his replacement as soon as a new appointment has been made.

Allan Sako
Director - Student Services

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:
Monday:**UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**
WEEK-ENDS
Saturday
AM -SDA
PM-TSCF
Sunday
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

Sunday
CLC CHURCH

IAEA

The International Atomic Energy Agency has vacancies for the following positions:

1. Plant Breeder/Geneticist, 2. Computer System Specialist, 3. Director, 4. Radiation Therapy Specialist, 5. Nuclear Engineer and 6. Nuclear Engineer.

Applications deadline for above vacancies: 22 July 1998.

Recruitment Notice
Secretariat of the Pacific Community has vacancies for the following positions:

1. Statistician, 2. Translator (French) and 3. Interpreter-Translator (French).

Deadline for the applications: 31 May 1998

Interested persons please, come and collect copies of information sheets from the Public Relations Unit.

CLASSIFIEDS

Positions Vacant

Open and Distance Learning Centre

Applications are invited for the positions of Temporary Admin Clerk and Senior Storeman in the Open and Distance Learning Centre.

Applicants must be Grade Ten or higher with at least 2-4 years work experience in similar environment and a self-starter.

High standard of work, honesty and consistent performance are required for these positions:

1)Temporary Administrative Clerk

Duties:
Assist Administrative Officer with all administrative duties. Other duties as directed by the Director.

2) Senior Storeman

Duties:
Manage storeroom, order and arrange printing of modules, dispatching, stocktaking, help with registration and student queries, other duties as directed by the head.

Salary
Admin Clerk I
K4,527 - K5,530 PA

Admin Clerk II
K5,178 - K6,327 PA

Admin Clerk III
K5,947 - K7,269 PA

Snr Storeman
K4,527 - K5,530 PA

(The level of appointment will depend upon qualifications and experience)

Detailed applications (two copies) with curriculum vitae including Certified copies of certificates and the names and addresses of three referees plus telephone/fax numbers and an indication of earliest availability should be received by: The Registrar, PNG University of Technology, Private Mail Bag, LAE, Papua New Guinea by 15 May, 1998

Homely Tips

Hints on the proper use and maintenance of household appliances.

Refrigerators

1.Ventilation

Do not stand refrigerator hard up against the wall. Allow enough space behind the refrigerator for good air circulation around the motor and compressor.

2.Loading of Refrigerator

Refrigerator doors not closing properly or are starting to come loose, usually result from overloading. Avoid overloading the door side pockets with heavy food stuffs and beverages. Do not store heavy water bottles on side pockets especially 2 litre wine bottles. Make use of the main freeze shelving. Prevent small children from hanging on freezer door or using it as a swing.

3.Defrosting

Never, ever use a knife, fork or other sharp metal objects to remove ice from the freezer.

There have been many cases whereby tenants have tried to remove ice from the freezer compartment and in doing so puncturing gas lines.

Note that the metal base of the freezer compartments protect evaporator gas coils. Metal bases to freezer compartments of some models are actually part of the gas lines, which when scratched or poked with sharp hard object could rapture very easily. These are very hard to repair and usually result in the freezer replacement, which is very costly.

When defrosting, simply switch the thermo control knob to DEFROST, or switch off the refrigerator at the power point and let the ice chunks melt loose for easy removal in a couple of hours. Remove ice and clean/wipe the inside with a sponge and clean cloth.

Would you rather wait a couple of hours for defrosting or a couple of months for a new refrigerator.

4.Rust Prevention

Base of the refrigerator should always be kept dry and clean by regular wiping and dry mopping to avoid rusting of the metal base.

5.Storing wet items on top of Refrigerator

Never leave wet items, or raw frozen food stuff on top of the freezer. Water will drip over the sides, seep through and short circuit the auto timing switch located just below the top back of the freezer in some models, or to the compressor/motor at the base of the refrigerator.

6.General Cleaning

Regularly wipe off dust, dirt and excessive moisture from the refrigerator surface inside and outside with a clean dry cloth. Look after your refrigerator well, and it will look after you.

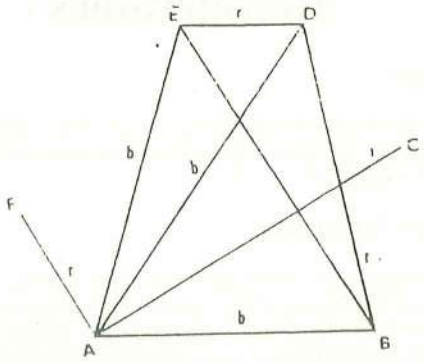
Warning

Tenants who damage refrigerators by removing ice with knives or other sharp objects risk being asked to repair or replace them at their own expense.

Read manufacturers instructions.

Tenants who want to know more about the workings of a Refrigerator are free to call in at the refrigeration workshop. Our staff at Buildings & Grounds will be only too willing to help.

FUN WITH MATHEMATICS



Solution to Problem 5

Represent the six persons by six points. If any two persons are related, join the corresponding points by a black line, otherwise, by a red line. Thus, join all the six points in pairs by 15 lines, some of them coloured black and some red. We have now only to show that there are always three points among the six whose three joins are of the same colour.

Let ABCDEF be the six points. Consider any one point, say A and the five lines from A, namely AB, AC, AD, AE, AF. In whatever way these may be coloured, it is obvious that atleast three of them are of one colour.

For definiteness, let us say that AB, AD, AE are black and AC, AF may be red or black: Now if the sides of the traingle BDE are all red, then we have proved the proposition. If they are not all red, at least one of them will be black, say BE. Then, ABE will be a triangle all of whose sides will be black. So, in any case, whatever may be the scheme of colouring the lines, red or black, there will always be a unicolour triangle and this completes the proof.

Problem 6

Can you cut a rectangular sheet of paper into three pieces which can be rearranged, without overlapping, to form a square?

K5 for first correct entry.

Please send your detailed solutions before 11th May 1998.

Dr Neela Sukthankar, Department of Mathematics & Computer Science.

Air Mail

STAMP

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Papua New Guinea University of Technology
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TARAKA
BULOLO
BUMBU
ISSUE No:1287 ISSN:10119-5354 15 May, 1998 WEEKLY

Masterclass pressure brings out the best in students-visiting lecturer

Masterclass is always pressure time for Architecture & Building students each semester.

And last week was no exception, as the students worked night and day to develop models of the proposed central teaching block from concept to miniature reality, during the BHP Steel Masterclass Seminar.

About seven groups comprising students from 2nd to 5th year worked under extreme pressure to produce designs and models, and later made presentations to the panel for judging on Friday.

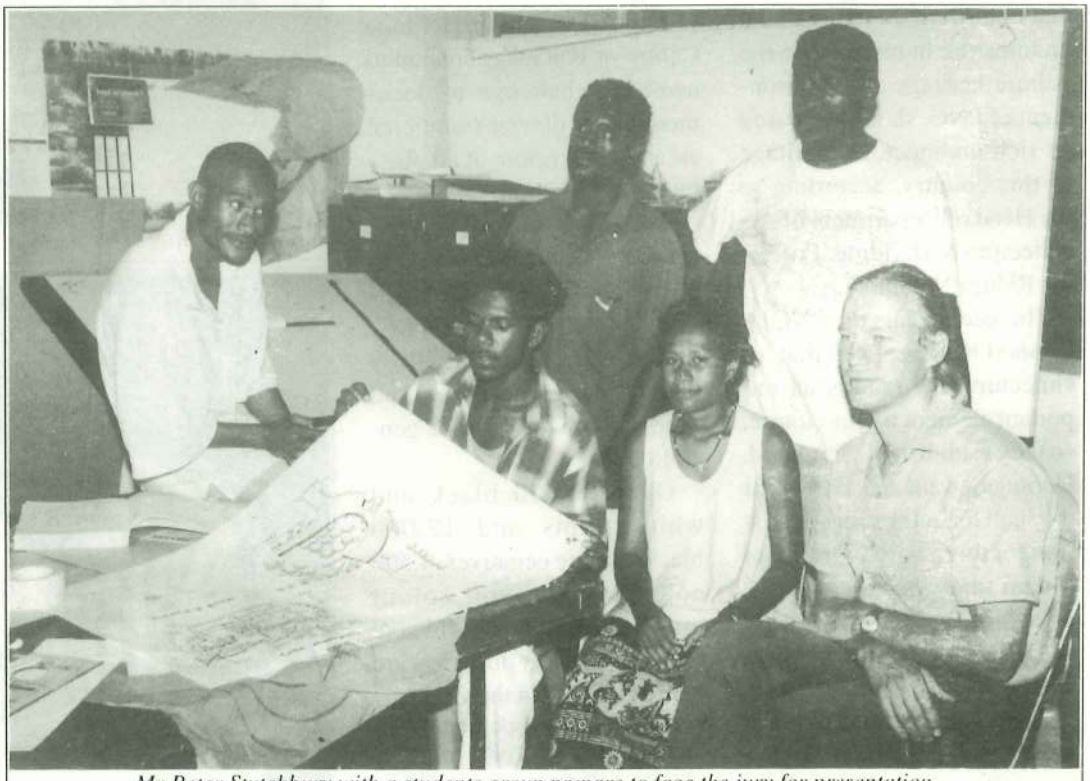
The guest lecturer and private practitioner, Peter Stutchbury of Stutchbury and Pape in Sydney was extremely pleased with the quality of work by the students during the week.

"PNG students show an amazing personal commitment to the process of designing and painting the works of architecture," Stutchbury said after a week of mingling with the students.

"They also worked remarkably well together, and it's quite unique with the range of years, when people of different ages work compatibly together, it is very good - it could not happen in Sydney.

"The intensity of design and quality to design a K2 million building in one week, which would take about a month, is remarkable.

"I know the masterclass pressure to perform but these students have been really positive,



Mr Peter Stutchbury with a students group prepare to face the jury for presentation

By CORNEY LAHIES

a group of people who are more than able to assist in the cultural and climatic bond of architecture."

Making his third trip to the country, Peter first heard about PNG at about four years of age, when his uncle a missionary with the Evangelical Church of Papua, would go home for field breaks after a few years and tell the family about the people in PNG.

A graduate of Newcastle University, Australia, Peter has also developed a special liking for the traditional architecture of PNG.

"One of the clear observations to me was PNG has so much depth and richness that is tangible, and I am envious of that," Stutchbury said.

"Australia is so badly defined in depth, and there is a great opportunity for Papua New Guineans to take this into year 2000.

"But unless what is shown here is evident over PNG, the prospect of a frontier country will never be achieved.

"I love PNG and have high regard for this country. I've lived in the Highlands in 1980-1981 and was involved with long haus buildings in Mogulu in Western Highlands, Mt Busavi, Lake Kutubu and Tari in Southern Highlands.

"I am deeply and forever impressed with the honesty of indigenous architecture, the structure waste is extremely minuscule, whereas in my country up to 40 percent is wasted.

"This is the architecture of the future and we should be encouraging students to be proud of that cultural heritage, which is embodied in tropical architecture.

"Traditional architecture demands very little from the environment and still leave the environment in a very natural place, in future it could become a resource in itself."

Prof Ruff winnner of PNG Institute of Architects Heritage Award

Professor Wallace (Mac) Ruff is the winner of the Papua New Guinea Institute of Architects sponsored Heritage Award for 1997

The award is presented annually by the Papua New Guinea Institute of Architecture (PNGIA) for the best effort in preservation and promotion of traditional architecture in the Country.

The appropriate architecture that contribute to the regional architecture in response to the culture heritage and environment of PNG, should be based on rich architectural heritage of this country, according to the Head of Department of Architecture & Building, Professor Rahim Milani.

"In recent years the PNGIA Council have realised that architectural heritage is an important element of this culture, so they established this award, Heritage Award and every year they call for entries for submission for this award," Professor Milani said.

"Mac has submitted his work for the first time and won this prestigious award.

"This is the second time the award was presented after it was initiated in 1996, where anybody can submit entries. "The entries and assessed based on the level of contribution they make on promotion and preservation of traditional architecture."

The 1996 award was won by an architect from Port Moresby who presented a statement on Kwato Church in Milne Bay Province.

Mac submitted drawings of the Haus Tambaran (Cult Houses) in the Murik Lakes in the East Sepik which are included in his vast collection located in the Architectural Heritage Centre of PNG housed in the Department of Architecture and Building.

The Architectural Heritage Centre of PNG was created to meet the challenge of documenting the diverse traditional art and architecture of all provinces in the Country.

The aim of the Architectural Heritage Centre of PNG is to preserve the wealth of tradition, skills and talents displayed in the buildings built by fathers and grandfathers and ancestors of the present generation.

Over 10,000 black and white prints and 12,000 black& white negatives, 4,500 colour slides, 900 colour prints, hard covered field note and 400 abstract drawings are all now stored in the Centre.

Another set of personal collection of over 1600 artifacts of which 95 per cent are PNG's artifacts are on permanent display at Bishop Museum in Hawaii.

A display of Mac's Collection at the Matheson Library is being organised by the Department.



Prof Mac Ruff at the Architectural Heritage Centre of PNG



Masterclass pressure adds demands on students

The Reporter is produced weekly by the PUBLIC RELATIONS UNIT.
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email: reporter@unitech.ac.pg or ckl @global.net.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

NUS to demand Government for K8 million for second semester studies

The newly elected interim National Union of Students executive will be demanding the National Government to immediately make funds available for the second semester for the tertiary students nation wide.

By STEVEN BUSIN

This is in light to the current short fall of about K8 million for Natschol sponsored students nationwide as revealed by Education Vice Minister Dr John Waiko recently which would affect more than 7000 tertiary students.

With such pressing issue at hand, newly elected interim National Union of Students president, Daigo Kumulgaul, has called on the National Government to come out clearly and explain to the students.

At a special NUS national congress at the University of Technology, last weekend, the executive resolved that it would be making a submission to the government to immediately make funds available for the second half of the school year.

Kumulgaul said the interim executive would develop strategies and action plans to address such national issue on hand.

Goroka University SRC president, Simon Gesip warned that the government would be making a terrible mistake by denying students access to education next semester.

Meanwhile, a successful vote of no confidence was carried out on the current NUS executive and a new interim executive voted in.

Daigo Kumugaul from the Goroka University was elected president while Johny Minga Wemin from Unitech and Paul Kaman from Goroka University were elected vice presidents.

Mr Allan Pulyul from the Goroka Business College was elected treasurer while Ms Theresa Bera from the Lae Technical College was elected as secretary.

On the question of the legality to remove the NUS president, the congress upon deliberation ruled that the NUS constituion allowed for such a event to occur through a vote of no confidence in accordance with section (48) subsection (3) (a) of the NUS constitution.

The Congress unanimously upheld the motion since the requirements of the vote of no confidence was met.

Unitech SRC president, John Kaio described the congress as the beginning of reviving the so called "student power" in the country.

"For so long till now, the highest office (NUS) of the student body in the country has been inactive and mismanaged," he said.

"For so long the leading roles of the office of the NUS have been misrepresented.

"Successive student leaders have been driven by selfish thoughts and short term benefits that sensitive national issues of this country have been passed through unnoticed."

Mr Kaio said that the NUS needed leaders with vision to lead the student body and student leaders must not been seen to be submissive to political power.

Also at the NUS congress, Divine Word University was chosen as a venue for this year's NUS games.

The President Miss Sabiña Francis has accepted the responsibility to host the games and the congress fully endorsed the proposal.

Unitech President, John Kelly Kaio reminded the SRC presidents present at the congress to get their sports chairpersons to organise and prepare their students straight away. The games would be held from 31st July to 2nd August.

The congress was attended by representatives from: Faculty of Medicine, University of Goroka, Divine Word University, Vudal University, Unitech, Goroka Business College, Goroka School of Nursing, Lae School of Nursing, Lae Technical College and the Martin Luther Seminary.

Masters of Business Administration curriculum completed

The Master of Business Administration (MBA) curriculum to be offered by the Department of Business Studies has been finalised according to Acting Head of Department, Gomi Gipe.

By STEVEN BUSIN

An MBA Task Force, he said, had appointed Dr Stewart Fleming and John Gimiseve to prepare the curriculum documents in consultation with an Australian University partner, which would be submitted to the Courses Committee for approval.

This is part of the implementation process of the Department's medium term plan "1996-2000", developed in 1995, which would be reviewed on a yearly basis.

In preparing the MBA programme for implementation this year, the Departmental Planning and Review Committee carried a curriculum review of all its Sections last October in Madang. The department selected two action officers from each Sections to undertake preparations of the curriculum documents for the Courses Committee's approval.

He said that all curriculum documentation would be completed by the end of June.

The Department had also appointed Dr Vivienne Saverimuttu to coordinate and compile the production of a multi disciplinary refereed journal.

The Department is expected to initially fund the journals, subject to availability of funds." Mr Gipe said.

"In future, external funding will be sought and the following proposed journal committee comprising the Head of Department, all Section Heads, Kwame Afosa and Dr Saverimuttu was formed."

The Department has also considered a proposal from the National Government through the Department of Commerce and Industry, on the establishment of a Small and Medium Enterprise Centre (SME).

The proposal of the Department was accepted for detailed consideration by a committee made up of the Head, Section Heads and senior advisors to consider the various implications of the SME Centre, including finance and a new building for the Department of Business Studies.

Meanwhile, the Department is still without a Professor and substantive Head.

A Professor, from the United Kingdom, was expected by the University and the Department of Business Studies on early last year.

According to a brief of 18/02/98, the professor had accepted the offer and had decided to come on 21/02/97.

"We were later informed that he was expected to arrive in March 1997 however this has not eventuated." Mr Gipe said.

"Soon after the situation with the professor, a potential candidate from United Kingdom was interviewed, without the position being formally advertised.

"In any case the person was found to be unsuitable, and the exercise went back to the drawing board

The latest situation is that the position was advertised again in late 1997, and over 30 candidates have applied, from all over the world.

"A short listing was done but the short listing committee has now gone back to reconsider the long list."

The present Acting Head is not an applicant for the position.

Building students help build "Well Womens Clinic" at Angau Hospital

Building students constructed a "Well Women Clinic," for primary health care for women at the Angau Memorial Hospital last week.

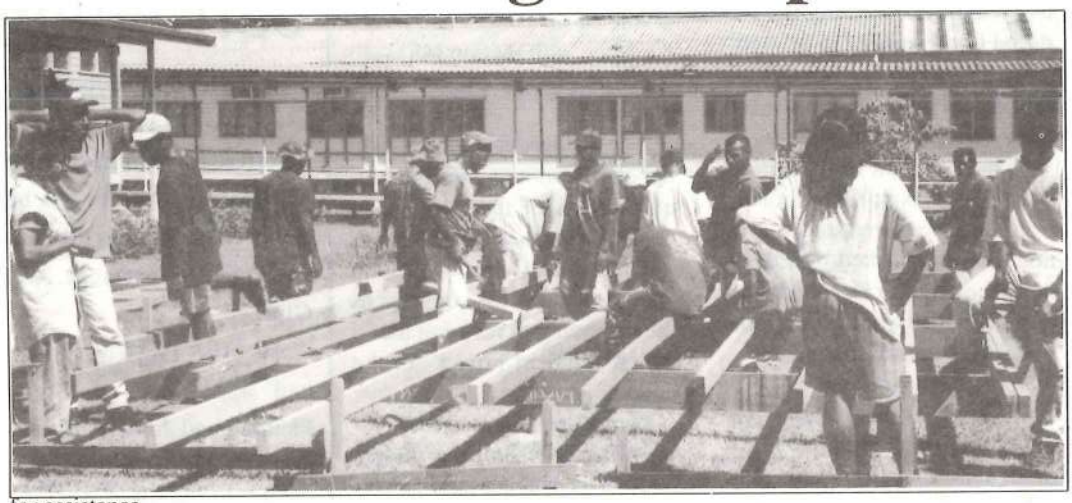
During the project week, the students also constructed concrete footpaths for Ward 4 area.

According to Building lecturer and project week coordinator, Ken Polin, each semester the Department of Architecture and Building suspend classes for a week to allow students to participate in their project week, which at times involve hypothetical situations or such community projects as the "Well Women Clinic."

The charity project was funded jointly by British Petroleum (BP), Seeto Kui and the Cancer Relief Society, while construction was a joint effort by the students and the PNG Defence Force Engineering Unit of Igam Barracks.

Polin said the building used in the project was designed by first year students last year, which attracted much attention from the public due to its optimum size and simplicity.

He said the model of the building was erected by the first year students last year near the Architecture and Building Department and according to the Cancer Relief Society of Lae, the model was as an ideal one for their proposal and approached the Department for assistance.



The Building Section of the Department undertook to organise the project, which involved the students to construct the building near the Cancer Unit during the project week.

The structure of the building was completed within the week and is now left with the Defence Force to complete.

At the end of the hectic week last Friday, the Chief Executive Officer (CEO) of Angau Memorial Hospital, Ms Margaret Samei met with the students to express the Hospital Board's appreciation and congratulated the students.

The CEO further said that the hospital would continue to seek assistance from Unitech where possible in the future.

The students involved in the construction have been invited by the CEO, on behalf of the Hospital Board for the opening of the building when it is completed.

"The Department takes this opportunity to congratulate the students for a job well done," Polin said.

"We would also wish to tha[illegible] following for their invaluable as[illegible]tance in making this project week a successful one.

"The are: Unitech Transport Section for the prompt arrangement of transport of students and materials daily, SHRM at the students mess for the daily arrangement of students lunches, Mainland Plumbing for the supply of building materials and BP for the funds which made everything possible."

Security officers urged to smarten up act

Unitech campus security personnel have been urged to smarten up their act while performing their duties.

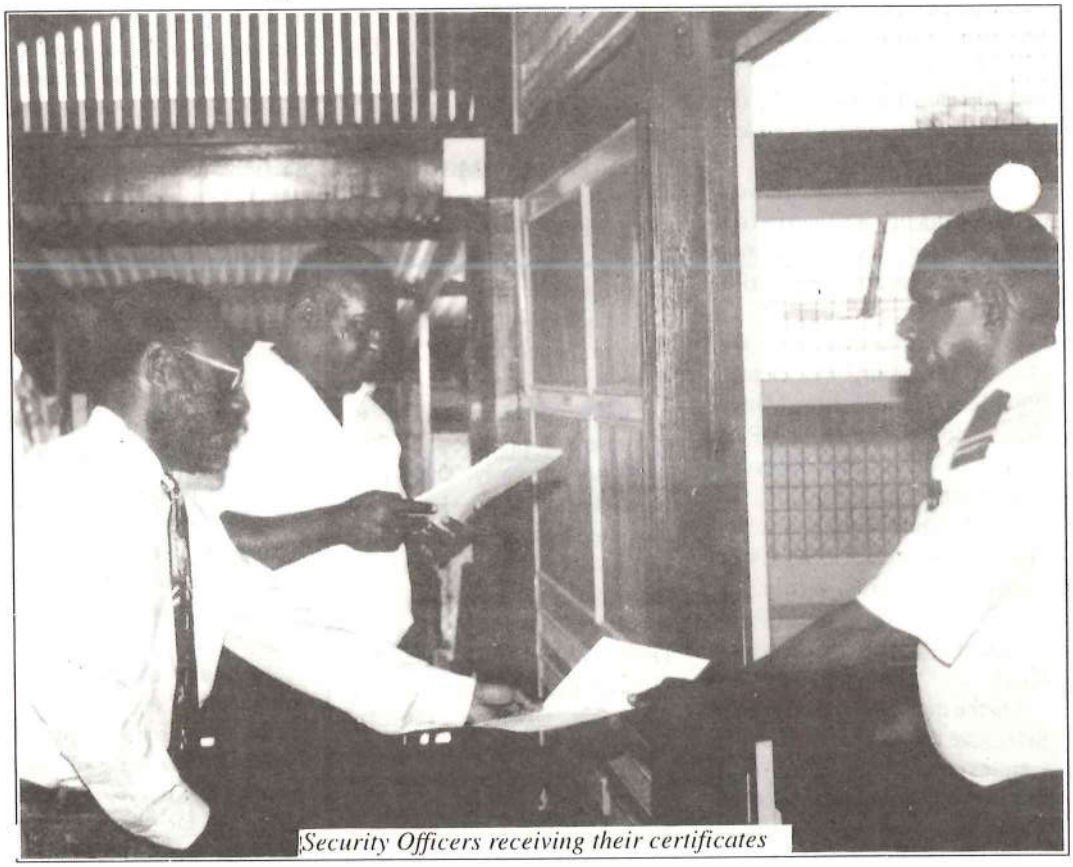
Pro Vice Chancellor (Academic) Dr Philip Siaguru made the call when presenting certificates to security personnel who underwent a basic patrol men course during the presentation at the Staff Amenities Centre (SAC).

He told the Security Officers that the public's perception of their image was very important.

As security personnel, they are the first people that the public contact when entering the University Gates, and their conduct and approach to visitors or the University Community, reflected on their profession.

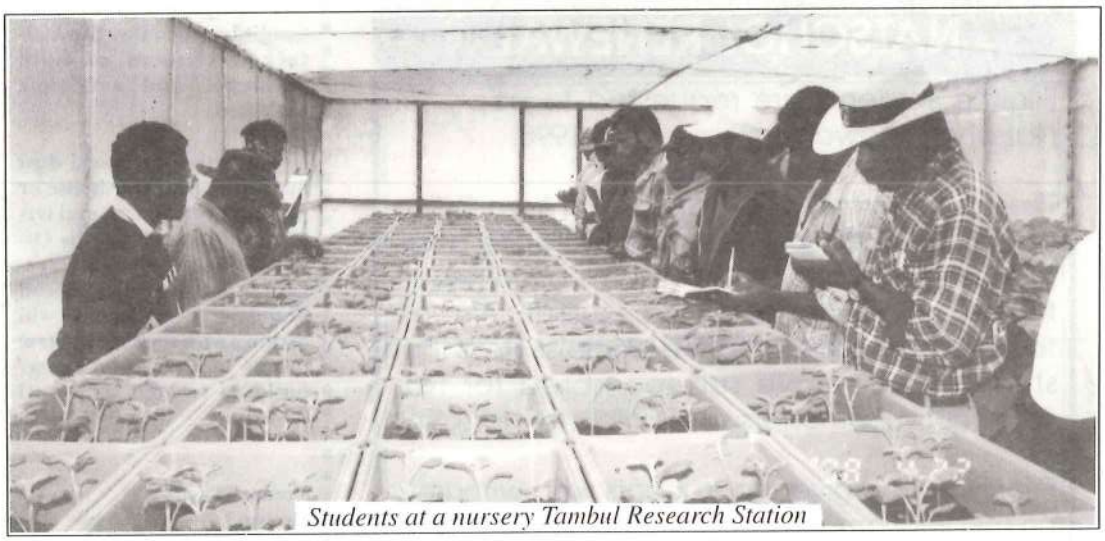
Dr Siaguru also revealed to the security officers that he was impressed with their quick response to a particular incident that he was involved in,while he urged them to continue to maintain such professionalism in their duties.

Meanwhile, Dr Siaguru urged the Campus Security to initiate on-the-job training for officers as it was the University's belief that only through training, that Unitech staff could maintain a high standard of professionalism. He said that such short courses was neccessary for Security Officers, as they encounter all sorts of people from within the University community and the public at large.



Security Officers receiving their certificates

Highlands field trip for Agriculture students



Students at a nursery Tambul Research Station

The fourth year students from the Department of Agriculture, along 'th two staff members Dr Kevin well (Fourth Year Coordinator) and Mr Luke Wangi (Senior Technical Officer) recently travelled to the Highlands.

The trip which lasted for a full week enabled students to appreciate and observe the wide diversity of agriculture enterprises being carried out in the region and the range of potential employers.

These included large scale commercial enterprises such as the Aviamp Tea Plantation and the Sigri Coffee Plantation, managed by W.R. Carpenters Estates, in the Mount Hagen area where plantation managers and staff described the agronomy and processing of beverage crops.

Research activities were described by staff at the Coffee Research Institute, Aiyura and Highlands Agricultural Research Station, Tambul, while the potential for fish farming was described by staff at the JICA-funded HAQDEC Fisheries Project in Aiyura.

At the Christian Leaders Training College in Banz students observed the commercial side poultry production visiting the hatchery, layer and breeding sections.

A wide range of activities were observed in Goroka included honey, jam and marmalade producers, spice production and coffee roasting.

In all twelve enterprises where observed during the Highlands tour and the co-operation of staff at these enterprises is greatly appreciated.

Unitech boxer returns from Oceania meet with bronze medal

Unitech Boxing Club member, Sam "Liklik" Muzoki, has returned from the recently held 21st Oceania Boxing Championship with a bronze medal.

Muzoki was a member of the eight men Papua New Guinea boxing team that participated at the Oceania Boxing Championship held in Wellington, New Zealand held 20-24 April which returned with a medal haul of eight bronze medals and a silver medal.

Sam "Liklik" Muzoki fought in the g division and made it into the semi ls only to go down to Australian fighter, S. Smith on a points decision to land himself the bronze medal.

His opponent, S. Smith went on into the grand final to knockout his New Zealand opponent in the second round to snatch the gold medal for the light weight category.

Musoki would like to thank the Unitech Union Board for their sponsorship in making it possible for him to attend the Oceania Championships and fellow club members and executive for their support and encouragement.

Although being pleased with his bronze medal performance at the regional championships, Muzoki said, he still has a daunting task ahead to further prove himself at the National Boxing Championships in Buka over the Queens Birthday long weekend next month.

At the national championship, a elite boxing squad would be named for the Commonwealth Games in Kuala Lumper which he hopes to make it again in the national team.

Unitech Boxing Club would also be sending a huge contingent of about 20 boxers participate at the Buka Championships, and are currently undergoing an aggressive training regime to prepare themselves for the coming tournament.

The Unitech club, under the mentorship of former professional boxer, Francis Laka are in high spirits with hopes of making a impact at the national meet.

The Unitech contingent to the Buka Championships would be led by President Dominic Nimbi, coach Lohial Nuau and team manager Berldon Timah.

The boxing club would be conducting fund raising activities and club executives have urged the Unitech community to support the club in its fund raising efforts to attend the national championships.

They would need to raise approximately K7000 to be able to travel to the championship next month.

Meanwhile, four boxers were invited to fight in Bulolo at a boxing trial organised by the PNG Boxing League.

In those trials, the four Unitech boxers participated in the flyweight and bantam weight division.

The boxers put up an impressive performance with winning three of the four bouts.



Sam "Liklik" Muzoki shows off his prized medal

Junior boxer, Rex Wai fighting in the junior flyweight division has impressed selectors who have named him to participate in the Australia against some of their professional fighters.

Robert Kanawi and Joseph Ulem have been slotted in to go for another trail bout in Bulolo to see which one of them will travel to Australia in July.

The Unitech team will also be sending up another contingent of boxers to Bulolo in three weeks time to trial matches against fighters from Bulolo, National Sports Institute and Kundiawa.

These trial matches will also be used as a lead up preparation for the Unitech team for the national championships in Buka.

CAMPUS BULLETIN BOARD

Rainfall Readings for 24 hours to 0900 on:

Wed	6.05.98	4.8 mm
Thurs	7.05.98	0.4 mm
Fri	8.05.98	Trace mm
Sat	9.05.98	0.2 mm
Sun	10.05.98	0.0 mm
Mon	11.05.98	0.0 mm
Tues	12.05.98	8.0 mm

Total rainfall for week ending 12.05.98 13.4 mm
Total yearly rainfall up to 5.05.98 1390.6 mm
Total yearly rainfall up to 12.05.98 1414.0 mm

Sali Bafinu
Civil Engineering Dept.

Papua New Guinea Banking Corporation

Please note that our Operating Hours from Monday the 1st of June will be 8:45 am to 3:00 pm Monday to Thursday and 8:45 am to 4:00 pm on Friday.

Your assistance in conveying our new hours to your staff is appreciated.

B M Hutchinson
Manager

Unitech Citizen Women's Association

Female staff, students and members are all invited to attend our meeting on 24/5/98.

Agenda

1. **Election of new Office Bearers**
2. **National Council of Women AGM Report**
3. **Convention**

Please come along so that we can plan for the National Council of Women's Convention next year.

President
UCWA

NATSCHOL RENEWAL

Eligible students are requested to apply for Natschol renewal for Semester 2, 1998.

There is no formal application form from Office of Higher Education. You need to write a formal letter and attach your Examination Results for the period you sponsored yourself. Also attach your self-sponsored fee receipts. Note that students who have self-sponsored for two consecutive semesters, are eligible for Natschol.

Priority will be given to students who withdrew on medical grounds.

Address all applications to: Scholarships Officer, (OHE), Student Support and Scholarships Division, P O Box 5117, BOROKO NCD.

Applications close on 19 May 1998

Return/drop in all applications to the Scholarships Officer, Unitech, at Students Affairs Office.

Yawi K Rapi
Student Affairs

Lae Bridge Club

Lae Bridge Club meets every Thursday in the Staff Amenities Centre (SAC) at 7:00 pm. The club is suitable for players of all standards. We particularly want to encourage new members and beginners to come along and have a go. For more serious players, we play duplicate Bridge and have a range of computer software available for practice.

Dr Stewart Fleming
Business Studies

STAFF AMENITIES CENTRE

Lunch Menu

1.Rump Steak
(grilled to your liking) - K5.00,

2. Seafood Choice (beer battered fish fillet) - K5.50,

3. The Great Classic Burger (burger served with egg + bacon) - K5.00,

4. Kakaruk
(roast spring chicken) - K5.00,

5. Omelette
(plain or with filling) - K4.00,

6. **Texan Steak Sandwich** (prime steak with fried onions) - K4.00,

7. Stew + Rice
- K4.00.

All dishes served with French fries and fresh garden salad.

Termites

It has been discovered that due to aging and weather condition, termites have attacked timbers of both residence and academic buildings.

If you notice any wood dust on the floor of your house or place of work and suspect termites, please contact the Office Manageress or the Secretary of Buildings and Maintenance Office. We will arrange with the Pest Control people to have your house/ building treated with anti pest spray.

Norbert Angale
Housing and Property

NEW DRAMA CLUB

Look out for information on notice boards for those interested persons.

For more information contact Maxwell Chiru, Civil 3rdyear, Stavis Benson, Applied Physics 3rd year, Frida Lindemalm, VDT 472 1666, David Lee ATCDI 473 4607 or Roger Paulsen, Architecture and Building 473 4513.

UNITECH SOUVENIRS

UNITECH SOUVENIRS ARE AVAILABLE AT THE PUBLIC RELATIONS UNIT.

PLEASE DO NOT HASITATE TO CONTACT ANGELA FOR MORE INFORMATION OR THE PRICE LIST.

PH: 473 4291

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday: UNITED CHURCH
Tuesday: ANGLICAN
Wednesday: LUTHERAN
Thursday: AOG
Friday: CATHOLIC

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF

Sunday
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

nday
.J0 CLC CHURCH

Fundamental Campus Bible Fellowship

Reminder to all members that our normal fellowship is on tonight.

Teaching on soul winning. Any interested person is welcome to attend.

ue: HLT (Civil Department)
Time: 7:30 pm
Date: 15/05/98

Unitech Staff Bible Study

The next meeting of the Unitech Staff Bible Study group will be held on Monday 18 May, 1998 at 7:00 pm.

Venue: 86 Fly Drive
For discussion: The History of the Christian Church

All interested staff are welcome.

Patrick Afenya
(Tel: 4674)

CLASSIFIEDS

Recruitment Notice

Secretariat of the Pacific Community has vacancies for the following positions:

1. Statistician,
2. Translator (French),
3. Interpreter-Translator (French),.
4. Graphic Arts and Design Officer and,
5. Population Advocacy and Reproductive Health, Information, Education and Communication (RH/IEC) Adviser.

Deadline for applications for positions 1-3 is: 31 May and for positions 4 & 5 : 15 June, 1998

Interested persons, please come and collect information sheets at the Public Relations Unit.

Homely Tips

Hints on the proper use and maintenance of household appliances.

Refrigerators

1. **Ventilation**
Do not stand refrigerator hard up against the wall. Allow enough space behind the refrigerator for good air circulation around the motor and compressor.

2. **Loading of Refrigerator**
Refrigerator doors not closing properly or are starting to come loose, usually result from overloading. Avoid overloading the door side pockets with heavy food stuffs and beverages. Do not store heavy water bottles on side pockets especially 2 litre wine bottles. Make use of the main freeze shelving. Prevent small children from hanging on freezer door or using it as a swing.

3. **Defrosting**
Never, ever use a knife, fork or other sharp metal objects to remove ice from the freezer. There have been many cases whereby tenants have tried to remove ice from the freezer compartment and in doing so puncturing gas lines.

Note that the metal base of the freezer compartments protect evaporation gas coils. Metal bases to freezer compartments of some models are actually part of the gas lines, which when scratched or poked with sharp hard object could rapture very easily. These are very hard to repair and usually result in the freezer replacement, which is very costly.

When defrosting, simply switch the thermo control knob to DEFROST, or switch off the refrigerator at the power point and let the ice chunks melt loose for easy removal in a couple of hours. Remove ice and clean/wipe the inside with a sponge and clean cloth.

Would you rather wait a couple of hours for defrosting or a couple of months for a new refrigerator.

4. **Rust Prevention**
Base of the refrigerator should always be kept dry and clean by regular wiping and dry mopping to avoid rusting of the metal base.

5. **Storing wet items on top of Refrigerator**
Never leave wet items, or raw frozen food stuff on top of the freezer. Water will drip over the sides, seep through and short circuit the auto timing switch located just below the top back of the freezer in some models, or to the compressor/motor at the base of the refrigerator.

6. **General Cleaning**
Regularly wipe off dust, dirt and excessive moisture from the refrigerator surface inside and outside with a clean dry cloth. Look after your refrigerator well, and it will look after you.

Warning
Tenants who damage refrigerators by removing ice with knives or other sharp objects risk being asked to repair or replace them at their own expense.

For Sale

Mazda 929,
Air conditioned, power steering & brakes, radio; newly fitted rear struts, rego. August 98. K10,000 ono. And Pajero, turbo-diesel, air conditioned, power steering & brakes, radio/ cassette player, reg. May 99. K16,000 ono. Call 475 7462 or 473 4455.

SHARP TV

Sharp 20 inch colour TV. 10 months old. Selling for K550.00. Contact Jim Jarabi on Phone 473 4275.

Computer

The computer comes with AMD 5 X 86, 133 MHZ Processor, 16MB RAM, 1.7 GB Hard Disk, 3.5" and 5.25" floppy drives, 14" non-interlaced monitor, 16 Bit sound blaster, keyboard, mouse and mousepad and heaps of software including windows 95 and office 97. K1300.

2. Sony Video camera
It comes with carrying bag and 2 spare batteries - K1200.

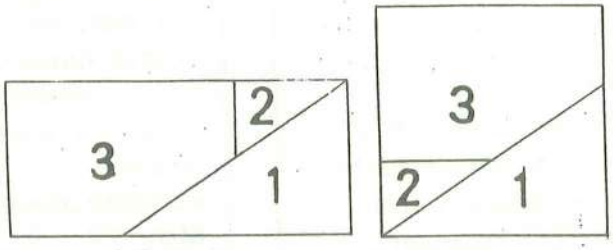
National Rice Cooker
Only K45.

Contact 473 4606 b/h or 475 52076 a/h.

FUN WITH MATHEMATICS

Solution to Problem 6

Let ABCD be the rectangular sheet of paper and. let the lengths of AB = a cm and BC = b cm. Let AB > CD and $x = \sqrt{ab}$.



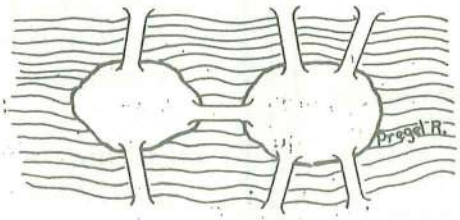
Along the length CD, cut off CP = x and along AB, cut off AQ = x. Join $\overline{AB}$ at Q meet $\overline{PB}$ in R. Then cut the paper with scissors along PB and QR. We will get the three pieces which can be rearranged to make a square as shown in the second figure above.

K5 for first correct entry.

Problem 7

Konigsberg Bridges

In the Pregel River in Konigsberg (Germany) there are two islands which are connected by a bridge and they are connected with the mainland by six other bridges, as shown in the figure. Can you show a way by which one can walk over each of the seven bridges once only, starting from any point on land and ending at the same or any other point?



Please send your detailed solutions before 25th May 1998.

Dr Neela Sukthankar, Department of Mathematics & Computer Science.

Air Mail

STAMP



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Public Relations Unit
Papua New Guinea University of Technology
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PAPUA NEW GUINEA

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The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1298 ISSN:10119-5354 29 May, 1998 WEEKLY

PNG's underground movement attracts international attention

An international collaborative research program into the movement of plates beneath th[illegible]rth on various sites in PNG will commence next month.



Surveying students on a site will gain exposure from the international research program

By CORNEY LAHIES

According to the Head of the Department of Surveying & Land Studies Professor Rod Little, this research on the crustal geo-dynamics of PNG will provide new challenges to scientists.

"Recent improvements in measurement technology and geophysical technology have allowed researchers to improve their knowledge of the various tectonic plate movements," Prof Little said.

A large fault line that lies in th[illegible]amu-Markham Valley and f[illegible]a boundary between the Australian and South Bismark tectonic plates has attracted outside attention over the years, but its position and structures have not been fully defined.

"The definition of plate boundaries and plate movements in PNG has been the subject of international research for some years," Prof Little said.

"The Institute of Tectonics at the University of California, Santa Cruz (UCSC) has a specific interest in the definition of the Ramu- Markham fault.

"UCSC, in conjunction with the Department of Surveying and Land Studies and the National Mapping Bureau (NMB) undertook initial surveys of the Ramu- Markham fault in 1993, before and after the Kaiapit earthquakes, to determine changes."

In 1996 Unitech, the Australian National University (ANU) and the National Mapping Bureau (NMB) carried out a large crustal motion survey covering most of PNG.

Last year, Unitech combined its expertise with UCSC, NMB and UPNG, to conduct a crustal motion survey of 19 sites in Morobe, Madang and the Eastern Highlands Provinces over two weeks.

"The current campaign commences in June, with sites to be re-observed in the year 2000." Prof Little said.

"This campaign is being funded under a United States National Science Foundation research grant; research staff from UCSC and ANU will join with staff and students of Unitech to simultaneously survey 40 sites of tectonic interest from Lae, Finschaffen, Kaiapit, Bulolo, Goroka, Madang, Pindiu and other tectonically significant sites along the Finisterre Range."

More than 10 high precision Global Positioning Systems (GPS) will be used with continuous observation over 96 hour periods.

"The application of precise GPS receivers that use satellites to determine three-dimensional positions allows accuracies of less than 10 millimetres over 300 kilometre ranges to be achieved with the application of special field procedures and computer analysis." Prof Little said.

All Third and Fourth year Surveying students in the Department will be employed as members of the crew on site to expose them to a learning experience opportunity.

"The experience of working with seismologists, geologists and experienced surveyors will enhance their professional knowledge," Prof Little said.

"The University is supporting this campaign through logistical support and use of facilities, with the Department providing scientific advice, equipment and personnel.

"International projects of this nature enhance the profile of the University and expose staff and students to current research."

Dr Colleen of the University of California, Santa Cruz will conduct a seminar on the research later in June.

All members of the team travelling in from overseas are expected in the Country in the next couple of weeks.

New diploma course planned for next year

The Economics Section of the Business Studies Department is planning to introduce a Diploma course in Economics and Finance next year.

According to Head of Economics Section, Dr Asoka Seneviratne, all ground-work for the Diploma program has been completed, and was just awaiting approval from the Courses Committee.

"As soon as the Courses Committee approves the program, we will introduce it immediately as one of the Diploma courses offered by the Business Studies Department in 1999," Dr Seneviratne said.

After an extensive research carried out throughout the Country, it was discovered that there was a great need for a Diploma program in Business Economics.

Dr Seneviratne said the Business Economics Diploma course was basically in response to the needs of the banking and finance industry.

"The banking and finance industry, one of the fastest growing sector in the Country, was asking for more graduates in Business Economics, and we are trying to meet that demand," he added.

Dr Seneviratne said untill 1995, the Economics Section was a service unit of the Business Studies Department where the subject matter was taught as part of the three Diploma courses offered by the Department.

However, after a nation - wide research in 1995 on the demand for Business Economics graduates, a Degree program in Business Economics was introduced in 1995.

With the possible introduction of the Business Economics Diploma course, Dr Seneviratne said, the Economics Section would also come to par with other sections of the Department in providing its own diploma to students.

In the meantime, another major task for the Section, according to Dr Seneviratne, was to review the existing curriculum, following the plans of the Department to prepare students for the year 2000 and beyond.

The Section is also planning a seminar series in the near future, to be presented by the fourth year Business Economics students .

The Business Economics Section, currently, has four full-time staff and a part-time tutor. All three expatriate lecturers have doctoral degrees in economics and the national lecturer has a Masters degree from Australia. The part-time tutor is a graduate from the University of Papua New Guinea.

This year, the Section is teaching a total of 345 students from various departments in the University.

There are 165 first year students and 110 second year students in the Diploma in Commerce programs, and they read for Macro and Micro economics.

In addition, there are 35 students in third and fourth year of the Business Economics degree course.

Students who obtain a Diploma with a minimum of 65 per cent total marks, are admitted (limited to only 20 students) to the Business Economics degree courses.

During the two years of their study, they have to read for 15 economics and other relevant courses and are required to submit a minor thesis before they qualify for the B.Com degree in Business Economics.

The Section participates actively in consultancy services and short courses through the Management Development Centre. The Section also offers seminars, from time to time, on current economic problems in Papua New Guinea.

Currently, the Accounting Section of the Department offers a diploma in accountancy (2 years) and a bachelor of commerce in accountancy (2 years after the diploma).

There are 68 students in the second year, 46 in the third year and 38 in the final year.

To proceed to the degree program immediately after completion of the diploma in accountancy, a student must obtain a minimum weighted average of 65 percent of the diploma course.

In addition, a minimum overall average of 65 percent must be obtained in the second year accounting subjects.

Students who are not able to statisfy this requirement are usually advised to work for about two years before re-applying for the degree programm.

Currently, the staff strength of the section is five (an associate professor, a senior lecturer, two lecturers and a principapl technical instructor). Also, a lecturer from the Section is studying for his PhD in Australia. The research interest of the staff of the Section include taxation and development, issues in accounting education, accounting standards, investments and financial reporting.

Lecturers in the section offer consultancy services through the Management Development Centre and the Unitech Development & Consultancy.



Students at work in their computer laboratory- new course to offer new opportunities

The Reporter is produced weekly by the PUBLIC RELATIONS UNIT.
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Fax: (675) 4757 667
email: reporter@unitech.ac.pg or ckl @global.net.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Anti-corruption body needs more power



The Ombudsman Commission should be given more power and resources to effectively fight corruption.

This is according to a submission presented to the Parliamentary Select Committee by Pati Herivi, on behalf of the Students Representative Council and the Student Body, on the proposed constitutional amendment to the Organic law regarding the establishment of the Independent Commission Against ıption (ICAC).

The students' submission strongly recommended to the Parliamentary Committee to scrap ICAC, and give more teeth to the existing watch-dog, the Ombudsman Commission by giving it prosecutory powers.

The recommendation said that the Ombudsman Commission had functioned for the last 23 years and was experienced and capable of fighting corruption.

The recommendations warned that unless the Ombudsman Commission was well funded and given prosecutory powers, weeding out corruption would be very difficult.

"If the Government believes ICAC should assist the Ombudsman Commission, it should divide the job between the two organisations by allowing the Ombudsman Commission to specialise in the investigation of alleged or suspected corruption, and delegating to the ICAC the task of arresting and prosecuting those who are corrupt," Herivi said in the submission.

"We strongly believe that the above two are our best alternative ways to go to minimise cost and be effective, and recommend the both to the Parliamentary Committee to be given the due consideration.

"The Ombudsman Commission has not been given the prosecutory powers as the Constitution states in Section 219, Subsection 6 except, as provided by or under Div. 111.2 (leadership code).

The Commission's powers of enforcement are limited to publicity of its proceeding, reports and recommendations to the Parliament and other appropriate authorities as provided in the Organic Law, and giving advice.

"Consequently, many of those suspected or alleged of corruption and investigated, escaped via the bureaucratic loopholes.

"The question of whether ICAC would supplement the work of the Ombudsman Commission,was quite clear.

"ICAC would indeed supplement the work of the Ombudsman Commission, in that ICAC is given the Prosecutory Powers whilst the Ombudsmen is not.

"The duplication of duties and functions would lie in the task of investigation. Section 219, subsections (a),(b) and (c) of the Constitution indicate that the functions of Ombudsman Commission are to investigate into any conduct on the part of different bodies and persons that come under the Leadership Code etc.

"On the other hand, many functions stated by the ICAC legislation, relate to the investigation of people who are alleged or were suspected of being corrupt, thus, it is a mere duplication of duties."

The students' submission said that Papua New Guinea would waste public money on two organisations investigating the same problem, an indication of the Government's inability to make effective decisions.

"Given the current economic situation Papua New Guinea is experiencing, I wonder how the Government is going to fully fund the ICAC to effectively and efficiently implement its functions and duties," Herivi said.

"We just hope it would not be from the borrowings from the World Bank and IMF as the Country already owes these financial institutions millions of kina.

"Therefore, is introducing ICAC an effective decision, when we already have a well established watch-dog to cater for such needs? Has the Government in the previous years been able to provide adequate funding for the Ombudsmen Commission?

"Is the Government genuinely concerned about uprooting corruption from its bases? If so, then at what cost? Is there any way to reduce that cost of weeding out corruption? The answer is yes, there is." ***SBusin***

TERTIARY STUDENTS' FEES ON THE AGENDA

The Office of Higher Education (OHE) is currently conducting workshops throughout the Country on various student financing options to supplement the National Tertiary Scholarship Scheme (Natschol).

By STEVEN BUSIN

The third of such workshops was conducted on Wednesday last week at the Lae Technical College, and was attended by representatives from various tertiary institutions, secondary schools, the industry and student leaders within the city of Lae.

Similar workshops were also held in Rabaul, Mount Hagen and another one would be held in Port Moresby later next month.

At the workshop, OHE representatives told participants that the National Executive Council had instructed them to look into other means of financing education for tertiary students, as the current Natschol scheme has become too expensive for the Government.

Participants were also told that with the current trend of decreasing funding from the National Government to tertiary education, it is anticipated that the Natschol scheme may be abolished in the near future.

Moreover, Natschol funding may benefit fewer students under specific cases, such as students from families with very low income, or students who come from remote areas or disabled students.

The Government was concerned about spending a lot of tax payers money to educate tertiary students and was looking for ways on how money spent could be recycled in the system to fund other unfortunate students.

Therefore, there was a need to look into other options as part of educational reforms, to be implemented as the Country moves into the next century.

As a result, the Office of Higher Education has established a working committee called "Tertiary Education Student Support Initiative" (TESSI) to canvas views from stake holders.

From the information and recommendations gathered, the TESSI committee would then present a report to the OHE, which would then make further recommendations to the National Government for implementation.

The National Tertiary Scholarship scheme was developed immediately after Independence, when the Government saw the need to standardise tertiary education provisions; the need to encourage a pool of professionals; and the need for equity and access to tertiary education.

Under the Natschol scheme, it helped standardise the provision of government scholarships; it supplied the labour market with professionals; and it enabled access to education to many students.

However, it did not promote competition in excellence among its recipients; did not provide incentives for the development of academic values, and was seen as a "right" rather than a "privilege."

Options on student financing discussed at the workshop included:

• student loans - where ter-







tiary students were to be given loans and upon graduating, repay the Government.

• Graduate Tax - where tertiary students are to be given loans and upon graduation, repay the loan as part of their tax contribution to the National Government if they secure employment.

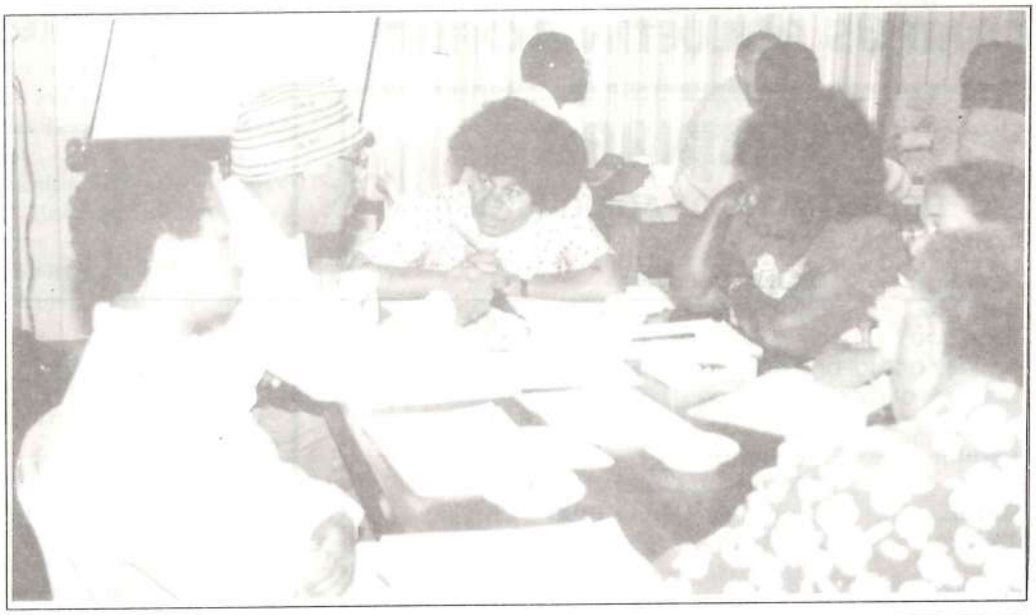
• Bonding - where students sponsored either through company sponsorship or government sponsorship, are required to serve their sponsor for a given period of time.

•Work - study - where students work in their institutions for their school fees

•Vacation employment - students work during holidays to earn money to pay their school fees; and

• Full fee payers - where students meet the full cost of their education.

The pros and cons of the above choices were discussed in length during the one-day workshop and the information gathered would be presented to the OHE.





Photos:
The different phases and moods of the meeting as representatives from different sectors of education look for solutions to address student funding into the next millennium



STUDENTS WITH OUTSTANDING FEES

This is to advise students with outstanding fees to settle these by 11th Thursday, June 1998.

Failure to do so will result in you being barred from sitting for your Semester One exams and eventually asked to vacate the University.

A debtor's note has been circulated to those students concerned and Departments have also been informed accordingly.

Goodnius Aruai
Academic Registrar

CAMPUS BULLETIN BOARD

SEMINARS

DEPARTMENT OF AGRICULTURE

Speaker: **Dr Jim Goodwin**
Subject: Blood-feeding flies of the family Tabnidae of the New Guinea Subregion with comments on their actual and potential importance as vectors of diseases of man and animals.

Venue: **AV Room (Matheson Library)**
Date: **Thursday 4 June 1998**
Time: **11.00 am**

All welcome.

******

DEPARTMENT OF MECHANICAL ENGINEERING

Catastrophic Failure of Components and Structures Case Histories

Remember the Titanic? Did you know that during World War II, over 250 ships either cracked or fractured (not due to military action) out of which 19 broke in two? Did you know that between 1978 and 1981, 142 bridges (in only 20 states in US that were surveyed) developed cracks?

If you are wondering why, come to this seminar to understand why those catastrophic failures and others took place.

Speaker: **Dr Gad S Gad**

Venue: **Mechanical Engineering Room M1**
Date: **Wednesday, 3rd June, 1998**
Time: **2:45 to 4:00 pm**

All are welcome.
Light refreshments will be served.

For further information contact:

Dr Khalil A Awan,
Departmental Seminar Coordinator
Mechanical Engineering Department
Room No. M110
Ex. 4853

RAINFALL WATCH

Rainfall Readings for 24 hours to 0900 on:

Wednesday	20.05.98	0.2 mm
Thursday	21.05.98	1.2 mm
Friday	22.05.98	16.0 mm
Saturday	23.05.98	2.4 mm
Sunday	24.05.98	3.2 mm
Monday	25.05.98	1.0 mm
Tuesday	26.05.98	Trace mm

Total rainfall for week-ending	26.05.98	24.0 mm
Total yearly rainfall up-to	19.05.98	1600.4 mm
Total yearly rainfall up-to	05.98	1624.4 mm

Sali Bafinu
Civil Engineering Dept.

TREES & SHRUBS

All campus residents are reminded that planting of food crops shrubs, flowers and trees is not allowed or encouraged in or near Drainage and Services Reserves.

This hinders proper maintenance, care, use, and operation of the infrastructure concerned.

Tenants who have planted in and around such areas should trim/ remove/relocate their shrubs and gardens etc. as necessary.

Affected areas are:

- Street and road kerbs
- Under Elcom high voltage overhead power lines
- Open drains
- Security access roads
- Designated open fields

Buildings and Grounds will not be responsible for damage or removal of gardens, shrubs etc., in the course of maintaining such facilities.

Buildings and Grounds

NATIONAL STAFF ASSOCIATION

1998/9 Membership Fees

The Management Committee at its meeting on the 20th May has agreed to a two year membership fee of K6.00. We need this money to be able to function more effectively as efforts are being made to locate our previous passbook and account details.

Salary deduction authority forms are available with the following committee members

Jackson Numbi	Security
David Arapi	Agriculture
Tanabi Guitam	Maintenance Workshop
Konrad Kalen	Maintenance Office
Jill Bebe	Student Services
Veronica Michael	Central Facilities
Amos Kairi	Agriculture Farm
Wap Kuipa	Applied Sciences
Thomas Wail	Printing
John Geyasca	Staff Office
Kore Horovahu	Central Engineering Workshop
Guli Maragau	Mining Engineering
Limbie Kelegai	ITS
Charles Nakau	ATCDI

Please sign a form with any of the above persons before the 5th of June so the deductions can be made on the pay period ending 17th June 1998. All permanent national staff are eligible members of NSA. Your co-operation will be most appreciated.

Charles Nakau
President

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:
Monday: **UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**

WEEK-ENDS
Saturday
AM -SDA
PM-TSCF
Sunday
8:00 UNITED CHURCH
9:30 CATHOLIC

CLC MEMBERS-
Combined Service and Crusade at Busu Church-Find transport to Busu (Malahang), drop off after service.

UNITECH STAFF BIBLE STUDY

The next meeting of the Unitech Staff Bible Study group will be held on Monday, 1st June, 1998 at 7pm.

Venue: 86 Fly Drive

For Discussion: The History of the Christian Church

Al interested staff are welcome

Patrick Afenya
Ext 4674

UNITECH CATHOLIC COMMUNITY

This Friday night rosary prayer will be at the Chaplain's residence.

Time: 7:30 pm

Please do come along.

Thank you.

CLASSIFIEDS

STD AND HIV/ AIDS WORKSHOP

June 22nd & 23rd

Individuals who have been nominated or have nominated themselves for the above workshop are hereby requested to confirm you attendance on the above dates on the final list at the SRC office.

This is to enable finalisation of the costs submission to be forwarded to the facilitators (Health Department) in Port Moresby.

I need your immediate confirmation so that the financial component of it can be prepared in due course by the funding source.

Coordinator & SRC Vice-President

UNITECH CRAFT & SOCIAL CLUB

The Unitech Craft & Social Club is open to all ladies on the campus. The Club meets on alternate Wednesdays and aims to share or introduce new skills among the members. We are a friendly bunch and we extend a special welcome to any new ladies on the campus with or without small children who are also welcome.

Our next Meeting:

Venue: 130 Sepik Drive
Time: 9:30 am
Date: 3rd June, 1998

See you there

Craft & Social Club.

UNITECH PRE/ PLAYSCHOOL MEETING

Time: 12:00 noon
Date: Monday 01/06/98
Venue: Playschool

Punctuality is very important, please be on time so that the meeting can start and finish on time. Every parents/guardians-attendance is important.

Miriam Pasanai (Mrs)
Playschool Supervisor

WORDS OF TENKYU.

Morobe Students Association members would like to thank all the staff, students and the members of the general public who came to watch the Duaks perform at DH on Saturday 23/05/98. We acknowledge all your presence, wonderful people. Our word of thanks also to the Duaks Band Members.

Ian H
Financial Committee

CITY COMPETITION

I am appealing to interested Unitech Staff, spouses or dependents to team up with various students dominated teams participating in the City Competition.

The main reason is to cut down or put an end to a number of games cancelled or forfeited when students are out for holidays.

Please assist to promote Unitech in the sports you intend to join.

If you are interested, please submit your names to the Office Secretary, Mrs Molly Geno.

The sports are: Volleyball, Netball, Soccer and Aussie Rules.

Philip Lavatu
SRC/Sports Co-ordinator

FOR SALE

VCR National Panasonic selling for K300.00. Contact Mary Maima on Phone 473 4562 (B/H) or 475 7730 (A/H).

SPORTS NETBALL

This notice serves to invite any interested Unitech Staff member or dependents to team up with the Students Unitech Netball club.

If you are interested, then please submit your names to the Unitech SRC/Sports Office at the Secretary's desk. This would cut down or put an end to the number of games that our students would miss during their holidays.

This will also help you as part of your participation for the coming Inter-varsity Games.

Francis Essacu
SRC Sports Chairman

ORIGIN II SPECIAL

Wear your favourite team colour next Friday during the second State of Origin clash.

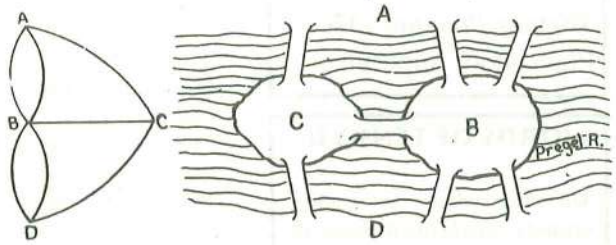
Unitech Maroon or Blue caps are on sale at the Public Relations Unit.
Come on, show your true colour-Grab one for yourself and one for your mate.

Price:
Brushed Cotton K15
Plain Cotton K12

FUN WITH MATHEMATICS

Solution to Problem 7

There are four land pieces A, B, C, D. Represent them by four points, using the same letters. Each of the seven bridges may be represented by a line joining the points which correspond to the land pieces joined by the bridges. Thus we get the design shown.



The problem of walking over the bridge only once is , obviously, equivalent to tracing the representative design without lifting the pen. This is impossible since all the nodes are odd.

Problem 8

A vulture sitting on the top of a tower 20 meters high sees a snake on the ground 100 metera away from the foot of the tower. The vulture at once swwops down in a slanting straight line to catch the snake cwaling at a uniform speed towards the tower. If the speed of the bird is the same as that of the snake, find where the bird catches the snake.

Please send your detailed solutions before 8th June 1998.

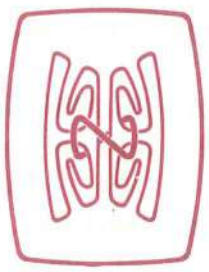
K5 for the first correct entry.

Dr Neela Sukthankar,
Department of Mathematics and Computer Science

E-mail: neela@sukthankar.com

Air Mail

STAMP



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The Reporter
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TARAKA
BULOLO
BUMBU
ISSUE No:1290 ISSN:10119-5354 05 JUNE, 1998 WEEKLY

Seafront beautification project to mark world environment day

Today is observed around the globe as the World Environment Day.

And the United Nations has decided as the theme for this year "For Life on Earth... Save our Seas".

Over the years the Department of Forestry at Unitech has provided thousands of seedlings for planting to various schools in the City, but the sad part of that is the survival of these plants.

At Unitech alone, different sites were selected and trees planted to mark the world environment day, but to date not a single tree has survived the blades of the mower gang.

Today the Forestry Students Society will focus their efforts on Stewart's Park along the beach front near Voco Point, where they will plant some of the selected 400 plant species, according to their advisor and lecturer Mr P Maddugoda.

The objectives of the exercise are for the protection of seashore from soil and sea erosion; provide shade for the people to enjoy and to improve the aesthatic value of the area," Mr Maddugoda said.

"The species are suitable for the seashore."

Meanwhile, Mr Maddugoda, who has been involved with forestry extension in many countries in the region including South East Asia, was concerned about the level of conservation in the Country.

"People don't see the need of forest conservation, but at the same time the forests are being exploited" Maddugoda said.

"Also, the increasing population, for example in Lae City, will see gradual depletion of forest along the hills."

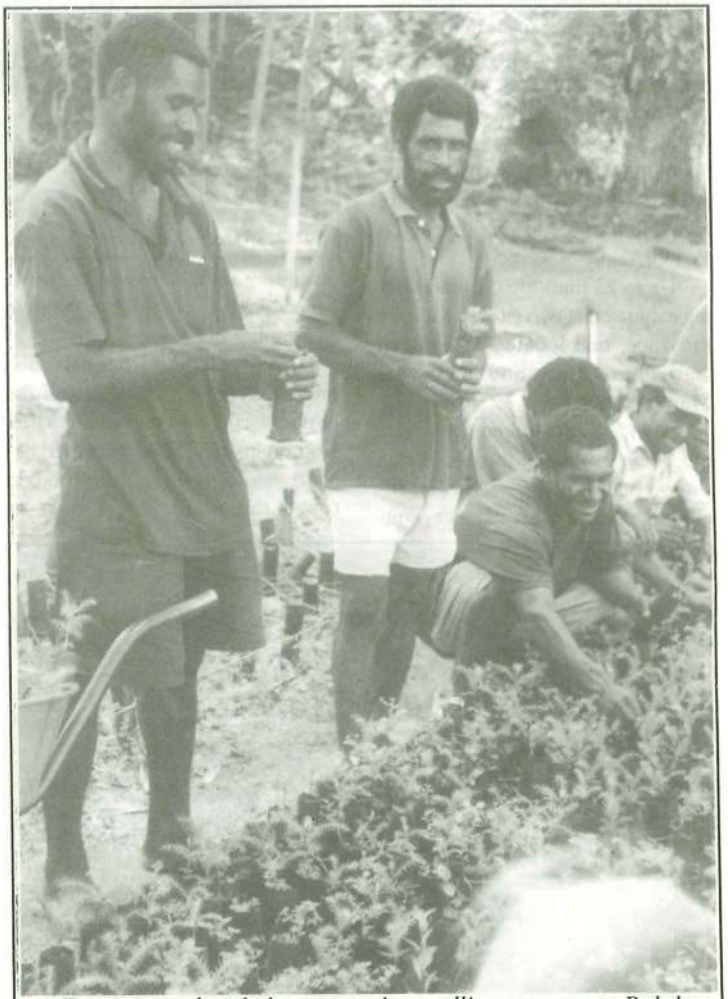
He cited the Atzera hills as a classic example where exploitation over the years has led to floodings along the Nadzab road.

"A lot of trees have been removed from those hills, and during the rains, soils get washed down to the roads making the roads impassible," Maddugoda said.

"To address this we must have an awareness.

"Tell the people now about the problem and what could happen in the future if people are not careful.

"While we have 80 per cent of the forest, the general public may not see the need to plant more trees now, but the future may not be the same as the natural resources are dwindling. We must be proactive instead of being reactive, if we wait until the resources are gone, it will be too late."



A Forestry student helps out at the seedling nursery at Bulolo

Fragile Ozone layer

The layer of the Earth's atmosphere that surrounds us is called the troposphere. The stratosphere, the next higher layer, extends about 10-50 kilometres above the Earth's surface. Stratospheric ozone is a naturally-occurring gas that filters the sun's ultraviolet (UV) radiation. A diminished ozone layer allows more radiation to reach the Earth's surface. For people, overexposure to UV rays can lead to skin cancer, cataracts, and weakened immune systems. Increased UV can also lead to reduced crop yield and disruptions in the marine food chain.

Ozone depletion is caused by the release of chlorofluorocarbons (CFCs), which came to be used widely as refrigerants, insulating foams, and solvents. Although CFCs are heavier than air, they are eventually carried into the stratosphere in a process that can take as long as 2 to 5 years. Measurements of CFCs in the stratosphere are made from balloons, aircraft, and satellites.

When CFCs reach the stratosphere, the ultraviolet radiation from the sun causes them to break apart and release chorine atoms which react with ozone, starting chemical cycles of ozone destruction that deplete the ozone layer. One chlorine atom can break apart more than 100,000 ozone molecules.

Other chemicals which damage the ozone layer include methyl bromide (used as a pesticide), halons (used in fire extinguishers), and methyl chlorofoam (used as a solvent in industrial processes). As methyl bromide and halons are broken apart, they release bromine atoms, which are 40 times more destructive than chlorine atoms.

In 1978, the use of CFC propellants in spray cans was banned in the U.S. In the 1980s, the antarctic ozone hole appeared and an international science assessment more strongly linked the release of CFCs and ozone depletion. It became evident that a stronger worldwide response was needed. In 1987, the Montreal Protocol was signed and the signatory nations committed themselves to a reduction in the use of CFCs and other ozone-depleting substances.

Since that time, the treaty has been amended to ban CFC product after 1995 in the industrialized countries, and later, in non industrialized countries. Today, 150 countries have signed the treaty. Beginning January 1, 1996, only recycled and stockpiled CFCs will be available for use. This production phaseout is possible because of efforts to ensure that there will be substitute chemicals and technologies for all CFC uses.

Research study focus on leucaena and pests

Leucaena or lantoro as it is locally known, is currently under the spotlight as researchers try to gain better understanding of some of its characteristics.

According to Dr Kevin Powell, an entomologist in the Department of Agriculture of the University, Leucaena legume is not native to PNG, but is found widely throughout PNG and can be used as a feed for cattle, rabbits and chickens.

Leucaena is considered as both a fodder crop and a weed in some countries, as a crop it has good potential because it can withstand high grazing pressure and drought, and as a weed because of its high reproductive capacity to produce abundant seeds.

"Currently Leucaena germplasm yield trials are being conducted in Papua New Guinea as part of the ACIAR co-ordinated multi-site evaluation of Leucaena lines," Dr Powell said.

"Up to 25 lines are currently being evaluated at two sites in Morobe Province, one located at Unitech Agriculture Farm and another at Munum ranch.

"A wide range of characteristics are being evaluated as part of this three year study (1995 -1998), including insect pest resistance, concentrating on a sap sucking insect called 'psyllid' or sometime known as jumping lice."



Miok Komolong, Spencer Poloma & Joshua collecting insects from the liucaena tree

Dr Powell was recently approached by his colleague and the junior in-country coordinator Miok Komolong, who was concerned because while psyllids were thought to be the main insect pest of Leucaena, Komolong observed that other insects seemed to attack certain lines of Leucaena at both evaluation sites.

Dr Powell was invited to examine the insects and a preliminary survey in 1997 indicated the presence of at least three other major pests; a beetle which feeds on the seeds, and two different scale insects which suck up sap from the plant causing considerable damage.

The focus of the insect monitoring exercise was to identify the insects and determine which Leucaena varieties were attacked and to suggest where necessary, if control measures need to be implemented.

According to Dr Powell's observation, damage to some Leucaena varieties was severe with up to 100 per cent destruction, but other varieties appeared to possess a form of resistance as damage was much less severe.

"Another important factor was climate- at Munum during the recent dry spell insect damage was very severe, whereas at the Unitech Farm where rainfall was higher and more frequent, damage was less severe," Dr Powell said.

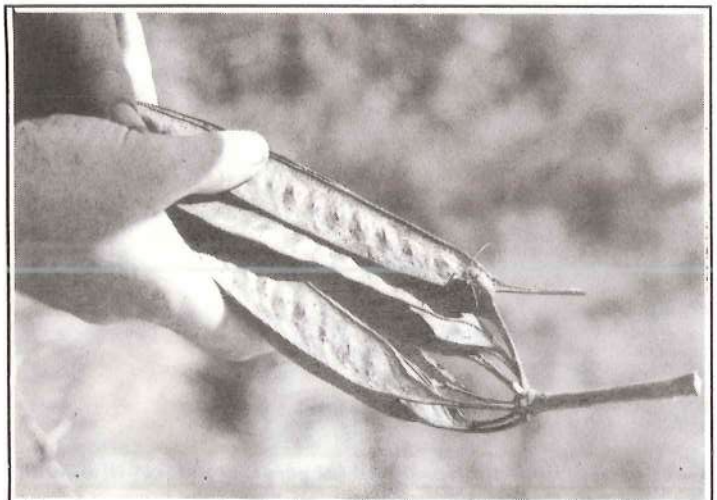
"Therefore climate was a major factor in insect outbreaks.

"The beetles were observed because they attack the seeds in the pods and can have two implications for Leucaena production in PNG.

"Firstly, Leucaena can spread throughout the Country quite rapidly and its spread needed to be control, the beetle could be used as a natural control agent.

"Conversely if Leucaena was to be grown in nursery beds for seed production and multiplication it could have devastating effects by reducing seed viability.

"The scale insects can cause severe economic damage by reduced yield, because leaves which animals eat become yellow and fall off the plant or may become blackened and covered with fungal growth."



Dry leucaena seeds are the result of attack by pests and insects

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Deadline 4pm on Tuesday weekly.
Editor: CORNEY LAHIES phones **473 4298**
Journalist:STEVEN BUSIN **473 4290**
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Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

SALI GOES FINISH

Mr Sali Koimbang from Finchaffen was farwelled by his colleagues at the University Farm last Friday after years of service to the University.

In a typical wantok spirit, Sali's former colleagues chipped in some money and hosted a mumu for him and his family.

Organisor Amos Kairi paid tribute to Sali and thanked him for his contributions to the Department at the farm for the past 24 years.

"Sali started working in the farm in 1974 together with three others," Kairi said.

"He has witnessed the farm expand from a small operation to what it is today and we thank him very much for his contribution over the years."

As a gift to Sali, the farm workers have contributed towards two piglets which they hope will provide him with a steady income in the future.

Sali later thanked the University and also exchanged gifts with his former colleagues.

Retiring to his new home at Buimo Road, Sali in his mid 50s said he would take it easy with his wife and seven children.

Sali was one of the first four locals to be employed at the Farm in 1974 during the early years of the University and his departure leaves behind only one of the first farm boys to continue to till the land with the younger folks.



Sali's family presented farewell gifts to former colleagues as a gesture of Tenkyu



Sali (2nd from right) next to his long time co-worker Nawon Willino, pictured with his family and other members of staff

COUNSELLING TO OFFER SERVICE CAMPUS-WIDE

Introduction

Following introductory remarks are made to explain in general what Counselling Services Unit is and the [illegible] and approaches that the profession[illegible] in the Counselling Services Unit play.

This note also aims to introduce a series of Counselling Services information that will appear in The Reporter on monthly basis, at the end of each month, as an effort to introduce and sell Counselling Services Unit to the University Community. Hence, it is anticipated that you will enjoy reading and learn what will follow in these series for your own benefit and to offer help to others who may on basics in counselling and hopefully encourage and refer them to seek further help from the Counselling Service.

Mission Statement

The mission of the Counselling Services Unit is to provide counselling for social, spiritual and psychological well-being of the members of the Unitech Community.

Rationale

Ideally, the purpose of the Counselling Services Unit is to fulfil its mission. As an established function it thus serves to create and maintain a communication link and foster understanding among the members of the University Community. This communication link then serves as a medium to communicate concerns and needs of affected students to various concerned people, academics, departmental heads, administrators, other staff members, general student body and other people from whom they may seek help and vice visa.

Further, this link should also serve as a means of publicity on the existence and availability of the service. So that hopefully all the members of University Community may utilise this service when they need help on counselling in the areas of health, personal, social, academic and beliefs and convictions.

General Objective

General objective of the Counselling Services Unit is to provide services to the members of the University Community. It ultimately aims:

- to create peace, restore mind and harmonious relationship among the sick, disturbed, troubled, and counsel individuals, parties and communities.

- to help create and provide a community with social environment which is conducive to favourable and harmonious living, study and working place for all the students, staff and the families of both the staff and students.

Counselling Services Unit

Counselling Services Unit is a self help Services Unit. It provides facility and offer opportunities to those who seek help and counselling to discuss and share their needs and problems, and thus helping them to find solutions, or to help develop alternative values through discussion to cope and live with them.

Beneficiary are those people who take initiative to see the Counsellors, and take advantage of the service available. They are the people who are open and willing to share and discuss their problems and are ready to accept suggestions and directives developed through discussion with the Counsellors.

Duties and Responsibilities

The day to day duties and responsibilities of the Counsellors are in the following three broad areas: provision of general information and counselling in areas of health, personal, academic, social and in beliefs and convictions; participating in various university committees ; and performing such other duties as directed by the Director of Student Services and/or Pro Vice-Chancellor (Administration).

Remarks and Conclusion

Statistically, higher percentages of people that come to our office are normally to find general information and to use the telephones, followed by sick and compassionate leave cases for special consideration, but others, the figure is comparatively very small, such as drunkenness and assault; pregnancies; choices and selection of courses; then boy/girl relationship.

The attendance of cases are routine and minor in nature. This makes one wonder whether there are no serious cases and major problems in our community to be dealt with?

We evidently feel that the Counselling Service has not been fully utilised. Worst still, attendance has been confined to only students and this does not serve the purposes of the Counselling Services Unit and its community.

We therefore earnestly ask and invite all students, staff and their families, those that may need help and counselling to take personal responsibility and take advantage of the services available to them. We certainly look forward to offer our time and services to those of you who would be interested in helping yourselves.

STAFF CHANGES

This is the information Summary of Staff Changes in respect of Appointments, Departures and Interdepartmental Transfers for the week ending 18/5/98 - 29/5/98

NAME	DEPARTMENT SECTION	POSITION
Appointment		
Raphael Topagur	Business Studies	P/T TeachStaff
Rodney Nixon	Language & C/Studies	Lecturer II
Departures		
Wesley Matawa	Printing Services	CE II
Nasi Gialasi	Security Services	Patrolman
Bonas Maiya	Bldgs & Grounds	CE I
Polycarp Reu	Matheson Library	Librarian

STUDENTS WITH OUTSTANDING FEES

This is to advise students with out-standing fees, to settle them by Thursday 11/06/98.

Failure to do so will result in you being barred from sitting for Semester One exams and eventually asked to vacate the University.

A debtors note has been circulated to those students with debts and Departments have also been informed accordingly.

G. Aruai
Academic Registrar

Rules For A Happy Marriage

1. *Never both be angry at the same time.*
2. *Never yell at each other unless the house is on fire.*
3. *If one of you has to win an argument, let it be your mate.*
4. *If you have to criticise, do it lovingly.*
5. *Never bring up mistakes of the past.*
6. *Neglect the whole world rather than each other.*
7. *Never go to sleep with an argument unsettled.*
8. *At lease once every day try to say one kind or complimentary remark to your life's partner.*
9. *When you have done something wrong, be ready to admit it and ask for forgiveness.*
10. *It takes two to make a quarrel, and the one in the wrong is the one who does the most talking.*

PUBLIC HOLIDAY - QUEEN'S BIRTH-DAY

Staff and Students are hereby informed that the University will be closed for business on Monday 08 June 1998 and will re-open for normal business on Tuesday 09 June 1998 at 7.45 am.

Tess Chan
Registrar

RESEARCH COMMITTEE

Staff are advised that the first meeting of the Research Committee will be held on Thursday 18th June, 1998 and that applications for funds should reach me by 12th June, 1998.

Primus Dam
Assistant Registrar (Students)

CLOSURE OF UNION HALL

This is to advise everyone, that, as of Monday 8 June to 19 June, 1998, The Union Hall will be closed for all activities.

This will allow the Examination Officers to carry out their preparations towards 1st semester exams which commence on Friday 12 June, 1998.

All users are urged to comply with this notice and to assist us to keep the hall neat and tidy prior to the examinations.

Molly Geno
SRC Office

ELECTION
Unitech Citizen Women's Association Executive 1998

President:Joy Sahumlal
V/President:Molly Geno
Secretary/Treasurer: Jill Bebe
Committee
1. Mary Maima
2. Mrs Doko
3. Naomi Wilkins

GIRL FRIENDS CLUB FUNDRAISING DANCE

- Venue: Huon Gulf
- Date: Saturday 20th June 1998
- Time: 7.30pm till late
- DJ: Master Blaster
- Dress: Neat
- Transport will be provided
- K10.00 per head
- Entry by tickets only - so purchase yours from the following people:
  - Luciana Panau -475 7547
  - Dulcie Karani -472 4063
  - Mrs L Karani -LaeCity Council
  - Mrs M Panau -Academic & Student Admin Office - Unitech
  - Mrs A Kami -Architecture & Building Dept - Unitech

LAE NIGHT DINE & DANCE

- Venue: Haus Win -LIH
- Date: 27th Sat,June.
- Time: 7:00pm till Late
- Admission: K30 per Head
- DJ: Unisounds
- Dress: Tropo Formal

FLOOR SHOW-
Chinese Ladies Dance
North Solomons Bamboo Band.

Limited Tickets from Public Relations Unit for interested staff & students
This is a fundraising event of the Lae City Independence Celebrations Committee

LOTU TIME

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday:UNITED CHURCH
Tuesday: ANGLICAN
Wednesday: LUTHERAN
Thursday: AOG
Friday: CATHOLIC

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF

Sunday
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

Sunday
9:00 CLC CHURCH

UNITECH CATHOLIC COMMUNITY

This Friday night rosary prayer will be at the Christian Centre

Time: 7:00 pm
Please do come along.

Thank you.

WEATHERWIZE

Rainfall Readings For 24 Hours To 0900 on:

Wednesday	**27.05.98**	**95.6 mm**
Thursday	**28.05.98**	**0.2 mm**
Friday	**29.05.98**	**3.8 mm**
Saturday	**30.05.98**	**25.4 mm**
Sunday	**31.05.98**	**30.8 mm**
Monday	**01.06.98**	**20.0 mm**
Tuesday	**02.06.98**	**10.4 mm**
Total rainfall for week-ending	**02.06.98**	**186.2 mm**
Total yearly rainfall up-to	**26.05.98**	**1624.4 mm**
Total yearly rainfall up-to	**02.06.98**	**1810.6 mm**

Sali Bafinu
Civil Engineering Dept.

Central Facilities Information

New Sunday movies for children in Rose Kekedo Centre.

Sunday 7 June at 2 pm; adults K1, children 50t, children under 5 free.

A Disney Film: Homeward Bound.

This film is fun for the whole family. It is about pets finding their way home through obstacles and adventures.

During the school-break we will show several children's films. Please see the notice boards outside Duncanson Hall and Rose Kekedo Centre. Or Phone: 473 4364.

The CTF video library has purchased 12 new films this week - check them out.

Lena Young
Director

C L A S S I F I E D S

POSITION VACANT

Agriculture Department - Farm

A vacancy exists on the University agriculture Farm for the position of Casual Employee.

Applicant must have completed at least Grade 6 education. Possession of a Vocational Training Certificate in Agriculture, and experience in working in an Agricultural establishment would be an advantage.

Applications should be forwarded to:

The Head, Agriculture Department, PNG University of Technology, Private Mail Bag, Lae, Papua New Guinea. The closing date for applications is 30 June, 1998.

Recruitment Notice

Secretariat of the Pacific Community has vacancies for the following positions:

1. Graphic Arts and Design Officer and, 2. Population Advocacy and Reproductive Health, Information, Education and Communication (RH/IEC) Adviser.

Deadline for applications: 15 June, 1998

The Secretariat of the International Atomic Energy Agency has the honour to inform Member States that professional posts as described, have become vacant in the Secretariat as from 6 May - 6 August 1988.

1. Technical Writer, 2. Nuclear Physicist/Programmer, 3. Programme Coordinator , 4. Head MESL (Marine Environmental Studies Laboratory). 5. Legal Officer, 6. Section Head. 7. Senior Nutrition Specialist, 8. Treasurer.

Interested persons, please come and collect copies of information sheets from the Public Relations Unit.

FOR SALE

1. Mazda 929 in very good running order, low mileage, fully serviced K4,800 ono. 2. TV Colour 14" Sony with remote control - enhanced reception K500. 3. Video (VCR) Sharp with remote control, recording and playback and much more K350. 4. Clothing/shoes/toys and many of them at very cheap prices.

****

1. Toyota Corolla K4000. Saloon car. 2. Video Cassette player plus several video cassettes K300. 3. One Gold Star 20" television set K300. All three items selling are as good as new. Contact on Phone 475 7780 (a/h) 36 Warangoi Drive.

THE MIGHTY CLASH TONITE

BLUES TO AVENGE OR MAROONS TO REIGN

Enjoy!!

FUN WITH MATHEMATICS

Problem 9

1936 was the only year in this twentieth century which shows a perfect square. There is only one year in the next century which will also have this property. Which year is it? There is one such year in every succeeding century after that until for the first time, a century will arrive in which there will be no square numbered year at all. When will this be?

Problem 10

I have a thin uniform heavy rod AB. At what point C on AB should the rod be bent, making angle ACB= 60 degrees, so that when the rod is tied to a string at B hangs freely ? The part AC of the rod remains horizontal.

All interested members of staff and students should send their solutions to Problems 9 and 10 before Tuesday the 9th of June 1998, 12 noon. The winners will be awarded the prizes on the 11th. June 1998.

Fun With Mathematics Prize Distribution

Fun With Mathematics prize distribution will be held on Thursday, the 11th June 1998 at 3-00 PM in the Mining Engineering Lecture Theatre, MN 001. The Vice Chancellor Dr.James Kaiulo will be the guest of honour for this function and will be giving away the prizes to all the winners of Fun With Mathematics problems this year. All are invited to attend this function.

Dr Neela Sukthankar,
Department of Mathematics and Computer Science

E-mail: neela@sukthankar.com

Air Mail

STAMP

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TARAKA
BULOLO
BUMBU
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Mining Act signals change to encourage equal participation

Several sections of the current Mining Act in the Country needed fine tuning according to Registrar of Mines with the Department of Mineral Resources.

Ms Nellie James said since the enactment of the present Mining Act in 1992, it had generally worked well for both the Department and the mining industry, however, certain parts of the Act which have been identified require ammendments to make them relevant.

Ms James made these comments while addressing participants at the 1998 PNG Mining Conference at the Rose Kekedo Convention Centre, at the PNG University of Technology.

Sections of the Mining Act that needed fine tuning are: State Equity, Dealings, Minimum Exploration Expenditure, Transparency of Alluvial Mining Leases, Occupation Fees, Application Fees and Security Deposits.

Under State Equity, James said, it had been an accepted policy that the State may take up 30 per cent equity in major mining projects, but that has never been legislated, and it was proposed that section 17 of the Mining Act be amended to rectify this.

As part of Dealings, she said, the Department recognises that in order for explorers to realise their goals of progressing prospects to development, partnership was necessary.

"By allowing dealings in explorations licenses within the first term of the licence provided that it can be demonstrated to the Minerals Resources Department that the minimum expenditure requirements have been fulfilled by the company concerned," she said.

"Hence it is proposed to amend section 31 of the act to allow dealings with exploration licenses.



Participants at the 1998 PNG Mining Conference at the Dame Rose Kekedo Convention Centre

By STEVEN BUSIN

"These will necessarily require auditing of company expenditure and review of exploration reports."

Among other proposed changes, section 60 of the Mining Act relating to the Effect of Alluvial Mining Lease on Exploration Licence and Vice Versa will be amended to allow for coexistence of the tenements.

"All leases granted for the purpose of mining alluvial resources will be transparent to exploration licences," she said.

"Hard rock development will take precedence over alluvial mining.

"In order to effect this any hard rock development which requires the cancellation of an alluvial mining lease will require the holder of the alluvial mining lease to be compensated by the exploration licence holder.

"The value of alluvial mining lease will be determine by a valuer recognised by the Australasian Institute of Mining and Metallurgy."

Under Occupation fees she said that landowner will be paid occupation fees for the actual use of land by tenement holders.

"This is not to be confused with entry or access fees which are not permissible under Section 154 (4) of the Act," she said.

"Occupation fees payable could be either calculated at 10 percent of unimproved value of the land (to be determined by the Valuer General's Office) or negotiated between the tenement holder and the land owner.

"Application fees for all tenements including exploration licences are being reviewed by the Department.

"As yet the value of these fees have not been established and the review has been necessitated by the creation of a new tenement type.

"Security Deposits amounts are also under review.

"The department may use the security deposit to discharge the tenement holder's obligations arising from a failure to comply with: the Mining Act; the Licence conditions, or; a compliance condition.

"Security deposits may also be used to offset the State's cost for disposing of non useful mining plant and tailings as prescribed under Section 152."

Environmental pollution starts at home

As the global message of life on earth..save our seas spread on World Environment Day, the future generation of PNG were reminded of their local responsibilities.

Celebrating the occasion last Friday, the Forestry Students Association of the Forestry Department at Unitech, distributed about 400 assorted plants to various sites for planting.

A special tree-planting ceremony was held at the seafront of Stewarts Park with the assistance of about 200 children from the following Community schools; Ganton, St Paul's, St Martin's and Omili Top Up School.

The guest speaker Dr Philip Siaguru, Pro-Vice Chancellor (Academic) while explaining the theme, told the children that life in the sea depended on man's activities on the land.

"The sea is a world of its own as there is life underneath which is able to support the marine life and also sustain life on earth," Dr Siaguru said.

"The sea responds to what we do on the land."

He told the children that teachers and students had the responsibility to spread the word about the environment, and the importance of living a hygienic lifestyle begins at home.

"Protecting the environment is not as simple as planting trees," Dr Siaguru continued.

"The way we keep our homes is the beginning of how we treat the environment."

He also criticised the cruel action of some industrial operators, who deliberately spill oil on the roads in an attempt to keep dust down.



"Some Lae City residents have a bad habit of spreading oils on the roads to keep the dust down," he said, " and these oils end up in the sea, so in order to protect and save life at sea, we must begin on the land."

Meanwhile, Dr Franz Arentz of the PNG Forest HRD Project stressed the need to plant trees in order to improve environment and later urged the children to look after the plants.

"It is important to tell your friends that the trees planted are yours and you must look after them, they do not belong to the Lae City Authority nor the University," Dr Arentz said.

"Everyday should be environment day for all of us as we should plant trees to improve our environment.

"What happens on the land will eventually end up in the and what is worrying is who is going to look after them?"

The Forestry Students Society Leaders later thanked the schools for participating in the annual tree planting ceremony, and the Coca Cola team for providing refreshments.

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INDONESIAN POLICITAL CRISIS WAS A LIFETIME EXPERIENC

To actually experience and witness the recent Indonesian political turmoil that eventually saw their longest serving president, tumble from his 32 year reign of power, is an historic ordeal that would take a life time to forget.

Caught in the middle of the political saga that sent shockwaves and made headline news world wide, were several Unitech academics and their families, who were studying at various Indonesian universities.

One of them was Felix Bage, Assistant Lecturer with the Civil Engineering Department, who was there to do his Masters specialising in Construction Management at the Gadja Mada University, Yogjarkarta City, Indonesia.

Bage described the whole political saga as a very frightening experience.

"Although I have been through student protests while being a student here at Unitech, which also involved police shooting at students, the Indonesian experience is totally different and terrifying especially when it is happening and you are in a foreign country and a long way from home," Bage said.

Indonesian university students began anti Suharto and pro-reform campaigns after Suharto committed the Indonesia economic reforms in return for an International Monetary Fund US $40 Billion (K83 Billion) bail-out October 31, 1997.

Suharto's handling of the economic chaos sparked riots and protests which rocked Indonesian towns and cities as the Indonesian economic woes worsened.

During that time, Bage, recalled that students held forums daily on the campus at the University he was attending - Gadja Mada University, whose students played a major role in spearheading the anti-Suharto and pro-reform campaigns/protests.

Gadja Mada University is one of the biggest universities with a student population of about 32,000.

"Because of the huge number, students held forums in their own departments and later would move to gather at a central area and then stage protest marches around the campus perimeters," Bage said.

"Several radical students went outside of the fence to clash with military and police officers, who maintained a heavy presence just outside the University's boundary."



Happier times, Felix Bage (4th- left) with his Indonesian classmates and fellow PNGians

While the students were staging their protests, foreign students or Papua New Guinean students were attending classes, as they were told during their orientation not to mingle with the political affairs of the country or carry out political activities.

"As a foreigner in Indonesia, my greatest fear was that the students may try to take out their frustration on me and other Papua New Guineans as at that time, they were targeting foreigners, who were partly blamed for their economic crisis," Bage said.

Mr Bage was going through his initial six months of learning the Indonesian Bahasa language said, he had to try his best to speak the language fluently as he did now want the students to identify him as a foreigner.

On April 18, Bage injured himself in a rugby union game in Jakarta and had to stay with the Papua New Guinea Embassy staff while seeking medical treatment.

"I tried going back to the University in Yogjarkarta, however, things were getting worse, and I didn't want to risk my life going over there so I continued to stay at the Embassy," he said.

The crisis got out of hand when six students from the Trisakti University were killed by military personnel during a peaceful protest march.

These triggered two days of mob rampage throughout Jakarta with more than 500 people killed in fires sparked by looters.

"From the Embassy, we could hear gunfire, see smoke from burning cars and motors bikes and buildings burning," Bage recalled.

"Looters could be seen running through the streets with their spoils.

"We could see people running with refrigerators, TV sets, radios, food items, you name it.

"It was then PNG Ambassador Eri, considering our safety, began arranging with the Foreign Affairs to have PNG citizens evacuated from Indonesia.

"We were just praying that the plane would come quickly as the situation was getting worse and other 'countries were already airlifting their citizens out of Jakarta.

"When we heard that the F28 plane had left Port Moresby, we all rejoiced and began taking packing our bags"

"The PNG Defence Military Attache, Colonel Kerry Frank arrange security personnel to escort us to th airport.

"The soldiers escorted our bus a the way to the airport which was a ready jam packed with people wh were also trying to get out of Indon sia.

"People were sitting or lyin around the airport waiting for the flights.

"Most people had to stay for mo than 24 hours to catch their planes.

"We were lucky, 30 minutes aft we arrived from the airport, th chartered F28 plane arrived howev it took us about another hour to g through customs formalities."

The F28 plane then flew t Yogjarkarta to pick up families other students, because some had t stay and do their exams and fear th they would not be accepted after th crisis.

The Dujambis had to leave the father, Slio, who was also studyin at Gadja Mada University.

Mrs Elizabeth Dujambi, who trav elled back to PNG with her fiv children said it was a painful deci sion and experience.

As for Bage, he said: "This is on happening I will never forget."

SB

NAL'S ACCREDITATION PASSED BY NATA & PNGLAS

The National Analysis Laboratory (NAL) recently successfully completed the biennial Papua New Guinea Laboratory Accreditation Scheme (PNGLAS) review and audit of laboratory operations.

National Analysis Laboratory has held PNGLAS registration continuously since 1986.

The PNGLAS laboratory audit was conducted in conjunction with officials and technical experts from the National Association of Testing authorities, Australia (NATA) and the PNG National Institute of Standards and Industrial Technology (NISIT).

The Director General of NISIT and his supporting council recommend that any industry or individual requiring chemical or physical testing, use an appropriately registered laboratory under the PNGLAS.

Using the services of a PNGLAS certified laboratory ensures that expectations will be met.

PNGLAS registration means the laboratory has the ability and competence to do specific tests, and that the laboratory undergoes regular independent audits to help ensure it is providing the best possible service.

In order for NAL to achieve and maintain its PNGLAS accreditation, the following had to be demonstrated:

- competence to perform the registered chemical tests.
- sound laboratory management.
- suitably qualified staff and proper staff training programmes.
- proper equipment management, calibration and maintenance.
- accurate and complete record keeping.
- adequate quality control and quality assurance procedures.
- appropriate facilities for the handling, storage and testing of samples.
- not just an interest, but a commitment to doing things right.

NAL is the only laboratory in PNG registered for the analysis of the constituents of the environment, and the only commercially orientated laboratory endorsed to perform water analysis for potable and domestic purposes.

A list of all the tests for which NAL holds PNGLAS certification can be obtained from the Chief chemist.

The National Analysis Laboratory has been accredited under the PNG Laboratory Accreditation Scheme for the following classes of tests:-

- Stockfeeds for protein, ash, moisture, calcium, manganese and sodium.
- Plant materials for nitrogen, major cations and trace metals.
- Waters for potability to follow the PNG Public Health (Drinking Water) Regulations.
- Trade wastes for trace metals and toxic components.
- Soils for fertility status.
- Biota for trace metals.



Proud moment for staff of NAL as they show off certificates of achievement from NATA & PNGLAS

PNG UCUR women conference comes to Unitech



The Papua New Guinea United Church Urban Region recently had their 11th Biennial Women's Conference in Lae, from 24th - 30th May, 1998.

Over 60 delegates attended from eight major urban centres around the Country.

With the theme; "Jesus Christ our strength and hope for all of life" the week long conference created an in-depth challenge to all participating women. Held every two years, the aim of this conference is to discuss issues and problems encountered by women in their societies. The conference tries to resolve ways of enabling them (the women's fellowship) help each other stand firm in their faith a witness for Christ Jesus.

The opening session on Monday 25th staged an unique flavor of Morobe traditional dancing at the Taraka United Church ground. The session on Thursday 28th was hosted in the Unitech Campus at the Union hall with a lot of memorable extras. According to many delegates the sessions at Taraka and Unitech were the highlights of this conference.

The myths of Lae's incensed rain had its bigger share during the closing ceremony hosted by Malaita United Church on the Friday night. On Saturday 30th, the delegates started departing for their respective provinces.

Department of Mathematics and Computer Science

In-House Computer Training Courses July 1998

The Department of Mathematics and Computer Science will offer seven training courses for Universtity staff, teachers and administrators running from Monday 6th July to Friday 10 July. All lab work in Maths & Computer Science Labs. Lectures in Rose Kekedo. A charge of K10 is made towards costs for tea, biscuits and issue of certificates

1.Word for Windows: Afternoon Course: Mr Roy Lewis/Alan
Monday 6th July to Friday 10th July
Start: 1.00pm - Monday 6th July, RKLT
Time: 1:00pm - 4:00pm daily
1:00pm - 2:00pm Lectures (Rose Kekedo)
2:00pm - 4:00pm MA78
Prerequisite: Prior use of PC Computers with Windows
Maximum Participants: 30

2.Visual Basic(Windows)Programing: Morning Course: Dr Chris Wilkins
Monday 6th July to Friday 10th July
Start: 9.00am - Monday 6th July, RKLT
Time: 9:00am-12:00 noon daily
9:00am-10:00am Lectures (Rose Kekedo)
10:00am-12:00pm MA79

Content: Concepts of Visual Basic. Programing in Visual Basic 4.

Prerequisite: Working knowledge of Windows environment.

Maximum Participants: 15

3. Using Excel 5 for Statistics: Morning Course: Prof. Phythian/Dr. Alan Oxley
Monday 6th July to Friday 10th July
Start: 8.00am - Monday 6th July, MA22
Time: 10:00am -11:00am Lectures (Rose Kekedo)
8:00am-10:00am MA78 Lab & MA22

Content: Creating a table, use of absolute cells, sum and function wizard, statistical functions incorporating charts. Inserting tables into a word document. Spinner.

Prerequisite: Working Knowledge of Windows environment.

4. Creating Database and Reports: Afternoon Course: Dr. Alvin Bampton
Monday 6th July to Friday 10th July
Start: 1.00pm Monday 6th July, MA22
Time: 1.00pm - 3.00pm - Lab Sessions
3.00pm - 4.00pm - Lectures (Rose Kekedo)

Content: Use of Foxpro to create a data base, queries of the database and reports based on these queries.

Prerequisite: Idea of Tables and a database.

5. Mathcad/Derive: Afternoon Course: Dr Sukthankar/Alan
Tuesday 7th July to Friday 10th July
Start: 1.00pm Tuesday 7th July, MA79
Time: 1:00pm - 4.00pm Lab times (MA79)

Content: Use of Mathcad or Derive for derivatives, symbol manipulation, graphics, matrix operations.

6. Creating a Web Site: Morning Course: Technical Officer

Monday 6th July to Friday 10th July
Start: 9.00am Monday 6th July, MA78
Time: 9.00am - 12.00pm MA78 Lab

Content: Communications to a Web site, creating Web pages, links and extra pages.

7. Minitab Statistics: Morning Course: Mr John Wamil
Monday 6th July to Friday 10th July
Start: 9.00am Monday 6th July, MA21
Time: 9.00am - 12.00pm MA21

Content: Use of minitab for general statistics, data diagrams, regression, hypothesis testing, Anova (if time).

PROFESSOR J.E. PHYTHIAN
Head of Department
Mathematics and Computer Science

Food Processing Workshop

Small Business Development Corporation is conducting a small scale food processing workshop from 22nd June to 3rd July, 1988 at the Malahang Industrial Centre (Training Room). The course fee per participant is K200.

SBDC targets people who are interested and willing to start a food processing business after the course and/or intends to be a trainer of trainer, i.e. train others after the course in his/her organisation.

Interested people are to contact:

Rose Kalua or Lilian Mwangi for application forms on Phone 472 1677, Fax: 472 3876

CAMPUS BULLETIN BOARD

THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY

Applications are invited for these positions in the following departments at this University:

Applicants must possess Grade 10 qualifications and also hold a PETT Clerical Certificate or equivalent from a recognised Technical College.

BURSAR'S DEPARTMENT

ACCOUNTS CLERK I/III

Applicants should have at least two (2) years experience in filing of payroll documents in staff personal files, payroll vouchers, cheque vouchers and other essential correspondence in alphabetical, numberical or date order.

REGISTRAR'S DEPARTMENT

Candidates should also have 3-5 years relevant work experience with an educational institution. It is essential that the candidates should be able to relate confidently to people, have mature appearance, have good command of written and oral communication skills and be able to work under pressure. Some knowledge of using Computer/Word Processor will be an advantage.

1)SENIOR ADMINISTRATION CLERK I/II (RECORDS)

The appointee will be directly responsible to the Records Officer and would assist with the tasks including maintaining a filing sysem (both manually and computerised) for students, preparation of Academic Timetable, Student Registrations and preparation of Statistical information.

2)SENIOR ADMINISTRATIVE CLERK I/II (EXAMINATION)

The appointee will be directly responsible to the Examinations Officer and would assist with the tasks including preparation of Examination Timetable, Rooms and Materials, stocktake and ordering of graduation materials, printing and distribution of Examination Results and preparation of reports and lists relating to examinations.

Appointees must be prepared to act in the absence of the Admissions, Records and Examination Officers and perform other duties assigned by the Assistant Registrar and the Senior Assistant Registrar (Academic).

SALARY	
SENIOR ADMIN CLERK I/II	K6,866 - K9,696 P.A.
ACCOUNTS CLERK I/III	K4,527 - K7,269 P.A.

Detailed applications (two copies) with curriculum vitae including certified copies of qualifications obtained and names and addresses, fax/phone numbers of three (3) referees and an indication of the earliest availability to take up the appointment should be received by: The Registrar, PNG University of Technology, Private Mail Bag, LAE, Morobe Province by 26 JUNE 1998.

TREES & SHRUBS

All campus residents are reminded that planting of food crops shrubs, flowers and trees is not allowed or encouraged in or near Drainage and Services Reserves.

This hinders proper maintenance, care, use, and operation of the infrastructure concerned.

Tenants who have planted in and around such areas should trim/remove/relocate their shrubs and gardens etc. as necessary.

Affected areas are:

- Street and road kerbs
- Under Elcom high voltage overhead power lines
- Open drains
- Security access roads
- Designated open fields

Buildings and Grounds will not be responsible for damage or removal of gardens, shrubs etc., in the course of maintaining such facilities.

Buildings and Grounds

SHRM- LOST URN

A 20 LITRE BLUE COMBRO URN LABELLED NUMBER 07 IS MISSING SINCE THE BEGINNING OF THIS YEAR'S REGISTRATION AT THE CIVIL ENGINEERING FOYER.

IF ANY BODY KNOWS THE WHERE ABOUT OF THE URN OR HAVE SEEN IT SOMEWHERE, PLEASE LET US KNOW SO THAT WE WILL PICK IT UP.

THANK YOU.

JOACHIM DELAWAN
PHONE: 4746

NATIONAL STAFF ASSOCIATION

Reminder: Payment of 1998/9 Membership Fees

The Management Committee at its meeting on the 20th May has agreed to a two year membership fee of K6.00 (ie; K3 for 1998 and K3 for 1999). We need this money to be able to function more effectively as efforts are being made to locate our previous passbook and account details.

Salary deduction authority forms are available with the following committee members

Jackson Numbi	Security
David Arapi	Agriculture
Tanabi Guitam	Maint
Konrad Kalen	Maint
Jill Bebe	S/ Services
Veronica Michael	C/ Facilties
Amos Kairi	A/Farm
Wap Kuipa	A/ Scien
Thomas Wail	Printing
John Geyasca	Staff Office
Kore Horovahu	Cent Engine
Guli Maragau	Mining
Limbie Kelegai	ITS
Charles Nakau	ATCDI

If you have not done so, please, sign a form with any of the above persons as soon as possible accordingly. All permanent national staff are eligible members of NSA. Your co-operation will be most appreciated.

Charles Nakau
President

David Arapi
Treasurer

Unitech Craft & Social Club

The Unitech Craft & Social Club is open to all ladies on the campus. The club meets on alternate Wednesdays and aims to share or introduce new skills among the members. We are a friendly bunch and we extend a special welcome to any new ladies on the campus with or without small children who are also welcome.

Our next meeting will farewell Jenny Murphy: who is leaving us shortly. All ladies who know Jenny are cordially invited to join us in wishing her well in her new life.

Venue:	130 Sepik Drive
Time:	9:30 am
Date:	17th June 1998

See you there?

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:
Monday: **UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**
WEEK-ENDS
Saturday
AM -SDA
PM-TSCF
Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

Sunday Morning
CLC CHURCH

Staff Bible Study

The next meeting of the Unitech Staff Bible Study group will be held on Monday 15 June, 1998 at 7.00 pm.

Venue: 86 Fly Drive

For Discussion: The History of the Christian Church.

All interested staff are welcome.

Patrick Afenya (Tel: 4674)

damantal Campus Bible Fellowship

Tonight will be our last night of fellowship. All are invited to attend.

Venue: HLT
Time: 7:30 pm
Date: 12/06/98

Unitech Catholic Community

This Friday night rosary prayer will be at the Chaplains Residence.

Time: 6:30 pm

Please do come along.
Thank you.

CLASSIFIEDS

Girl Friends Club Fundraising Dance

Venue: Huon Gulf
Date: Saturday 20th June 1998
Time: 7.30pm till late
DJ: Master Blaster
Dress: Neat
Transport: Provided

K10.00 per head

Entry by tickets only - so purchase yours from the following people:

Luciana Panau -475 7547
Dulcie Karani -472 4063
Mrs L Karani - Lae Council
Mrs M Panau -Student Adm
Mrs A Kami- Architecture

Position Vacant
Agriculture Department - Farm

A vacancy exists on the University agriculture Farm for the position of Casual Employee.

Applicant must have completed at least Grade 6 education. Possession of a Vocational Training Certificate in Agriculture, and experience in working in an Agricultural establishment would be an advantage.

Applications should be forwarded to:

The Head, Agriculture Department, PNG University of Technology, Private Mail Bag, Lae, Papua New Guinea. The closing date for applications is 30 June, 1998.

For Sale

Rarely used Epson 24-pin LQ 570+ Printer. Printer is in very good condition. Prize K350 or nearest offer. Call Mahen on 472 6948.

****

1. Mazda 929 in very good running order, low mileage, fully serviced K4,800 ono. 2. TV Colour 14" Sony with remote control - enhanced reception K500. 3. Video (VCR) Sharp with remote control, recording and playback and much more K350. 4. Clothing/shoes/ toys and many of them at very cheap prices. 5. Cassette player, Sony new K90. 6. Video Camera, Sony NTSC, new with all accessories K1,000. Call us on 475 7243.

****

Toyota Rav 4 Station-Wagon, Produced in 1997. Less than 10,000km. In the best condition. Registered till May, 1999. Comprehensive Insurance till June, 1999. Price negotiable (reasonable). For information

****

Toyota Landcruiser Utility. Fully kitted. Air conditioned. Radio Cassette. Power steering, bullbar spot lights, mag wheels, w. shields. Only one year old. Contact: Matu 472 5199.

SPORTS

Unitech Female Rugby Touch

Interested in Rugby Touch (Seven Aside)?

If you are, then join now by forming a team for Unitech. For more details call the SRC/Sports Office on ext. 4237 or 4238.

Please note, this notice serves immediate dependants of the University Staff members, Female Staff and Female Students only.

Molly Geno
SRC/Sports Office

Essential Services Basketball Team

Our team is looking for members to participate in the Unitech Womens Basketball Association.

Those members eligible are immediate officers of respective divisions of the PVC (Admin) department ie. Medical Services, Students Services, Maintenance, SRC/Sports Office just to name a few. Dependants and female students are also welcomed to join this team.

Molly Geno (ext: 4237)/
Jill Bebe (Ext: 4231)
Team Organisers

Unitech Staff Sports Steering Committee

This is a reminder to those staff members nominated to please confirm by end of this week 912/06/98) on their participation in the Staff Sports Steering Committee.

So far only 9 names were confirmed.

SRC/Sports Office

FUN WITH MATHEMATICS

Solution to Problem 8

Suppose the bird catches the snake at a distance of x meter from the foot of the tower. So the snake covers a distance of $(100 - x)$ meters. As the two speeds are equal the bird also cover $(100 - x)$ meters. Hence, by Pythagoras Theorem,

$$(100 - x)^2 = 20^2 + x^2$$

So, $10000 - 200x + x^2 = 400 + x^2$

Hence, $200x = 9600$

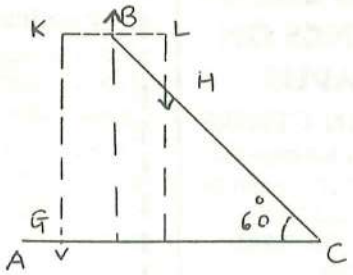
Giving, $x = 48$

Answer: 48 meters.

Solution to Problem 9

$1936 = 44^2$ and $45^2 = 2025$, this will be the year wanted in the next century. Note that we get this by adding the odd number 89 to 44^2. If you add the next odd number 91 to 45^2, you will get 2116, the only square (46^2) in the 22nd Century. Next to get the only square of 23rd Century, we must add 93 to 2116 getting 2209 ($= 47^2$). Continuing in this way, we will get $50^2 = 2500$, while $51^2 = 2601$, showing clearly that the 26th century will have no perfect square number for the first time, i.e. between 2501 and 2600.

Solution to Problem 10



The weight of any portion of a rod is proportional to its length. Let us take the length of the whole rod AB as a unit. Let the length of the AC be x, so that BC = $1 - x$. Their weights can be taken as λx and $\lambda(1 - x)$. For equilibrium, we must have

$\lambda x.KB = \lambda(1 - x)BL$

$$\because x(GC - BC\cos 60^0) = (1-x)\frac{1-x}{2}\cos 60^0$$

$$\because x\left(\frac{1}{2}x - (1-x)\frac{1}{2}\right) = \frac{1}{4}(1-x)^2$$

This gives $3x^2 = 1$ or $x = \frac{1}{\sqrt{3}}$.

$\because$ The point C is such that $AC = \frac{1}{\sqrt{3}}AB$.

Dr. Neela Sukthankar, Department of Mathematics and Computer Science.
E-mail: neela@sukthankar.com

Air Mail

STAMP

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Papua New Guinea University of Technology
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PAPUA NEW GUINEA

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INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1292 ISSN:10119-5354 19 June, 1998 WEEKLY

Sukthankar farewells Unitech with award for top maths & comp student

The lady who campaigned over the years that mathematics was fun and not boring, goes finish at the end of this month.

She lightened up the back page of The Reporter on a weekly basis over the last eight years with Fun With Mathematics, attracting a lot of interest and competition within the Country.

Last week she also announced a sponsorship of the "Dr Neela Sukthankar Prize for Best performance in Degree course in Mathematics and Computer Science by a PNG National Student" worth K1000, to be awarded annually.



Dr N Sukthankar presents the cheque to the VC witnessed by Prof Phythian

By CORNEY LAHIES

At the presentation, Dr Neela Sukthankar, a senior lecturer in Mathematics and Computer Science, told invited guests of how it all began eight years ago.

"I had always observed that students' response to mathematical questions is much better when they are relaxed and not under pressure of writing an assignment or a test," Dr Sukthankar said.

"I started this activity in my 2 nd year Applied Science students, and having noticed their positive response and interest in these problems, I thought, why not involve a wider Unitech community?"

Dr Sukthankar approached the editor of The Reporter about the possibility of running the Fun With Mathematics competition on a weekly basis and was given a permanant space on the back page.

"In 1991, I began writing in The Reporter and with the circulation going to UPNG and other tertiary institutions, I started receiving solutions from students from all over PNG," Dr Sukthankar said.

"Once I had to solve a mathematical dispute between a school boy and his teacher from Bougainville.

"They both sent me their solutions claiming that they both wrote the correct solutions.

"After going through the solutions, I wrote them back stating that they were both correct, only that they started with different initial conditions for the same problem and therefore got different answers."

She said the circle of problem solvers had increased over the years and the rewarding aspect of the whole exercise was to see so many different people together with the common bond of love for mathematics.

An enlarged version of Fun With Maths known as PNG Mathematics Competition was launched in 1992 coinciding with the University's 25th Anniversary.

"Around 600 students took part in the competition, which was simultaneously held in 14 different tertiary institutions in the Country," Dr Sukthankar said.

"With the overwhelming response to the competition, we decided to make it as an annual event.

"The competition will be in its seventh year this year and has brought all the tertiary institutions together with a common aim to promote Mathematics in the Country."

Dr Sukthankar later called on her colleagues to direct students in ways that will help them understand mathematical principles in different techniques instead of restricting their work to textbooks and modules.

She said educators should recognise students who were talented and encourage them to work harder in order to stretch their minds instead of spending too much time worrying about slow learning and weak students.

Papua New Guinea has a lot of young talents in the villages that need to be tapped, and educators have the task of nurturing them so that their skills and knowledge could benefit the country, according to Dr Sukthankar.

As for the next step of the fun game, Dr Sukthankar also suggested the training of a team to participate in the international mathematics competitions, in her closing comments.

"I am leaving Unitech at the end of this month, and I am going to the United States of America to take a new challenge, may be a different career path," Dr Sukthankar said.

"My colleagues Dr Samuel Kopamu and John Wamil, I am sure, will effectively carry the work, which I started eight years ago. In fact, I would like

them to go one step further, namely to train a team for the International Olympiad, which I could not do.

"In 1994, I participated in the International Olympiad as a Jury and started building contacts with Asia Pacific Olympiad committee, Australian Mathematics Olympiad committee etc. so that I can start to build up a team for PNG in future. In 1995, the Vice-Chancellor's Office funded K6000 to sponsor John Wamil, whereas my funding was already organised with the help of IMO, in spite of this, John and I could not go due to reasons beyond my control.

"Some of the first year prizewinners for Fun With Mathematics we see today, could easily have been our team members. We should not underestimate the mathematical talents of our young PNG school students. After all, making an effort is very important, not everybody can win. We have in PNG two PhD's in Mathematics, Dr Cecilia Nembou (PVC-UPNG) and Dr Samuel Kopamu from Unitech. They are both very good role models for students. PNG has made a beginning and I am sure there will be more in the future."

Organisations including Telikom, Pacific Foam, The International schools of Lae and the Vice-Chancellors office were also acknowledged for their financial support, as well as the support from the Mathematics and Computer Science staff, and The Reporter since the commencement of Fun With Mathematics.

SAWMILL TRAINERS CERTIFIED FOR SERVICE



The first group to complete the Trainers' training course set to change things in the workplace

Nine Sawmill trainers have pioneered a new phase in PNG's logging industry, after successfully completing an AusAID sponsored Trainers' training programme at Timber & Forestry Training College (TFTC) last week.

Their achievement was also hailed by those involved in the training programme, and welcomed by representatives from the Forest Industry and the National Forest Sector.

The Principal of TFTC Frank Corin, thanked the PNG Forestry HRD Project Coordinator for their assistance and reminded the nine pioneer trainers of the responsibilities at hand.

"The nine graduating are honoured to be the first to participate in this course which will see more training for chainsaw operators in the country," Corin said, adding that the forestry industry was keen to put in place practices that would be sustainable.

"It is essential for the logging industry to ensure that chainsaw operation and felling are done correctly and efficiently.

"The key to this is the establishing of trainers throughout the country who can train and assist operators.

"This one year programme is part of an ongoing programme, where people in the forestry industry are assessed in the work situation throughout the country by an Aus AID personnel under the HRD training package.

"As part of the assessment, operators are assessed on the operation of chainsaw and maintenance of chainsaw, and the felling of trees and crosscutting.

"They are also assessed on all safety aspects and their training ability in training skills."

Meanwhile, AusAID representative, Dr John Wescott in congratulating the trainers, urged the industry not to c promise the sustainability of environment with exploitation of the natural resources as experienced in other countries.

He also called on trainers to use their newly acquired skills in educating the workforce in the forest industry.

"The skills learnt are important- the basic skills in chainsaw, where the trainee learns how to handle and maintain it, and the skills on how to impart the knowledge to other chainsaw operators as well," Dr Wescott said.

The Harvesting Training Unit at TFTC will now take over the responsibility of conducting the train the trainers course as c e 1st of July.

The occasion was witnessed by representatives from the National Training Council, National Forest Authority, Forests Industry Association, while several companies were on hand to display their sawmilling products and accessories.

The Reporter is produced weekly by the PUBLIC RELATIONS UNIT.
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Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

COMPUTER ENGINEERING DEGREE COURSE IN PIPELINE

A new chapter in Papua New Guinea higher education is about to be written when a Bachelor of Computer Engineering course is introduced at the Papua New Guinea University of Technology next year.

The Bachelor of Computer Engineering Course would be offered as part of the Department of Electrical and Communication Engineering under graduate program.

According to Electrical and Communication Engineering Head of Department Professor Al Dabbagh, the Department felt it was able to offer the course after it rationalised its resources and integrating its Diploma and Degree programs.

"In re-examining our operations in the Department, we found that there was a duplication on some of the courses in the Diploma and Degree programs which is a waste of resources," Professor Al Dabbagh said.

"So the Department decided to rationalise the resources by integrating the Diploma and Degree courses for the first and second years, and by doing so we were able to improve the usage of human resources and services.

"Due to the rationalisation of resources, we will be able to introduce for the first time in the history of Papua New Guinea, a new stream in undergraduate program, the Computer Engineering program."

Professor Al Dabbagh explained that there was a big difference between the current Computer Science program offered at the University and Computer Engineering course that would be offered.

"With Computer Engineering, we would deal mainly with computer hard-ware designs, networking, internet, e-mail and Data Communication while the Computer Science program mainly deals with computer software and computation," he said.

"At the moment there is a shortage of expertise in computer hardware and these services are vital for the industry and future education in Papua New Guinea.

"Currently, the country relies heavily on international expertise on computer hardware should anything go wrong and it costs a lot of money to hire this experts to deal with computer problems.

"In future, this expertise will shift to Unitech through our Department, which will provide the leadership in Computer Engineering.

"Therefore, we want to make our own Papua New Guinean specialists in Computer Engineering."

According to Prof Al Dabbagh, in preparation for the Computer Engineering program, the Department has furnished three, state of the art, computer laboratories with the help from the Japanese International Cooperation Agency (JICA).

With about K1 million equipment aid from JICA which Prof Al Dabbagh was very thankful of, the Department was able to set up a Multimedia laboratory, a Data Communication laboratory, a Power Electronics laboratory and a Micro Processor laboratory.

A position for an Associate Professor and three lecturers in Computer Engineering would soon be advertised.

In addition to the new undergraduate program, the Department has already developed curriculums for two Masters of Engineering programs in Communication Engineering and Power Engineering which would be offered through course works and dissertation.

The two masters courses' syllabi are still going through the appropriate committee for approval, nonetheless, Prof Al Dabbagh is adamant that the course would kick off next year.

"An Associate Professor would be appointed as Telikom/Ericsson foundation chair in communication engineering which be fully funded by the industry," he said.

In other developments, the Department is negotiating to have its degree programs accredited to internationally recognised bodies. This move is followed in collaboration with the Institute of Engineers Papua New Guinea.

"The staff and students in our department are aiming that graduates from this University are as good as other engineering graduates in the world," Prof Al Dabbagh said.

"For this purpose we are working hard to raise standards subsequently, one area for improvements is the final year projects, which is regarded as an important design component of all our courses."

The Department has formalised its mission statement for the first time. It has formulated The Industry Advisory Committee to make sure that the Department's teaching programs meet industry needs in PNG.

The Department is also embarking on improving its profile internationally by attending conferences and seminars which in turn would also improve the profile of the University.

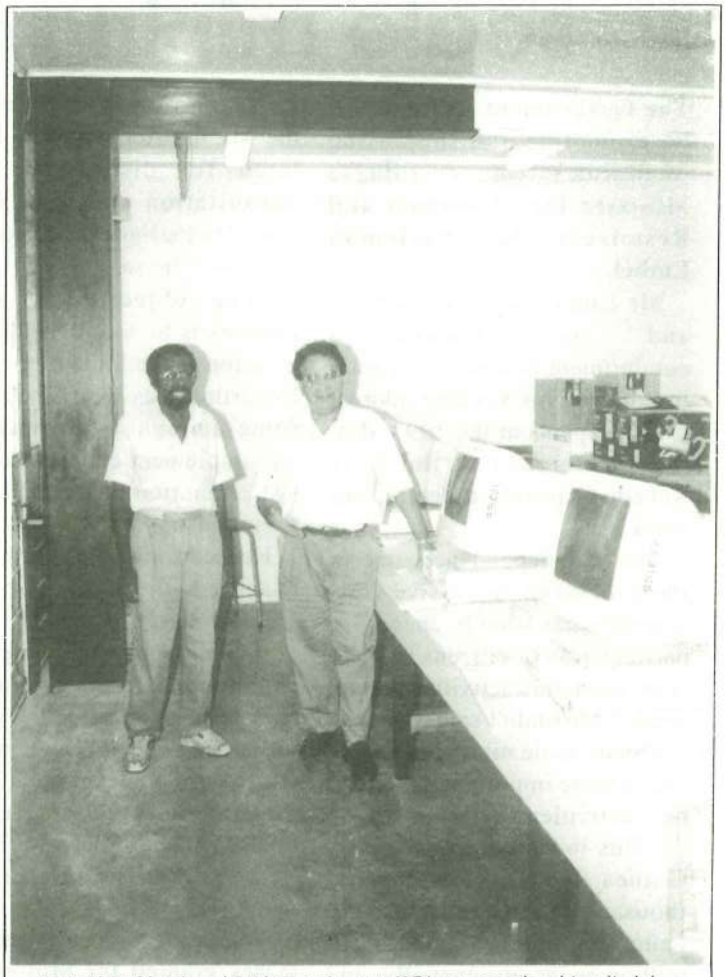
The Department began renovation work to improve working environment of its academic, technical and general staff. As resources become available, more work is needed to upgrade the Department's teaching facilities.

"We believe that unless we provide good conditions for our employees, we cannot demand from them high productivity and efficiency."

Meanwhile, the Department would also be conducting 20 continuing education short courses for the Industry in the following areas: Communication Engineering, Power and Control Engineering and Computer Engineering.

"We believe that getting a degree or certificate will not last long without a continuing professional education program because technological changes are rapidly progressing almost daily," he said.

"In order to keep up with these new changes, professional engineers and technicians need to attend such short courses that we are going to offer in order to keep up with modern technology."



Prof Al-Dabbagh and B Alusi at the new JICA sponsored multimedia lab

By STEVEN BUSIN

Government encourages small scale mining for rural people

The Government will embark on promoting and supporting small scale mining according to Minister for Minerals and Resources Mr Philemon Embel.

Mr Embel made known his and the Department's commitment to small scale mining, during his keynote address to participants at the 1998 Mining Conference at the Rose Kekedo Convention Centre, last week.

'Since Independence, one of the policies of successive Governments has been to encourage participation of citizens in small scale economic activities in rural areas," Mr Embel said.

"Small scale mining is clearly one of these important rural business activities.

"This industry in Papua New Guinea involves some twenty thousand miners and currently generates approximately K40 million in income annually, and most of the money goes directly into the rural economy.

"Recently, I have been successful with a request to the Australian government for the provision of an AUSAID Funded advisor to assist my Small Scale Mining Branch.

"The terms of reference for this specialist will include training of our mining engineering staff and mining extension officers to better assist small scale miners in the field.

"The obejective of the AUSAID programme is to have our small scale miners working more efficiently and thereby increasing their output.

"The expert will also be developing educational programs for small scale miners to promote safe and environmentally sound mining methods."

The Minerals and Resources Minister said that the other major goals would be the fine tunning of the 1992 Mining Act.

"The proposed changes to the Mining Act will be circulated for discussion and consultation and then presented to Parliament as soon as possible," he said.

"The objective of the changes is to simplify administration of the Industry by my Department as well as clarify some ambiguous provisions and implement changes to assist promotion of the exploration industry."

He said some of the possible changes to the Mining Act under consideration are:

•the allowing of dealings in exploration licences within the first term of the licence provided that it can be demonstrated to his Department that the minimum expenditure requirements have been fulfilled by the company concerned and;

• the need to ensure that all leases granted for Mining of Alluvial Mineral Resources are transparent and can co-exist with other leases.

He said that this was one of the more contentious issues affecting explorers and Alluvial Miners alike, and it was proposed that the Alluvial Mining lease holder could be compensated for the value of the alluvial lease as determined by a certified valuer recognised by the Australian Institute of Mining and Metallurgy (AUSIMM), if a hard rock development displaces an alluvial miner.

Mr Embel also said that his Department has also proposed changes to the Mining and Safety Act and regulations.

"This is long overdue and the new act will incorporate world's best practices with regard to occupation health and safety," he said.

"It will also be complementary to the high



Minerals and Resources Minister, Philemon Embel at the Conference

By STEVEN BUSIN

standards of safety and engineering which are already practised at our mines in Papua New Guinea."

Meanwhile, Mr Embel said his Department in conjunction with other relevant Departments was formulating a seabed Mining Policy for Papua New Guinea.

"The importance of this issue was recently brought home to me by the granting of exploration licences to Nautilus Corporation to explore the seabed in the Manus Basin waters for copper and gold deposits," Mr Embel said.

"Some of the aspects being addressed by the Seabed Mining policy committee include licence terms and conditions, licence size and work programmes and environmental guidelines.

"We are also working on developing an appropriate fiscal regime, technology transfer provisions, and methods for addressing all stake-holder interests as well as mechanisms for dispute resolution.

"Given that this is really a "frontier" area, much consultation and discussions will be held, firstly within the committee and secondly with the industry and other international organisations.

"Our desire is to develop a policy for Seafloor Mineral exploration and development which is consistent with the relevant provisions of the United Nations Convent[illegible] on the law of the sea (UNC[illegible]S) to which Papua New Guinea is a signatory.

The draft will be circulated to all concerned parties in Government and Industry for their input before it is finalised for presentation as a white paper and our target is to have a draft policy out by the end of this year.

"My Department is also working closely with the South Pacific Applied Geosciences Commission, better know as SOPAC, to organise and host a Regional Workshop on Seabed Mining in November 1998.

"This workshop is designed to assist Island States including Papua New Guinea to develop appropriate policy and legislative frameworks for their respective countries."

ROVING COM-DEV STUDENTS AT LARGE

The newly introduced Communication for Development course has attracted the attention of various organisations with all students securing work experience opportunities.

According to the Department of Language & Communication Studies fieldwork Coordinator, Justin Kehatsin, the response from companies and other organisations have been very good.

"Forty-six students will undergo field work experience with various organisations within the Country," Kehatsin said.

"Field work is a major component of the course and is undertaken each year for two weeks and a whole semester in the fourth year.

"These field work training exercises are assessed by the supervisor on-site and the University supervisor who visits the student during the training."

During the semester break, the students will undergo training with the Department of Mineral Resources, European Union, Hides Gas Fields, Misima Mines, Highlands Pacific, PNG Product, PNG Elcom, Department of Agriculture & Livestock, Morobe Local Level Government, Lae City Police, Porgera joint Venture, Lihir, Kum Gie Consultants, North Solomons Province, and the Lae City Authority.

According to Kehatsin, other students will gain fieldwork experience in September, while the rest will undergo the programme during the long christmas vacation.



A group of students being briefed by their lecturers, Kehatsin and Tomlin before their departure

Communication for Development is a specialist course, the only one of its kind available, and was developed in response to calls by the Mining industry in PNG.

"The Course is a designed to train students to become Liaison Officers or public relations officers," Kehatsin said.

"So far it has proven very popular and this popularity has been shown by the large number of non-school leavers and school leavers who have applied for it over the years.

Meanwhile, since its inception three years ago, the course has already attracted interest from other countries in the region, but due to limited space only a selected number is enrolled.

This year the Department enrolled a total of 67 students including 33 in first year, 16 in second year and 18 in the third year, who are expected to graduate in 2000.

Government to rehabilitate mining sites- Embel

The Department of Minerals and Resources is focussing on eveloping a Mine Closure Policy for the country, according to Mining Minister Philemon Embel.

Mr Embel, during the 1998 Mining Conference at the Papua New Guinea University of Technology said that the recent closure of the Wapolu Mine, the looming closure of the Misima Mine and Ok Tedi's present obligation to provide the State with a mine closure plan have emphasised the absence of a PNG Mine Closure and Rehabilitation Policy.

Mr Embel said that there was a need to have a define procedure for mine decommissioning and mine site rehabilitation.

"However, most companies have been progressively rehabilitating disturbed areas voluntarily as part of their good environment practice codes.

To date, the Department has had no experience of planned large scale mine closures with the only mine closure in Papua New Guinea to date being the small Mount Victor and upper ridges mine in 1990 and the forced closure of the Panguna Mine in 1989.

"Ideally, planning for rehabilitation and decommissioning should begin before a mine project commences and continue as an integral part of mine planning throughout the mine life.

"In PNG, it has been the practice to include a clause in the mining development contract stating a time frame for the company by submitting a mine closure plan for consideration by the State.

"The Ok Ted mine was given a time frame of ten years before closure, to submit its plan and has recently established the Ok Tedi Rehabilitation planning committee to coordinate its rehabilitation programme.

"This committee includes members from key Government agencies such as my department, the office of Environment and Conservation, the Office of Planning and Implementation and the Department of Western Province.

"My Department together with the office of Environment and Conservation has already started work on a Rehabilitation policy in close consultation with other relevant Government agencies, the mining industry and the community.

"Other areas that are at an exploratory stage include a policy on land owner participation in exploration standardisation of land owner equity and other benefits, conversion of Government expenditure on liaison and coordination in a mine development as a project cost, and an audit of mining practices and standards."

CAMPUS BULLETIN BOARD

Driving Through Sports Grounds

I've noticed that many people are still driving through our Sporting Grounds. As a result, the fields surfaces were spoilt due to carelessness on short cut driving.

I am again appealing to any drivers to put a stop to this business, unless you have a job to be done on the fields.

Please look after the fields because they provide your sporting needs.

P Lavatu
Sports Co-ordinator

Semester Break Library Hours

Library Opening Hours - Inter Semester Break from Friday 19th June to Sunday 12th July, 1998.

Monday to Friday
8:00 am to 6:00 pm

Saturday
Close

Sunday
Close

Normal opening hours will resume on 13th July, 1998.

Raphael ToPagur
A/University Librarian

HIV/AIDS WORKSHOP

The workshop will commence coming Monday 22/06/98.

It will officially be opened by the Lord Mayor for Lae City at 8am at the Mining Lecture Theatre and closes on Tuesday by Lae Chamber of Commerce president Allan McClay.

Unitech Clinic

As of 1st July 1998, our free medical services will only be given to staff/ students, their legal dependants including their legal spouse and their children under the age of 19 years.

Wantoks, brother, sisters, 2nd wife, grandchildren and adult children of staff/students will pay regardless.

Clinic Management

TREES & SHRUBS

All campus residents are reminded that planting of food crops shrubs, flowers and trees is not allowed or encouraged in or near Drainage and Services Reserves.

This hinders proper maintenance, care, use, and operation of the infrastructure concerned.

Tenants who have planted in and around such areas should trim/ remove/relocate their shrubs and gardens etc. as necessary.

Affected areas are:

- Street and road kerbs
- Under Elcom high voltage overhead power lines
- Open drains
- Security access roads
- Designated open fields

Buildings and Grounds will not be responsible for damage or removal of gardens, shrubs etc., in the course of maintaining such facilities.

Buildings and Grounds

REWARD

A reward offered for return of items stolen from Sepik Drive on evening of Friday 12 June, 1998.

Canon "EPOCA" camera - unusual shape for 35 mm in brown svede case.

AIWA XP-200 CD player. Sony SRS-A30 Speakers. Sony 12 band radio. Classical CD's-Paganini, Vivalde, Back, Corelli etc. Jazz CD's - Earl Hines, great Jazz pianists Gershwin/Porter. Blue Mountain Bike. Black "Karrimor" Ruck-sack.

Please contact Dobikins, Architecture & Buildings on Phone: 473 4513

Unclaimed Mail

Most of this mail has been with the Student Services Office for over three (3) months now. If it is not claimed after this notice, it will be returned to the senders.

Alfred Waiwo, Bata Tom Michael, Brian Maliso, Charles Tungekai, Daniel Omal (Fax), Della Wally, Dier Tiawong, Dorothy Mai, Edward Shaun Masi, Ekonia Wanariu, Elizabeth Korerua, Elva Arabata (3), Eremas Goeba, Gabriel Kirabu, Gebob Bayu, George Wachingara, Helmu Elliot, Henry Mune, Joel B Lagai, Joel Warambi, Jonathan Ikime, Joseph Kobel, Josephine Williams, Julie Langio, Kelly Bineng, Ken Adams (2), Kepas Lapan Tias, Kido Podias, Michael Robert, Nathan W Yapi, Nop Kupul, Peres Waviong, Robert Kupo Mai, S. Balagawi, Simon Apea Yopai, Simon K Malu, Steven Misiar, Toby Natabe, Wali Grinde, Willie Mapal, Yetsie Koigiri, Yvonne Kaar

This is the information summary of Staff Changes in respect of Appointments, Departures and interdepartmental transfers for the week ending 9/6/98 - 12/6/98.

Appointment

Marilyn Kuniaka Employ	Surveying & L/Studies	P/T
Tom Leango	Inform & Tech Services	CE I
Mrs A Kumar Tutor	DODL	P/T

Departures

Dr B Bye	Maths & Comp. Science	P T I

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:
Monday:**UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**

WEEK-ENDS
Saturday
AM -SDA
PM-TSCF
Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL
Sunday Morning
9:00 CLC CHURCH

Unitech Catholic Community

This Friday night rosary prayer will be at the Chaplains Residence.

Time: 6:30 pm

Please do come along.

Thank you.

The Reporter wishes all students a happy and trouble free Semester Break.

CLASSIFIEDS

UNITECH SOUVENIRS

Come and buy some for your relatives, friends or loved ones.

Call in at the Public Relations Unit while stocks last.

Price List

Adult T'Shirts -K20.00

Children Collar T'Shirts - K12.00

R/Neck T'Shirts - K8.00

Caps -
Brush Cotton - K15.00

Ord Cotton - K12.00

Caps (30th Annivesary) -K6.00

Laplaps (assorted) -K8.00

Umbrella (small) K10.00

Umbrella (large) K20.00

Nectie -K25.00

FINAL CLASH OF ORIGIN

WILL LANGER PULL OUT ONE OF HIS MAGIC'S FOR THE LAST TIME OR WILL THE BLUES CAUSE HAVOCK

ENJOY YOUR VIEWING BUT NO CLASH AT HOME. PLEASE!!!

SPORTS

Unitech attend PNGBL National Boxing Championships

Twelve Unitech Boxing Club members have been selected to participate in the Papua New Guinea Boxing League National Championships in Bulolo this weekend.

Unitech boxing coach, Lohial Nuau, said that all of the fighters were rearing to take on their opponents at the Bulolo championships against fighters from Bulolo, Wau, Buka, Kainantu, Goroka and Wewak.

According to coach Nuau, the Unitech squad would be made out of six experienced fighters and six novices.

The bout of the tournament, according to coach Nuau would be a return fight between Bulolo boxer Markus Sani and Unitech's most experienced boxer Kevin Charlie in the feather weight (57kg) division.

Coach Nuau predicted the match between the two to be a tough and gruelling encounter as the two fighters lock horns this weekend.

Nuau said Sani who had just returned from the Queensland Boxing Championships after knocking out the Queensland champion in the third round will prove to be a very tough opponent.

"However, our boxer, Charlie is all prepared to meet him and we will just have to wait and see what the results would be like at the tournament," he said.

"Other Unitech boxers who would be having rematch bouts at the tournament are Robert Kanawi in the 67 kg division and Rex Wari in the fly weight division.

"Both boxers, three weeks ago, defeated their opponents in Bulolo."

According to Nuau, the PNG Boxing League National Championships would be used as lead games for Unitech boxers for the PNG Boxing Union championships in Buka in November.

The PNG Boxing League and PNG Boxing Union are two separate national boxing bodies in the country.

Previously, there was only one boxing union in the Country however, differences amongst boxing executives resulted in the formation of the PNG Boxing League.

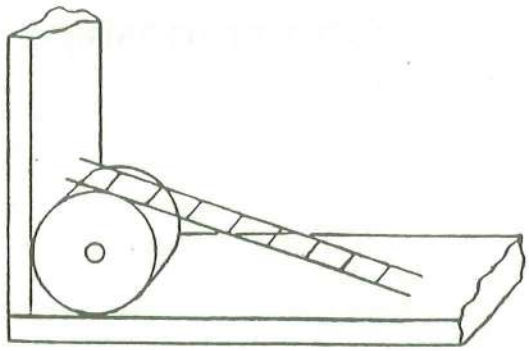
Unitech Boxing Club is affiliated with the PNG Boxing Union, however, have been invited by the PNG Boxing League to participate at the championships.

The championships at Bulolo would be used to select boxers to participate in the Australian National Boxing Championships.

"Should Unitech boxers put up an impressive performance at the championships, some of our boxers might be selected to participate in the Australian championships," Nuau said.

FUN WITH MATHEMATICS

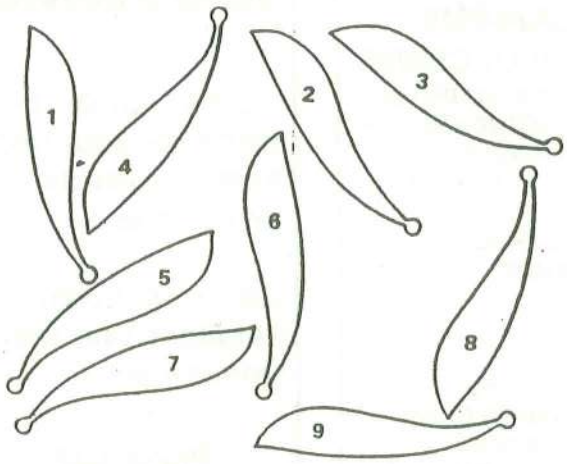
Problem 11



A barrel of diameter 2 meters rests with its curved surface in contact with the ground and a wall. A ladder, 6.5 meters long lies in contact with the barrel, the wall and the ground. What is the maximum distance of the ground end of the ladder from the wall?

All interested members of staff and students should send their solutions to Problems 11 and 12 before Monday the 22nd of June 1998. K5 for first correct entry.

Problem 12



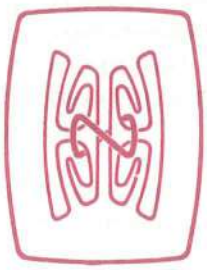
All the nine figures given on the page are without exception, congruent. But, in a certain respect one of them differs from all the rest. Which one and in what respect? Can you find?

Dr Neela Sukthankar,
Department of Mathematics and Computer Science

E-mail: neela@sukthankar.com

Air Mail

STAMP



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Papua New Guinea University of Technology
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PRINTED MATTER

The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1293 ISSN:10119-5354 26 June, 1998 WEEKLY

AIDS & HIV increase at alarming rate, workshop warns

About 30 people nationwide were diagnosed HIV positive weekly and it was estimated that about 20,000 people would be infected by the end of this year

These frightening statistics were revealed by STD/AIDS Information Officer with the Health Department, Mr Frank Idau, during a two day HIV/AIDS Awareness Workshop held at the Mining Engineering Lecture Theatre on Monday and Tuesday.

Mr Idau, who is responsible in collating data on all HIV/AIDS cases in Papua New Guinea said that currently there were 1121 HIV cases recorded, out of which 403 have developed into full blown AIDS.

However, he warned that this number could only be the tip of the ice-berg as there could be more people infected with HIV - the virus that causes AIDS, but have yet to be identified.

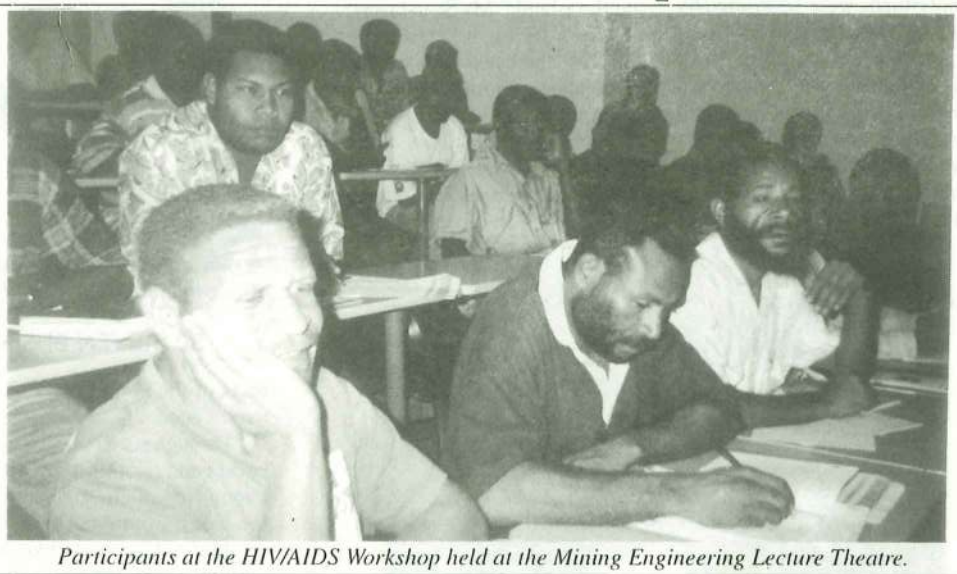
He said this statistics was very alarming and if the disease continues to spread at its current rate, in five years time, more than half of the country's population would be infected by the disease.

"This would then have a very devastating effect on the lives of people and the economy of the country," Mr Idau said.

According to World Health Organisation (WHO) reports, there are 22 million men, women and children who were infected and living with the HIV.

Everyday there were around 8500 new HIV infections, which over half of them, were young people under the age of 25. Altogether, nearly 8 million people, including 1.5 million children under 15 years have already developed AIDS, and nearly 7 million have died.

Special projects officer for STD and HIV/AIDS with the Health Department, Muwete Gatsia, said that the HIV/AIDS situation in PNG had become a grave concern with already an estimated 6000-15000 HIV infections in the Country.



Participants at the HIV/AIDS Workshop held at the Mining Engineering Lecture Theatre.

By STEVEN BUSIN

"Before it is too late, we need to strengthen our prevention program by well defined effective prevention strategies to stop the transmission," she said.

"With education and support, people are able to take action to prevent infection and education is the most important of the available strategies."

Accordingly, the two day HIV/AIDS Awareness Workshop covered various areas on STD and HIV/AIDS including: Overview of STD, HIV/AIDS Infection in PNG; Health Department Policy on HIV/AIDS; Social and Economic Impact; Epidemiology and Statistics in PNG; Women's Health; Prevention Strategies; Common STDs in PNG; Institute of Medical Research HIV/AIDS Infection and Intervention; Social Migration Problems associated with STD/AIDS; Community Care of HIV/Positive clients; Counselling and Health Education of STD/AIDS.

Female Students Association President Scholar Maru said that the AIDS workshop was very informative in many areas which students were very ignorant about.

She said that it was a very good initiative by the Care and Rehabilitation Committee of the SRC, however, she would prefer that such workshops be held again for a wider student participation.

"As the President for the Female Students' Association, I have been convinced that it was necessary to have such a workshop conducted for female students only as a large number of people infected were females," Maru said.

"Before we go out preaching AIDS awareness programs to our people, I think it would be better if we teach ourselves here first, before we go out and talk to the people of this country."

Mrs Gatsia, said that the workshop was very important and thanked the Vice-Chancellor, staff, students and participants for making the time available to have the workshop organised.

"This is not a health problem, but it is also a social, economical and religious problem that involves the community-at-large," she said.

Meanwhile, Pro Vice-Chancellor (Admin), Wilson Tovirika, during the presentation of certificates to participants at the Staff Amenities Centre, said that the organisers of the workshop had done Unitech proud for organising such a very important workshop.

"It is important because HIV is a very big problem in the country, and as a learned community of PNG, we should be very concerned about it," he said.

"We know that this illness does not target the aged or the very young, but normally the very sexual active people who are between the ages of 15 -35.

"PNG is a very young country, and if we don't take appropriate action to address this threat, 5 to 10 years down the line, we will be very sorry to see many members of our community taken away by this dreadful disease.

"In the past, the community-at-large have labelled students as being more interested in what they can get from the people and Government, but I think one way of going back to the community, is to return what you have have learnt and make them aware of the seriousness of this disease."

Rabbit farming can help Bougainville rehabilitation

"Training of Bougainville people to carry out self- help projects could greatly help the restoration program, and help bring peace to Bougainville," says Raphael Evinu, Officer In Charge of the Live Stock Section in Arawa.

"And Rabbit Farming is an ideal way in which the people of Bougainville can occupy themselves with, and in turn help boost the economy of the Province."

Mr Evinu made this comment after completing a one week Rabbit Husbandry course conducted at the Unitech Agriculture Farm last week.

Evinu with nine other Bougainvillians,were sponsored by the New Zealand Official Development Assistance, while the rest of the 12 participants were sponsored by the Canada Fund for Food and Agriculture of the United Nations and the Targetted Community Development Projects.

After going through one week of extensive training on Rabbit Farming, Evinu said, he would be making a strong recommendation for more Bougainvillians to attend the course at Unitech.

Albina Sisusia, a church worker in Arawa, who is involved with the rehabilitation of youths on the trouble-torn island said that rabbit farming would greatly help in the physical rehabiliation of youths on Bougainville.

"I am involved in the spiritual rehabilitation of youths in Arawa, however, after attending the one-week course, I have discovered that the breeding of rabbits could help the physical development of people on the island," Ms Sisusia said.

"In order for full restoration to succeed, there needs to be a balance in both the spiritual and physical development of a person."

Theresa Muna, also a church worker in Arawa said that through the workshop, they had intereacted with other participants from other parts of the country and have fostered a good relationship with them.

"Through such courses, we could build good relationships with other Papua New Guineans, and I urge the North Solomons Government, or other aid agencies like this one to send more Bougainvillians to such courses. "

The Rabbit Husbandry Course covered a wide area which inclued; areas in feeding of rabbits; feeding, breeding, handling, building cages; diseases, and small scale business management.

According to Kolopa Paita, Technical Officer involved with the Rabbit Project at Unitech, the participants also learnt how to make money from rabbit furs and the different uses of rabbit manure.

Baza Yowa, a vegetable grower from the remote Teptep area in Madang Province, said that he had learnt a lot from the course.

"As a vegatable grower, I have continuosly used the same plots to grow vegatables and the soil is slowly loosing its fertility," Mr Yowa said.

"I can now use manure from the rabbits to fertilise the soil on my vegatable plots.

"Fertilisers from the store are very expensive, while rabbit manure will cost nothing, and will do the same job as the expensive fertilisers from the stores."

Casper Kenim, from the East Sepik Department of Primary Industry, who is involved in a fish pond project in Wewak, said that he has learnt that the rabbit wastes can also be used to feed fish.

Ms Sisusia said that she always wondered how purses were made out of furs, thinking that it was a difficult task.

"However, I have learnt that it was very easy so when I go back and raise enough rabbits, I will make products out of rabbit furs, and at the same time teach other women on how to make them," she said.



Bougainville participant, Raphael Evinu trying to soften the rabbit fur.



Casper Kenim shows how a rabbit should be handled.

By STEVEN BUSIN

The Reporter is produced weekly by the **PUBLIC RELATIONS UNIT.**
Deadline 4pm on Tuesday weekly.

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The Media is most welcome to use stories with due acknowledgement

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Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

UDC undergoes organisational review to enhance performance and service delivery

The Unitech Development and Consultancy (UDC) Company has undergone an operational review with the view of adopting a long-term strategy towards enhancing its performance and delivery of service.

To undertake the review of its overall operations, UDC engaged Mr Anthony Javis, who has carried out appropriate internal discussions, received and assessed all relevant information and documentation on the operations of the UDC.

He is yet to submit his recommendation to the UDC's Board of Directors.

According to UDC executive manager, Esekia Warvi, UDC has been operating at seemingly successful level since it began in 1991.

"The company's operations, being wholly owned by the University of Technology, is probably heavily subsidised through the use of facilities and services, otherwise, available exclusively to the University as a Government institution," he said.

"Since its inception and after operating for some time, UDC is in the process of undergoing its first major review.

"Ostensibly, the company has the task of serving two fairly distinct areas of interest.

"As a development company, it is expected to operate objectively towards fostering the development interest of the University as a development institution.

"Often this means concentrating on activities that are generally complimentary towards the primary objectives of the University which, by commercial standard, are not always attractive in terms of profitability.

"UDC is also expected, as a bona fide company, to operate by virtue of its terms of registration under the Company Act, essentially meaning that, with its own constitution/ memorandum of association, it has to maintain operations viably and be accountable to its stakeholders.

"Under these circumstances there is a grey area where uncertainties exist over a number of specific matters.

"There is in this respect, a need to clearly define and formalise lines of command and responsibility, even declaring the the legitimate ownership over assets for the purpose of valuation and investment.



UDC Executive Manager Esekia Warvi shows where renovation work would be done to make more room for their daily operations,

It was also suggested in the past that a formalised relationship arrangement be established between the University and UDC as a company through the adoption of a Memorandum of Understanding.

"It may not necessarily be practical under existing circumstances for the company to depart completely from the developmental objectives of the University and concentrate entirely on profiteering as its primary objective," Mr Warvi said.

"The blending of these distinct objectives, institutionalised in a systematic and practical strategy cum modus operandi should give UDC the new look, necessary to operate successfully in the years ahead.

"Preliminary accounts indicate that UDC has had its ups and downs, having clocked up both losses and profits over its years of operation.

"There are questions over the authenticity of whatever profits the company had made in the past, because of the prevailing links and connections that it has with the University.

"Concessions and subsidies, whether accounted for or not, could highly influence the level of success and until this is clearly established, UDC's operations, whether profitable or not, cannot be accepted with certainty."

Mr Javis, under the terms of reference, was tasked to identify and make recommendations for remedial measures against the existing and potential constraints including other factors that may adversely affect the company's future operations.

This is in line with the recent Government proposals for higher education reforms as stipulated in the White Paper on Higher Education, Research, Science and Technology.

Mr Javis has also reviewed and updated the current mission statements and institutional objectives, on the overall review excercise of UDC and its subsidiaries.

He has also assessed the internal working relationship arrangement and is expected to recommend suitable networking options including the prospects of MOUs, necessary for clearer identification of more realistic company income and expenditure patterns, leases, rental rates, asset ownership, communication links and other related operation costs that were currentl unquantified and accounted for b cause of the prevailing links b tween UDC, its subsidiaries and th University.

Mr Javis would also make a rec ommendation for appropriate stra egy for professional service deliv ery including the development an protection of intellectual propert rights for and on behalf of the Un versity through the company.

He would also recommend suit able procurement and maintenanc strategy with respect to the contro and operation of company plants equipment, property and assets.

It was also envisaged that M Javis would recommend a suitabl alternative to existing symbioti relationship arrangement betwee the Company and the University where it relates to subsidised an free access to University services facilities and assets for commercia purposes; as well as make recom mendations for a practical and fea sible investment strategy, package for the company and its commercia agencies to operate on a stand alon basis

Mr Javis is expected to present his report in the near future.

IEEE students offered world of opportunities

Institute of Electrical and Electronics Engineering (IEEE) Unitech student branch members were delivered a lecture on IEEE by Professor C.S Indulkar titled: "The IEEE and the global perspective for a competitive world."

As part of his lecture, Prof Indulkar mentioned that the global objectives of the IEEE were scientific, educational, professional and societal.

He said that the IEEE helped in advancing theory and practice of electro-technology, increase the public's understanding of how electrical engineers contribute to the well being of society; and how the use of electro-technology enhanced the people's quality of life.

The IEEE is a professional body, which has a world-wide membership of about 350,000, of which 75 per cent were US nationals and 25 per cent were from other countries of the world.

"The scientific and educational programs of the IEEE deal with publishing, holding technical conferences, developing standards, and provide electrical engineering courses," Prof Indulka said.

"These programs provide a key opportunity for businesses that need to compete more keenly for world-wide market share.

"The IEEE publishes about 200,000 pages of technical material annually, which include 115 Transactions, 170 Conference records, and publishes books in various areas of electrical engineering.

"The information that is made available is internal, and more than half of it is generated in major corporations and academic institutions outside the USA.

"The IEEE technical conferences provide a unique international opportunity for dialogue between company employees and experts who speak at these conferences."

Professor Indulkar also told the student members, that being a member of the IEEE will:

help them in knowing the past, understanding the present, and improving the future; enrich their technical education; encourage careers in engineering and help them achieve their career goals; broaden their education; and educate the general public about the electrical engineering profession;

It will also enable them to gain an edge with the best technical information on electrical, electronics, and computer engineering in the world; make them stay competitive in marketplace with- magazines, journals, books, videos, conferences, the Spectrum magazine, meetings, seminars, continuing education programs, self study courses, abstracts on-line, the IEEE Web site and more; help them network with their professional colleagues throughout the world.

Professor Indulkar summarised participation in the IEEE activities means access to their premier global information exchange; professional growth through access to world's foremost practitioners, and world-wide competitiveness.

Department of Mathematics and Computer Science

In-House Computer Training courses July 1998

The Department of Mathematics and Computer Science will offer seven training courses for University staff, teachers and administrators, running from Monday 6th July to Friday 10 July. All lab work in Maths & Computer Science Labs. Lectures in Rose Kekedo. A charge of K10 is made towards costs for tea, biscuits and issue of certificates.

1.Word for Windows: Afternoon Course: Mr Roy Lewis/Alan
Monday 6th July to Friday 10th July
Start: 1.00pm - Monday 6th July, RKLT
Time: 1:00pm - 4:00pm daily
1:00pm - 2:00pm Lectures (Rose Kekedo)
2:00pm - 4:00pm MA78
Prerequisite: Prior use of PC Computers with Windows

Maximum Participants: 30

2.Visual Basic(Windows)Programming: Morning Course: Dr Chris Wilkins
Monday 6th July to Friday 10th July
Start: 9.00am - Monday 6th July, RKLT
Time: 9:00am-12:00 noon daily
9:00am-10:00am Lectures (Rose Kekedo)
10:00am-12:00pm MA79

Content: Concepts of Visual Basic. Programming in Visual Basic 4.

Prerequisite: Working knowledge of Windows environment.

Maximum Participants: 15

3.Using Excel 5 for Statistics: Morning Course: Prof. Phythian/Dr. Alan Oxley
Monday 6th July to Friday 10th July
Start: 8.00am - Monday 6th July, MA22
Time: 10:00am -11:00am Lectures (Rose Kekedo)
8:00am-10:00am MA78 Lab & MA22

Content: Creating a table, use of absolute cells, sum and function wizard, statistical functions incorporating charts. Inserting tables into a word document. Spinner.

Prerequisite: Working Knowledge of Windows environment.

4.Creating Database and Reports: Afternoon Course: Dr. Alvin Bampton
Monday 6th July to Friday 10th July
Start: 1.00pm Monday 6th July, MA22
Time: 1.00pm - 3.00pm - Lab Sessions
3.00pm - 4.00pm - Lectures (Rose Kekedo)

Content: Use of Foxpro to create a data base, queries of the database and reports based on these queries.

Prerequisite: Idea of Tables and a database.

5.Mathcad/Derive: Afternoon Course: Dr Sukthankar/Alan
Tuesday 7th July to Friday 10th July
Start: 1.00pm Tuesday 7th July, MA79
Time: 1:00pm - 4.00pm Lab times (MA79)

Content: Use of Mathcad or Derive for derivatives, symbol manipulation, graphics, matrix operations.

6.Creating a Web Site: Morning Course: Technical Officer
Monday 6th July to Friday 10th July
Start: 9.00am Monday 6th July, MA78
Time: 9.00am - 12.00pm MA78 Lab

Content: Communications to a Web site, creating Web pages, links and extra pages.

7.Minitab Statistics: Morning Course: Mr John Wamil
Monday 6th July to Friday 10th July
Start: 9.00am Monday 6th July, MA21
Time: 9.00am - 12.00pm MA21

Content: Use of minitab for general statistics, data diagrams, regression, hypothesis testing, Anova (if time).

PROFESSOR J.E. PHYTHIAN
Head of Department
Mathematics and Computer Science

NZODA AOTEROA SCHOLARSHIP

The above scholarship is available for genuinely interested persons only.

There are very limited number of applications available from the Scholarships Officer, Student Affairs.

Interested applicants should note the following:

- Do you have dual citizenship/residency?
- Is the course of study you wish to undertake available at a South Pacific Institution?
- Are you currently studying a course at a South Pacific Institution that "will not" be completed before the beginning of the academic year for which the scholarship is offered.

If you answer YES to any of these questions, you are not eligible to apply for this scholarship.

A/Scholarships Officer
Students Affairs

1998 2ND SEMESTER REGISTRATION

Registration for second semester will commence on Monday 13th July, 1998 and terminate on Friday 17th July, 1998. Second semester lectures begin on 20th July, 1998.

TESS CHAN
REGISTRAR

1999 Lihir Management Company Tertiary Scholarship Scheme

Written expressions of interest are sought from Papua New Guineans who wish to undertake tertiary studies under the Lihir Management Company's Scholarship Scheme in 1999.

If you wish to apply for a scholarship, take note of the following criteria;

- You must be a PNG Citizen (Male or Female)
- Have completed Foundation Year in the following disciplines: Geology, Mining Engineering, Mineral Processing, Business Management and Arts.
- Have not completed similar program through other sponsors.
- Age between 18 to 35 years old.
- Applicants can apply to complete Diploma or Degree programs only.

Selection will be based mainly on academic merit. Applicants applying to complete Diploma or Degree programs should have achieved A or B grades in grade 12.

Standard application forms are available from Students Affairs, which should be returned after completion, enclosing certificates, transcripts and a reference note from the Head of Department to:

The Scholarships Coordinator
Lihir Management company
P O Box 380
KAVIENG
New Ireland Province

Attention: DIURY TOLOPA

*Students currently sponsored by LMC must re-apply for new scholarships.
*Please note, incomplete applications will not be considered by the Company.

Applications closes on 10 July 1998

POSITIONS VACANT

The Department of Electrical and Communication Engineering is planning to introduce as from the 1999 academic year a new stream for the Bachelor Degree in Electrical Engineering (Computer Engineering). There is an urgent need to fill the following vacancies as soon as possible.

SENIOR TECHNICAL OFFICER/ PRINCIPAL TECHNICAL OFFICER (POWER & CONTROL)

Applicants should normally have a certificate in Higher Technical Education or equivalent qualification; or should possess a Diploma in Engineering, or a related discipline, with appropriate experience.

The appointee would be required to provide technical support for the department's teaching laboratories, maintain and repair laboratory equipment and provide technical assistance for research and students projects. Experience in one or more of the following is advantageous: PLC's, Electrical Machines, Power Electronics, Power System.

For academic enquiries only, please contact, Professor Majid Al-Dabbagh, Head, Department of Electrical & Communication Engineering on Ph: (675) 473 4701, Fax: (675) 475 7209 e m a i l mdabbagh@ee.unitech.ac.pg

SALARY:

SENIOR TECHNICAL OFFICER I

K10,599 - K12,955
plus DMA of K1,000 P.A.

SENIOR TECHNICAL OFFICER II

K12,288 - K15,017
plus DMA of K1,500 P.A.

PRINCIPAL TECHNICAL OFFICER

K14,273 - K17,445
plus DMA of K2,250 P.A

(Level of appointment depends upon qualifications and experience)

Detailed applications (two copies) with curriculum vitae including certified copies of qualifications obtained and names and addresses, fax phone numbers of three (3) referees and an indication of the earliest availability to take up the appointment should be received by: The Registrar, PNG University of Technology, Private Mail Bag, LAE, Morobe Province, Fax: 675 475 7667 by 30 June 1998.

CAMPUS BULLETIN BOARD

SEMINARS

Environmental Research and Management Centre

ERMC Presents another ENVIRONMENTAL SEMINAR

Bob Curley: Department of Surveying and Land Studies Unitech.

"Positioning by Satellite: The Myths and Applications in the Environment"

Thursday 2 July, 2 pm, Mining Engineering Lecture Theatre (MN001)

All Environmental Lecture Series Seminars are free and open to staff, students and public.
Direct any questions to Dr Rick Bein on Phone: 473 4606

Matheson Library

Library Opening Hours - Inter Semester Break from Friday 19th June to Sunday 12th July, 1998.

Monday to Friday 8:00 am to 6:00 pm

Saturday Close
Sunday Close

Normal opening hours will resume on 13th July, 1998.

Raphael ToPagur
A/University Librarian

Unitech Clinic

As of 1st July 1998, our free medical services will only be given to staff/students, their legal dependents including their legal spouse and their children under the age of 19 years.

Wantoks, brothers, sisters, 2nd wife, grandchildren and adult children of staff/students will pay.

Clinic Management

UNITECH BOOKSHOP

The Bookshop will be closed for stocktake from 29/06/98 - 13/07/98.

Anybody wishing to purchase, please, call us on Phone 4321 / 4320.

Delilah Kumaina
Unitech Bookshop

Staff Changes

This is the information summary of Staff Changes in respect of Appointments, Departures and interdepartmental transfers for the week ending 15/6/98 - 19/6/98.

NAME

Appointment

Nickson Yafa	Grounds/Gardens	CE I
Brian Kimbley	Elect & Comm Eng.	P/T Staff
Robin Poros	Students Services	CE I
Chrisine Skelton	Bulolo Uni College	P/T Staff
Ari Mambe	Student Services	CE I

Departures

Ms Alita Pianga	Applied Sciences	Secretary II
Eric Wood Teine	Security Services	Patrolman

Staff Office

CLASSIFIEDS

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:
Monday:**UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**

WEEK-ENDS
Saturday
AM -SDA
PM-TSCF
Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL
Sunday Morning
9:00 CLC CHURCH

PENFRIEND WANTED

I am a twenty-one-year old French boy from the North of French and I'm fond of Papua New Guinea.

That's why I would like to have a penfriend in this country, girl or boy around about 20 years old.

In the meantime, I send you my best thoughts from France.

Address:

Hans VANCOSTENOBLE
279, rue Fouquet - Lelong,
59700 MARQ-EN-BAROEUL
FRANCE

Weatherwatch

Rainfall Readings For 24 Hours To 0900 on:

Wednesday	17.06.98	54.0 mm
Thursday	18.06.98	3.0 mm
Friday	19.06.98	9.0 mm
Saturday	20.06.98	6.0 mm
Sunday	21.06.98	2.0 mm
Monday	22.06.98	0.0 mm
Tuesday	23.06.98	0. mm

Total rainfall for week-ending 23.06.98
74.0 mm
Total yearly rainfall up-to 16.06.98
1937.8 mm
Total yearly rainfall up-to 23.06.98
2011.8 mm

Sali Bafinu
Civil Engineering Dept.

CENTRAL FACILITIES INFORMATION

DEAR CAMPUS RESIDENTS! REMEMBER THAT WE SHOW CHILDREN'S FILMS EVERY SUNDAY AT 2:30 PM IN RKCC

This week's film is BABE - an origional and funny commedy about a charming pig. Parents and students are welcome.

K1 - Adults
50 Toea- Chilren

AEROBICS GROUP meets on Monday and Friday at 5pm in AV Theatre. We use a tape, so it is free for all

THANKYOU TO ARCHITECTURE STUDENTS FOR EXCELLENT DRAWINGS OF THE UNIVERSITY ETHNOGRAPHIC COLLECTION.

WELL DONE

For Sale

Nissan Skyline

1 . airconditioned, stereo, manuel, 5 speen, remote security system, stereo cassette, low mileage, excellent condition. K9800 only.

Mazda 626

automatic, good condition. K3000 only.

Contact: Neela 473 2661, 473 4801 (B/H) or 475 7378 (A/H).

UNITECH SOUVENIRS

THE WET IS HERE.. GET YOURSELF AN UMBRELLA... LIMITED STOCK.

Laplaps - K8.00

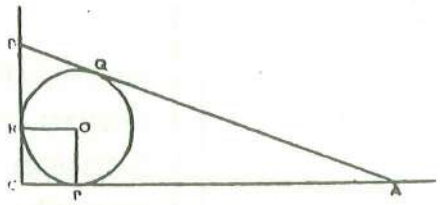
Collar T'Shirts - K20.00

R/neck T'Shirts- K8.00

Please call in at the Public Relations Unit for further information or price list.

FUN WITH MATHEMATICS

Solution to Problem 11

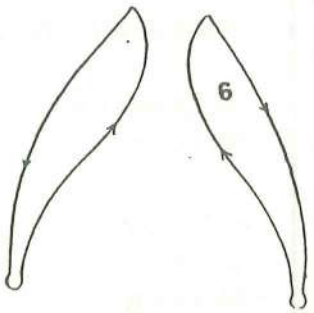


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Hence, $x^2 + (8.5 - x)^2 = 6.5^2$
Simplifying, $2x^2 - 17x + 30 = 0$
Solving (x - 6) (2x - 5) = 0.
From this, the greater value of x is 6.
Answer : 6 meters.

E-mail: neela@sukthankar.com

Solution to Problem 12



WRONG MAN OUT # 6

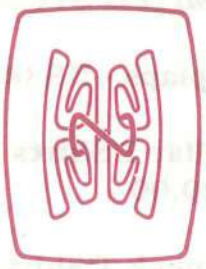
Well folks, this is the last "Fun with Mathematics from me. My colleague Mr John Wamil have promised to continue this feature in the 2nd semester.

Thank you all for your participation over the years. With best wishes and "Have Fun".

Dr Neela Sukthankar,
Department of Mathematics and Computer Science

Air Mail

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PRINTED MATTER

The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1294 ISSN:10119-5354 03 July, 1998 WEEKLY

Dr Kaiulo signals new direction for university at Huon seminar launch

The Second International Huon Seminar was officially launched by the Vice Chancellor, Dr James Kaiulo, last Thursday evening at the Lae International Hotel.

In his address to members of the Industry and the University, Dr Kaiulo said that there were pressing issues that Papua New Guinea must address as the Country progressed into the next millennium.

"As this young nation develops, it must attempt to design a path that will appropriately cater for its peoples' aspirations," he said.

"The new modern values should be integrated with our cultural heritage, as this forms the basis of any direction this young country takes to take in the next millennium.

"It is crucial that we debate ideas that will expand and sustain resources for the development of PNG.

"I will take the mining sector as a case, which has made a significant contribution to the economy of our country.

"However, not many Papua New Guineas have made it to senior ranks of this industry.

"As multinational companies control this sector, many important decisions on managing the development of natural resources in our country are made in board rooms beyond the shores of PNG.

"Indeed, 1998 theme reflects the direction the University wishes to move towards in the new millennium.



Vice-Chancellor Dr James Kaiulo launching the Huon seminar

"This is reflected in the University's mission which is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for PNG and the Pacific."

Dr Kaiulo said that the achivement of the University's mission and objectives cannot be attained alone but with the support and input from the wider Papua New Guinea community.

He said that the Huon Seminar was unique to Morobe Province as it was named after the Huon Peninsula, and so the University was seeking support from the local Lae community, which was vital for the success of the Huon Seminar Series.

He said that any assistance in cash or in kind towards the seminar cost would be gratefully appreciated.

The very first seminar in the Huon Seminar Series was held in 1988 and after a long spell it was revived in 1994.

The Huon Seminar was originally intended to be a biennial event, alternating with the Waigani Seminars staged by the University of Papua New Guinea.

"However, due to funding difficulties, no seminar was held in 1996 and the staging of this year's seminar does not mean that the University has come out of its financial doldrums," Dr Kaiulo said.

"This is not the case and in fact the cash flow problem has worsened.

"Then the most logical question that might be raised is why hold the seminar?

"I have often observed that the best of mankind is displayed during difficult times.

"Universities as learning institutions have always survived difficult times, and I am pleased to report that the Academic Board of the University has endorsed the staging of the second Huon seminar, fully aware of the financial constraints of the University.

"The University sees itself as a partner with the industry in the training and development of the human resource in PNG for mutual benefits."

Huon Seminar Chairman, Pro Vice Chancellor (Academic), Dr Philip Siaguru said that so far arrangements have progressed very well.

"We are very optimistic that the Seminar in September would be a success," he said.

"We are trying to squeeze everything into a very short time frame, and I would like to thank the Organising Committee for its effort."

Meanwhile, Huon Seminar Executive Officer, Joy Sahumlal said that about 45 papers would be presented in the five day seminar.

She said all presenters are advised to submit their full papers to the Seminar Office by 31st July.

Post Graduate Studies for rabbits mooted

As the Unitech Rabbit Project celebrates its fifth birthday, the Agriculture Department aims to provide post graduate training at the Masters level in rabbit production.

Dr Ian Grant who is in charge of the rabbit project, said that this was one of the objective that the rabbit project hopeed to achieve by the end of this year.

Amongst others, Dr Grant also said, they were aiming to have 1000 trained farmers and 10,000 rabbits in PNG by the end of 1998 as part of the project's aim to establish rabbit projects in every province in PNG.

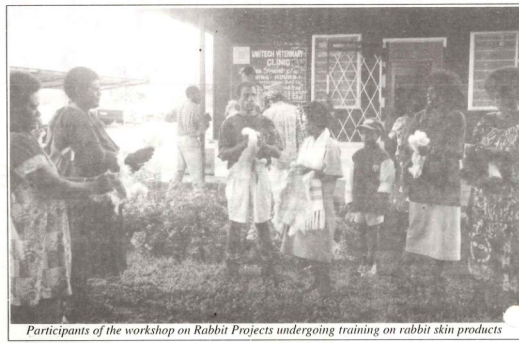
It was proposed that the research activity of the rabbit project be transferred to the National Agriculture Research Institute (NARI), to establish a National Rabbit Research Institute.

Currently, there are about 500 village farmers and 5000-6000 rabbits in the country.

In its initial stages in 1993, Unitech brought in 15 disease free rabbits into Papua New Guinea with the aim of establishing a rabbit meat industry among small holders.

This work was supported by the Unitech Research Committee and Agriculture Department at Unitech and after five years of work (Grant, Low, Askin, Paita, Thomas, Epo and many others), there are now about 50 breeding and evaluation sites in strategic locations in PNG.

Other developments which happended over the years include; the project management of the rabbit project has been taken over by Unitech Development and Consultancy Pty Ltd; a Technical Officer was employed to manage the Central Breeding Facility and part time Extension Officers were employed to assist missions, company and government centres to run their own rabbit centres and extension activities; development and provision of training courses for government and NGO Extension Officers and finally for village farmers; development of a concentrate pellet, which can be fed with forages, based on by-products available locally and; evaluation of dual purpose tree legume species for farmers in lowland regions.



Participants of the workshop on Rabbit Projects undergoing training on rabbit skin products

The rabbit and garden project is a joint undertaking between the University of Technology's Agriculture Department, Department of Agriculture and Livestock, National Agriculture Research Institute, and Non-Government Organisations.

The project is also supported by the Unitech Research Committee, Unitech Department of Agriculture, Unitech Development and Consultancy Pty Ltd (Project Management), BANZAID, Pogera Joint Venture, Canadian High Commission, Targeted Community Development Project, FAO under the Food Security, AusAID (Oro Butterfly project), NZ Official Development Assistance, Boinamo Enterprises Pty Ltd, Ok Tedi Mining and DAL.

According to Dr Grant, first phase of quarantine formalities was jointly undertaken by DAL and Department of Environment and Conservation which looked into the health and productivity of imported breeds in the tropics and community education programs.

In 1994 and 1995, during the second phaset, six key sites were used to evaluate rabbit production, and the Unitech rabbit facility and garden area was developed at the Agriculture Farm.

During that second phase of the project development , a fact finding team visited rabbit projects in Irian Jaya and other areas of Indonesia.

Dr Grant said that phase three of the project saw; 50 breeding and evaluation centres established in PNG; a Tok Pisin and a draft English manual developed; the evaluation of locally available foods and cage buildi[illegible] terials; advanced training courses in rabbit production for people from key centres; employment of a full- time extension officer; development of improved rabbit skin tanning methods and incorporation of ducks into the project.

The Reporter is produced weekly by the PUBLIC RELATIONS UNIT.
Deadline 4pm on Tuesday weekly.
Editor: CORNEY LAHIES phones 473 4298
Journalist:STEVEN BUSIN 473 4290
Secretary: ANGELA BOROMANA 473 4291
The Media is most welcome to use stories with due acknowledgement
Mailing Address:
Public Relations Unit
PNG University of Technology
Private Mail Bag Lae- PNG
Fax: (675) 4757 667
email: reporter@unitech.ac.pg or cklahies @global.net.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

PNG Builders Institute Incoorporated

Builders in the country, now have a professional body, the Papua New Guinea Institute of Builders.

The formation of the Institute of Builders was a result of the hard work of the staff at the Papua New Guinea University of Technology's Department of Architecture and Building.

According to the Building Course Coordinator Paul Constable, the Institute of Builders was formed after they realised that building personnel did not have a professional institute for professional guidance.

"Over the past two years, the necessary preliminary work and formalities have been carried out, in respect to registering an Incorporated Association. The Incorporation was awarded in May of this year," Mr Constable said.

"To date because of convenience, the preparatory work has been carried out by the staff at the University.

"However, if it is to be successful the Institute should be developed as a partnership between Industry and Education, with personnel from Industry playing a major role in its future direction and development."

To date, he said, 95 applications have been received from all Regions of Papua New Guinea and from all sections of the Industry.

The aims of the Institute are:

• to promote the profession of Building in Papua New Guinea with the aim of fostering nation-building through the building of quality structures to meet the requirements of the Nation.

• to represent the growing body of professional builders, unite them into one entity and to protect their professional interest in order to allow them individually and/ or collectively to realise their true potential as builders.

• to make policy recommendations to all levels of government and all relevant public and private entities involved in any way whatsoever with the building industry for the purpose of promoting the quality of buildings of whatsoever kind for whatsoever purpose or purposes.

•to make and/or set down a code of ethics and set standards of conduct for members of the profession to comply with in order to allow for a professional and quality discharge of service to the private sector and public at large and legal entities.

• to make rules and regulations for the efficient running of the proposed association.

• to inquire into the quality of the service discharged by the profession for the purpose of identifying areas in the profession that need to be upgraded, reviewed, attended to, omitted, altered, emphasised, and to conduct continuing building education in seminars or conferences in order to improve the quality of the service or services provided by members of the profession and also to recommend to the appropriate faculty and department in the Universities, areas in the curriculum that should be taught to building students in order to improve the quality of the graduates from the building schools.

• to conduct research to determine the appropriate building techniques, design and structure as well as materials suitable for use in buildings in the country in both urban and rural areas.

• to create and enter into partnerships or joint ventures with international associations of bodies of builders which may be and are beneficial to the local profession.

• to disseminate information through the mass media and making available information thus establishing a Building Information Centre easily accessible to the world at large.

• to establish building research programmes in collaboration with research institutions, colleges and universities, nationally and internationally.

People who have applied to become members of the Institute will be receiving a personal update of events by post. Actual details of the launch will be advertised in the newspaper nearer to the date.

Construction personnel who are interested in joining are advised to contact Mr Lucas Panau, Publicity Officer, Institute of Buildings on the following address;

Department of Architecture and Building, PNG University of Technology, Private Mail Bag, Lae, Morobe Province. Phone: 473 4506/ 473 4501 Fax: 475 7633 Email L.Panau@arch-bldg.unitech.ac.pg

BULLETIN BOARD

MOVIES UPDATE

We are doing a special treat for children during the holidays. There will be movies for children every Mondays, Wednesdays, Fridays, and Sundays at 2.00 pm at the Rose Kekedo Centre.

FRIDAY 3RD JUNE - 2.00 - 4.00PM
The Railway Children

SUNDAY 5TH JUNE 2.00PM
The Mask - Starring our funny man Jim Carrey.

MONDAY 6TH JUNE 2.00PM
Annie

WEDNESDAY 8TH JUNE 2.00PM
Herbie Rides Again

THURSDAY 9TH JUNE - 7.30PM
Catch Fire

FRIDAY 10TH JUNE 2.00PM
The Secret Garden

SUNDAY 12TH JUNE 2.00PM
E.T

Watch this for more information & Happy Viewing.

BUGANDI SECONDARY SCHOOL FETE

Date:4th Sunday July,1998
Venue: Bugandi School Back Oval
Loads of Fun & Games for Kids and Oldies too

Please go along and support the Fundraising drive.

CONDOLENCE MESSAGE

Management and Staff of Buildings and Grounds convey their deepest Sympathy and Condolence to the Family and Friends of the LATE ZANINGIA MANGO, who passed away over the weekend. The late Zeningia was employed at the grounds section since 1978 until May 1998.

May his Soul Rest In Peace.

FOR SALE.

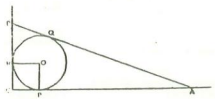
NOKIA MOBILE TELEPHONE K300 (ORIGINAL PRICE K600.) TELEPHONE ANDREW ON 473 4802. OR 693 1055.



Building students at the Angau Hospital project

FUN WITH MATHEMATICS

Solution to Problem 11

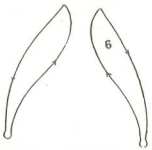


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Answer : 6 meters.

E-mail: neela@sukthankar.com

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Department of Mathematics and Computer Science

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PRINTED MATTER

The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1295 ISSN:10119-5354 10 July, 1998 WEEKLY

PNG's Finnisterre mountain range rated world's youngest and still growing

Scientists have known for many years that the islands and continents were formed by the collision of large tectonic plates.

Tectonic plates are large masses of material that float on the molten material in the centre of the earth.

According to scientific theory, about five million years ago, the Pacific Plate began to crash into the Australian Plate around what is now Madang.

This collision resulted in the formation of the highlands and the uplift of the Finisterre mountains.

The collision has continued in the Huon Peninsular part of the range and the mountains are continuing to be uplifted, and the famous coral terraces of Sialum are evidence of this uplift.

This means that the Finisterre is the youngest mountain range in the world and it is still growing.

This allows scientists to study growth in detail and discover how other mountain ranges in older parts of the world were formed.

The boundary between the plate that forms the mountains lies along the Markham Valley, and to test the theory, very accurate measurements are needed to determine how each Plate is moving.

In 1993 a large research project commenced to study this particular area funded by the National Science Foundation in the United States of America.

It was a joint project with the University of California, Santa Cruz, PNG University of Technology, the National Mapping Bureau (NMB) and the Australian National University.

In the current campaign (June/July '98), staff and students from Unitech and NMB have been assisting the international researchers in a large survey of some 25 locations, mainly in the Mamose Region, ranging from small villages to the large towns.

The teams are being led by Prof Eli Silver, Research Director and Dr Colleen Stevens, Project Leader from the University of California, and Prof Rod Little of Unitech.

The teams camped out near the sites to record satellite observations over four days, continuously.

This project shows that international researchers and PNG expertise can be combined to develop valuable research important to PNG.

The project will be repeated in the year 2,000 to check on further movement.

The support given to the teams from government staff and villages was very much appreciated and showed our international visitors the true face of the PNG hospitality.



Prof Eli Silver (right), Unitech Vice Chancellor, Dr James Kaiulo, Pro VC (Academic) Dr Philip Siaguru and Surveying and Lands Studies Head of Department Prof Rod Little having informal discussions at the Vice Chancellor's Office.

AUSSIE SURVEYORS CHIEF VISIT

MR Keith Hayes OA, President elect of the Institution of Surveyors Australia visited Unitech.

Mr Hayes was here to represent Australian surveyors at the 33rd Congress of the Association of Surveyors PNG (ASPNG) being held in Madang this week.

Making most of his visit to Unitech, although under umbrella due to the current wet weather, Mr Hayes was very impressed with the beauty of Unitech Campus and spoke highly of the Rainforest Habitat.

He also visited Bulolo University College Campus with the Head of Surveying & Land Studies Department, Prof Rod Little to meet students who were carrying out a survey there.

Mr Hayes was here at the invitation of the Department of Surveying & Land Studies.

Prof Little said that it was very helpful to have visitors of Mr Hayes' standing to discuss the role of surveyors and surveying education in PNG, as they provide a valuable input based on many years of experience.

Mr Hayes said he was pleased to note the achievements of the Department and managed to meet a number of students.

"I feel that surveying has a great future in PNG with the quality of education they can receive," Mr Hayes said.

"When I take over the office of President, I will certainly be looking at ways of strengthening the links between my Institution and the ASPNG and Unitech."

Mr Hayes also met the Vice-Chancellor Dr James Kaiulo who

presented him with an official tie of the Institution.

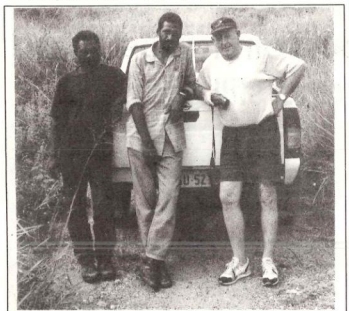
Meanwhile the ASPNG Congress in Madang had chosen "Surveying, the New Generation" as its theme.

Papers from PNG and overseas focused on the changing role of surveyors as they move into more diverse areas of spatial data management and apply the new technologies available to them.

The Congress was opened by the Hon Jacob Wama, Minister for Justice on Wednesday 8th July and closes on Friday 10th July.

Former regional MP for Madang Mr Peter Barter will provide the keynote address.

The Department of Surveying & Land Studies is well represented through organisation of the Congress, the provision of a Workshop on Global Positioning Systems and presentation of a number of papers.



Mr Keith Hayes with 3rd year surveying students, Emmanuel Tagoro and Alfred Antipas at Bulolo.

HIGH VOLTAGE STUDY

Professor C.S. Indulka has studied the voltage collapse phenomenon in series and shunt- compensated extra high voltage (EHV) transmission lines for voltage sensitive loads.

The analysis considers a practical situation wherein a steep rise in active load demand within a short duration impairs the voltage stability of the system.

The effects of switching a series of capacitors and of the operation of the transformer tap changing gear at the load end of the transmission line have also been studied.

In present day utility practice, bulk power transmission over long EHV transmission lines has become necessary due to economical and logistical considerations.

The heavy amount of power transfer over long distances has limitation due to system stability. The latter manifests itself, in particular cases, primarily by the loss of synchronism of one or more generating units (angular stability) or, by the uncontrollable voltage collapse in certain regions of power system (voltage instability).

The load characteristics and the available means of voltage control determine the voltage stability of the system. Voltage instability may occur as a local phenomenon, but if not corrected, it can develop into a voltage collapse spread over wider areas.

This occurs due to the dynamic performance of the power system such as operation of automatic tap-changing transformers, switching of shunt capacitors, operation of voltage regulators and sudden load variations, etc.

The reactive power availability of the transmission line, the type of load characteristics, and the load variation at the load end affect the voltage stability of the power system.

It is well know that the series-capacitor compensation in AC transmission lines is an economical means of increasing the load carrying capacity and the steady-state stability of the system.

Series and shunt compensation equipment, either alone or in combination, when used at different locations of the long line, also improves the voltage stability and the voltage profile of the line.

The research has brought out that the type of load connected to the transmission system affects the voltage stability of the system.

The investigation considers a mixed load characteristics. The load consists of 50 percent constant power load, 30 percent current load, and 20 percent constant impedance load.

Such a study is useful in identifying a suitable compensation scheme for a given loading condition to avoid voltage collapse in case of a sudden load increase in the system.

Earlier workers had concluded that switching proper values of shunt capacitors at the load end can prevent voltage collapse, but these workers had not considered the distributed nature of the line parameters.

This is necessary because voltage collapse generally occurs in long transmission lines.

Apart from long line representation, Professor Indulkar has investigated the influence of the following parameters on the voltage collapse phenomenon for a sudden and steep load variation on a transmission lone.

- Degree of series compensation
- Degree of shunt reactor compensation
- Switched series capacitors, and
- Transformed tap control.

The following salient conclusion have been drawn from the investigations.

The voltage collapse at the load end of a compensated EHV transmission line can be prevented if the line is operated initially with a low value of series of compensation and a fixed value of shunt reactor.

More series compensation can be switched in when the load end voltage drops below a specified value.

Shunt reactor compensation at the end has no appreciable effect on the power transfer capacity of the compensated EHV transmission line.

The effect of transformer tap control on the load end voltage is appreciable only for the lower degree of series compensation.

Since transformer tap variation is fast, the tap reaches its maximum value when the degree of series compensation is low.

The on load tap changing gear worsen the line end voltage but maintains a constant voltage at the end load.

However, transformer tap control alone is not able to control the voltage collapse.

Hence, it needs to be controlled by switching in more compensation when there is a sudden steep load variation in the power system lines.

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Secretary: ANGELA BOROMANA 473 4291
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Fax: (675) 4757 667
email: reporter@unitech.ac.pg or cklahies @global.net.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Student intake quotas should meet industry demand says Academic

The intake quota for Building students must be increased to meet the current industry demand for more builders, according to out going Building Coordinator, Paul Constable.

He said that in a developing country like Papua New Guinea where the economy and the construction industry was small, the construction industry can absorb only few architects, while it could absorb more builders as generally more builders were required.

Currently, the Architecture and Building Department has a quota of 35 new students yearly out of which students were then split to either Architecture or Building.

However, looking seriously at the market demand, there was a greater need for builders, he said.

He also said that the University should now seriously look into satisfying the needs of the Industry adding that all Academic Departments within the University should conduct regular review on the number of graduates going out to satisfy the needs of the Industry and the future economy of the country.

Constable, who leaves the University to join the European Union said that he felt that his attachment with the EU in Port Moresby would be an opportunity to influence training in the industry at a different level.

Over the past three years the Building Course has seen significant changes in its course which include the review of its curriculum to make it more industry specific, and the incorporation of the one year industrial training for students, he said.

He said that in the initial year of the one year field experience, it was difficult getting employers to accept building students into work experience areas as they did not really know what to expect from the students.

"However, within the three years, all employers have been really pleased with the input the students had and many have ended up being offered very good employment which is something nice," Mr Constable said.



Building Students with PNGDF Engineering Battalion members working on a foot path at the Angau Memorial Hospital as part of their community project.



Building students building the Well Women's Clinic at Angau Memorial Hospital earlier this year.

"I think the high point is being able to take the building team, through the accreditation process, with the Australian Institute of Building, so that our Diploma/Degree courses are recognised externally, so if any of our students want to go down to Australia, or be employed by the bigger contractors here, it could be seen as an equivalent qualification.

"Now finally after two years of hard work, we've now got the incorporation of the PNG Institute of Builders, and we've got enough interest from the Industry, to be able to launch it in September which we planned to be held in Port Moresby and in Lae."

The launching of the PNG Institute of Builders in Port Moresby will be sponsored by James Hardie while BHP would sponsor the launch in Lae.

Mr Constable has also involved himself in various community projects in which he has involved the building students and the PNG Defence Force Engineering Battalion personal.

Various projects that Mr Constable had involved himself in were the upgrading of the Angau Memorial Hospital which included training and awareness of hospital staff.

He has assisted Kimbe General Hospital and the Lae School of Nursing in preparing budget estimates for refurbishment and upgrading to be submitted to the Department of Health.

He has done the same for the Nonga Base Hospital, Mount Hagen Hospital and Vanimo Hospital.

Other community projects were the upgrading of the Lae Main Market, Niall Community Centre, Lae City Authority Main Office upgrading, Voco Point Development and Wampar Health Centre.

Unfortunately, he said most of this projects were put on hold because of lack of funding

"I think the best thing about community projects was that we have actually got building students involved in these community projects which dealt with upgrading of health facilities in the country," he said.

ATCDI investigates water supply potential for Oro

The Appropriate Technology and Community Development Institute (ATCDI) has been engaged to investigate potential micro hydro power and water supply for the Tufi Government Station and surrounding villages.

The preliminary investigations, may also extend to other government stations in Oro Province according to ATCDI Energy Research Engineer, Garaio Gafiye, who together with Water Supply Research Engineer Mininga Memafu conducted the investigations last month.

The ATCDI was approached by the Oro Province Planning Office to carry out the survey for the station due to constant power problems faced by the Tufi Station.

Tufi station's existing power generators were not functional due to lack of regular maintenance on the equipment and the non availability of funds for fuel to run the generators.

The current problem has forced the Oro Provincial Government had to look for an alternative power supply for the station and the surrounding villages.

However, according to Gafiye their survey indicated that there was no potential for a micro hydro scheme, as it would be uneconomical for the station, but there was a possibility to set up a water supply scheme to supply the station and its surrounding villages.

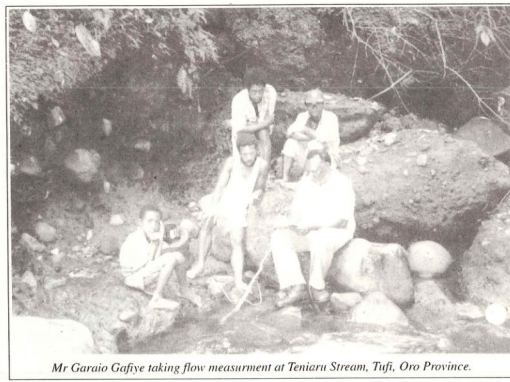
The survey concluded that the selected streams for the micro hydro scheme were too small to meet the power requirements for the station, and the streams were too far from the load centres which would prove too costly to set up the hydro scheme.

However, he said the streams were suitable for a water supply project and ATCDI's Water Supply Engineer, Memafu, has gone back to Tufi to carry out detailed study for the station's water supply project.

"The existing power generating sets should also be upgraded and put into active use for the benefit of government and private sector employees, and business houses," Gafiye said.

"Other sources are going to be costly and not recommended, except for facilities like the health centre and communication systems.

"The Tufi station can enjoy 24 hour power supply and support itself financially with fuel and maintenance if a good system for collection of tariffs (payment of electricity by power uses) is put in place.



Mr Garaio Gafiye taking flow measurment at Teniaru Stream, Tufi, Oro Province.

"This would help during times when the Oro Administration is not in a position to provide support.

"The water supply project will be the first development project for the areas and ATCDI will give priority for implementation.

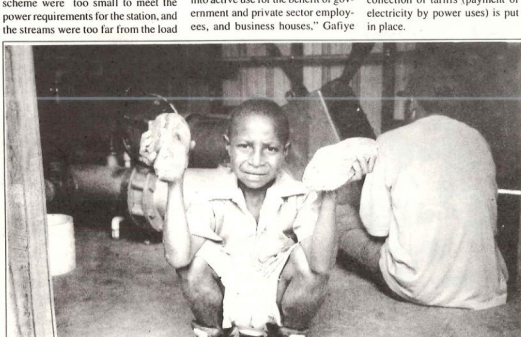
"The local people have showed a lot of interest in the projects and were very helpful and many people actually assisted with our investigations on a daily basis

In his recommendation to the Oro Provincial Government, Gafiye also recommended that the genset be overhauled by Elcom, and the Oro Administration should ensure that regular supply of diesel fuel is made available for the power house, or the administration discuss with the Tufi Dive Resort about a central power unit for the entire station, with a view of introducing a workable tariff and managment system.

The ATCDI team will also carry out similar investigation for other government stations within the province.

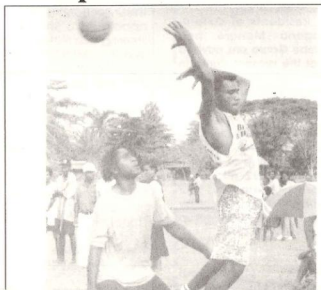
Meanwhile, ATCDI is also helping out the Bena SDA School in maintenence of its micro hydro scheme.

The micro hydro scheme has been non functional for sometime and the ATCDI team has carried out its investigation into the problem and would help the school in its micro hydro scheme.



A student shows stones discovered at the Pan Stock at the turbine end of the Bena SDA School, Eastern Highlands Province.

Tertiary students to compete in NUS Games



Basketball action during last years National Union of Students Games which Unitech hosted.

About 160 students would be taking part at the National Union of Student (NUS) Games to be held at the Divine Word University.

The NUS Games is scheduled to be held in Madang from August 1st and 2nd with students competing in eight different sports.

Unitech Sports Coordinator Filip Lavatu said that Unitech would be sending both male and female teams to compete in soccer, volleyball, basketball and tennis.

Lavatu said that rugby league, rugby union, rugby touch and possibly Australian Rules will be played males only while netball will be for females only.

"So far my office has received lists of names for rugby league, netball and male basketball only, and I urge other sports coordinators who have not submitted their list to do so by Friday 17th July," Lavatu said.

"We need the name lists so that all necessary arrangements such as transport, uniforms, medical fitness tests and proper training time slots could be catered for prior to the contingents departure for Divine Word University."

Lavatu pointed out that due to transport problems a restricted number of students for each sport will be allowed to travel and each sport will have only two officials to travel with the teams.

According to Lavatu, the quota for each sport are: Soccer - 30 (M/F), basketball - 16 (M/F), Volleyball -18 (M/F), netball - 10, rugby league - 22, rugby union - 22, touch footy - 15 and table tennis - 6.

Institutions anticipated to participate at the Games are: Divine Word University, Goroka University, University of Papua New Guinea, Lae Technica' College, Lae School of Nursing, Balob Teachers College, Madang Technical College, Madang Teachers Collage, Madang Marine Time College, and Goroka Technical College.

THE AUSTRALIAN NATIONAL UNIVERSITY

RESEARCH SCHOOL OF PACIFIC AND ASIAN STUDIES.

FUNDING INITIATIVES RELEVANT TO PACIFIC ISLANDS AND/OR FOR PACIFIC ISLANDERS.

The Research School for Pacific and Asian Studies has responsibility for administering a number of small grants, all of which support initiatives of specific relevance to the Pacific Islands. The grants include support in the following areas

- for young leaders from Pacific Islands with professional or educational experience which gives the potential to make important contribution to their home countries - in business, government or the community, for visits to Australia. (John Knight Fellowship)

- for Pacific Islands students who have recently completed or are completing their tertiary education and who require assistance for short periods of study at institutions or places other than their current place of study (Davidson-Te Rangi Hiroa Fund Awards.

Specific conditions apply for each of these initiatives. Assistance is not given to full time study. Application forms and further information for all awards should be obtained before making application from.

The School Secretary
Research School of Pacific and Asian Studies
The Australian National University.
Canberra ACT 0200 AUSTRALIA

Phone (61 2) 6249 2678 Fax: (61 2) 6249 4835

Email: Schlsec.rspas@anu.edu.au/RSPAS/.

The closing date for applications is 1 September 1998.

Interested applicants can obtain application forms from the CDO's Office.

Ok Tedi Mining Limited

Graduate Development Scheme Promotion.

Two representatives from OTML will be on campus to promote the OTML Graduate Development Scheme.

Promotion Includes:

- Presentation on
- The overview of the Ok Tedi Mining Project
- The preferred area development
- the graduate development scheme.

DISPLAY OF BOOKLETS ON OTML AND ITS GRADUATE DEVELOPMENT SCHEME.

Date Wednesday 29th July 1998

Time: 1300 - 1500 Hrs
1900 -2100 Hrs

Venue: DUNCANSON HALL (DH)

All final year students and interested persons are invited to attend these presentations.

CAMPUS BULLETIN BOARD

APPROPRIATE TECHNOLOGY & COMMUNITY DEVELOPMENT INSTITUTE

MICRO HYDRO POWER TRAINING WORKSHOP

National Sports Institute - Goroka

23-25 September 1998

Aim of the Workshop.

The main aim of the workshop is to train engineers, technicians, project officers and development workers at the provincial level on how to select a potential micro-hydro site that will meet the power requirements of a particular load centre (village, school, station, mission etc).

At the end of the workshop, participants will be able to determine if a site has micro-hydro potential, whether it will meet the power demand and then communicate with ATCDI for assistance. This training will also encourage people to think about building micro-hydro schemes.

The workshop will cover the following topics:

- Introduction to micro-hydro power
- Determining power requirements of the station or village
- Site selection
- Stream flow measurements
- Head (drop) measurements
- Estimated project cost
- Practical work in the field.
- Visit 3 micro Hydro schemes in operation

Course materials: Course handouts, micro hydro videos and micro hydro source book will be available to participants as part of the course fee.

Course Fee: K350.00
Board and Lodging: K177.00

Course Organiser

Garaio D Gafiye
Research Engineer
ATCDI, Unitech
PMB, Lae
Morobe Province

Tel: 473 4778 Fax: 473 4303.

Rainfall Readings

Rainfall readings for 24 hours to 0900 on:

Wed	**01 7 98**	**4.0 mm**
Thur	**02 7 98**	**64.0 mm**
Fri	**03 7 98**	**25.0 mm**
Sat	**04 7 98**	**55.0 mm**
Sun	**05 7 98**	**15.0 mm**
Mon	**06 7 98**	**38.4 mm**
Tue	**07 7 98**	**54.0 mm**

Total rainfall week ending 07 /7/98 291.4 mm

Total yearly rainfall up to 30/ 6 /98 2108.6 mm

Total yearly rainfall up to 07/ 7 /98 2400.0 mm

Suli Bafinn
Senior Technical Officer
Civil Engineering Department

Fund Raising Dance

SHRM WOMEN'S BASKETBALL TEAM FUND RAISING DINNER DANCE

Venue: SAC

Music by Joe Luni
K8.00 per head
Plenty of Door Prizes to be won
Tickets available at Joachim Dellawan Students Mess 4246

Entry strictly by tickets only.

GARDEN REFUSE AND RUBBISH DUMPING

1. Residents of Oxford, Bagana Manare and Kimbe Gaure are advised that the present dump in front of House 54 is unhygienic and will be closed.

2. Residents of Fly Drive, are also advised that the present dump in front of House No 82 and 83 is closed. Please bring your rubbish to the end of Fly Drive. A sign will be put up to identify the spot.

Please notify your gardeners etc.

Residents are also advised not to dump rubbish too close to the roads

Buildings and Grounds Management

National Staff Association

Officers from Kwila Insurance Company have been invited to introduce their 'Life Insurance Policy" to us on Tuesday 14th July at 3.30 pm in the Duncanson Hall.

Approval has been given by the Registrar's Office for the meeting to be from 3.30 to 4.30 pm so you should leave your workplace to attend the meeting at 3.20 pm. Please be punctual!!!

Drivers of vehicles for dropping off workers are asked not to leave the campus until after the meeting at 4.30 pm.

STAFF SPORTS STEERING COMMITTEE

The Unitech Sports Office has appointed a Staff Sports Steering committee to plan and organise different sporting activities at the Campus, PNG and abroad.

This Committee has been endorsed by the Sports Office and approved by the Pro Vice Chancellor (Admin).

This Committee now has all the powers to make any decisions relating to Unitech Staff Sports.

The Committee members are:

Goodnews Aruai - Chairman
Pulas Yowat - D/ Chairman
Philip Lavatu - Executive Off
Witare Tauye - Basketball (M)
Veronica Micheal - B/Ball (F)
Charlie Levi - Volleyball (M)
Agatha Sinemau - V/Ball (F)
Helen Costigan - Softball (M/F)
Stanton Sogiri - Darts
Martha Kodiwa - Darts
Leo Fugre - Soccer (M)
Freda Doe - Soccer (F)
Christable Fainame - Netball
Saroa Ilaru - Touch Footy (M)
Molley Geno - Touch Footy (F)
Joe Yale - Tennis

Cricket will be taken care by the Chairman Mr Aruai.

The Committee meeting schedules will be drawn up and sent out to members at a later date. The first meeting of the committee will possibly be next week.

I wish to appeal to the Committee that we have some big tasks to look into towards the preparation of this year's Intervarsity Games here and next April at the Jame Cook University in Brisbane, Australia so your coorperation is highly needed.

Philip Lavatu
Sports Coordinator

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:
Monday: **UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**

WEEK-ENDS
Saturday
AM -SDA
PM-TSCF
Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL
Sunday Morning
9:00 CLC CHURCH

UNITECH SOUVINIRS ARE AVAILABLE AT THE PUBLIC RELATIONS UNIT.

PLEASE HURRY WHILE STOCKS LAST.

CLASSIFIEDS

FOR SALE

Video Cassette Recorder

Brand: Sony
Model: SLV-x315 ME
(1995 Model).

Rarely used and still brand new (1 1/2 years old)

Brand new price: K600.00
Now selling for K400.00 only.

Not Negotiable

Interested persons may contact

Ph 473 4688 B/H or 472 9705

STAFF CHANGES

Name	Department	Position
Appointments		
Stanley Kagup	Stud Affrs	Temp Ad Clerk
dia Rubiang	Appl Sc	Asst Lecturer
Joanne Tziu	Arch	Snr Secretary
John Kuratsa	Registry	As Staff Officer
Paul Kengabatu	ITS	APP/Temp
Jack Wale	ITS	APP/Temp
Paibe Taleina		
Paul Pinjik		
Departures		
Dr U Bindir	Agric	Snr Lect
Alex Murphy	ESU	Mngr ESU
Paul Constable	Archie	CTI
Richard Baker	Civil	PTI
Albert Wangi	ESU	CE 1
Dr C Brown	Mech Eng	Lect
Dr N Sukthankar	Maths	Snr Lect

POSITION VACANT

MATRON/WARDEN FEMALE SLOQ

Applications are invited from staff members for the position of Matron/Warden for Female SLOQs.

The applicant must be a matured person either married with spouse or single.

The person appointed to the post will be required to perform the following duties

- maintain and enforce the rules and guidelines for the SLOQs
- liaise with the Housing Office and the Administration on SLOQs 1 & 2 matters.
- liaise with Security Office on matters where it requires their assistance.
- organise meetings and take minutes.
- implement meeting resolutions
- lock and open the main gate to SLOQ 1 & 2.
- maintain rosters and supervise working bees.
- attend to appropriate requisitions as required.

In return the University will provide the appointee with a rental free self contained accommodation unit within the premises of the SLOQ 1& 2.

Applications should be addressed to the Housing and Property Manager which close at 16000 hours 22nd July, 1998.

PART TIME TEACHING

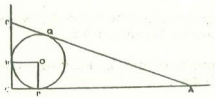
The Department of Applied Sciences wishes to appoint a number of part-time staff to assist in Chemistry and Food Processing subjects.

Applicants for the Food subjects would be expected to have a B.Sc in Food Technology or equivalent.

Applicants should apply in writing to the Registrar by Friday 17th July with a copy sent to the Head of Department, Professor M R Khan. Applicants who have worked in the he Department previously do not have to enclose a curriculum vitae.

FUN WITH MATHEMATICS

Solution to Problem 11

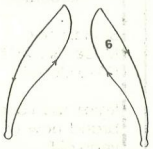


CPOR is a square whose side is 1 meter. Take CA = x. Then AP = x -1. So, AQ = x - 1. Hence, BR = BQ = 6.5 - (x - 1) = 7.5 - x. Therefore, CB = 1 + 7.5 - x = 8.5 - x. By Pythagoras Theorem, $CA^2 + CB^2 = AB^2$.

Hence, $x^2 + (8.5 - x)^2 = 6.5^2$
Simplifying, $2x^2 - 17x + 30 = 0$
Solving (x - 6) (2x - 5) = 0.
From this, the greater value of x is 6.
Answer : 6 meters.

E-mail: neela@sukthankar.com

Solution to Problem 12



WRONG MAN OUT # 6

Well folks, this is the last "Fun with Mathematics from me. My colleague Mr John Wamil have promised to continue this feature in the 2nd semester.

Thank you all for your participation over the years. With best wishes and "Have Fun".

Dr Neela Sukthankar,
Department of Mathematics and Computer Science

Air Mail

STAMP

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Public Relations Unit
Papua New Guinea University of Technology
Private Mail Bag
LAE 411, MOROBE PROVINCE
PAPUA NEW GUINEA

PRINTED MATTER

The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1296 ISSN:10119-5354 17 July, 1998 WEEKLY

Rundown infrastructure robs nation of vital services-Taranupi

Minister for Education, Science and Culture, Hon. Muki Taranupi, praised the Japanese Government for its multi-million kina funding of equipment at Unitech last week.

Mr Taranupi was present to officiate in the Hand-over Ceremony of the JICA Funded Project-Upgrading of Teaching & Research Facilities of PNG University of Technology and the new University of Vudal.

"On behalf of the National Government and the people of Papua New Guinea, I wish to extend our gratitude to the Japanese Government and the people of Japan for their generous gift of teaching and research equipment to this University," Mr Taranupi said.

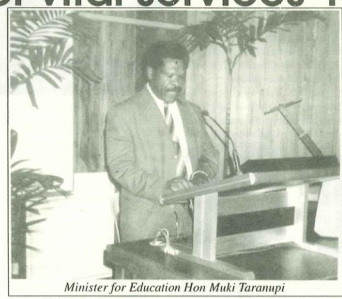
"This day is the climax of the last 12 months of dedicated work by staff as well as the Japanese Government and the contractors, Nubeni International Corporation and its subcontractors on the implementation of the project."

Despite the current global economic climate, the Education Minister was pleased that the Government of Japan was still able to fund the JICA project worth over K10 million.

"This reflects a genuine desire of the Japanese Government to see the development of human resources in Papua New Guinea," Mr Taranupi said.

"I understand that this university is one of the beneficiaries to the higher education projects funded by the Japanese government through JICA."

The Education Minister also highlighted the phase of growth the University experienced in the last fifteen years of its 30 years of operation, and its contribution to the development of human resources in the technical and professional areas.



Minister for Education Hon Muki Taranupi

"The Country depends entirely on this University to produce its engineering and technologists, because it is the only technological university in Papua New Guinea," Mr Taranupi said.

"It will continue to play an important leadership role in the training of highly educated technocrats."

Turning to the occasion of the day, Mr Taranupi also raised concerns about the level of neglect by various governments over the years leading to deterioration of infrastructure in the higher education institutions.

"What has become in the last decade is that this University and other higher education institutions in general have been neglected and their basic infrastructure were allowed to deteriorate beyond acceptable standards," Mr Taranupi said.

"Most teaching and research facilities in this University are as old as the University itself, out-dated in time and technology and posed health hazard to staff and students. "The problem is not unique to higher education sector but it applies to all other sectors as well in the Country."

He said a lot of social infrastructures such as public roads, hospitals, schools etc, were also suffering from lack of proper maintenance despite more than 75 per cent of the national budget going to recurrent operations annually.

"We have an obligation, whether it be the National Government, public servants and general users, to maintain and preserve the existing physical infrastructure," Taranupi said.

"Many of us in PNG are made to think that what belongs to the Government is not ours, it belongs to Government, so government service, whether it be classroom, hospital or a piece of equipment becomes nobody's property.

"Such careless mentality has robed this country of all its services and denied the right of many people from receiving the most needed services."

Meanwhile, the Vice-Chancellor, Dr James Kaiulo also thanked the Japanese Government and its agencies for the assistance which would help rehabilitate the university's equipment and laboratories.

"It is indeed pleasing for the Japanese Government through its bilateral agreement with the PNG Government, come to the aid of this University with the provision of equipment for teaching and research activities at the total cost of K10 million," Dr Kaiulo said.

"This reflects a genuine desire of the Japanese Government to see the development of human resources in Papua New Guinea to proceed during these difficult times.

"These teaching and research facilities will be for preserving the quality of the academic programs at this university over the next several years."

The Vice-Chancellor also pointed out that the declining funding support from successive governments over the last 10 years would result in far reaching adverse consequences in the quality of academic programs offered in the University.

"At the present time, the Government has lower level education as priority over higher education," Dr Kaiulo said.

"However, it should be pointed out that with the increasing number of grade 12 graduates each year, the demand for higher education will also increase in similar proportion, and it is essential that the Government seriously and urgently consider paying some attention to the resourcing of higher education sector.

"It is no use establishing Universities by Parliamentary Acts if we will not ensure that reasonable funds are made available each year for their operations, as university programs take from two to four or five years to complete."

He said the university was gradually developing its alliances with industry, NGOs, donor agencies and other overseas universities as alternative sources of funding to support declining government budgetary allocations.

JICA EQUIPMENT TO IMPROVE TEACHING & RESEARCH

The Unitech Equipment Improvement Projects aims at enabling the University to produce competent professionals of various degrees with up-to-date capacity through sophisticated educational and research infrastructures.

This was according to Japan International Aid Cooperation (JICA) representative, Kei Jinnai, during the official hand over of the K10 million JICA sponsored equipment to the University last Thursday.

Mr Jinnai said that the development of human resources in PNG, especially through the education of technologists with various specialists was indeed an important task for PNG's economic and social development.

He said the University of Technology was expected to play a leading role in educating young Papua New Guineans with advanced scientific and technological expertise.

"For this reason, it is most gratifying that JICA has been given an opportunity to support and cooperate in the strengthening of the University of Technology," he said.

"JICA has been extending technical cooperation to Unitech's Department of Mining and Engineering by dispatching Japanese experts, since 1992.

"JICA as the facilitator of Japanese Official Development Assistance, also carried out the Basic Design Study for the Unitech Equipment Improvement Project in 1996."

Mr Jinnai said he hoped that this project would further cement the mutual goodwill and friendly relations existing between Papua New Guinea and Japan.

Meanwhile, Minister-Counsellor of Japan to Papua New Guinea, Mr Hideki Shimazaki, said acknowledged the Government's effort in the educational reforms.

"We are well aware of your Government's utmost efforts to build an economically sound nation despite the recent economic difficulties facing your country, and it goes without saying that the development of human resources is of vital importance for nation building and economic development," he said.

"On the other hand, we are now facing the continuous change of a global economy and the revolution of information technology under globalisation.

"This environment creates an increasing demand for constant updating of teaching and learning activities, and highly trained and qualified manpower is now required to promote the socioeconomic development."

He said under this circumstances and in response to the request of the PNG Government, in March, 1997, the Government of Japan decided to extend a grant of seven hundred and sixty million yen (761), which was equivalent to approximately K11 million, for the purpose of contributing to the execution of the project named Improvement of Equipment at Unitech.

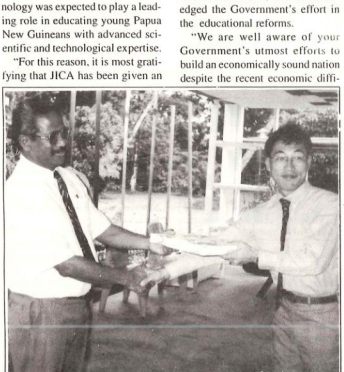
The aim of this project, he said, was to upgrade teaching and research facilities by providing equipments, such as computers and laboratory equipment, in order to secure a higher level of education in all departments at the Unitech.

"Education has always been a top priority area under Japan's Official Development Assistance to Papua New Guinea, therefore, we firmly believe that this project will contribute in some way to improving the quality of teaching and learning at Unitech," he said.

"This should allow Unitech to produce many well trained professional, which in turn would facilitate the socioeconomic development of Papua New Guinea."



Minister- Counsellor of Japan to PNG, Mr Hideki Shimazaki delivering his speech during the equipment presentation



Unitech VC, Dr James Kaiulo presents JICA Resident representative, Mr Kei Jinnai with a present during a luncheon at the VC's Residence

The Reporter is produced weekly by the **PUBLIC RELATIONS UNIT.**
Deadline 4pm on Tuesday weekly.
Editor: CORNEY LAHIES **phones** **473 4298**
Journalist:STEVEN BUSIN **473 4290**
Secretary: ANGELA BOROMANA **473 4291**
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Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

TFTC COURSE ATTRACTS SOUTH AMERICANS

The Timber and Forestry Training College has broken into the international education scheme by training two South American students, from the country of Suriname at the college.

The two students who arrived in the country on Sunday, would be studying Advance Saw Doctoring, Mill Alignment and Installation and specialist training in saw milling for two months at the TFTC.

The two students are sponsored by Belgium based organisation Centre for Development of Industry (CDI) which provides training for people in less developed countries around the world.

The two, Mr Roy Soerdjpal and Yaswant Kandhai, employed by the Nooitgedacht N.V. Sawmill in Surinam - a country situated between Brazil, French Guiana and Guyana.

Kandhai who was the only one of the two who could speak English said that they hoped to learn as much as they could for the duration of their course at the College.

He said that his colleague, Soerdjpal, was their grinder at the sawmill was responsible for all their saw doctoring.

"However, we are here to learn how to do it right and professionally as our sawmill has been in operation for only five months," Kandhai added.

"What we learn from here will greatly help with our operations when we go back to our country."

Surinam does not offer any saw doctoring courses in the country and both were recommended by CDI to undertake training at the Timber and Forestry Training College.

The CDI has also engaged personnel from TFTC to carry out training programs in Samoa, Solomon Islands and Fiji.

TFTC Principal Frank Corin said he was pleased to have the students come all the way from South America as it demonstrated that people approved of the standard and quality of training provided by the college.

"One of the policy of the college is to develop the opportunity to train people from other Pacific countries, nonetheless the opportunity to train people from other parts of the world was really encouraging," he said.

"Our aim is to expand or open up training opportunities for people from other countries as we are aiming to have 10 per cent of our student intake to be from overseas.

"We also value our links with CDI and possibility for further training links with them world wide."

He said it was exciting to see that Papua New Guinea can have influence on other timber producing countries in other parts of the world.



South Americans, Roy Soerdjpal and Yaswant Kandhai with Senior Saw Doctoring Instructor Philip Bayak

Unitech names training squad for Mamose tour

Unitech Women's Basketball Association has announced its 15 member training squad for the Mamose Regional Basketball tournament.

The tournament which would be held at the Erika Courts on July 24th - 26th which may attract teams from Wewak, Madang, Ramu Sugar, Markham, Lae and Unitech.

According to Unitech Women's Basketball Association President Veronica Micheal, the selection of the final 12 players will depend on attendence at training and the performance of each player.

Training for the 15 select train on squad would be on Tuesdays, Thursday, Fridays and Sundays at 5pm sharp.

The selected 15 are: Nita Bandi, Patricia Orere, Veronica Sakail, Lomot Alefeay, Jane Alefeay, Lina Glipu, Shirley Wandau, Mary Ume, Jessieca Minim, Frieda Siaguru, Irene Isom, Esther Collin, Theresa Katu, Numa Sam and Helen Sakeo.

Squad officials are: Philip Lavatu (executive officer), Witari Tauye (head coach), Brian N'Drelan (Technical officer and assistant coach), Geua Meda and Joachim Dellawan (team managers).

Meanwhile, the women's competition has gone into its second round with Bursary leading the points table for round one.

The Bursary team is slotted in the top spot after going through round one undefeated winning all the seven games played to score 14 points.

Arabasti takes the number two place on points average with 8 points. Also on 8 points are Hausbuk and Engineering who find themselves on third and fourth place respectively. Their placing is also based points average.

Registry falls into fifth place with 6 points followed by Essential Services 4, SHRM 4 and Natres 2.

SHRM backs darts team in staff competition



SHRM has come to the aid of its darts team in the Unitech Darts Competition by presenting its players with a set of new uniforms to the club. As pictured, SHRM Manager Phil Hart (Right) presenting the new set of uniforms to SHRM Darts Team Captain, Tom Harry while fellow team mates lookon. The Unitech Staff Darts competition has gone into its last round before the finals are contested.

APPROPRIATE TECHNOLOGY & COMMUNITY DEVELOPMENT INSTITUTE

MICRO HYDRO POWER TRAINING WORKSHOP

National Sports Institute - Goroka
23-25 September 1998

Aim of the Workshop.

The main aim of the workshop is to train engineers, technicians, project officers and development workers at the provincial level on how to select a potential micro-hydro site that will meet the power requirements of a particular load centre (village, school, station, mission etc).

At the end of the workshop, participants will be able to determine if a site has micro-hydro potential, whether it will meet the power demand and then communicate with ATCDI for assistance. This training will also encourage people to think about building micro-hydro schemes.

The workshop will cover the following topics:

- Introduction to micro-hydro power
- Determining power requirements of the station or village
- Site selection
- Stream flow measurements
- Head (drop) measurements
- Estimated project cost
- Practical work in the field.
- Visit 3 micro Hydro schemes in operation

Course materials: Course handouts, micro-hydro videos and micro-hydro source book will be available to participants as part of the course fee.

Course Fee: K350.00
Board and Lodging: K177.00

Course Organiser

Garaio D Gafiye
Research Engineer
ATCDI, Unitech
PMB, Lae
Morobe Province

THE AUSTRALIAN NATIONAL UNIVERSITY RESEARCH SCHOOL OF PACIFIC AND ASIAN STUDIES.

FUNDING INITIATIVES RELEVANT TO PACIFIC ISLANDS AND/OR FOR PACIFIC ISLANDERS.

The Research School of Pacific and Asian Studies has responsibility for administering a number of small grants, all of which support initiatives of specific relevance to the Pacific Islands. The grants include support in the following areas:

- for young leaders from Pacific Islands with professional or educational experience which gives them the potential to make important contribution to their home countries - in business, government or the community for visits to Australia. (John Knight Fellowship).

- for Pacific Islands students who have recently completed or are completing their tertiary education and who require assistance for short periods of study at institutions or places other than their current place of study (Davidson-Te Rangi Hiroa Fund Awards).

Specific conditions apply for each of these initiatives. Assistance is not given to full-time study. Application forms and further information for all awards should be obtained before making application from:

The School Secretary
Research School of Pacific and Asian Studies
The Australian National University.
Canberra ACT 0200 AUSTRALIA

Phone (61 2) 6249 2678 Fax: (61 2) 6249 4835

Email: Schlsec.rspas@anu.edu.au/RSPAS/.

The closing date for applications is 1 September 1998.

Interested applicants can obtain application forms from the CDO's Office.

2nd International Huon Seminar-98

The Papua New Guinea University of Technology will be hosting its 2nd International Huon Seminar from 7th - 11th September, 1998 on the theme

RESOURCES FOR DEVELOPMENT AND TECHNOLOGY IN DEVELOPMENT

* Women in Science and Technology
* Technical and Continuing Education in PNG
* Research Quality in Higher Education

For more information;

Contact Joy Sahumlal on 4734244 or
Theresa Paliwa on 4734233

Dr Philip Siaguru Chairman - Organising Committee

PR2698

Unitech Souvenirs

Laplaps, Caps, T-Shirts are available at the Public Relations Unit.

New laplaps with Unitech Logo are now in stock.

Laplaps are available in Maroon, Blue, Green

New Price: K9:00

Ok Tedi Mining Limited

Graduate Development Scheme Promotion.

Two representatives from OTML will be on campus to promote the OTML Graduate Development Scheme.

Promotion Includes presentation on:

- The overview of the Ok Tedi Mining Project
- The preferred area development
- the graduate development scheme.

DISPLAY OF BOOKLETS ON OTML AND IT'S GRADUATE DEVELOPMENT SCHEME. BROUCHERS OF THE SCHEME ARE AVAILABLE WITH THE SCHOLARSHIP OFFICER

Date *Wednesday 29th July 1998*

Time: *1pm - 3pm*
7pm -9pm

Venue: DUNCANSON HALL

All final year students and interested persons are invited to attend these presentations.

RESEARCH COMMITTEE SEMINARS

The Research Committee wishes to hold a series of seminars during the second semester. In previous years, the seminars have normally been held on Wednesdays during lunch time in MNOO1 in Mining Engineering. It would be best if seminars could be presented forthnigthly.

A small number of staff members have indicated that they wish to present a seminar but more are needed. If you are willing to present a seminar on your research activities, could you please contact the Seminar Co-ordinator with the relevant details and an indication of when you prefer to give the seminar so a timetable can be drawn up.

It is particularly important to have volunteers to get the program going early in the semester.

Dr Malcom Carrick
Seminar Co-ordinator
Ext 4557

CAMPUS BULLETIN BOARD

Research Seminar

Seismic Strain Pre & Post the 1993 Kaiapit Earthquake

Dr Colleen Stevens
University of California, Santa Cruz
Institute of Tectonics

Time: Thursday 23rd July 12.10pm

Venue: Rose Kekedo Lecture Theatre.

POSF CONTRIBUTION STATEMENT

This notice is to advise that the Staff Office has received the POSF Statements and has distributed them to relevant staff members. You should have received your statements by now.

Unfortunately, we have not made copies for our files records, and therefore I am requesting individual staff member to get a copy and send it to the Staff Office to file in each personal file.

Lawrence Yaum
Staff Officer.

BUS ROSTER: TISOL JUNIOR SCHOOL

This roster for supervision of the junior school bus for the second term is below: The morning supervisor should pick up the bus at one of the bus stops at 7:30 am. The afternoon supervisor should go to the transport office at 1:40 pm. Supervisors can be dropped off at home on their return. Supervisors should let the coordinator know if/when there are any problems concerning bus times or other difficulties. If supervisors are unable to supervise on any day, they are responsible for finding a replacement. Some supervisors were noticeably absent from the bus last term.

Week Starts	*Morning*	*Afternoon*
27/07/98	Corbyn	Wallum
3/08/98	Miah	Milani
10/08/98	Powel	Agyei
17/08/98	Wagih	Wilkins
24/08/98	Mc Lean	Anwar
31/08/98	Goon	Hartemink
07/09/98	Mr Laurin	Michalik
14/09/98	Nonie	Kalate
21/09/98	Popov	Tomlins

Mohamed Wagih
NCSA Bus Coordinator

PUBLIC HOLIDAYS - 20TH & 21ST JULY 1998

You are hereby informed that Monday 20th July is Provincial Government Day.

As Remembrance Day holiday has now been changed to Tuesday 21st July 1998, the University will close for business on Monday 20th and Tuesday 21st July 1998.

Normal operations will resume at 7:45 am on Wednesday 22nd July 1998.

John J Fainame
Acting Registrar

RAINFALL READING

Rainfall readings for 24 hours to 0900 on

Wed	08 7 98	8.6 mm
Thurs	09 7 98	0.0 mm
Fri	10 7 98	0.0 mm
Sat	11 7 98	4.2 mm
Sun	12 7 98	4.0 mm
Mon	13 7 98	2.0 mm
Tues	14 7 98	3.4 mm

Total rainfall ending for week ending 14/ 7/ 98 22.2 mm

Total yearly rainfall up to 07/ 7/ 98 2400.0 mm

Total yearly rainfall up to 14/ 7 /98 2422.2 mm

Sali Bafinu
Senior Technical Officer
Civil Engineering Department

Madang Night

The Madang Students' Association Executives would like to inform all prominent Madangs and friends within the campus and around the Lae City that the Association has proposed for a "Get Together and Fund Raising Function - Madang Night on Saturday 25th July, 1998, in the SRC Union hall.

Details on this will be made known to your formally or in the Reporter next week.

Executive
Madang Students Association

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday:**UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF

Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

Sunday Morning
?:00 CLC CHURCH

Madang Students Association

Fund Raising Dance

Date: Friday 24th July 1998

Venue: Momase 140 Club
PTC Way Tent City

Time: 7:30 till late

Dress: Formal

Music: Combined Live Performance
Wali Hits
Magoi Hot Line
Zeros

Tickets: Ladies K10.00
Gentlemen K10.00

?g: Entry by Tickets only...so ?'l miss out, get your's now

Tickets can be purchased from

Maia Karl - Accounts Ph: 4734308
George Kombe - Yalkuna Room #7
Florence - Helura Room # 54

FUND RAISING DANCE

SHRM WOMENS B/ BALL CLUB

Date: 18/7/98
Venue: SAC
Music: Joe Luni
Tickets: K8 per head

Plenty of door prizes to be won
Tickets available at Joachim Dellewan Students Mess 4246.Entry stricly by tickets only

CLASSIFIEDS

Morobe Provincial Government Day-20th July 1998 - Sports Activities

This letter is served to infrom all Provincial Programme Advisors/Managers that the Morobe Provincial Government Public Holiday on Monday the 20th July will be commemorated with a Sports Day.

I advise you all to inform all your staff that sporting events will take place at the Lae Provincial High School.

The draws of the events to be played are attached and divisions merged should consult each other for formation of teams.

Although, it is public holiday I urge all staff of the Morobe Provincial Administration to participate.

A. R. Sengero
Provincial Administrator

SPORTS DRAW- Morobe Provincial Government Day

Time	Teams	Time	Teams
9:00	1A vs 2A	9:30	1A vs 3A
9:30	3A vs 4A	10:00	4A vs 2A
10:00	1B vs 2B	10:30	1B vs 3B
10:30	3B vs 4B	11:00	4B vs 3B
11:00	1C vs 2C	11:30	1C vs 3C
11:30	3C vs 4C	12:00	4C vs 2C
12:00	1D vs 2D	12:30	1D vs 3D
13:00	1A vs 4A	13:30	4D vs 2D
13:30	2A vs 3A	14:00	1B vs 4B
15:00	1C vs 4C	15:30	2C vs 3C
16:00	1D vs 4D	16:30	2D vs 3D

Semi Finals
Winner A vs Winner B
Winner C vs Winner D

Finals
Winner AB vs Winner CD

GAMES TO BE PLAYED ARE , BASKETBALL (M &W) VOLLEYBALL (M&W).

Qualification Criteria/Guidelines

Each team are to have
1 X Basketball Team (men)
1 X Basketball Team (women)
1 X Volleyball team (women)
1 X Volleyball Team (men)

GROUP A
1. Administration, Transport Division and Governors Office.
2. Sports, Culture & Liquor, Home Affairs, Commerce Divisions,
3. Planning & Research, Provicial Affairs and Disaster Divisions
4. Legal Services, Monitoring & Evaluation Unit and Information Unit.

GROUP B
1. Fisheries & Marine Resources Division and National Court.
2. Health
3. Administrators Office, Elcom and Labour Department.
4. Finance and Information Unit

GROUP C
1. Education
2. National Works
3. Habours Board
4. PNG Forest Research Institute

GROUP D
1. Lae City Authority
2.IgamBarracks Commanders A Team
3. PNG Sports Commission
4. Unitech Vice Chancellors Best

Vehicles for Sale

Mazda 929, with AC, radio, power steering, brakes, windows and locks, heavy duty tow bar,

Price: K8.900

****

Mitsubishi Pajero 4wd, turbo - diesel long body with radio/cassette, power steering, brakes and door locks, and with heavy duty towing package.

Price: K15, 300

Contact Jim Goodwin at 473 -4455 or 4451 (work) or 475 7462 (home)

Mazda 929, automatic, in very good mechanical condition, body needs some work,

Price: K4000

Camera 35mm, New in case K15.00

Sony Video Camera Handicam 8mm New in Hard Case NTSC system with batteries K950

Tel: 475 7243 (A/H) or 473 4454 (B/H).

44 Gallon Drums with lids on sale

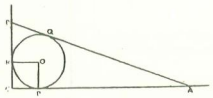
For K2.00 only

At: Laga Industries Ltd Orion Street, West Taraka next to PI Logging

Ph: 475 7387

FUN WITH MATHEMATICS

Solution to Problem 11

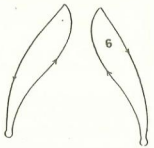


CPOR is a square whose side is 1 meter. Take CA = x. Then AP = x -1. So, AQ = x - 1. Hence, BR = BQ = 6.5 - (x - 1) = 7.5 - x. Therefore, CB = 1 + 7.5 - x = 8.5 - x. By Pythagoras Theorem, $CA^2 + CB^2 = AB^2$.

Hence, $x^2 + (8.5 - x)^2 = 6.5^2$
Simplifying, $2x^2 - 17x + 30 = 0$
Solving (x - 6) (2x - 5) = 0.
From this, the greater value of x is 6.
Answer : 6 meters.

E-mail: neela@sukthankar.com

Solution to Problem 12



WRONG MAN OUT # 6

Well folks, this is the last "Fun with Mathematics from me. My colleague Mr John Wamil have promised to continue this feature in the 2nd semester.

Thank you all for your participation over the years. With best wishes and "Have Fun".

Dr Neela Sukthankar,
Department of Mathematics and Computer Science

Air Mail

STAMP

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PRINTED MATTER

The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1297 ISSN:10119-5354 24 July, 1998 WEEKLY

MRDC chips in K200,000 to Unitech Mining Engineering Department

Mineral Resources Group of Companies (MRDC) has injected its annual sponsorship of K200,000 to the Mining Engineering Department at Unitech.

MRDC's Corporate Affairs Manager Madiu Andrew, who was on Campus last week to present the cheque to the University also hinted the possibility of new arrangement in the future if proposed by the University.

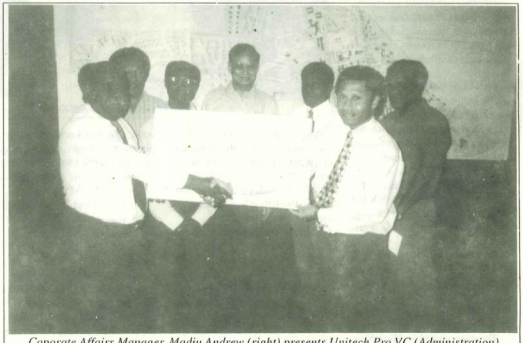
"Our ability to fund state entities has somewhat change, but as a company we are committed to supporting human resources in the Country, therefore our commitment to the three institutions namely to UPNG, Unitech and National Research Institute," Mr Andrew said.

"This sponsorship has been going on for the last three years and we would hope that the sponsorship continues.

"We also have received two other proposals from Unitech but our attitude is for us to deal with the organisation instead of dealing with individual departments.

"We would like to continue in any arrangement so long as its in the programme that reflects in our interest."

Mr Andrew also pointed out that the company was also considering the possibility of diversifying its assistance in other specialised areas apart from mining engineering, adding that the situation within the company has also changed with the setting up of the new company- Oregon Minerals.



Coporate Affairs Manager, Madiu Andrew (right) presents Unitech Pro VC (Administration) Wilson Tovirika a giant replica of the K200,000 cheque.

By CORNEY LAHIES

Meanwhile, the Pro Vice-Chancellor (Administration), Wilson Tovirika thanked the MRDC group of Companies for their support in sponsorship of the Chair in Mining Engineering for the last three years.

"I believe MRDC is the first private organisation that has come to support the academic programme and also fund the chair of a department and your support has been the best," Mr Tovirika said.

"We have tried to contact other organisations to do the same with other department but it has taken a bit longer than anticipated.

"We are very thankful that your company has invested in the most important area, in the purchase of equipment and of course, to fund the chair.

"For the last three years funding from the Government has declined, I am not sure whether it will change the trend and directions, but contributions like this is very much appreciated and I would like to thank the Company.

"I wish other companies in the country come forward like your organisation to support our human resources programme in the country.

"In the long run PNG will not move ahead without the well trained human resources, and therefore, on behalf of the Vice Chancellor and the University thank your for supporting our academic programme for the last three years and hope that it will continue."

Research focuses on problems in rural sector

Resource management decision making processes in rural villages is the focus of ongoing research by Department of Language & Communication Studies lecturers.

Spearheading the research in the Forestry industry are lecturers Malcolm Malone, who has conducted socio-economic research in rural Uganda, and Rod Nixon, who has been involved in consultation, assessment and negotiation involving traditional landowners and resources developers in central Australia.

The principle objective of the research was to undertake a comparative study of decision making processes and outcomes relating to the management of forestry resources in a sample of villages in West New Britain.

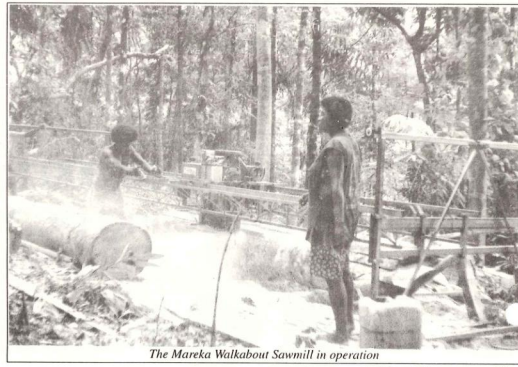
Prior to the West New Britain research, both lecturers went on a field trip to Bukaua, Morobe Province and gained valuable insight into the people's problems and experiences with the logging companies.

"During the visit we spoke to landowners with experience with a logging company in the late 80s and early 90s, and these people felt quite disenfranchised with the experience," Nixon said.

"Presently they face problems with their gardens, with the river having changed its cause, possibly due to landslides caused by logging operations. Eventually, they asked the logging company to go away."

The sites visited in West New Britain included the Aimaga Mission, Mareka and Aumo villages and at least one location which gave a graphic accounts of extensive harvesting of timber, which was left to decompose after the logger closed operations and moved to another location.

Communities which allowed logging companies to into their land also raised concerns about the lack of real infrastructural developments, while those operating small wokabout somils tended to be more satisfied with their level of achievements.



The Mareka Walkabout Sawmill in operation

Without rushing to conclusions at this stage, the two agreed that some of the findings have confirmed some of the general conceptions the public has about the forestry industry, but their purpose was to identify areas which could be addressed through the Unitech Communication for Development programmes.

"What we were looking at was the extent to which informed decision making took place, and which, if any, agencies were involved in facilitating this process. Are people aware of options when they say yes they want large scale logging or no they don't want, that they know the full implication of what is going to happen with regard to the potential threat to their subsistence economy," Mr Malone said.

"It was possible that perhaps there was a miss-understanding that could have been resolved if there was somebody actually fulfilling the public and communications role, which is important because we know that the resource industry was so much behind the establishment of the communications for development course.

"What we have experienced was actually a need for that within the forestry sector."

"It would be very interesting to compare our research with the experiences of Bukaua villages, particularly because we are teaching Communication for Development, and looking at the actual decision making process as it took place in the villages regarding logging.

"Questions like how companies first found out these villages, who was approached by who, which agents perhaps companies used to approach villages and how that decision making process took place within the village and what the outcome was.

"The more we looked, the more questions arose.

"We found that the decision making process was different from place to place, problems of different members of the community were different. I think that was the most dif. .t part of this research, the active decision making process.

"There's a cultural tendency not to blame wantoks and clan leaders for what's gone wrong, I find it very difficult to disentangle different versions of the same series of events."

The two hope to finalise their report by the end of the year.

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Secretary: ANGELA BOROMANA 473 4291
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PNG University of Technology
Private Mail Bag Lae- PNG
Fax: (675) 4757 667
email: reporter@unitech.ac.pg or cklahies @global.net.pg

Mission Statement

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Unitech community raises over K5000 for Aitape tsunami disaster victims

"More donations needed"

The Papua New Guinea University of Technology community, together with Sandaun community in Lae city, have raised over K5000 in cash and kind for the Aitape tsunami disaster victims.

Moreover, the whole Unitech student body have agreed to skip two lunches on Wednesday and Thursday so that food from these lunches would be donated to the victims of the Tsunami.

According to Unitech Sandaun community spokesperson Joy Sahumlal, the amount was raised in just two days of fund raising efforts, and a committee has already been set up to co-ordinate fundraising efforts for the victims.

Over the public holiday on Monday and Tuesday, Unitech students, staff and Sandaun community together with concerned members of the public, braved the scourging heat and pouring rain, pushed wheelbarrows around the city of Lae appealed for donations in cash and kind for the disaster victims.

Support and concern shown by the response from public during the two days, had overwhelmed the organisors.

People were coming out of their houses with cash, clothes, plates, pots, spoons etc, which shows that they too care for the victims," Sahumlal said.



Prime Minister Bill Skate with injured boy at Sissano. Picture courtesy Post Courier

By STEVEN BUSIN

"What was most heart warming was that the little children, after seeing adults put money into the wheel barrow, asked for small change from their parents so that they too could contribute money toward the children affected by the tidal wave in Aitape.

"We could have raised more if it hadn't been for the rain, however, fund raising efforts are still continuing as we expect to raise as much as we can."

"There is no limit and we would greatly appreciate any contribution, no matter how big or small as your contributions will definitely assist the victims in a very big way."

She also thanked the Vice Chancellor, Dr James Kaiulo and Pro Vice Chancellor (Administration) Wilson Tovirika in providing transportation for people to the various locations in the city.

She further thanked the SRC President for organising the student body into provincial groups to walk the different zones on Tuesday

"I would like to thank other individuals on campus and in the city of Lae for your kind donations and prayers during this week and we hope you will continue your goodwill for our country."

The Unitech community is advised that all donations in cash or cheque should be directed to either Wilson Miroi at Civil Engineering Department on Ph: 473 4601 (ext 4611) or Joy Sahumlal 473 4244 (4244) at the Huon Seminar Office or Luke Wangi at the Agriculture Dept on 473 4451.

Donations in kind, would be very much appreciated and the central collection point would be the Security Office during the day.

Villages along the West Coast of Aitape last Friday around 7:30 pm were hit by three 10 meters high tidal waves at Malol, Arop, Warapu and Sissano and an estimated 3000 people feared dead.

Fund raising efforts around the country have began as well as aid from foreign countries are pouring into the Aitape for the affected people.

Meanwhile, the National Academic Staff Association (NASA) is also conducting its fund raising efforts for the Aitape Disaster [illegible]

The Association is selling raffle tickets (100 Club) at K2.00 per ticket or K20.00 per book. If you are approached by any member of the staff selling raffle tickets, please help by purchasing a ticket or a book for this worthy cause.

The first prize winner of the raffle ticket would win K40.00 while the second prize winner will get K20.00 and results of the draw will be published in The Reporter on Friday 31st July 1998.

It is understood that other associations within the University would also be doing their own fund raising efforts.

Mechanical Engineering staff undergo training on EDM

Mechanical Engineering Department staff have completed a two day workshop on how to use a High Precision Al wire-Cut Electric Discharge Machine.

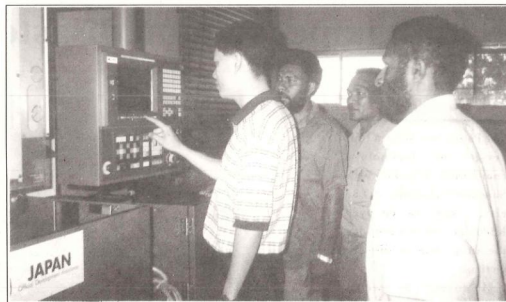
The electric discharge machine (EDM), the first of its kind in the Country, was donated by JICA as part of its K10 million equipment aid to the University which saw a Engineer from the manufacturers, Funoc Pty Ltd, came all the way from Singapore to train Mechanical Engineering staff.

Mr Anthony Hia Yeow Sheng, Funoc Engineer, said high speed non-electrolysis cutting at a rate of 300 square millimeter per minute was possible using cost effective brass wire.

He said the use of brass wire to cut metal also eliminated the need for expensive specially coated wire enabling high speed non-electrolysis cutting at a minimum cost.The machine also protects material against electrolytic corrosion, prevents cut surface from softening, prevents rust and could cut very accurately according to required specifications.

Mechanical Engineering Head of Department, Professor Satter, during a brief farewell ceremony said he was grateful to JICA for enabling the installation of the EDM which is a milestone for the Department and the manufacturing industry.

"The response from the Department was very pleasing from both the technical staff and academics," Prof Satter said.



Funoc engineer Hia Yeow Sheng shows Mechanical Engineering staff how to operate the EDM.

At the brief ceremony, Hia Yeow Sheng said before coming to Papua New Guinea he had doubts about his coming to the Country to conduct the training program, because of stories he had heard about the place.

However, upon his arrival here, he had discovered that most of what he has heard of the place was not true and he was surprised by the warmth of hospitality shown by the staff at the Department and the community.He said he hoped to come back sometime again in the near future to either conduct another training program or come back as a tourist.

"This country has a lot to offer," he said.

Unitech to host National Book Week Coca Cola Quiz Challenge

As part of the National Book Week, a Coca Cola Quiz Challenge between high schools in Lae would be staged at the Papua New Guinea University of Technology on August 6th 1998.

According to Chairperson of the National Book Week (NBW) organising committee, Gewa Meda, top up schools, two international schools and colleges in Lae would also be in the quiz challenge.

She said two time champions, Markham Valley High School, some 60 km along the Okuk Highway would also be defending their title.

"The quiz competition is for grades 7 and 8 students only and schools should enter three of their best students each for the contest," she said.

"The competing schools vie for three shield prizes for first, second and third placing while all competitors would receive complementary medallions with their names engraved from major sponsor Coca Cola Amatil (PNG).

"The major sponsor committed itself four years ago to a 10 year sponsorship deal to support the NBW inter-school quiz challenge here in the city of Lae."

Ms Meda, who is also the secretary to the PNG Library Association (Northern Region) said the National Book Week was an annual event on the national education and literacy calender for schools nationwide.

The occasion graces the school activity calender the first week of August each year which schools actively engage in library and literacy related activities in the weeks leading up to the National Book Week, she said.

"Intra and inter-class competitions, drama and plays, exhibitions, etc often depicting the theme of the NBW were carried out by individual schools," she said.

"Libraries throughout the country celebrate the event with displays and invitation to the public to visit.

"Public floats are sometimes organised particularly by the Public Library Service arm of the National Library Service as a way to highlighting the importance of literacy, reading and libraries and self learning to the public.

"The National Book Week is celebrated with the main purpose of encouraging and promoting habitual reading among the young generation and literacy awareness to the [illegible]r community."

She said that in Lae and along the Okuk Highway, the PNG Library Association (Northern Region), the only active remnant of the defunct PNG Library Association, in the country at the moment was the principle organiser of the NBW programme.

She said individual schools in the city were advised by the Association to organise their week's programme, but to leave the Thursday of the week free for the Coca Cola NBW Quiz Challenge.

"The Association, the only surviving Library Association in the country, was committed to

continuing its contribution to library development in Lae and the surroundings particularly for the under privileged government funded school libraries," Ms Meda said.

"The Association is in a very clear position to see the plight of schools struggling out of scratch to allocate building space and stock and organise library collections.

"The situations as we know it is worse for schools such that the quality of education for young people are getting nowadays, left much to be desired.

"The Association on its part is committed to continuing to assist schools by providing technical advise on acquisition or sourcing of books, cataloguing, organising, and management of school library lections.

"The number of youths now entering public libraries, college and university libraries around the country is indicative of the gain the NBW awareness activities achieved over the years.

"In Lae City, the Lae Public Library despite the obsoleteness of its book collection is cramped by school aged children on a daily basis.

"The Matheson Library in the last four years is swarmed by students and young men and women scurrying for material suited to their reading level, often posing ity risks to the collection.

"The hunger to know is there but there isn't material to read for our young people whom we often call our future generation.

"There is an absolute irony in a world we know is supposed to be suffering from information overload, for the Association at least, its not time to throw in the towel yet.

"PNG Library Association (Northern Region) wishes to thank major sponsor Coca cola Amatil for its generation support of the National Book Week Quiz Challenge over the past four years."

Kina devaluation eats into Library budget

The devaluation of the kina has adversely affected the Matheson Library forcing it to buy less number of books then the required number for each academic department.

Acting University Librarian, Raphael Topagur has advised Heads of Departments of the current situation facing the library and has asked them to come up with alternatives.

He said the library's projection of 2000 volumes per year has been reduced by half due to the current funding from the University, and the devaluation of the kina against major currencies.

"We cannot meet all the academic departments' requisitions for books and because of the currency situation, we would be able to buy those that can fill information gaps in our collection and not necessarily according to the requested figures submitted by each Department," Topagur said.

"The average prize of a book is about K225, and books are allocated to each department according to their size, which on the average would cost us about K6000 per department and it would cost us about K87,000 for the books requested."

As part of its cost cutting measures, the library, would be reducing the number of its subscription to journals as of next year, and the cut in the number of journal subscription would be the second time in recent years.

Previously, the library used to subscribe for 600 journals annually, however, the former librarian reduced it to 500. The subscription would be reduced by 50 percent, taking the number of subscription to 250.

Topagur said that they would also reduce their dependency on the International Serials Agency (ISA) as being the middle man in obtaining journals.

"What the ISA does is that it approaches publishers on our behalf for journals then it packages them, exertion them then mail them to us, and it is costing us money, and what we intend to do is cut off the exertion," he said.

"We would contact publishers directly to have them send us their items directly to us and we would exert them."

According to the Topagur the library would also be reviewing its cost areas which were expensive to run.

"Some of the products that we are using are quite expensive and we are looking for alternatives," he said.

"Some of the programs or products we are using could be cheaply obtained by using the Internet.

"We are setting up an internet access sites where staff can help students search the Internet for needed information which could not be obtained from the library.

"However, the use of the internet would be strictly monitored by staff to prevent any misuse of the internet."

The Information and Technology Services Division has also been allocated an space at the library to oversee the smooth running of the Internet and E-mail services.

"We want to see the library as the gateway to information which staff and students can use as access points to information and the outside world.

"The main objective or mission of the library is to support research and teaching in the University, we want to provide timely, intimate access to information in whatever format that is available in the building, in country or outside."

He said in order to achieve the objectives, one of the important components was to adequately conduct training programs for library staff and the injection of adequate funds.

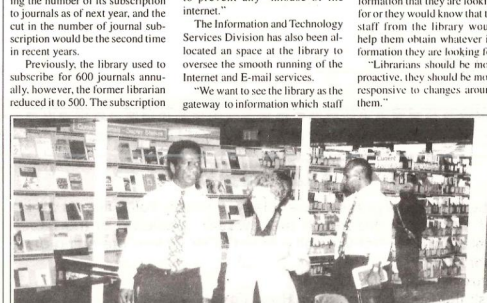
Training, he said, must be continuous in library particularly in the areas of effective communication with users and information technology.

"The roles of libraries were changing and were become more user orientated," he said.

"Traditionally, libraries were seen as a traditional storage warehouse for information, however, now the academic library is changing, to be more user or client oriented.

"Its purpose must be more visible to the community so that when they come in they will know that they will get the information that they are looking for or they would know that the staff from the library would help them obtain whatever information they are looking for.

"Librarians should be more proactive, they should be more responsive to changes around them."



Former Librarian Policarp Ren showing Lady Kidu what the Matheson Library has to offer and its potentials

CAMPUS BULLETIN BOARD

RELIEF AND FUND RAISING ACTIVITIES FOR THE TSUNAMI DISASTER VICTIMS IN AITAPE - SANDAUN PROVINCE.

In the evening of Friday, 17th July 1998, at approximately 7:30 pm, three lots of 10 meter high tidal waves hit four villages of Malol, Arop, Warapu, and Sissano. These coastal vialges located approximately 30 km to the west of Aitape town were completely devastated.

The villages comprising an accumulated population of between 6000 to 8000 suffered high casualties with more than 3000 presumed dead. As to the lastest count thousands are still missing. Many have fled into the bushes and surrounding hills and yet to be contacted. Corpses were seen on National EMTV News still floating in the lagoon and sea and have yet to be recovered.

Many children and families are now homeless and many have lost their immediate relatives. They are left without basic requriements such as clothings, cooking untensils, and necessary tools.

The small Saundaun community here in Lae is organising fund raising activities to assist those who have been affected by the Tsunami, and are asking for donations and contribution in cash or kind such as clothings, cooking utentials, food, medicine, and others to be sent to assist those affected by the disaster. We are aware of the difficult times experienced by the current economic recession in PNG, however, your generous contribution will assist the people of Aitape with great appreciation.

Please contact or send in your donations and contribution to the following organising committee or could be deposited in PNGBC Account No: 170783

1. Albert Jalmein	Lae City Council, PC Box 1333, Lae	Ph: 472 6576/Fx 472 1949
2. Patrick Pruaitch	Shell PNG, PO Box 1033, Lae	Ph: 472 3282/Fx 472 6256
3. Lucas Brere	ANZ Bank, PO Box 674, Lae	Ph: 472 3282/Fx 472 6135
4. Barry Amol	Haus Computer, PO Box 570, Lae	Ph: 472 6029/Fx 472 3945
5. Wilson Miroi	PNG Unitech, PMB, Lae	Ph: 473 4601/Fx 473 7667
6. Peter Laina	Telekom, PO Box 1475, Lae	Ph: 473 5001/Fx 473 5007

Remember that natural disaster is something we all can not avoid and as one community, one country and one people we have all assisted in the Bougainville conflict, the Rabaul volcanic disaster, the recent drought and now we only ask for a small condtribution to our Tsunami affected areas of Aitape, Sandaun Province.

Your contribution and assistance in any proposition is worth more than anything else.

Albert Jalmein
Chairman - Fund Raising Committee.

30th Anniversary Ruffle Tickets

FINAL CALL

The drawing of prizes for the 30th Anniversary Ruffle Tickets will be at the end of this month (next week). Available at the Public Relations Unit. Get yourself a ticket NOW. Tickets are going at K2 per ticket.

Prizes include:

1st: Ticket for one to Japan,Hong Kong or Philipines.
2nd: Ticket for one to any Air Niugini destination in PNG.
3rd: One day boat trip for two to Finschaffen plus K50 cash.
4th: Family speed boat trip to Salamaua plus K50 cash
5th-10th: K100 shopping vouchers

Executive Officer

FUND RAISING DANCES

UNITECH FEMALE STUDENTS ASSOCIATION

Where: Club 96 -Negiso
When: 1st August, 1998
Time: 7.00pm till late
Admission: K10 / head
Dressing: Formal
DJ: In House DJ

Tight security provided

Madang Students' Association

Date: Friday 24th July 1998

Venue: Momase 140 Club
PTC Way Tent City

Time: 7:30 till late

Dress: Formal

Music: Combined Live Performance
Wali Hits
Mogoi Hot Line
Zeros

Tickets: Ladies K10.00
Gentlemen K10.00

Note: Entry by Tickets only...so don't miss out, get your's now

Tickets can be purchased from
Maia Karl - Accounts Ph: 4734308
George Kombe - Yalkuna Room #7
Florence - Hetura Room # 54

Seminar

"THE YEAR 2000 PROBLEM"
GUEST SPEAKER; HUGH GREER
DATE: Thursday 30th July 1998
Venue: Rose Kekedo Lecture Theatre.
Everyone is invited

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE
EVENING SCHEDULES:
Monday:**UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**
WEEK-ENDS
Saturday
AM -SDA
PM-TSCF
Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC
DUNCANSON HALL
Sunday Morning
'00 CLC CHURCH

TSCF GOSPEL RALLY

ON TONIGHT AT THE UNITECH BASKETBALL COURTS.

ALL WELCOME

MADANG NIGHT

Madang Students' Association Executiveswould like to inform all prominent Madangs and friends within the campus and around the Lae City that the Association has proposed for a "Get Together and Fund Raising Function - Madang Night on Saturday 25th July, 1998, in the SRC Union Hall.
This would include dinner, buying of food and dance to the sounds of Wali Hits, Mogoi Hot Line and Zeros.

Tickets are on Sale for
K15.00 - Single
K30.00 - Family
Strictly entry by tickets only.

CLASSIFIEDS

HUON SEMINAR

2nd International Huon Seminar-98

The Papua New Guinea University of Technology will be hosting its 2nd International Huon Seminar from 7th - 11th September, 1998 on the theme

RESOURCES FOR DEVELOPMENT AND TECHNOLOGY IN DEVELOPMENT

* Women in Science and Technology
* Technical and Continuing Education in PNG
* Research Quality in Higher Education

For more information;
Contact Joy Sahumlal on 4734244 or
Theresa Paliwa on 4734233

Dr Philip Siaguru Chairman - Organising Committee

P22693

Ok Tedi Mining Limited

Graduate Development Scheme Promotion

Two representatives from OTML will be on campus to promote the OTML Graduate Development Scheme.

Promotion Includes:
- The overview of the Ok Tedi Mining Project
- The preferred area development
- the graduate development scheme.

DISPLAY OF BOOKLETS ON OTML AND IT'S GRADUATE DEVELOPMENT SCHEME.
BROCHURES OF THE SCHEME ARE AVAILABLE WITH THE SCHOLARSHIP OFFICER

Date Wednesday 29th July 1998

Time: 1pm- 3pm
7pm-9pmHrs

Venue: DUNCANSON HALL (DH)

Public Relations Unit

All Umbrellas at the Public Relations Unit have been sold out.

The responsibility for the sale of Unitech umbrella's and bags have been shifted back to the Book Shop.

For further enquries on the two items, please consult the Book Shop.

Items that would be sold at the Public Relations Unit are: T'Shirts, Neck ties, laplaps and caps

FUN WITH MATHEMATICS

Problem 13

A man wants to paddle his canoe across a river from a point x to the point y on the opposite shore directly from x. If he can paddle the canoe at the rate of 4 miles per hour and the current in the river is 2 miles per hour, at what angle should he steer his canoe in order to go straight across the river? Also what is his resultant speed across the river.

K5 for the First Entry

Problem 14

Two cylindrical containers of radius 10 and 50 centimetres, containing equal volumes of water are left on a bench. If the sum of the water levels is 50cm, what is the total volume of water contained in the two cylinders?

All interested staff and students should send their solutions to problem 13 and 14 before Monday 17th August 1998.

John Wamil, Dept. of Mathematics & Computer Science.

Air Mail

STAMP

If unclaimed please return to:

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Papua New Guinea University of Technology
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PAPUA NEW GUINEA

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The Reporter
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BULOLO
BUMBU
ISSUE No:1298 ISSN:10119-5354 31 July, 1998 WEEKLY

Unitech first year student strikes Chevron's international scholarship

A Foundation Year Engineering student has won a prestigious Chevron Corporation and the Institute of International Education scholarship from thousands of applications around the world.

Darius Waula Jr, aged 20, from Raluana village in East New Britain, currently undertaking his first year this semester, was presented documents to confirm his award by Chevron Niugini's Dr Moseley Moramoro at Unitech this week.

His father is an employee of Chevron Niugini and works in the Purchasing Section at Tabubil.

"Chevron Niugini is very happy about this award as this is the first time the award has been open to other countries in the world where the company operates, and PNG has come out as the winner," Dr Moramoro said.

"It is a prestigious award and Darius won this out of thousands of applications that were submitted to the Committee in San Francisco, in the United States.

"In the previous years, employees in the United States were the only ones benefiting from this scholarship, but this year this scholarship was open to other countries as well such as Nigeria, Angola, Indonesia, South American countries and Papua New Guinea."

Dr Moramoro explained that the scholarship worth US$1000 (K2500.00) was an annual award under the Chevron REACH International Scholarship Program for Children of Company Employees and Retirees.

Prior to entering Unitech, Darius attended Keravat National High School in 1996.

For Darius, the scholarship has come at the time when he is trying to focus his attention on his university course after he failed his first year in 1996.

Spending the past 12 months at his home in Raluana and working on the family's cocoa and coconut plantation has taught him one or two lessons in life and its meaning.

"I've learnt the lesson not to take life for granted and now realise that my entry to university was just the beginning of the journey which won't be over until I graduate," Waula said.

"While at home I worked very hard to raise money for my school fees from the cocoa and coconuts plantations."

He also attributed his scholarship as a divine providence from the Good Lord, since he decided to become a Christian.

"When I failed my second semester exams, my life was a like a dark tunnel," Waula said. "But when I changed my life, things have also changed for the better for me.I did not think I would win this award, but since I have turned around, God has blessed me so much.I wish to thank Him for all this."

The scholarship will conclude next January.



Darius Waula jr is congratulated by Chevron Niugini's Deputy Managing Director Dr Moseley Moramoro on his achievement

BUDGET CUTS DEEPER

The University budget has been cut by a further half a million kina in the recent review by the National Government.

In a memorandum to Heads of Departments copied to three Staff Associations on campus, the Vice-Chancellor directed the Departments to comply with 10 control measures on expenditure to see the university through the academic year.

"All Heads of Departments and Centres are advised that as a result of a further reduction to the revised 1998 budget by K500 000, the University community is requested to review all its operations so we can be able to complete the academic year in November," Dr James Kaiulo said.

He urged all to operate within the revised operational budget of K26.32 million for the balance of the academic year.

The actions to be taken immediately by the Departments and Centres include; reduction of employment of temporary staff in all sections of the University by 50 percent except for Library and Security; restrict all domestic travel;

There will be no overseas travel except for those funded by the Research Committee and those fully funded by other organisations;no staff recruitment for staff replacements unless authorised by the Vice-Chancellor.

No recreational leave fares to be taken in advance except for medical and death in immediate families.

Meanwhile, payment of ERSA or IMA and Gratuity protection will be at 73 percent rate from July to December 1998.

Staff have been told to restrict usage of water, electricity and telephones, while no capital purchases will be allowed.

There is also further restriction of fuel usage by all university vehicles to one refill a week unless authorised by the Pro-Vice Chancellor (Admin). and no further commitments on consumable are to be made after 31 October,1998.

There was no immediated reaction from the Staff Associations to the cut.

Students facilities centre to be catalyst for change

The Student Facility Centre must be catalyst for change and development in the Papua New Guinea University of Technology, according to its Director.

Under the University's administration restructure, the Student Services Unit has been renamed the Student Facilities Centre headed by the Director Mr Allan Sako, who successfully completed his masters program in Public Policy at Victoria University of Wellington, New Zealand.

One of the objectives was to convert all existing student halls of residence into colleges and accomodate students from each department or disciplines into a community with the view to minimise discipline related problems, and promote the interchange of ideas, cultures and values.

It is also part of the University's overall plan to make Centres more cost-effective, customer orientated and self financing.

"The College model will begin with the three female halls of residence (Poroman, Hetura and Toluan) as early as next year, followed by the male students halls of residence," Mr Sako said.

"Tender notices for the building of the female hall of residence have already released in the daily newspapers and a contractor would be appointed soon after."

While in New Zealand studying for his Master of Public Policy at the Victoria University of Wellington, Mr Sako had witnessed an unprecedented wave of public sector reforms including universities where most of tertiary education institution (TEI) cost centres have been turned into revenue centres.

He argued that if universities and other TEI's of these developed and yet smaller countries like New Zealand can change for the better, there was no reason why TEI's in PNG with less numbers of students can also do likewise.



Daniel Kumaina and students handing allocating rooms to students at the begining of the year. These reponsibility may soon be transfered to whoever will be looking after the female residential college.

"The change process in public sector organisations including universities is by no means an easy task, because they operate within a political and resource constraint environment," he said.

"Any change within an organisation must always have the backing of those in power or the hierarchy of the particular organisations in question."

Mr Sako believes that by the year 2000 the Student Facilities Centre will be given a new look will be better placed to meet the increasing student demands and challenges of the next century.

"This change is in line with consumerism and other market ideologies that have swept and supplanted old and archaic way of doing things in universities in most capitalist societies and elsewhere," he said.

"In this era of declining government funding, increased levels of student participation, and the penetration of corporate cultures and decision making styles into university activities, there is a need to review, rethink and redo the way universities have been conducting their activities and delivering services to stake holders."

Mr Sako said that for too long the focus of tertiary education institutions, universities, in Papua New Guinea, had been on teaching, research and community services without proper attention, and adequate support to students as the major stake holder and primary consumer of university activities.

"In this climate of intense competition for students and funding, Unitech must be seen to be changing it course delivery systems, improving its accountability mechanisms to stake holder constituencies, and ensure that its activities are transparent, contestable, and responsive to the needs of stake holders," he said.

"Other sources of alternative funding must be aggressively an vigorously explored to supplement constrained government funding."

Moreover, Sako said that organisations like universities did not operate in a vacuum, but rather within the context of a rapidly changing turbulent environment, characterised by sudden continuity and discontinuity.

"This climate of uncertainty and tight interconnectedness of universities to the outside world poses both opportunities and threats for their continuity and survival," he said.

"To counteract these threats and turn them into opportunities, universities must think strategically as never before, translate their insights into effective strategies and do the rationale necessary to lay the ground work for adopting and implementing their strategies.

"Accordingly, the primary objective of the Student Facilities Centre is to make the Unit a cost-effective, customer orientated and revenue generating centre."

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Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

TFTC and EU to standardise small sawmills training

The Timber and Forestry Training College (TFTC) together with the European Union (EU) are working on standardising their training manual on Small Sawmills in the country.

According to TFTC Small Sawmills Head of Section, Karl Tama, both organisations have come up with a inter-change program for trainers to have working stints with each other to observe each other's training program.

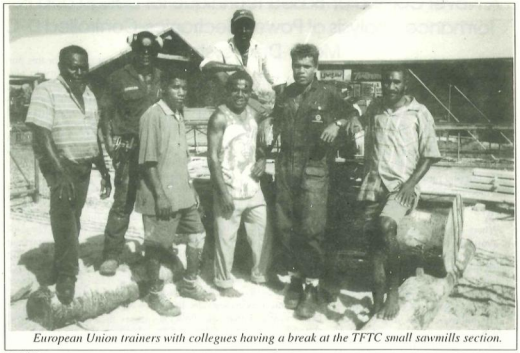
"A lot of Non Government Organisations (NGOs) seem to have their own training programs, but we as a national institution are trying to standardise all training programs for all NGOs in the Country," Kama said.

To kick off the inter-change program, Kama, had a two weeks work attachement with the EU in Kimbe, observing their training programs conducted at villages in the West New Britain Province.

"Over there, villagers start their training with chain saws, and the EU basically gives villagers their own projects, carry out feasibility studies, supply them with machines (chain saws) and manages the projects for them," he said.

"They also show the people what to do with their forest, keeping in mind environmental damages to the forest.

"We are doing the same thing, except that we don't give projects to land owners, and we train our students on the use of diffeent types of small sawmills available in the country.



European Union trainers with collegues having a break at the TFTC small sawmills section.

"The students will then decide on which type of small sawmill they prefer to use when they go back to their villages, and this would also depend very much on what they can afford.

The different types of small sawmills used by TFTC for its training programs are: Lucas Mill, Lewis Mill, Token Mill, Solite Mill, Mahoe Mill, Westford Mill and Alaskan Mill.

These saw mills are supplied by Farmset, KK Kingston, UMW and Narapelawei on the understanding that these machines would be used for practical and demonstrations by the students.

Currently, two Kimbe based EU small sawmill trainers, Mr Daniel Maku and Harry Ngopnop, are observing the operations and the use of the different mills at the college.

The EU trainers had the opportunity to take a one week field trip to Lalabia to witness a Forest Management course conducted by the Village Development Trust (VDT).

"Their visit to Lalabia was to observe the different types of training program conducted by the VDT."

Meanwhile, Kama said that they were also pleased to provide training to a Solomon Islands student, Patrick Geru, for the next three weeks small sawmill course.

"We are encouraged to have Solomon Islands students coming here to their training like the other two who came in from South America," he said.

"They are enjoying their training here, and we are giving them a lot of work to do and we are assessing them which is part and partial of our training."



Students doing practical work using a chainsaw



Student cutting timber using the Lucas Mill

A Novel Computer-Based Technique for Design and Performance analysis of Power-Electronics-Controlled D-C Motor-Drive systems.

Dr Vlad Kosteky

Variable-speed d-c motors play a significant role in modern industrial drive systems because the speed of a d-c motor can be controlled over a wide range and the methods of speed control are simpler and less expensive than those used for a-c motor drives.

The typical applications of d-c motor drives used up to 15 kW are rolling mills, printing presses, mine winders, and machine tools. In some special cases, such drives are employed up to 50kW.

Where only the a-c supply voltage is available on the installation site, power electronics apparatus is ordinarily used to provide a variable d-c voltage for the d-c motor. The core of such apparatus is a rectifier converter that includes the arrangement of power semiconductor switching devices, which are associated with control electronics for the generation of low-power trigger pulses for the switching devices.

Today's most common power solid-state switches employed in converters are silicon-controlled rectifiers (SCRs) of which phase-controlled thyristors are used most extensively. A switching-mode operation of thyristors, obtainable by triggering the devices into conduction at a continuously-variable phase-delay angel, provides a controllable d-c out voltage which feeds the armature circuit of a drive motor, thereby ensuring a smooth control of its speed. Obtained in a similar way, a variable d-c voltage may be applied also to the field circuit of the motor, which widens the range of controllable speed variation.

The project presents a novel computer-based technique developed for complete design and performance analysis of a d-c motor drive system supplied from the a-c mains through a rectifier converter.

The case chosen concerns a separately-excited motor whose armature-applied voltage is derived from a single-phase, two-pulse, fully-controlled bridge rectifier converter comprising four thyristors with symmetrical, phase-delayed triggering of the semiconductor devices in pairs. The motor field circuit is supplied with an uncontrollable voltage of fixed magnitude. It is assumed that the drive will be used only for a steady-state, first-quadrant (forward motoring), open-loop operation without provision for flywheeling.

Although the analysed case is far from being very difficult in terms of the complexity of the electrical configuration involved, both the design and performance analysis of the system poses normally a serious problem to the engineer equipped with conventional design tools.

Depending on the motor-armature inductance and speed and torque requirements, the drive will operate in either continuous- or discontinuous-current-conductions modes, the latter being the most frequent case under typical conditions of operation.

In either mode, the armature current waveform is unidirectional of pulsating nature. The current is continuously greater then zero over the entire cycle or there are zero-current intervals in the cycle. In the latter, most common case, both the armature current and voltage are represented by piecewise continuous functions.

The shape of the current wave is described by a transcendental function of time and thyristor triggering-delay angle in combination with armature-circuit parameters. Another angle, characteristic of the circuit, which is the thyristor conduction angle, determines the duration of the current pulse. Implicit transcendental functions of the two angles in combination with armature-circuit and mechanical-load parameters inter-relate both electrical angles. Their numerical values need to be determined in an early phase of the circuit design process.

Irrespective of the actual physical nature of the armature current (continuous or discontinuous), it contains all harmonic components which, in turn, produces harmonics in the converter input current.

All these aspects combined, make the design process extremely difficult: symbolic expressions of the functions representing currents and voltages in the system must be obtained and various symbolic and numerical operations performed on these expressions.

In order to negotiate the problem, a suitable solution algorithm has been developed, using a powerful mathematical package as a computational engine.

The mathematical algorithm together with ample annotations and comments, constitute the project worksheet that has thirty sections arranged to ensure a natural flow of design and performance analysis of the drive system.

The package chosen has proven to be most useful for this purpose because of its ability to perform symbolic and numerical computations, well combined with visualisation capabilities and advanced word-processing and text-editing abilities. The latter features have enabled documenting the resultant work in the form of a presentation-quality report.

The successfully completed major part of the project comprises the results of fundamental importance for the whole project. These include the necessary expressions derived by means of symbolic computations, numerical results, and graphs of circuit current and voltage waveforms.

Numerous verification procedures included in the algorithm eliminate the errors that are normally unavoidable in carrying out difficult symbolic and numerical computations. The validation procedures ensure as well that each consecutive section of the algorithm uses expressions and values, which are not only correct mathematically but also acceptable from the physical point of view.

The technique presented is universal and may easily be adopted for working out any complex engineering or scientific problem. In particular, it pays to employ it where a solution algorithm involves various symbolic and numerical operations on transcendental, implicit, parametric or special functions solving ordinary or partial differential equations, harmonic analyses of piecewise continuous functions, and plotting 2-D or 3-D graphs. The necessity of carrying out many of these operations within the same design project is a frequent case in sciences and technology.

The skilful use of the package provides the ultimate computational environment for engineers and scientists in dealing with the design of the most sophisticated systems, carrying out performance analyses of such systems under steady-state or dynamic conditions, and investigating system variants for different input data sets.

Although the project is targeted specifically towards the needs of practising design engineers, to provide them with a novel coherent design technique, its educational aspect is also noteworthy. Owing to ample annotations, the design algorithm is a clear user-friendly tool that can be a guide for senior undergraduate-and graduate-level students to their engineering design tasks.

RAILWAYS RESEARCH STILL ON

Since 1993, the project titled "Electric Railways for PNG" has been ongoing in the Department of Electrical & Communication Engineering under the supervision of Associate Professor Kris Korzeniowski.

The project has mainly been concerned with technical and economical aspects of this mode of land transportation. Some initial designs and proposals were made between 1995 and 1997, for long distance electric railway and for urban rail implementation in Lae City and for National Capital District.

The paper titled "Electric Railway Proposals for Papua New Guinea - Present State and Prospects" was presented by Dr Korzeniowski in Australia at the joint conferences of Australian Universities and IEAust (AUPEC/EECon '97) in October 1997.

Another paper titled "Economics of Electric Railways in Papua New Guinea", authored jointly by Mr Gomi Gipe (ABS) and Dr Korzeniowski was presented at the 8th world conference on Transport Research in Belgium, in July this year.

In another development, in December 1997, a technical and economical design of the test urban rail at Unitech Campus was submitted to the Vice-Chancellor.

Meanwhile, the Pro Vice-Chancellor (Academic) Associate Professor Philip Siaguru recently endorsed former decisions for such a test line. Funding for this project will be sought externally.

Unitech to defend NUS Games title this weekend



IFC Personnel and Public Affairs Manager, Col J. Maras presenting the students with a K25o cheque.

Unitech has a daunting task in defending its title as the National Union of Student Games champion, this weekend.

The Unitech contingent consisting of 147 participants and 5 officials leave today for the NUS Games at the Divine Word University.

The NUS Games will be attended by Mendi School of Nursing, Mount Hagen Technical College, Goroka University, Goroka Technical College, Goroka School of Nursing, Lae Technical College, Lae School of Nursing, Timber and Forestry Training College, UPNG, Medical Faculty, Madang Technical College, Madang Teachers College, and host Divine Word Institute.

Sports that would be competed over the two day sports carnival are: soccer, basketball, rugby league, rugby touch, volleyball, and table tennis for boys while the female students will be competing in soccer, basketball, netball and volleyball.

Meanwhile, International Food Corporation, makers of Besta Tinfish, has donated K250 towards the students trip to Madang.

IFC Personnel and Public Affairs Manager Colonel Joe Maras said the company had hoped to donate more, however, it had used up most of its budget for the Aitape Tsunami Disaster victims.

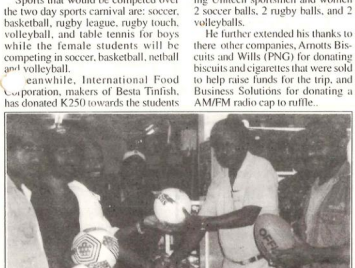
However, he hoped that the money in some way or another contribute to the contingent's success in Madang.

SRC Sports Chairman Francis Essacu thanked the company for their timely donation.

He also extended his gratitude to other business houses who have shown their support.

He thanked Brian Bell for presenting Unitech sportsmen and women 2 soccer balls, 2 rugby balls, and 2 volleyballs.

He further extended his thanks to there other companies, Arnotts Biscuits and Wills (PNG) for donating biscuits and cigarettes that were sold to help raise funds for the trip, and Business Solutions for donating a AM/FM radio cap to ruffle.



Brian Bell representitive presenting the students with balls to be used at the NUS Games in Madang.

AITAPE DISASTER RELIEF APPEAL
Central Collection Point

The Unitech Community is advised that a central collection point will be set up at Eriku on Saturday 1/8/98 at 8.00 am.

Anyone who wishes to make donations both in cash or kind can go there on Saturday and do so.

A large container will be put there so people can donate anything towards the Tsunami Victims.

We need your assistance from all Sandaun Students and Staff in co-ordinating this activity.

Sandaun Community on campus and in the city are advised that fund raising through BBQs will also be done.

Please cook something for sale or donate food for sale to the organising committee on Saturday at Eriku.

All proceeds will go to the Aitape Disaster Relief.

Organising Committee.

SHRM MAMA'S DONATE TO AITAPE DISASTER RELIEF



SHRM Mothers coordinator Joachim Delavan presenting Sandaun Community Rep. Joy Salumlal two bags of clothes and cooking utensils and K50 cash. SHRM Manager Phil Hart also donated K154 cash collected from ruffle tickets.

National Staff Association

The Association's Management Committee at its special meeting on the 23rd of July approved a cash donation of K500.00 on behalf of its members to the Aitape Relief fund set up by the Unitech/Lae organisers.

In view of the above being made on your behalf, I kindly appeal to those members in arrears with their 1998/99 membership fees (K6.00 for two years) to either make direct payment to the treasurer, David Arapi at the Agriculture Department or liaise with the secretary, Jill Bebe at the Student Services for payment through pay deductions.

Please spare a minute to consider this humanitarian and unwise to be counted through the commitments and sacrifices of other members, especially those less fortunate.

Charles Nakau, President (NSA)

CAMPUS BULLETIN BOARD

Small Business Development Corporation

Small Business Management Seminar for Unitech

Topic: Introduction to Starting your business and Improving Management of Small Business

Speakers: Robin S Siwick (SBDC Momase Regional Manager)
Tony M Walega (Accredited Facilitator)

Start Your business & Improve Your Business Programs

Time: 12 - 1 pm
Date: 27 August 1998
Venue: Matheson Library - AV Unit
Fee: K10.00 per person

For Registration, call Janet on phone 472 1677 or fax 472 3876 at Small Business Development Corporation, Momase Regional Office, Malahang Industrial Centre, Busu Road, Lae.

Come & listen to how SBDC is helping small business persons. Entry is by receipt. do not miss this one.

Counselling Series

Series 2 topic: Your Greatest Enemies.

Who are your greatest enemies? Until you have identified and knew your enemies and their potentials; you can not avoid or even fight them. Nor would you be able to fight and defeat them.

To begin, let us share the insights of someone great, who did not only identify and know his enemies and their potentials; but who was able to fight and defeat them too. We invite you to share Dr. Harold Sala's success stories.

Dr Sala says: "The Greatest Enemies Are Within.. The greatest struggles are not fought on the world's battlefields; they are fought in human heats as men and women war with the pressures within which often defeat them. The real enemies are forces such as fear, worry, inadequacy, inferiority, anger, frustration, and the inability to cope."

We extend his own desire and quote his prayer; "Heavenly Father to use this to strengthen your life and help you to realise that you can be a victor rather than a victim in life." (Sala, 1988)

Reference: Sala, Harold J. (1988) "Winning Your Inner Struggles." Manila: OMF Literature Inc.

Reverend W Siawong

PJV Visit to Sponsored Students

Ray Kelly (PJV Training & Localisation co-ordinator) will be visiting PJV sponsored students on Friday 7th August, estimate about 2.30 pm.

The purpose of the visit will be to discuss their academic progress, pay book fees and issue second semester living allowances.

Yawi Rapi
Scholarships Officer

Customs Officer

The Customs Officer will be away on leave on the 3 August until end of August. I inform the CTOs to report to the Stores Manager Mr Stanton Sogiri regarding all customs matters.

Francis Meno
Customs Officer

Unitech Female Students Association

Where: Club 96 - Negiso
When: 1st August
Time: 7.PM till late
Admission: K10/head
Dressing: Formal
DJ: In house DJ

Tight Security Provided

National Academic Staff Association

The NASA would like to thank the following staff for contributing money towards the Aitape Disaster Relief Victims.

Each staff contributed K10 each raising K470 while the selling of ruffle tickets netted K140, bringing to a total of K610 raised by the association for the victims.

The NASA thankS the following members for contributing K10 each to the Aitape Tsunami Appeal.

Mr Loko Anota, Mr Pat Ila'ava, Mr Miok Komolong, Mr MacGuee Maino, Mr Peter Manus, Mr David Koloma, Mr Paul Philips, Mr Sam Renagi, Ms Rag Gubag, Dr Anthony Harakuwe, Mr Michael Kiapulkalo, Mr Reity Nigo, Mr Aisak Pue, Mr Lukas Panau, Mr Ken Polin, Mr John Gimiseve, Mr Gomi Gipe, Ms Agnes Kapipi, Mr Ken Konafo, Mr Godfrey Langtry, Mr Toffamo Mionzing, Mr Barnabas Sonnboba, Mr John Tau, Mr Felix Bage, Mr Chris Kobal, Mr Josiah Novulu, Mr Patrick Oai, Mr Mukura Pepe, Mr Sammy Aiau, Mr Joe Fisher, Mr John Mukiu, Mr Kulala Mulung Mr O Petilani, Mr Edward Etepa, Ms Lilly Sar, Mr Jim Keake, Dr Sar[illegible] Kopamu, Mr Silo Dujai[illegible], Mr Andrew Puy, Mr Pulas Yowat, Mr Gabriel Arpa, Mr David Pakne, Mr David Saiang, Mr Atawe Koigiri, Mr Jacob Sinne, Mr Robert Songan and Mr Leonard Wana.

NASA also thanks participants to its "100 club" Raffle which raised K140 to the Appeal.

Winners of the Raffle: 1st prize - Dr. A K Aggarwal K40 (ticket # 22). 2nd prize: Ms L Rubiang K20 (ticket # 17).

NASA Executives

CLASSIFIEDS

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:
Monday: UNITED CHURCH
Tuesday: ANGLICAN
Wednesday: LUTHERAN
Thursday: AOG
Friday: CATHOLIC

WEEK-ENDS
Saturday
AM -SDA
PM-TSCF
Sunday Morning
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL
Sunday Morning
9:00 CLC CHURCH

Unitech Staff Bible Study

The next meeting of the Unitech Staff bible study group is scheduled for Monday, 3 August, 1998 at 7.00 pm.

Venue: 86 Fly Drive.

For discussion: The History of the Christian Church

All interested staff are welcome.

Patrick Afenya - (Tel: 4674)

WISDOM

The findings of this century were findings of speed and effeciency, of comfort and prestige, but not of wisdom

UNITECH ANNIVERSARY RAFFLE TICKETS

We sincerely apologise for the delay in drawing of the Anniversary Raffle Tickets due to the slow return of the rest of the ticket books.

All coordinators are requested to return all ticket books - sold and unsold together with the cash to the Executive Officer by next Friday-8/8/98.

It is planned that the Draw will be taken as soon as the ticket books and monies are returned.

W Tovirika- Chairman

CHINESE COOKING DEMONSTRATION

Do you want to enjoy Chinese Meals without leaving home sweet home; In the comfort and security of your own house; And the company of your misis or hubby and the pikininis; Without paying a fortune?

WE HAVE JUST WHAT YOU NEED

COME & LEARN HOW TO PREPARE THREE CHINESE DELICIOUS YUM YUM DISHES EACH SESSION

ALL THE RECIPES WILL BE DIFFERENT DURING THE FOUR SESSIONS, SO COME ALONG AND LEARN 12 DISHES

COOKING LESSONS WILL BE OFFERED BY JEFF "THE CHEF"
DATES: SATURDAY 8TH, 15TH, 22, 29TH AUGUST 1998.
VENUE: ATCDI -Unitech.
FEE: K12 per person
PARTICIPANTS: 16 per session
TIME: 2:00 PM - 3:30 PM

Avoid Disappointment- Register Now

FOR REGISTRATION:
CORNEY LAHIES - PRU 4734290/ 4298
JEFF CHAN- BHP - 4721866

PROCEEDS TO SUPPORT PNG MISSIONARY ON MV DOULOS

POSITION VACANT

PRINTING SERVICES

ADMINISTRATION OFFICER
(Temporary)

Applicants are invited for the position of Administrative Officer in the Unitech Printing Services.

To provide adminstrative support to the Printing Manager by preparing financial report, quotations, costings, invoices, debt collecting, purchasing of consumables and scales.

Salary: Admin Officer 1/11 K9,148 - K12,955
(Level of appointment depends upon qualification and experience)

Detailed applications (two copies) with curriculum vitae including certified copies of qualifications obtained and names and addresses, fax/ phone numbers of three referees and an indication of the earliest availability to take up the appointment should be recieved to **The Registrar, PNG University of Technology, Private Mail Bag, Lae, Papua New Guinea by 14 August 1998.**

FUN WITH MATHEMATICS

Problem 13

A man wants to paddle his canoe across a river from a point x to the point y on the opposite shore directly from x. If he can paddle the canoe at the rate of 4 miles per hour and the current in the river is 2 miles per hour, at what angle should he steer his canoe in order to go straight across the river? Also what is his resultant speed across the river.

K5 for the First Entry

Problem 14

Two cylindrical containers of radius 10 and 50 centimetres, containing equal volumes of water are left on a bench. If the sum of the water levels is 50cm, what is the total volume of water contained in the two cylinders?

All interested staff and students should send their solutions to problem 13 and 14 before Monday 17th August 1998.

John Wamil, Dept. of Mathematics & Computer Science.

Air Mail

STAMP

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The Editor
Public Relations Unit
Papua New Guinea University of Technology
Private Mail Bag
LAE 411, MOROBE PROVINCE
PAPUA NEW GUINEA

PRINTED MATTER

The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1299 ISSN:10119-5354 7 August, 1998 WEEKLY

Newcastle Uni students launch exchange study at Unitech

Six Australian students from the University of Newcastle Faculty of Architecture are currently undergoing a 10 week education exchange program at Unitech initiated by both Universities.



Mr Kora Korawali and the students from the University of Newcastle here on a student educational exchange program.

According to Mr Kora Korawali, the purpose of the student education exchange program was initially to enhance training and research in Architecture and Building by undergraduate students to foster regional and national exchange of experiences, awareness and co-operation.

"The program was specially aimed for exchange students to experience various teaching and learning methods; to develop an understanding of tropical architecture design issues; to become aware of the diversity in cultural design issues and to develop linkages for further postgraduate research opportunities or career development in the field of architecture and building in the Oceania Region," Mr Korawali said on his arrival with the students.

"In pursing this exchange programme, the Faculty of Architecture at the University of Newcastle and the Department of Architecture and Building at the PNG University of Technology (Unitech) Lae, have the desire to bring together a wealth of experience and expertise in developing other avenues for student learning and training.

Consistent with curriculum goals and aspirations, the Faculty of Architecture at Newcastle wishes to develop meaningful educational programmes with external institutions, and this project will provide a vehicle for such co-operation.

"In order to co-ordinate this project at the highest level, Assoc. Prof. Lindsay Johnston has been identified as the Project Leader of the exchange programme," Korawali said.

"Prof Johnston is currently the Head of Architecture Department at the Faculty of Architecture, University of Newcastle.

"He has had experience in dealing with exchange students enrolling or transferring to other Universities and had has extensive experience in teaching architectural design.

"His involvement was considered valuable to ensure that the initial exchange student learning activities were within the objectives of the project. The Project Leader would also sign agreements relating to student exchange and with UMAP as required."

Representing the Department of Architecture and Building from Unitech will be Mr Ken Costigan and Mr Kora Korawali.

Mr Costigan is currently a senior lecturer and the Director of Architecture Studies and his role would be to facilitate exchange students learning in subjects enrolled, and to provide in-country monitoring and reporting of student performance to the project leader.

Mr Korawali is also a senior member of staff at Unitech, and is currently a full-time post graduate student in the Faculty of Architecture, University of Newcastle, undertaking doctoral studies in architectural education.

His role would be to brief Newcastle students about PNG before departing, to provide an orientation for exchange students from PNG, and to undertake evaluation using questionnaire and interview of exchange students as part of his doctoral research.

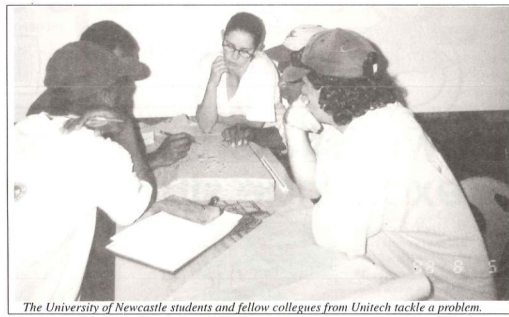
UP HERE LIFE'S GREAT MATE!

"The Land of the Unexpected," was exactly how six University of Newcastle students felt when they arrived in Papua New Guinea, for what awaited them was unforeseen.

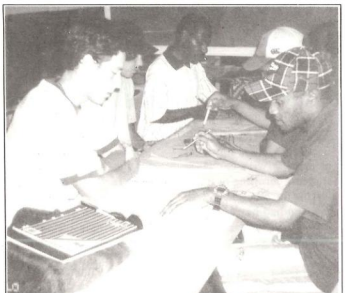
From the negative comments, stories or opinions that either relatives, friends or the media portrayed about the place in Australia, they did not know what laid ahead for them.

"We just arrived not knowing what to expect." summed up the general feeling of the students.

Nevertheless, much to their surprise, discovery and experience, most of their prior misconception about the place, after spending three weeks at the Papua New Guinea University of Technology as part of an educational exchange program, was not true.



The University of Newcastle students and fellow collegues from Unitech tackle a problem.



Group discussion, the best way to learn from each other throught the exchange of ideas and views.

By STEVEN BUSIN

"Over the past three weeks, we have learnt a lot, culturally and socially, and it has been very educational for us," said Paula Birch, while Michael Davison, Dirk Anderson, Scott Beh, Emma Townsend and Stuart Campbell agreed without doubt that Unitech was a very interesting learning experience.

"Life here is so relaxed, down to earth and completely contrary to what we had expected.

"Here people greet you, people are always smiling and are curious, they normally come up to us and ask where we're from.

"The people here have been very friendly and that has made us easier to adopt quickly, and it has been eye opening. "

Davison said, the students were easier to get along with, and they have made several friends, adding that he liked the warm climate and the scenery.

"What I like about here is the strong sense of being part of the community," Dirk Anderson said.

"In Australia, it's more individualistic, and you have to think about your image, however, its really down to earth and more relaxed here."

The six students have had the opportunity to visit Lababia and have had a drive up the Okuk Highway.

However, they said that this country had a lot to o[illegible] with a lot have yet to be see[illegible], and they are thinking of visiting other either Madang or the Highlands Provinces during the semester break before they return to Australia.

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Deadline 4pm on Tuesday weekly.
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Journalist:STEVEN BUSIN **473 4290**
Secretary: ANGELA BOROMANA **473 4291**
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PNG University of Technology
Private Mail Bag Lae- PNG
Fax: (675) 4757 667
email: reporter@unitech.ac.pg or cklahies @global.net.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

New NUS executive voted according to Constitution

The newly elected National Union of Students (NUS) Executives was in line with the NUS Constitution, according to the Vice President.

The NUS executive brushed aside media reports which the former President Norit Luio claimed that the current Executives were illegally occupying office as their election was invalid.

To push his case, Luio said that he would seek restraining orders to prevent the NUS executive from performing any NUS related duties.

However, NUS Vice-President (National), Johnny Minga Wemin, called on Luio to accept the decision of the Student Congress to replace him and his executive.

"He should have been well aware that the Congress has the power under the NUS Constitution to elect or remove executives of the NUS," Wemin said.

Wemin said that Andrew Pondo (former Vice President (International) and himself were the only surviving members of the Luio executive, that survived the vote during the congress meeting.

He said that they had witnessed the meeting to be proper and it was in accordance with the NUS Constitution.

"Norit and his executives were voted out through the normal democratic process, because they were not prepared to report to the congress, even though, they were at Unitech during the meeting," Wemin said.

Luio, and his executive boycotted the meeting, consequently, new office holders were elected to immediately address the K8 million short-fall in Natschol and the User Pay Policy on Education.

Wemin said that Luio and his executive failed to address these issues together with other pressing national issues while they were in office.

"We wish to inform our clients (students and parents) that the new executive, with the assistance of SRC Presidents, have petitioned the Government on the two issues," he said.

"As a result, the Prime Minister made a commitment on June 23 to make available K8 million for Natschol by 10th August 1998.

"He did fulfill that commitment enabling students to continue their second semester studies this year."

Wemin said that the executive was also working on strategies to ensure a favourable consideration was given by the Government on the User Pay Policy on Education.

"We have nothing to hide and we have gained nothing, but we have only sacrificed our studies to perform our duties as expected by the Congress," he said.

"We have no personal grudges against Mr Luio and his executive."

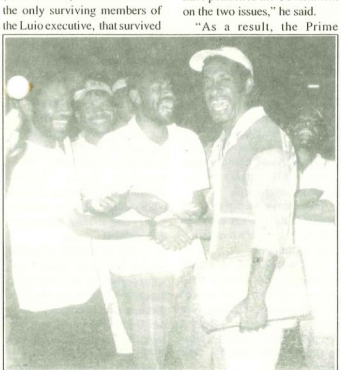
He said that they were not a rebel union as purported by Luio in the Uni Tavur Vol 24 of 25th June 1998.

"We do not fear standing for the students because after all we gain nothing while the student body of this nation will become subordinate to political power, and surrender to it," he said.

"The student congress has removed him, and it is only right for him to sue the congress rather than naming individual student leaders as respondents.

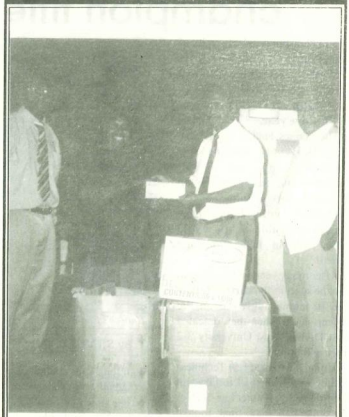
"The Court will make a just ruling, but regardless of which side it is in favour of, the term for the NUS executive is only one year, and it is only two months away when the congress will meet to elect new office bearers for 1999.

"Thus, we should not waste our time accusing each other, rather accept democratic process of decisions in a governing body such as the NUS and serve our students interest."



The fun, laughter and sportmanship displayed at last weekend's NUS Games at the DWU in Madang was a sure sign of student solidarity.

VC's Office Donate to Aitape Disaster Relief



The Vice Chancellor, Dr James Kaiulo, this week presented Sandaun Province representative Joy Sahumlal a K300 cheque for the disaster victims together with about K500 worth of old stock adults and childrens' clothes.

By STEVEN BUSIN

Unitech wins NUS Games overall champion title back to back

Papua New Guinea University of Technology successfully defended its title as the National Union of Students Games champion for the second consecutive year.



Unitech's Pius Nolih shows off the spoils for taking out the table tennis title during the presentation night.

By STEVEN BUSIN

The Games held at the Divine Word University, Madang, saw Unitech coming out overall champion after taking out the top honours for men's soccer, basketball, volleyball, rugby league and table tennis while ladies took out table tennis and netball.

After many years attempting to win the soccer title, Unitech finally had its name engraved on the soccer shield when they defeated host Divine Word University 3-2 after extra time.

Unitech defeated Lae Technical College in Basketball to take out the title and again met Lae Tech at the volleyball grand final to take the volleyball title while the ladies ended up in third place.

Unitech went through undefeated in rugby league and finally took sweet revenge over Goroka University with Unitech snatching the title away from them after a 14-12 victory.

The last minute inclusion of rugby union took our officials by surprise, however, most of the league boys and touch boys joined force together as Unitech union regulars did not attend.

According to SRC Sports Coordinator, Philip Lavatu, those who took the field in rugby union did very well and came only to lose to Telikom in the grand final.

In the women's division, Unitech just proved too good for other institutions going through the carnival undefeated and winning by huge margins ,which resulted in games organisers giving the netball title to Unitech without the grand final being played. The girls victory will be their third consecutive year as NUS Games netball queens.

Unitech women also went through the carnival undefeated in basketball, however, the finals ended in a stalemate after Mendi School of Nursing fielded a few non-students, resulting in the grand finals being called off.

The Games at the weekend were attended by Mendi School of Nursing, Unitech, Telikom Training College, Goroka University, Goroka University Centre, Madang Teachers College, Madang Technical College, UPNG Medical Faculty, Madang College of Allied Health Sciences and Bulolo University College.

Lavatu said that the NUS Games at the Divine Word University was a great success for Unitech and for the general student body in the country with teams competing in soccer, basketball, volleyball, rugby league, rugby touch, rugby union and table tennis.

"As witnessed, the 157 Unitech participants showed a lot of team spirit, co-operation and sportsmanship and they have shown a lot of supremacy in all games played," Lavatu said.

"Unitech retained the NUS title again this year due to the dedication, commitment and hard work from the students, team captains, coaches and the organisers.

"The SRC and University Administration have also offered tremendous assistance and support to the contingents which resulted in the students winning most of their games."

Lavatu extended the students thanks to PVC (Admin) Mr Wilson Tovirika, UDC Executive Manager Elisa Warvi, Mr Corney Lahies (Public Relations Office), Mr Mesengi Aniong (Bursar), Mr Roy Keura (HEO), Unitech Medical Officer (Clinic) and Acting Direction - Student Services for their undivided support.

"As for those students who participaied, we thank you very much for your commitment towards all aspects of the games," Lavatu said.

"They have shown a lot of respect to the Unitech Officials and their counterparts from other institutions.

"As witnessed, Unitech sportsmen and women were always together at all venues when there was a Unitech team playing and those teams that did not play always came together to support and cheer for their team.

"The team officials have also shown good leadership in organising their players in all games played.

"I wish to commend the respective officials for a job well done throughout the two day carnival; Iyape Madu, Samson Wena (rugby League), Martin Kelei, Benjamin Samson (rugby touch), Malepo Walimu, Vagi Boga (volleyball), Brian N'Drellan, Alfred Antipas, Jimmy N'Drekore (basketball), Robert Nuguri, Jeffrey Kunsim, Shirley Dindillo (soccer), Sisa Kini, Molley Geno (netball), and Heribert Bogombari."

Lavatu said that the SRC executives also did tremendous job, especially the Sports Chairman, Francis Essacu who worked tirelessly throughout the games, SRC President John Kaio, Vice-President Henry Tokain, Treasurer Soa Marome, Unitech NUS representative Andrew Pondo and Johnny Wemin for their support.

"I wish to convey on behalf of the SRC, our thanks and appreciation to the following business houses in Lae for their donations and sponsorships to the Unitech teams. They are: International Food Corporation (IFC), Wills (PNG), Arnotts Biscuits and Business Solutions."

FREEZE FRAME OF THE NUS GAMES

MEET THE TEAMS

PHOTOS BY FRANCIS ESSACU & SISA KINI













CAMPUS BULLETIN BOARD

Seminars

Research Committee Seminar

"Economics of Electric Railways in Papua New Guinea"

Associate Professor Kris Korzeniowski, Department of Electrical and Communication Engineering and Mr Gomi Gipe Business Studies Department.

Kris Korzeniowski will present the seminar on his 4 year research, feasibility study and consultancy on this topic.

Date: Wednesday 12th August
Time: 12.10 pm
Venue: MNO01 Mining Engineering Lecture Theatre.

Any other staff wishing to present a seminar could they please contact Malcolm Carrick, Applied Sciences.

ERMC Presents The Unitech Environmental Seminars

Don Carroll, Ok Tedi Mine Monitoring Unit

"Aspects of Recent Ok Tedi Mine Limited Environmental Monitoring and Investigations"

Thursday 20 August 1998, 4-5 pm, Mining Engineering Lecture Theatre (MN001)

All environmental lecture series seminars are free and open to the public.

STAFF SEMINAR

Department of Business Studies

"KINA REVIVED ?"

Speaker: Asoka Seneviratne (Head of Economics)

Date: Wednesday 12 August 1998

Time: 12.pm - 1pm

Venue: L3

DEPARTMENT OF MECHANICAL ENGINEERING

A SHORT COURSE ON FAILURE ANALYSIS OF COMPONENTS AND STRUCTURES

15-18 September, 1998

Failure Analysis

Equipment used in the different industrial applications may fail for different reasons. Failure analysis is a first step in identifying a problem that has led to the failure of a component, structure or mechanism. Once the cause of failure has been identified, appropriate corrective measures may be taken to try to prevent similar future failures. Understanding such failures would, therefore, be of considerable value to those involved in the design, manufacture and maintenance of equipment.

Who should attend?

Understanding how and why equipment failures happen is essential for all engineers and technical supervisors/staff, whether their involvement is in the design, manufacturing, operation or maintenance of equipment. This will cut the cost of repairs, replacement and interruption of production and will make the equipment last longer and operate more safely.

Course Outline

In this course, common failure mechanisms will be studied and supplemented with case studies of actual failures of components. A whole range of equipment will be covered including shafts, bearings, fasteners, springs, tools and dies, boilers, pump, heat exchangers, pressure vessels, valves, rotors, piping systems, etc.

Course Fee: K600 per person

For further information, please contact

Dr G.S Gad
Course Instructor
Department of Mechanical Engineering
UNITECH
Private Mail Bag, Lae

Fax: 475 7017
Tel: 473 4861

FARM SALES

This notice is to inform the whole University Community that due to price increase in all the livestock feed at Lae Feed Mills, all chickens, eggs and pigs prices will increase by 17th August 1998.

Amos Kairi
Agriculture Farm

Thankyou

Unitech Female Students Association would like to thank all staff, students and friends for making their fund raising event a success.

President

Lost And Found

If you have lost a pair of reading glasses, then please see Mr G. Aruai, Academic Registrar Office.

G. Aruai

One Hundred Club Draw No. 2

Sponsored by NCSA Winners

1.Mark Johnson (NARI) Ticket 102 - Prize K40.
2.Dr. Luo (Mechanical Engineering) Ticket 115 - Prize K20.

Both Dr. Mark Johnson and Dr Luo have donated their winnings to the Aitape Appeal.

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday:**UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF
Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

Sunday Morning
9:00 CLC CHURCH

Independent Baptist Campus Ministries

There is a Gospel Rally to be held this weekend 7th - 9th August 1998.

Theme: "All Else No Avail, Christ the All In All."

Venue: SRC Union Hall - Unitech
Time:6.00pm - 9.30pm each night

Transport:Available for pick up and drop off

Guest Speaker:
Pastor Mike Edwards (Goroka University Bible Campus Fellowship)

All are welcome to attend.

IF A LITTLE BIRD IS PUSHED OUT OF THE NEST IT DIES.

IF A CHILD DOES NOT FIND LOVE OR SECURITY IN THE ARMS AND HEARTS OF HIS FAMILY HE IS BEING SENT OUT INTO THE DESERT

CLASSIFIEDS

George Brown Day Anniversary

The United Church in the New Guinea Islands Celebrates its annual George Brown Day this month, August.

Our New Guinea Islands Community of Unitech and Taraka will hold this important event at the Taraka United Church on Sunday 16th August 1998.

Staff and Students of the above group are asked to meet at Mr Aisak Pue's residence, H32, Warangoi Drive on Friday evening 7th August 1998 at 6.30 pm for choir practice and a short meeting.

Please be prompt so we can finish early.

To my immediate neighbours, I would like to take this opportunity to apologise in advance for any noise from our singing. Our meeting is scheduled to end at 8.00 pm.

Thank you

Mr Aisak Pue & Mr Ken Polin

Fund Raising Dances

UNITECH WOMENS BASKETBALL ASSOCIATION

Date: 15/8/98
Venue: sac
Dj: Uni sounds
7pm -11.30
K8 per head

Entry strictly by tickets

Tickets available with Veronica Micheal (AV Unit),Joachim Dellewan or team captains

SHRM WOMENS BASKETBALL CLUB

BOWLING CLUB 20/08/98
Tickets: K10
DJ: WHEELS
Get tickets from Joachim Dellawan - 4246

Position Vacant

Administrative Officer (Temporary)

Applications are invited for the position of Administrative Officer in the Unitech Printing Services.

To provide administrative support to the Printing Manager by preparing financial reports, quotations, costings, invoices, debt collecting, purchasing of consumables and s ales.

Salary: Administrative Officer I/II K9148.00 - K12,955.00 PA

(Level of appointment depends upon qualification and experience)

Detailed applications (two copies) with curriculum vitae including certified copies of qualifications obtained and names and addresses, fax/phone numbers of three (3) referees and an indication of the earliest availability to take up the appointment should be received by: **The Registrar, PNG University of Technology, Private Mail Bag, LAE, Papua New Guinea by 14 August, 1998**

The International Atomic Energy Agency

The IAEA has vacancies for;

1.Energy Systems Analyst/Planner

2.Evaluation Officer, Reviser

3.Information Management Officer - 2 posts,

4.Occupational Protection Specialist

Applications Deadline for the above vacancies: 22 October, 1998.

5.Safety Information Officer (P-4),

Applications Deadline: 22 September, 1998.

Interested persons, please come and collect copies of information sheets from the Public Relations Unit.

Chinese Cooking Demonstration

Do you want to enjoy Chinese Meals without leaving home sweet home? In the comfort and security of your own house? And the company of your misis or hubby and the pikininis? Without paying a fortune?

WE HAVE JUST WHAT YOU NEED.

Come and learn how to prepare three Chinese delicious yum yum dishes each session.

All the recipes will be different during the four sessions, so come along and learn 12 dishes.

Cooking lessons will be offered by Jeff "The Chef"

Dates: Saturday 8th, 15th, 22nd, 29th August 1998.
Venue: ATCDI - Unitech
Fee: , K12 per person per session.
Time: 2:00 pm - 3:30 pm

For Registration: Corney Labies - PRU (Unitech) 473 4290/4298 or J Chan - BHP - 472 1866.

Proceeds to support PNG Missionary on MV D Julos

FUN WITH MATHEMATICS

Problem 13: (Answer)
The man crosses the river at 30 degrees with a resultant speed of 3.46 miles per hour.

Joint winners for problem 13 are
Masi Narewe - BSCS 1 and
Ngiya Alina- FYE

Problem 14: (Answer)
Total Volume is 30207.62 cubic cm
Joint Winners for problem 14 are Ngiya Alina- FYE and
Sipa Benny - BSCS 1

Problem 15
Let m be a positive integer and let the lines $13x + 11y = 700$ and $y = mx - 1$ intersect in a point whose coordinates are integers. Find the value of m.

Problem 16
At his usual rate a man rows 15 km downstream in 5 hours less time than it takes to return. If he doubles his usual rate, the time down stream is only one hour less than the time upstream. In km/hr what is the streams current?

All interested staff and students should send their solutions to problems 15 and 16 before Monday 24th August.

First Correct Entry gets a price of K5.00.

John Wamil, Dept. of Maths and Comp Sci,

Air Mail

STAMP

If unclaimed please return to:
The Editor
Public Relations Unit
Papua New Guinea University of Technology
Private Mail Bag
LAE 411, MOROBE PROVINCE
PAPUA NEW GUINEA

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The Reporter
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TARAKA
BULOLO
BUMBU
ISSUE No:1300 ISSN:10119-5354 14 August, 1998 WEEKLY

Railway in PNG would boost economy and transport efficiency: Prof

Electric railways would boost the economy and reduce transportation costs in Papua New Guinea, according to a study conducted by o academics.

In a joint seminar paper titled " Economics of Electric Railways in Papua New Guinea," Associate Professor Korzeniowski of Electrical & Communication Engineering and Mr Gomi Gipe, Acting Head of Department for Business Studies, stated that the present land transportation system in the country was inefficient both technically and financially.

At the presentation Wednesday, Dr Korzeniowski said land transportation in PNG relied mainly on roads and long heavy hauling has reached a point of crisis, and the introduction of electric railways would increase national wealth through a dramatic reduction of land transportation cost.

"Rapid development of the mining industry in PNG, gold and copper mining, oil and gas, requires regular road transportation of very heavy loads, and this has led to considerable damage of national roads which were not designed for such a purpose," Dr Korzeniowsky said.

"Due to increased traffic, the land transportation situation is also becoming critical in the National Capital District."

Over the last four years, the Department of Electrical Engineering & Communication Engineering has been looking into the possibility of developing electric railway systems for PNG, and towards which, initial examinations covered economical, financial, technological, geological, sociological and environmental aspects.

Since 1994, the following topics have been the focus of research, feasibility study and initial design proposals;

- long distance railway
- urban railway for Port Moresby
- urban railway for Lae
- electric railway test line at Unitech Campus
- economics of electric railways in PNG.

According to Korzeniowski, three possible routes have been considered for long distance railway including: Lae to the Highlands (mining operations) - 800 km, Lae to Madang - 300 km and Port Moresby to Lae - approximately 400 km.

"They would link the most important centres of population, industry and ports and some of these centres are connected by roads at present and it is our deep belief that the gradual development of electric railway between these centres would have a beneficial influence for the country's economy and development," he said.

"Lae is an important industrial centre and a major port and is connected with the Highlands, which has about 2 million people and also home to major mining, gas and oil fields and contribute enormously to the country's economy.

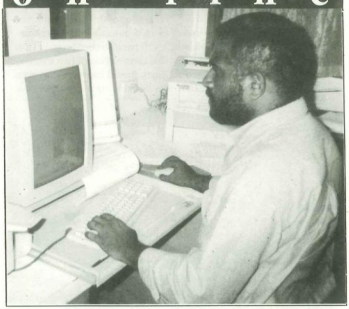
"Lae and the Highlands are connected by the Highlands Highway and this vital link was designed for much lighter traffic and vehicles.

"Heavy vehicles with containers and heavy haulage for mining and construction industries are continually damaging the highway and it contributes to enormous increase in transportation cost making land transport "a black hole" of the economy.

"The route through the mountains will most effectively be linked by electric railway and the distance

continue - page2

The Reporter goes o n - l i n e



It was only a matter of time, in fact, years before the advent of technology made it possible. I remember a discussion after work when a colleague posed me a question about reading The Reporter on his computer screen because not enough copies were going around.

Years later and the advent of the Internet, this bar-room talk has become a reality . Readers will be able to read the electronic The Reporter will be available in full colour through Unitech's Homepage as of TODAY. Staff connected to the web page will be able to view The Reporter as soon as it goes on-line on Friday afternoons, or when it publish each week. It is hoped that readers, especially external clients will be able to access The Reporter in the near future.

To view the on-line version, users must have an Adobe Acrobat Reader Version 3 installed on your computer.

Dr Peter Maclaurin's assitance on this new development is acknowledged. - *C Lahiev*

of approximately 800 km and freight quantities will require a few 1,100 tonnes trains with heavy duty locomotives of 4.4 MW rating.

"A maximum of 8 trains daily will be sufficient even for a quite distant planning and a total electric power requirements for operations will be 40 MW and the approximate cost can be assumed as high as a good quality highway and that is $US 2 million per kilometer."

The study also recommended a tramway for Port Moresby after considering the modes of transportation available, PNG's financial resources and the demands of NCD traffic.

"For future developments in the years 2005 - 2015, it has been recommended that a railway line be built parallel to a new circular road the so-called Outer Ring Road around future suburbs and it will provide fast transportation to the public and a connection to the harbour area," he said.

"A 1435 mm gauge will enable the circular railway line to be connected to the national railway system, first of all to Port Moresby-Lae line.

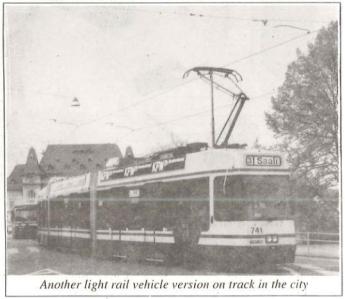
"For future tramway lines, a general recommendation is that a 10m median strip will be reserved along trunk and arterial and main urban roads.

"All proposed lines are planned to be served by a tramway, with exception of the outer road where a 1435 mm railway is intended.

"It has also been proposed that the construction of two tramway lines should commence as soon as possible since it will provide necessary experience for NCDC authorities."



Transport for the future in PNG? This Light Rail Vehicle is used to transport people around Europe



Another light rail vehicle version on track in the city

The two tramway lines are; the N-S line along Waigani Drive and W-E line along Hubert Murray Highway and Ela Beach. The latter one would connect the new airport with the Port Moresby city centre.

As for the Lae urban railway, the study pointed out that traffic congestion has not reached the level seen in Port Moresby, however the city was the outlet to the highlands and mining industry and very heavy vehicles were causing tremendous damage to the city roads.

The city would be serviced by eight tramcars with an initial frequency of operation of 30 minutes and the total electric power requirement for such a service would be 4 MW.

The electric power requirements for the proposed projects are as follows;

- urban rail for Port Moresby, 4 tramcars units, 2 lines - 2 MW
- urban rail for Lae, 8 tramcars, 4 lines - 4 MW
- inter-city rail from Lae to the Highlands; 8 trains of 4.4 MW each - 40 MW

The total balance is 46 MW.

The Yonki hydro has a stand power of 75 MW and two additional generators each can be installed, producing 30 MW of power.

The power plant at Hides Gas Fields generates 60 MW of power for the Porgera JV gold mine and there is an abundance of gas, and two additional generators of 15 MW can be installed producing another 30 MW of power.

He said 60 MW of power for the electric railway project can be made available at minimum cost through this exercise.

Since a number of transportation consultants invited to this country are road transport specialists, they are not able to advise on other modes of land transportation or on diversification of land transportation modes.

Therefore, the best way to show the benefits of electric railway introduction on one hand and to reduce the cost of all types of consultancies on the other is to show electric train in operation.

The authors propose to construct the Test Urban (LRV) Railway Line at Unitech Campus Grounds. Funding of the project is being sought externally.

The Reporter is produced weekly by the PUBLIC RELATIONS UNIT.
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email: reporter@unitech.ac.pg or cklahies @global.net.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

PNG'S RAILWAYS POTENTIAL RAISED AT WORLD CONFERENCE

The Country's transportation issues highlighted at an international conference has drawn a lot of interest from the international community.

The paper entitled "Economics of Electric Railways in Papua New Guinea" and jointly authored by Dr Kris Korzeniowski and Mr Gomi Gipe was presented at the 8th World Conference on Transport Research (WCTR), in Antwerp, Belgium, last month.

The conference which is the most important conference on transportation research in the world hosted 1,200 participants who presented papers.

The PNG paper was well received and the presentation had numerous audience.

According to Associate Professor Kris Korzeniowski PNG's transportation problems raised much interest among may other participants and the conference high ranking officials.

"Papua New Guinea is listed in the permanent membership directory of the CTR Society," he said.

"This way, the PNG transportation needs and problems have been brought to the attention of the most important authority in transport research in the world."

In the paper presented at the world conference, Dr Korzeniowski made mention of the problems faced by land transportation in Papua New Guinea.

These problems were also highlighted in the Unitech Research Committee Seminar presented on Wednesday at the Mining Engineering Lecture Theatre.

He said that Electric Railways for urban and inter-city applications were a 'must', if PNG was to avoid the mistakes of other developing countries.

"Electrical railway in PNG would be an asset for the 21st Century as they will dramatically change the country and its people.

"At the same time, it will preserve PNG's greatest treasure - the clean and undisturbed environment.

"This vision is not only realistic and viable but an absolute must.

"PNG can realise its tremendous potential for wealth development only by changing its land transportation modes."

He pointed out the direct advantages of having electric railways in the country were: energy savings, since railway transportation was approximately 15 times more energy efficient than road vehicle transportation; reduction of road traffics; reduction of road wear and deterioration; reduction of oil imports and expenses and conservation of the natural environment.

He said further indirect advantages were: further use of huge potential of hydro-power and gas resources in PNG; addressing a political issue of the country independence through better use of the above mentioned resources; economic development of regions adjacent to railways and creation of jobs; a boost to agriculture development in the highlands through fast and cheap transportation and a new dimension to further development of the tourist industry.



Associate Professor Kris Korzeniowski at the seminar

He said the commonly listed difficulties for railways were: high cost of investment; geological and seismological difficulties; lack of trained personnel, maintenance difficulties and landowners's rights and compensation.

"Many believe that the cost of investment in electric railway systems may be very high," he said.

"In fact, the development of a national railway system will be an endeavour spread over a number of years, probably over a quarter of a century, and so is cost.

"A step by step approach should be assumed in financial and technical matters, hence the initial cost of the project will be reduced and the total cost will be distributed in time from one step of the project to another.

"Some infrastructure are already in place, that is the electric power generations stations.

"The development of a railway line will bring immediate savings in other parts of the economy like the fuel import bill, road maintenance costs, major highway development etc.

"Single steps of such a project can easily be compared with the corresponding road projects and it means that in the case of long distance transport, the cost of long distance railway is comparable with the cost of a good quality highway."

Concerning geological and seismological difficulties, he said, many countries with comparatively difficult terrain and geological structure marked by seismic environment have successfully developed electric railway systems for urban areas and inter-city transportation.

He said countries like Japan, Peru, Chile have operated trains successfully in mountainous areas of seismic activity.

As for maintenance difficulties, Dr Korzeniowski said that rolling stock, power substation and power supply lines were not in anyway more difficult to maintain that the existing road transportation vehicles, fuel stations and electric power systems.

"In fact, due to a high degree of uniformity the railway system maintenance can even be easier.

"The maintenance of railway tracks and signalling system requires a regular, consistent and systematic approach.

"However, in may areas of national technology and economy, quality assurance methods are successfully applied and there is not reason to suspect that they cannot be applied to the railway system in PNG.

"For the last three years, a few final year projects in the Department of Electrical Engineering have been related to electric railway systems," he said.

"A greater output of qualified electric railway engineers can quite easily be achieved by running a post graduate diploma course of 12 months duration.

"At this stage of the country's development some of our graduates do not get jobs in their profession and they are forced to work in other areas.

"They may be a primary source of recruitment for a post graduate electric railway course.

"In a similar way, a one year post graduate course offered to PNG Civil engineers would provide sufficient personnel, assuming the progressive development of railways in PNG.

"In PNG nowadays, all major developers, investors as well as governmental agencies realise that negotiations with landowners are an indispensable part of any project.

"At the initial phase of may projects, some carefully designed steps are taken to explain the benefits of the given project to the landowners of the project area.

"A railway is one of a few projects which can bring immediate and significant benefits to the areas which railway lines will be crossing through.

"Moreover, it can bring a dramatic improvement to the quality of life of owners of the grounds where the railway line will be constructed.

"This particularly refers to the economic spin-offs, which open may opportunities to the landowners.

"They will be able to conduct business which is normally not possible without efficient transport means like a railway system.

"The most important task is to properly explain to people what such a project can offer them and how it will benefit them."

He said the question of investment and maintenance cost was a major one that attracts attention of powerful lobbies from the oil industry and manufacturers of road vehicles.

Dr Korzeniowski said that it has been noted that transportation consultants invited to PNG are road transmotion specialists.

"In their reports and discussions, they rely on pre - existing assumption that an electric railway system cannot be profitable, and cannot exist without government subsidies," he said.

"The fear that rail transportation is expensive and hence must be heavily subsidised by the government was unjustified.

"There are various methods to asses the economy of transport modes in PNG and these methods include least cost comparisons and cost benefit analysis.

"Such studies will help put to rest the misleading comparisons that are often made between rail and road transportation in PNG.

"On per unit basis, studies should show that rail transport does provide real advantages and can be profitably developed to benefit the country.

A call on the National Government to order a full report on diversification of land transportation modes should be considered, and the University through UDC could prepare such a report.

STUDENTS RELISH DREAMS IN MEN'S WORLD

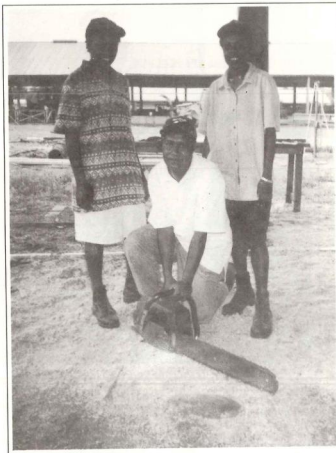
Operating chainsaws, and working in the labour intensive industry are things women wouldn't dream of doing as a career for the rest of their lives, because such tasks have been normally regarded as men's job.

However, this mentality or misconception, may gradually come to an end as a result of a project embarked upon by the Timber and Forestry Training College (TFTC) and the New Zealand High Commission.

The aim of the project is to encourage more national women to break into the male dominated industry by undergoing training at the College to work along-side their male counterparts in the country's timber and forestry industry.

"When I first came to the College and discovered that we would be handling huge sawmill machineries I wanted to turn back and go home, as I thought I was not meant to be here," said Georgina Wagluo, one of the 10 female students enrolled under the New Zealand High Commission scholarship.

"Most of us wanted to give up, however, it was through the encouragement of our instructors, and especially those previous female students, who told us that if they did it, they did not see it as a problem for us."



Harnessing the skills to operate the tool of trade are Laniet, Georgina and Janet

After spending more than six months at the College, Wagluo has overcome her initial misconception and was confident of performing the tasks that she once thought could be performed only by males.

"I think we, females just underestimated ourselves, and it was just a matter of having self confidence in ourselves that we could do the same job, and I am infact, enjoying myself trying to break into this male dominated barrier," she said.

Janet Tokupep also revealed that when she first came to the College she also wanted to give up when she discovered that they would be handling huge logging and sawmilling machines.

She no longer regrets her decision and was proud to be among a group of a growing number of women who are entering the industry.

"I have learnt a lot of things in the College that most other women in the country don't know and I am proud of it," she said.

She also described her initial fears about going through practicals on how to handle chainsaws.

"However, after having a few tries and getting a feel on how to handle chainsaws, I discovered that it was easy and it was a matter of knowing the basics," she said.

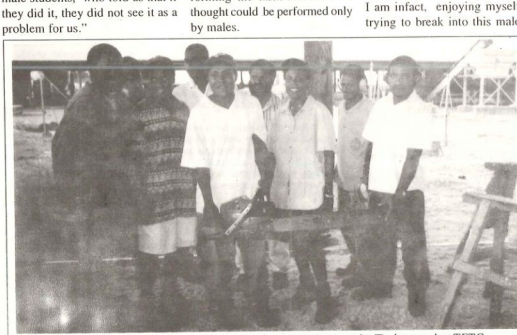
Fellow student, Laniet Ruru called on more women to have confidence in themselves to take up the course and the profession.

"There is a lot of talk on gender equality nowadays and I thank the New Zealand Government for having the insight in promoting gender equality in the forest and timber industry," she said.

The TFTC had its first and only female enrollment in 1996, the following year in 1997 the number of intake increased to seven and also saw the commencement of the New Zealand Government sponsorship of female students at the college.

College Principal, Frank Corin, said that for this year they had more than 400 female applicants to take up studies at the college, however, they could accommodate only 12.

He anticipated to increase the enrollment for female students in the future.



Georgina, Laniet and Janet with their male counterparts at the Timber yard at TFTC

1998 CONTRACT RENEWAL AND STAFF PROMOTION EXERCISE

Applications for Contract Renewal for Citizens and Non-citizens are now open and will close on 28 August. Also open are applications for Promotion for Junior and Senior Staff.

A schedule for processing applications is as shown. For both activities staff are asked to adhere to the timetable to ensure efficient and timely completion of these exercises.

Schedule

1) **CONTRACT RENEWAL - NON CITIZENS**

10 August	Applications open. Application forms sent to staff.
28 August	Applications close. Completed applications returned to CDO.
28 September	Report to Staffing Committee

2) **CONTRACT RENEWAL - CITIZENS**

10 August	Applications open. Application forms sent to staff.
28 August	Applications close. Completed applications returned to Deputy Registrar (Admin).
05 October	Staffing committee meeting to consider renewals.
12 November	Staffing committee Report to Council.

3) **JUNIOR STAFF PROMOTIONS**

07 August	Applications open. (Application forms to be given only to eligible staff).
28 August	Applications from HODs/Sections to Staff Office close.
14 September	Promotions consideration meeting.
05 October	Recommendations to Staffing committee.

4) **SENIOR STAFF PROMOTIONS**

17 August	Applications open. Forms are to be submitted through HODs/Sections.
07 September	Applications close. HODs/Sections will make rec ommendations.
28 September	Recommendations from HODs/Sections close. sub mission of completed applications to the Deputy Registrar (Admin).
01 October	Any applications that are not presented properly will be sent back to the Department/Section.
05 October	Amended/corrected applications to be returned to Deputy Registrar (Admin)
19 October	Senior Staff Promotions consideration by the Staff ing Committee.
12 November	Report to Council.
19 November	Council Meeting

UNIVERSITY HOUSING TENANTS WATER CHARGES

This is to advise that a proposal submitted through the Vice-Chancellor's Committee to the Finance and General Purpose Committee (F&GPC) for all University housing tenants to meet some cost for water usage was approved by the F&GPC at its 193rd meeting held on 29 July 1998. The Committee approved that a flat rate of K6.00 per fortnight be deducted from all tenants of University housing, commencing from the first pay period in August 1998.

This is an interim measure which will be in place until properly working water meters have been installed, and then the University will have to decide whether to make the tenants responsible for all or part of the water used.

You would have noticed from your payslip that the deduction of K6.00 for water usage has been effected commencing this pay period.

We apologise for this short notice, and any inconvenience caused.

Wilson F Tovirika
Pro Vice-Chancellor
(Administration)

CAMPUS BULLETIN BOARD

SECURITY INFORMATION WATCH

Residents of Finnisterre Flats, its neighbourhood and any other persons are informed that the land between the fence and the flats must be kept clear at all times.

The food gardens (banana, aibika, sugar cane etc..) have been planted in breach of a security directive to the effect that no gardens should be made on this piece of land.

Those who have gardens in that area must remove them by Sunday, 23 August 1998, before Security Guards and Grounds men moves in to clear them on Monday 24 August.

Campus residents are hereby informed that the Security Committee is concerned about security on campus. Security measures be taken by campus residents to stop/prevent intruders/unauthorised persons entering Unitech campus and residential areas are as follows.

1.All flowers/shrubs around residential areas are to be trimmed down to one (1) meter height.

2.All residents are encouraged to put up one (1) meter fence around their residential areas to prevent/stop intruders/ unauthorised people entering your premises.

3.Residents are also encouraged to look after dogs after a one (1) perimeter fence had been erected. Dogs are to remain within your residential area only and during the night gates must be locked.

4.Residents are also advised to inform their relatives, friends to make prior arrangement with you, then inform security, before visitors are allowed through the main gate.

Your participation on these measures will be really appreciated.

Wilson F Tovirika

Postponement of Maths Conference

In view of the sever financial restrictions operating both in Unitech and the whole Educational sector in PNG for the remainder of 1998, we have reluctantly decided to postpone the above Conference to (probably July 1999) - this will allow more people to attend from the Educational sector in PNG and also from overseas.

Those who have produced papers are asked to send them to the editor of the PNG Maths and Computing Education Journal and/or leave them over to July 1999.

Sorry about this, but the finance + back to back Huon Seminar, plus staff shortages have brought several negative reasons together and hence the postponement.

We will make every endeavour to run this Conference in 1999.

Professor Ted Phythian
Head of Department
Mathematics and Computer Science

Morobe Students' Association

Morobe Night on 15/08/98

Staff, fans and students are advised that Morobe Night is scheduled for Saturday

Date: 15/08/98
Venue: Union Hall
Time: 6.30 pm

Honourable Luther Wenge and Mr Ainea R Sengero will address the night.

All Welcome.

President 98

SEMINARS

ERMC Presents The Unitech Environmental Seminars

Don Carroll, Oktedi Mine Monitoring Unit

"ASPECTS OF RECENT OKTEDI MINE LIMITED ENVIRONMENTAL MONITORING AND INVESTIGATIONS"

Thursday 20 August, 1998, 4-5 pm, Mining Engineering Lecture Theatre (MN001)

All Environmental Lecture Series Seminars are free and open to the public. For further information, please contact Dr. Rick Bein, Director of ERMC, 138 Mining Building, 473 4686, Fax 475 7534

KINA REVIVED???

At the request of Associate Professor Kris Korzeniowski, who is going to give a seminar on "Economics of Electrical Railways in PNG", this seminar has been postponed to as follows.

Kina-Revived????
Date: August 19
Time: 12.00 - 1.00 Noon
Venue: Duncanson Hall

Speaker:
Asoka Seneviratne
(Head of Economics)

All are welcome

Associate Professor Anthony Agyei
Staff Seminar Co-ordinator
Department of Business Studies

Agriculture Farm New Prices List effective 17th August 1998

Chickens

Sizes	Price
9	K 5.30
10	6.20
11	6.50
12	7.00
13	7.60
14	8.20
15	8.80
16	9.00
17	9.00
18.	10.00
19.	10.80
20.	11.00

PIGS

sizes /Kg	Per Kilo L/W
5-29 Kg	K6.00
30-100Kg	K5.00

SHEEP K2.50

GOATS K2.50

EGGS

Grams	Prz/Dozens	Trays
45	K2.30	K5.70
50	K2.60	K6.50
55	K2.90	K7.20
60	K3.20	K8.00
65	K3.50	K8.70

Unitech Women's Craft & Social Club

This is Your Club, and open to all ladies in the campus. club meets on altern. Wednesdays and aims to share or introduce new skills among the members. We are a friendly bunch and we extend a special welcome to any new ladies on the campus with or without small children who are also welcome.

On our next meeting we plan to visit the Lae Botanical Gardens. A 15 seater bus is already booked. Hope you all ladies can make use of this great opportunity.

Meeting at: 130, Sepik Drive
Time: 9:20 am (Leaving sharp 9:30 am)
Date: 19th August 1998

See you there!

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday:**UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF
Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

Sunday Morning
10 CLC CHURCH

Unitech Staff Bible Study

The next meeting of the Unitech Staff Bible Study group is scheduled for Monday, 17 August, 1998 at 7 pm.

Venue: 86 Fly Drive
For discussion: The History of the Christian Church

All interested staff are welcome.

Patrick Afenya (Tel: 4674)

Democracy means to live and let live in one home.
It also means caring for minorities.
Dictatorship is a prison

CLASSIFIEDS

Tender ADM 02/98

Tenders are invited for the purchase and removal of the following items on an as is where is Basis and subject to inspection, located in the University Plumbing Section.

1.Lot 1:1. 3 x Alahr Gas Stoves
2. 4 x Semer Gas Stoves
3. 1 x Super Nova Gas Stove
4. 1 x Chef Fan Force Gas Stove
5. 1 x Chef Society Gas Stove

2.Lot 2:1. 6 x bench Top sink Unit Bowls
2. 2 x Wall sink Bowls
3. 2 x Shower Trays

3.Lot 3:1. 1 x Davey Sand Filter S/No. 1201.
2. 1 x Pool Water Pumb Model 62701-31
3. 1 x Sanyo Water Pump.
4. 1 x Honda Water Pump Model G150.

Tender forms are available on payment of 10t non-refundable at the Stores and Transport Manager's Office or, for more information, call 473 4330.

The successful tenderer is required to pay for and remove items within 7 days of notification. The University Reserves the right to accept or not to accept any offer. Offers will be closed at 12.00 noon on 20th August,1998, and are to be worded with the above Tender names and address to:

The Bursar, PNG University of Technology, PMB, LAE, Morobe Province.

George Brown Day Anniversary

The United Church in the New Guinea Islands Celebrates its annual George Brown Day this month, August.

Our New Guinea Islands Community of Unitech and Taraka will hold this important event at the Taraka United Church on Sunday 16th August 1998.

The celebration program will commence at 9.30 am with flag raising followed with the George Brown Day Commemoration Service.

The afternoon session which commences at about 4.00 pm will include presentation of various items such as gospel and Porevata Singing, Choir, Pacific Islands and creative dancing.

This program will be entertaining the public is most welcome.

RELIABLE HAUSMERI AVAILABLE

Looking for a very reliable Hausmeri to help you with your house chores?
Janis Ben is available to help you
Contact Jeff Chan for reference at BHP - 4721866

The International Atomic Energy Agency has vacancies for;

1.Energy Systems Analyst/ Planner
2.Evaluation Officer Reviser
3.Information Management Officer - 2 posts,
4.Occupational Protection Specialist

Applications Deadline for the above vacancies: 22 October, 1998.

5.Safety Information Officer,

Applications Deadline: 22 September, 1998.

Interested persons, please come and collect copies of information sheets from the Public Relations Unit.

CHINESE COOKING

IT'S ON AGAIN tomorrow from 2:00 pm- 3:30 pm. If you did not give your name, there is still space available. Times are tough- Cost of food will continue to rise. Come an learn to turn simple food into a restaurant meal and keep your food bill under your foot. Spice up your meals, keep your kids and the oldman SATISFIED and change your kids eating habit.

Tomorrow's menus-

Chicken chowmein;
Fish & Tomatoes&
Taro chips

Fee: *K12 tasol.*
Venue : *ATCDI Kitchen*

To secure next Saturday's space contact Corney on 4734298 or Jeff on 4721866

For Sale

1.PMV Bus Toyota Hiace with route 3/100 licence.

2.Nissan 4 X 4 Coffee Tray. Both Reg till November, 1998 and in good condition. Any business offer.

3. Stockman boots size 61/2 - 7. Two pairs at K35 each.

4. Live chicken - K10.00

Contact Benjes Alusi on Phone: 473 4719

FUN WITH MATHEMATICS

Problem 13: (Answer)
The man crosses the river at 30 degrees with a resultant speed of 3.46 miles per hour.

Joint winners for problem 13 are
Masi Narewe - BSCS 1 and
Ngiya Alina- FYE

Problem 14: (Answer)
Total Volume is 30207.62 cubic cm
Joint Winners for problem 14 are Ngiya Alina- FYE and
Sipa Benny - BSCS 1

Problem 15
Let m be a positive integer and let the lines 13x +11y =700 and y=mx-1 intersect in a point whose coordinates are integers. Find the value of m.

Problem 16
At his usual rate a man rows 15 km downstream in 5 hours less time than it takes to return. If he doubles his usual rate, the time down stream is only one hour less than the time upstream. In km/hr what is the streams current?

All interested staff and students should send their solutions to problems 15 and 16 before Monday 24th August.

First Correct Entry gets a price of K5.00.

John Wamil, Dept. of Maths and Comp Sci,

Air Mail

STAMP

If unclaimed please return to:
The Editor
Public Relations Unit
Papua New Guinea University of Technology
Private Mail Bag
LAE 411, MOROBE PROVINCE
PAPUA NEW GUINEA

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The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1301 ISSN:10119-5354 21 AUGUST, 1998 WEEKLY

Agriculture curriculum reviewed to meet needs of next century

The Department of Agriculture has embarked on a review of its curriculum to meet the industry needs for the 21st century.

In a recently held workshop titled "[illegible]iculture Degree Training for [illegible]st Century" stake holders discussed the future educational needs for agriculture in the next century.

"The purpose of the workshop is to take a fresh look at the degree programme and harness the views from those out in the profession," said Head of Agriculture Department, Professor Inno Onwueme.

"We have invited representatives from the Agriculture Industry, Department of Agriculture and Livestock, Ramu Sugar and the National Agriculture Research Institute to present their views on the quality of graduates.

"The workshop will also hear the views of current graduates as to how we can further improve the programme."

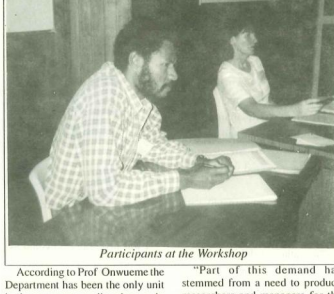
Following the workshop, the outcome of the findings would be im[illegible] in the future development of the degree program, Prof Onwueme said.

He said the critique, strength and weakness analysis and quality of graduates would be taken into account.

The workshop participants were asked to contribute their perception and give constructive criticism of the current degree program.

The workshop discussion was based around 5 main key topics which were:

- Comments on current program and its graduates - strength and weaknesses
- What is the role of agricultural graduates in the future?
- Should the program offered be more general or specific?
- What was the role of industrial training for undergraduates?
- What should be the balance between theoretical (scientific) and practical training?



Participants at the Workshop

According to Prof Onwueme the Department has been the only unit in the country awarding degrees in Agriculture, and one of the two in the South Pacific excluding Australia and New Zealand.

"The mission of the Department derives directly from the mission of the University, which is to produce agricultural graduates, and conduct high quality original research in Agricultural Sciences for environmentally sustainable development and service of Papua New Guinea and the Pacific," he said.

"This mission embraces teaching (human resources development), research, consultancy and public service.

"In terms of teaching, the Department offers the Bachelors degree as well as postgraduate programs which prepare students for a wide variety of agricultural and agro-related occupations.

"While students intake for the Bachelors degree program has been growing at a modest pace, there has been a dramatic increase in demand for the post-graduate programs (Diploma, Masters and Doctoral).

"Part of this demand has stemmed from a need to produce researchers and managers for the Department of Agriculture and Livestock (DAL) stations, Commodity Research Institutes, the National Agricultural Research Institute (NARI), and the private sector.

"Some of these organisations are willing to and able to pay for the students they sponsor, thereby, reducing dependence on Natschol which has sometimes been a restraint to student intake.

"Hitherto, most of these organisations have sourced their manpower needs from abroad, or done their training there, but with increasing emphasis on the conservation of foreign exchange, most of them have begun to look inward to the Department to provide the needed training.

"Moreover, in-country training provided by the Department is cheaper, and more relevant to the country's agricultural needs."

Prof Onwueme said that the Department also carried out agricultural research, and has the expertise in virtually all areas of agriculture.

Presently, he said, research was concentrated on selected food crops and small animals, and has the overall aim of improving the existing agricultural production systems so as to have greater quantity and quality of food available.

"There has been an emphasis on developing production systems that will be economically appropriate and environmentally sustainable," he said.

"In economic terms, the research will ultimately reduce the present degree of dependence on imported food, and conserve foreign exchange for other development purposes.

"It will also increase the opportunities for gainful employment and through an initiative of the Department, the University has recently established the PNG Biotechnology Center to further promote research in Agriculture and other areas.

"The public service function of the Department includes providing extension/advisory services to farmers, collaboration with DAL and research institutes, producing some food locally from its farms, running short courses for agro-related industries, and providing high level advice/consultancy to Government and other interested bodies.

"Therefore, the Department is poised to continue to contribute meaningfully to national development through its teaching, research and public service activities.

"In each of these activities, it provides training and expertise that had hitherto only been available abroad.

"This results in considerable savings to the nation.

"Strengthening the Department is therefore one effective way of ensuring that these savings are realised, and that the Department remains a significant vehicle of national development."

FORESTRY STUDENTS GO DOWNUNDER

Thirteen final year Forestry students would have the opportunity of witnessing the current logging practices in North Queensland, Australia, during a field trip there next month.

The ten day field trip scheduled for September 4 would have the students look into various aspects of natural tropical rain forest practices, forest re-generation, forest management, silvi-culture, harvesting, logging activities,and forest extension.

"This would be an ideal eye opener for students on forestry practices in North Queensland, and would really complement their studies at the University " said Acting Head of Forestry Department, Kulala Mulung.

"A lot have been taught on logging practices, however, the Papua New Guinea timber industry has yet to apply these practices.

"As for North Queensland, most of these practices have already been applied and end results have already been archived and students could witness the end results.

The Papua New Guinea Logging Code of Practice which is still in its infancy has most of its contents adopted from North Queensland.

While there, students would be able to witness what has been applied and the end results of their Logging Code of Practice."

The Department of Forestry in previous years has conducted similar field trips for final year students to the New Guinea Islands region, to give an insight to students on forest management in the region.

However, last year, after a successful submission to AusAID, the aid agency funded a similar final year students trip to North Queensland.

This year's trip would be the second trip funded by AusAID.

Academic fears for relatives

Every day Noel Mobiha says a little prayer for his relatives in Papua New Guinea, hoping they are still alive.

The Auckland University Electrical Engineering student is one of the few people in New Zealand with relatives in the disaster zone - but so far he's been unable to find out whether they survived the 10m tsunami which tore through his homeland.

Most of his aunts and uncles live in villages which bore the brunt of the massive tidal wave.

"To tell you the truth I don't want to know until I finish my presentation at the university," he said.

The strain of knowing they are dead would be too much."

Mr Mobiha is planning to go back in two weeks and will use his university experience to design solar powered water purification units.

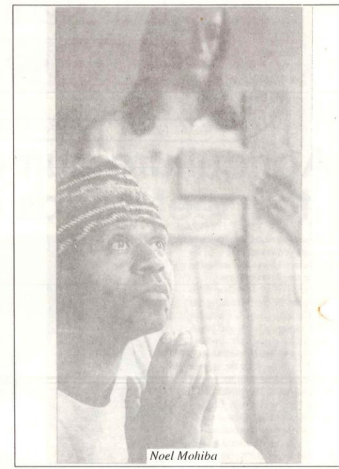
"Clean, uncontaminated water has to be the greatest gift," he said.

The father of three boys grew up in Aitape, 30 km from where the tsunami struck.

He heard of the disaster when his Catholic priest called him last Friday night.

Thankfully his wife and children are alive and well in Lae - 400 km from where the tsunami struck, killing at least 1600.

"I felt helpless, shocked, as if I should be at home helping out. I watched the coverage on TV and saw some of my friends.



Noel Mohiba

I was just grateful I could tick them off as still being alive."

He says people in the villages believe the area of sea where the tidal wave rose, 15 minutes after an earthquake, is sacred.

"Stories have been handed down through generations that the sea has ghostly Masalai - our word for a devil or spirit

"I used to take a daily boat trip and the captains would always dim their lights and asked people to be quiet as they crossed the area.

It was feared and respected."

Mr Mobiha says he has been cheered by the response of New Zealanders to be the tragedy, but remains bitter that the IG consulate in Wellington took almost a day to issue visas to Air Force crew taking supplies.

-By Simon Jones

(Sunday Star-Times, July 26, 1998)

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Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Uni to seek outside funds for 'trainsport'



The LRV (Light Railway Vehicle) of probable choice for the Unitech Test Line.

A Test Light Railway Vehicle (LRV) Line or tramway line has been proposed by the Papua New Guinea University of Technology and has been endorsed by the Vice-Chancellor Dr James Kaiulo.

However, this project would only get off the ground on the condition that external donor funding was secured.

The brain behind the proposal, Associate Professor Kris Korzeniowski, with the Department of Electrical and Communication Engineering, in his submission "An Electric Railway Test Line at Unitech" to the Vice-Chancellor, said that the project would be used as a demonstration, a test line and a teaching laboratory.

"The test railway would also provide community service to the University community through the transportation of University and local residents.

"The main aim of the project would be to demonstrate to the public, businessmen, politicians and decision makers of PNG that the whole idea was relatively simple and beneficial," Dr Korzeniowski said.

"Many misconceptions about electric railways can be explained and clarified through the live demonstration of an urban railway service.

"Unitech will become a center of expertise in a new and important technology which will significantly change the Country's economy."

Dr Korzeniowski said the tramway would help the University Administration in solving transportation and security problems in a number of ways.

The community benefits, Dr Korzeniowski highlighted were:

•staff living in the most distant Area No 5 would have a convenient means of transportation to the main University buildings in the vicinity of the main gate.

• communication with the Telikom College will be greatly improved and simplified, and in the case of short courses or other university needs, the accommodation at Telikom College would be easily accessible.

• all other needs of internal transportation within the campus would be improved, for example, transportation between academic areas, farm, students' accommodation, sports field, etc.

• the stream of settlers walking from surrounding settlements can be better channeled and controlled. This refers to the pedestrian traffic from the front gate to the back gate and to Madang Compound.

• Overall, this aspect of tramway transportation should enhance campus security.

"The Unitech LRV would serve for a number of tests regarding technical, environmental, social and economical matters," Dr Korzeniowski said.

"The operation of the line, the railway track, vehicle, power supply, signaling system would be put to test.

"The skills of local work force in carrying maintenance and service jobs will also be tested, especially, Unitech graduates who have already been trained towards railway systems operations.

"At the same time, continuous training on the job will be conducted."

He said that overall environment impact of an LRV line would be researched and tested, even though electric railways were well known for being environmentally friendly as they do not produce or burn fossil fuels.

"The reaction of the local community and campus residents to this new mode of land transportation would be also monitored.

"This includes passengers' reaction, as well as interaction on the road between the LRV and other traditional vehicles like cars and lorries," Dr Korzeniowski said.

"Those factors have obviously been tested in other countries, however, before introducing electric railways in PNG country wide, it is important to establish and confirm social reactions.

"It will bring many saving on all type of overseas consultants and shorten the introduction of this new transportation technology to the country.

"The Unitech LRV line would also make it possible to investigate expense and returns.

"The overall balance can be derived considering investment, cost of energy, cost maintenance and returns.

"The appropriate level of charges can be tested and indirect benefits like improvement of the campus security and environmental impact can be monitored."

Dr Korzeniowski stressed that the Unitech LRV can and must be used as a teaching laboratory, and staff of the LRV line would require special training and practical experience on railway line operations.

"If the PNG Government determines to develop electric railways in the country, there will be a need for trained engineers," he said.

"The Department of Electrical Engineering can easily satisfy such a demand by offering a degree/diploma course in electric railway systems. The Unitech LRV Line will be a corner stone of the course.

"The Line can be used for practicals which will cover railway power system operation, motors and drives, control systems, communication and signalling, track maintenance. LRV (tramway) driving lessons, economical operation of the system etc.

"Each year, one or two graduates from the Department of Electrical Engineering are trained, through final year projects, for various electric railway needs, and these people are the human resources for the Unitech LRV Line.

"Apart from that, any good graduate of the Power Section in the Department of Electrical Engineering can easily qualify for such a job.

"From the engineering point of view, the operation of an LRV line is the combined operation of electric power systems, electric motors and drives and a control system.

Two possible routes have been considered both beginning close to the male single accommodation and near the road leading to the Telikom Training College.

Both routes are laid along Sarawaged Road, and from the corner of Sarawaged Road and Finnistere Road. Route number one passes the Christian Center, the Security Office and finishes near the Amphitheater.

Route number two runs along the Finnistere Road encircling the sports grounds, near the Chaplain's House, the Grounds Workshop and the Students Mess down to the corner of Finnistere Road and Toliman way, ending near the main gate.

The Route No 2 seems to satisfy better all the assumptions and requirements explained earlier.

It would have nine stops all together including the stops at both ends. The total time of travel from the Area No 5 to the front University gate would be 9 minutes including times for all stops.

The maximum speed of the vehicle would be limited to 41 kilometer per hour for safety reasons.

The total passenger capacity is 125, ie. 42 sitted and 83 standing. The LRV of probable choice is shown in the picture.

NATRES dethrones ATCDI to claim Darts title

Natural Resources (Natres) Darts team are now the 1998 Unitech Staff Darts champions after they snatched the title from ATCDI.

In a thrilling encounter that kept both players and spectators at the edge of their seats, Natres just managed to outplay ATCDI 6-5 to take this year's title.

Natres kicked off the game on the right footing by winning the two triples games and the first doubles for a 3-0 lead.

ATCDI registered its first star on the board in the doubles when partners John Kaia and Gregory Numbo outplayed John Mukiu and Donny Baite to take the score to 3-1.

Natres again through Pikah Kohun and Koni Sabua further bumped up their score to 4-1 when Kohun checked out on 4 while their opponents had 15 on the board.

In the first singles match, Gileng Gwaidong for Natres registered another star for his team when he defeated Joel Baite by checking out on 40, while Baite had 51 points on the board.



TRUE SPORTMANSHIP! The loosers and winners

Gwaidong's victory put Natres on the half way mark with Natres having registered 5 stars to ATCDI's solitary star.

Natres needed only to win one more game before wrapping up the grand final and be declared this year's dart kings.

With the games tide turning up against them, ATCDI did not let this dampen their morale as they only needed to win all their remaining singles games to keep their hopes alive.

Numbo kept ATCDI's hope alive when he outplayed Mukiu by checking out on the bus stop for the scores to stand at 5-2.

ATCDI's Martha Kodiwa again furthered her teams hopes when she outplayed Pika Kohun at the bus stop for the scores to stand at 5-3.

ATCDI's Kaia and Garaio Gafiye again respectively defeated Donny Baite and Koni Sabua to tie the scores at 5 - all.

In the deciding match between Luke Kawe and Andrew Wiawi, Wiawi took a comfortable leap into the lead however, failed to check out quickly, allowing Kawe to overtake and snatch the premiership title for Natres.

• **Steven .Busin**

Staff soccer competiton kicks off next week

The Unitech Staff Soccer Association competition would kick off next week and clubs have been urged to form their teams for next week's competition in preparation of the Inter-varsity Sports Carnival in October.

The interim organising committee will comprise of the Sports Coordinator Philip Lavatu and Felix Bage from the Civil Engineering.

"As you are aware that we are starting a bit late for our soccer season and I urge everyone to coorperate to make this season an enjoyable one," Lavatu said.

"We need to have the game on because our Inter-varsity Sports Carnival will be coming up on October 23-25."

Lavatu extended his word of appreciation to Felix Bage who volantarily gave up his time to assist in organising the soccer games.

"Our soccer association committee are too busy at this point of time on work commitments so the exectives have given us the endorsement to act on their behalf in organising the competition.

"Remember, last year's inter varsity soccer we lost very badly so we should prepare well to take revenge.

"The whole purpose of this competition is to help staff members to be healthy and fit and enjoy the fun."

Snooker and Darts News

A knockout competition for singles and doubles on snooker and darts has been organised to kick off on Wednesday 26th August at SAC.

A registration fee of K2.00 per game will be collected from each player taking part.

Interested members can put their names on the list provided at SAC notice board.

Be there to be in it.

Mrnager
SAC

Unitech Female Rugby Touch

This is to advise the staff and students who have given in their names for the rugby Touch Team, that you will be informed of the training days by the Coach in next week's Reporter (28/08/98).

Molly P Geno
Sports Office

Unitech Staff Soccer Association Competition Draws

Tuesday 25/08/98
4:30

Natres Vs Admin or 2. Civil will provide referee.

Mechlib Vs Transmain Grd 1. Student Services will provide referee.

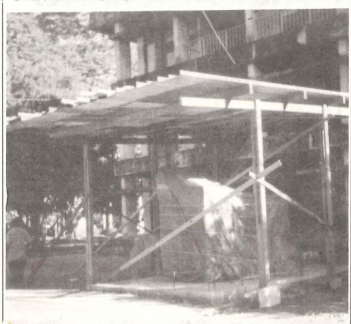
Thursday 27/08/98
4:30

Arabasti Vs Civil on Grd 2. Natres will provide referee.

S/Services Vs Elmaphy on Grd 1. Mechlib will provide referee.

The full draws of the season will be drawn up later and distributed out to all clubs.

GENERATORS TO FLUSH BLACKOUTS



With the on going power problems faced by the University, the University has bought two generators to help solve the power problem. One of the generators would serve the Sandover Building especially the Information Technology Services and the main administration building while the second set would service the students' mess

SRC donates to Aitape victims



Pictured shows SRC President, John Kaia presenting a cheque of K200 and 320 kg rice and 480 cans of tinned fish from the students while SHRM donated 180 kgs of rice and 240 cans of tinned firsh to Sandaun Students Association.

1998 CONTRACT RENEWAL AND STAFF PROMOTION EXERCISE

Applications for contract Renewal for Citizens and Non-citizens are now open and will close on 28 August. Also open are applications for Promotion for Junior and Senior Staff.

A schedule for processing applications is as shown. For both activities staff are asked to adhere to the timetable to ensure efficient and timely completion of these exercises.

Schedule

1) CONTRACT RENEWAL - NON CITIZENS

10 August	Applications open. Application forms sent to staff.
28 August	Applications close. Completed applications returned to CDO.
28 September	Report to Staffing Committee

2) CONTRACT RENEWAL - CITIZENS

10 August	Applications open. Application forms sent to staff.
28 August	Applications close. Completed applications returned to Deputy Registrar (Admin).
05 October	Staffing committee meeting to consider renewals.
12 November	Staffing committee Report to Council.

3) JUNIOR STAFF PROMOTIONS

07 August	Applications open. (Application forms to be given only to eligible staff).
28 August	Applications from HODs/Sections to Staff Office close.
14 September	Promotions consideration meeting.
05 October	Recommendations to Staffing Committee.

4) SENIOR STAFF PROMOTIONS

17 August	Applications open. Forms are to be submitted through HODs/Sections.
07 September	Applications close. HODs/Sections will make recommendations.
28 September	Recommendations from HODs/Sections close. submission of completed applications to the Deputy Registrar (Admin)
01 October	Any applications that are not presented properly will be sent back to the Department/Section.
05 October	Amended/corrected applications to be returned to Deputy Registrar (Admin)
19 October	Senior Staff Promotions consideration by the Staffing Committee.
12 November	Report to Council.

CAMPUS BULLETIN BOARD

Postponement of Maths Conference

In view of the sever financial restrictions operating both in Unitech and the whole of Educational sector in PNG for the remainder of 1998, we have reluctantly decided to postpone the above Conference to (probably July 1999) - this will allow more people to attend from the Educational sector in PNG and also from overseas.

Those who have produced papers, are asked to send them to the editor of the PNG Maths and Computing Education Journal and/or leave them over to July 1999.

Sorry about this, but the finance + back to back Huon Seminar, plus staff shortages have brought several negative reasons together and hence the postponement.

We will make every endeavour to run this Conference in 1999.

Professor Ted Phythian
Head of Department
Mathematics and Computer Science

Manus Students and Staff On Campus

The Governor of Manus, the Hon. Steven Pokawin MP, has accepted an invitation to speak to the Manus Community on campus, as well as other Manus people in Lae on Saturday the 22nd August 98.

Venue: Duncanson Hall
Time: 7:30 pm

Members of the general public are also invited to listen to and see the Governor of Manus.

Charlie Changei
President 1998

SEMINAR

Research Committee

Spoken Academic Discourse and Pedagogy: A Learning-Centre Approach

John Tomlins
Language and Communication Department

Date: Wednesday 2nd September

Time: 12:10 pm

Venue:MN001
Mining Engineering Lecture Theatre

All welcome

PNG MATHEMATICS COMPETITION - 98

The PNG University of Technology is proud to announce Mathematics Competition-98 for Tertiary Students in PNG. The contest encourages the development of Mathematical Talents in students.

Competition-98 will be held on Thursday 1st October 1998. Cash prizes will be awarded in each of the following categories.

1. First and Second Year Students.
2. Third and Fourth Year Students
3. Open Division

The contest is free to all students in categories (1) and (2)

Mathematically interested members of the community are encouraged to participate in the Open Division for a norminal (K2.00) fee. Certificates of distinction will be awarded to the top15% of participants in each category.

The contest will consist of a single 2 hour session and sample questions are now available.

Participants are expected to be familiar with foundation Year material:

- Geometry
- Algebra
- Trigonometry

Entry forms are now available from the Secretaries, Department of Mathematics and Computer Science (Tel: 473 4801), and the last date of receiving entries is 14 September 1998.

For further information, please contact:

Dr Samuel Kopamu
Department of Mathematics and Computer Science
PNG University of Technology
Private Mail Bag
LAE

Tel: 473 4808 Fax: 475 7458
Email: skopamu@cms.unitech.ac.pg



The changing face of the campus- More raintrees that have kept Unitech green in the past 30 years have succumbed to the axemen in recent weeks. Hundreds of trees planted over the years have also vanished without trace. That's history.

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday:**UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF

Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

Sunday Morning
10 CLC CHURCH

OPTIMUM HEALTH

What Are You Drinking?

Have you ever realised the drinking water from your tap is still unsafe?

Through scientific research and medical studies, there is indication of an alarming number of health conditions caused by drinking water. This includes the municipal water supplies in PNG and overseas.

You need a Water Purifier

These five simple questions will help you decide:

1. Does your watertap has an unpleasant odour or taste?
2. Do you believe unwanted chemicals are present in your tap water?
3. Have you every noticed impurities in the water you drink?
4. Do you drink eight glasses of water every day?
5. Have you experienced stomach upsets from your drinking water?Here is your chance to own one of the world's finest water purifier that is second to none.

This is a fine filtration stage water purifier for fresh, clean, clean water, suitable for homes, office schools and workplace.

Contact Mrs Cecelia Watai for more information and your order on phone: 475 7198 (h/h) or 475 7030 (a/h).

CLASSIFIEDS

INFORMATION TECHNOLOGY SERVICES
For Sale

Due to the falling exchange rate Information Technology Services has the following items of equipment for sale at a very competitive price. Compare these to local supplier's prices.

1.	Magtron DJ530 15" SVGA monitor	K495.00
2.	Magtron DX 1495 14" monitor	K395.00
3.	HP Desk Jet 690C printer	K522.00
4.	HP Laser Jet 5L printer	K807.00
5.	Multimedia speaker system (small)	K 23.00
6.	Multimedia speaker system (large)	K 56.00

These items should be purchased through Electronic Services Unit. Payments by cash/cheque or Transfer of Funds.

Staff Changes

This is the Information Summary of Staff Changes in respect of Appointments, Departures and Interdepartmental Transfers for the week-ending 27/7/98 - 07/08/98

NAME	DEPARTMENT/SECTION	POSITION
Appointment		
Mrs M Sathe	Maths & Comp Science	P/T Teaching Staff
Mr N Popova	Maths & Comp Science	P/T Teaching Staff
Mrs L Kachirskaia	Maths & Compu Science	P/T Teaching Staff
John Sadlow	Maths & Comp Science	P/T Teaching Staff
Mayassa Powell	Maths & Comp Science	P/T Teaching Staff
Ms Agnes Kapipi	Architecture & Building	P/T Teaching Staff
Gebob Bayu	Business Studies	P/T Teaching Staff
Mr M Aniong II	Business Studies	P/T Teaching Staff
Ms L Boulton	Architecture & Building	Researcher
Departures		
Mrs Yakusao Oai	Agriculture	Secretary
Mr Tanabi Guitam	Maintenance	Foreman Artisan
Nonga Silak	Maintenance	CE I
Chris Sinar	Computer Centre	CE I
Dr N Dixit	Business Studies	Senior Lecture

CHINESE COOKING - TWO LAST SESSIONS

IT'S ON AGAIN tomorrow from 2:00 pm- 3:30 pm. Space is still available. Times are tough- Cost of food will continue to rise. Learn how to turn simple food into a restaurant meal and keep your food bill under your foot, spice up your meals and keep your family nourished. MASKI LONG SIP TANG NA LEM PLEPS.

YU KAM TASOL TUMORA.

Tomorrow's menus-

EAT AT HOME
Sweet & Sour Pork
Rice Noodles / Spring Rolls (extrar)
Roast pork spare ribs & cracklings

Fee: *K12 tasol.*
Venue : *ATCDI Kitchen*

To secure FINAL Saturday's space contact Comey on 4734298 or Jeff on 4721866 **NAU TASOL**

SECURITY INFORMATION WATCH

Residents of Finnisterre Flats, its neighbourhood and any other persons are informed that the land between the fence and the flats must be kept clear at all times.

The food gardens (banana, aibika, sugar cane etc..) have been planted in breach of a security directive to the effect that no gardens should be made on this piece of land.

Those who have gardens in that area must remove them by Sunday, 23 August 1998, before Security Guards and Grounds men moves in to clear them on Monday 24 August.

Campus residents are hereby informed that the Security Committee is concerned about security on campus. Security measures be taken by campus residents to stop/prevent intruders/unauthorised persons entering Unitech campus and residential areas are as follows.

1.All flowers/shrubs around residential areas are to be trimmed down to one (1) meter height.

2.All residents are encouraged to put up one (1) meter fence around their residential areas to prevent/ stop intruders/unauthorised people entering your premises.

3.Residents are also encouraged to look after dogs after a one (1) perimeter fence had been erected. Dogs are to remain within your residential area only and during the night gates must be locked.

4.Residents are also advised to inform their relatives, friends to make prior arrangement with you, then inform security, before visitors are allowed through the main gate.

Your participation on these measures will be really appreciated.

Wilson F Tovirika

FUN WITH MATHEMATICS

Problem 15

Let m be a positive integer and let the lines $13x + 11y = 700$ and $y = mx - 1$ intersect in a point whose coordinates are integers. Find the value of m.

Solution:

Substituting the second equation into the first gives

$$x = \frac{711}{13 + 11m} = \frac{(3^2)(79)}{13 + 11m}$$

Since, x must be an integer , the denominator must be a devisor of the numerator and its only divisors are 1, 3,9,79,3x79, and 9x79.

Our task is to find a positive integer m such that $13 + 11m = d$, or $m = \frac{d - 13}{11}$, d is a divisor. Since $m > 0$; d must be greater than 13. Only value d can take is 79, therefore m=6.

Only two correct solutions were received. Joint winners are ; Ngiya Alina- FYE and Thorald Quiocho- BSCS 1.

Problem 16

At his usual rate a man rows 15 km downstream in 5 hours less time than it takes to return. If he doubles his usual rate, the time down stream is only one hour less than the time upstream. In km/hr what is the streams current?

All interested staff and students should send their solutions to problem 16 before Wednesday 26th August.

First correct entry wins a prize of K5.00.

John Wamil, Dept. of Mathematics and Computer Science,
Email: jwamil@cms.unitech.ac.pg

Air Mail

STAMP

If unclaimed please return to:
The Editor
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Papua New Guinea University of Technology
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The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1302 ISSN:10119-5354 28 August, 1998 WEEKLY

Network set to speed up campus communication

The Information Technology Services (ITS) in a bid to improve communication at the University expects to complete the cabling for the Local Area Network (LANs) by the end of this year.

ITS Director, Dr Robin Johnson, said that the LANs would greatly change the way of communication within the University, and would also change the way people work by making communication a lot faster.

"The LANs would allow people not only connected to special computers but any computers in the Departments to access the campus network," Dr Johnson said.

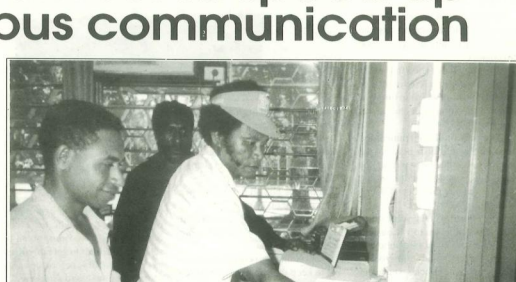
"It will allow the University community to communicate with each other using their computers, have access to the Internet to do E-mail, or share information across the University."

He said that at the moment, although several departments have their own LANs, it was not possible to directly communicate with each other.

However, once the LANs have been wired, people would be able to communicate directly with other departments or sections within the University.

Johnson said the use of the LAN would also save a lot of time spent on the administration of the Univeristy and make communication faster.

"For example, if the Staff Office wants to send out contract renewals for 45 staff, they have to photocopy 45 papers, and put then put them through the mail, and this alone, can consume a lot of time, however, with the LANs they could do this all in two minutes," he said.



ITS Technical Officer, Lawrence Mwyubu and collegues taking measurements to lay LANs cables

"It would take a while to get these things organised because there aren't many companies in Papua New Guinea that provide support for the equipment that we need to set up the LANs.

"People would also have to get used to it (LANs) and we would be conducting workshops to show people how to effectively use the LANs.

"The Campus Network - although we have faced problems with Internet - the LANs would work efficiently and we are not anticipating any problems."

The work on the Campus Network began in 1996 with Fiber Optic Cables laid connecting Academic Departments, the Matheson Library and the Administration Building to the Computer Center.

In July 1997, Internet was connected allowing E-mail access to all departments, while some departments had LANs allowing staff to access network and Internet from their offices.

By December 1997, remaining departments had LANs installed while the Web was released this month.

Work that the ITS have yet to complete are:

- provision of modems to allow sections not connected to access the Internet and to allow staff to access internet from homes.
- connection of remaining sections to the campus network.

Dr Johnson said that technicians have already wired the Agriculture Department, Civil Engineering Department, Applied Physics Department and are currently working in the Administration Building.

He said the Applied Sciences Department, some parts of the Matheson Library and Mining Engineering would be wired in the near future.

In other developments, Johnson said people currently enjoying TV channels provided by the University may loose some of the services by the end of October.

"People we used to get TV Channels from are changing their technology, which means that we would have to get service from different providers thereby losing some of the services being provided," he said.

"The cost of getting those services would also go up but the quality of reception would also be improved."

He said ITS would be making recommendations to the TV Committee who would decide on which channels they want and adjust the fees on the channels.

Academic calls for action to bolster the economy

The value of the Kina would continue to depreciate unless the gap between the demand and supply of foreign exchange in the country is addressed.

In a seminar last week, Head of the Economics Section at the University of Technology, Dr Asoka Seneviratne, in his seminar paper titled " Kina Revived?", said the Government would have to look at various ways and means to secure more foreign exchange, or impose control over imports to help rescue the Kina.

Another option, eventhough being very difficult, was to peg the Kina at a fixed value as well as good governance.

"The pegging of the kina would definitely reinforce confidence of foreign investors which in turn will enhance the foreign exchange reserves of PNG," he said.

"The control of government expenditure would also play a vital role in boosting the value of the kina, however, this action would affect economic growth and development in PNG.

"The boosting of the value of the Kina was subjected to various micro and macro economic policies.

"But before suitable micro and macro economic policies were identified and implemented to revive the Kina, the country's leaders should free themselves from corruption, and show devotion to the country on a common policy package that would ensure providing for the basic needs of the people."

At the seminar he also highlighted the economic rescue package, imposed on July 29 1998, to reinforce macro economic stability to the stop the exchange rate depreciation and to control the increasing interest rate.

The economic rescue measures imposed by the Government last month were:

• A 10 per cent cash reserve to be deposited by commercial banks



Economics Section Head, Asoka Seneviratne.

with BPNG replacing the Minimum Liquid Asset Ratio (MLAR).

• Establishment of 10 new foreign exchange dealers to increase the competition in the foreign exchange market.

• limit the budget deficit to 2 per cent of GDP of 1998.

• the abolition of export tax on log for price up to K100 per cubic meter.

• shortening the period for exporters to keep their foreign currencies or export proceeds off shore from three months to two months.

• selling of US$ 50 million by the Central Bank to the foreign exchange market or to commercial banks.

"It is too early to asses the total impact of the above measures on the value of the Kina," he said.

"However, I want to discuss the impact of the last two measures.

"Shortening of the period of export proceeds will increase the foreign exchange reserves but the implementing of this measure is difficult because, some companies have contractual agreements to keep their export proceeds off-shore for three months.

"The selling of the US$ 50 million raised the value of the Kina up to US$ 0.4500 cents and this was a very substantial increase.

"In fact, this increase may have generated benefits to the economy to allow exporters who have delayed exchanging their export proceeds waiting for the kina to hit rock bottom, must have been forced to sell their proceeds to get more Kina as early as possible before the value of the Kina increased further.

"This means that the foreign reserves may have increased.

"On the other hand, importers may have delayed placing their import orders, assuming further increase of the value of Kina which means that saving of foreign exchange just for the time being and reducing the downward pressure on the Kina.

"However, if the two factors worked as expected, the value of the kina should have stabilised at least somewhere close to US$ 0.4500 (minimum).

"But what I can see is that the value of Kina is sliding down again and the only short term solution to increase in the value of the kina is for the Central Bank to sell more foreign currency because the demand for foreign currency is still higher than then the supply."

However, the question of how far the Central Bank would continue to sell its reserves to boost the value of the Kina remain as the Central Bank has limited amounts of foreign reserves.

"If the K400 million from the WB/IMF and the cash advance requested from Australia is not forthcoming, PNG has to rely on commercial borrowing for which interest rates are so high," he said.

"Even for this lenders overseas may seek advice or approval from the WB/IMF.

"Commercial debt borrowing will drastically increase the foreign debt burden of PNG unless Dr Rac got some other hidden solution. The Kina's rise is a short lived one.

"In fact, the recent intervention by the Central Bank in the foreign exchange market is contradictory to the WB/IMF conditions or advice, and they expected that the Kina would find its market value through supply and demand but it was continuously declining.

"Even the WB/IMF could not say when it would stop declining, and in fact, the continuous decline of the Kina and subsequent intervention by the Central Bank have destroyed business confidence in the economy.

"If the economy was performing as well as the WB/IMF expected, the value of the Kina would not have declined as it did (after the devaluation of the Kina in 1994, it was expected that the long term value of the Kina would be equal to AU$ 1.

"The intervention of the Central Bank means, the PNG Government cannot any longer go with WB/IMF advice.

"In this atmosphere, the business community is reluctant to invest in PNG, and increasing interest rates also play a significant role in investors' decision."

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Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Huon Seminar attracts 40 papers

Forty papers, covering a wide range of issues would be presented during the Second Huon Seminar from the 7 - 11 September at the Papua New Guinea University of Technology.

The theme of the Seminar is "Resources for Science and Technology in Development."

The three seminar sub themes are: Women in Science and Technology; Technical and Continuing Education in Papua New Guinea; Research Quality in Higher Education.

Huon Seminar Executive Officer Ms Joy Sahumlal said that preparations for the seminar was progressing well and organisers were anticipating a good turnout of participants.

The seminar will strive to ensure a balanced representation from a range of stake holders," she said.

"The seminar is relevant to a broad range of participants such as scientific and business communities, industries, policy makers, academia, trade union representatives, NGO's and grassroot organisations."

The one week seminar is similar to the Waigani Seminar held at the University of Papua New Guinea. The keynote speakers would be Dr Ila Temu, Managing Director MRDC and Lady Carol Kidu, Parliamentary Member for Moresby South.



Student group work. The quality of education in Papua New Guinea would be one of the major issues discussed during the Huon Seminar.

On Monday, 7th September the sub themes for paper presentation would be: Resources for Science and Technology in Development.

On Tuesday, 8th September, topics discussed will be based around: Research Quality and Policy in Higher Education, Technical and Continuing Education in Papua New Guinea, Emerging Technologies in Higher Education and Technical and Environmental Issues in PNG.

On Wednesday, 9th September, talks will be given on: Resources for Science and Technology in Development; Women in Science and Technology and Research Quality in Higher Education.

Research in Higher Education will kick off discussion on Thursday, 10th September followed by Education Development, while on Friday, discussion would revolve around Technology Development in Papua New Guinea, and the conclusion of the seminar.

The objectives of the Seminar is to signify the importance of appropriate resources needed to expand knowledge.

The specific goals of the Seminar are:

- review the current human and fiscal resources and fiscal resource base and identify their major weaknesses.
- discuss and debate the availability of these resources in enhancing development processes.
- discuss the importance of quality research and propose improvements to link research to education, industry and training.
- identify sources and develop performance indicators for Higher Education competitive fundings.

The seminar aims to achieve realism against hypothetism, and would pool together professional people who understand and are involved in day to day realism of developmental activity, to try to translate professional and technical soundness into saleable political hope.

According to Ms Sahumlal, these objectives would be accomplished by structuring the Seminar to allow paper presentations and panel-case study discussions.

HUON SEMINAR
PNG UNIVERSITY OF TECHNOLOGY

2nd

HUON SEMINAR '98

The Papua New Guinea University of Technology will be hosting the 2nd Huon Seminar from 7th - 11th September, 1998 on the theme

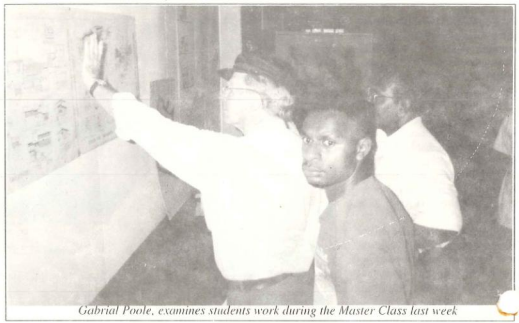
RESOURCES FOR DEVELOPMENT AND TECHNOLOGY IN DEVELOPMENT

* Women in Science and Technology
* Technical and Continuing Education in PNG
* Research Quality in Higher Education

OFFICIAL OPENING: HON LUTHER WENGE, MP
Governor of Morobe Province
KEYNOTE SPEAKERS: LADY CAROL KIDU, MP
DR ILA TEMU

PB3698

Aussie gold medallist hails master class



Gabrial Poole, examines students work during the Master Class last week

The Australian Institute of Architects 1998 Gold Medal Winner, Gabriel Poole, conducted a one week Master Class for Architecture students at the University of Technology last week.

Poole, during the week long Master Class, conducted a series of lectures, and finally on Friday, evaluated student groups' designs on the Unitech Home Ownership Scheme at Tent City.

Poole said: "The Master Class is a great idea as it seems to be working for the students and it is pretty much a new experience for someone like me."

"The students have done a fantastic job, as they have picked up quite a bit from the slide shows on things or designs that I have done and thought would be more appropriate to Papua New Guinea, which most of the time they won't have the opportunity to see.

"It is my intention, once I get back, to send the students several materials applicable to the type of architecture here, so they can get a better idea of what they are dealing with and then put a new emphasis to tropical architecture in the country."

The Master Class aim is to engage outstanding international architects, true "Masters" of their profession, as guest lecturers for an intensive week-long design project with the students. According to Architecture and Building Department Head Professor Rahim Milani, these architects combine academic training and professional experience to stimulate and inspire both students and staff with current architectural trends in the Pacific and rest of the world.

"Under a Master architect's leadership, and supported by their design lecturers in the Department, the 2nd, 3rd, 4th and 5th year architecture students form integrated teams to design large scale buildings for specific functions," he said.

"Many challenges face students of architecture in PNG, not the least of which is their architectural isolation.

"Only a few students have had exposure to contemporary urban architecture since PNG's cities are a relatively new development.

"In addition; financial constraints limit the opportunities for students of architecture, as well as academics and practitioners to exchange ideas in person with outstanding architects from other countries."

The whole exercise is being funded annually by the industry which BHP Steel sponsors the first master class in the first semester, while this semester's master class was sponsored by James Hardie.

"We don't have the funding to take students overseas to see significant architectural work , therefore, we invite Master architects from abroad to give classes to students," Prof Milani said.

TFTC dethrones big brother to win Forestry carnival



Unitech Forestry Soccer team.

The Timber and Forestry Training College is now the Forestry Society Tripartite Sports Carnival champions after snatching the title away from big brother, Unitech.

The two day sports carnival held over the weekend saw students from the three forestry campuses, Taraka, Bumbu and hosts Bulolo participate in soccer, rugby touch, basketball, volleyball, table tennis, tug of war and 4 X 100 relay.

The prime objective of the Games was to foster a concern and interest in forestry, timber industry and associate fields through such a sporting activity.

Mr Nahuet who was pleased with the outcome of the games said the carnival was to bring together people who share a common interest to know each other and share ideas which relates to their future career. During the Games, the three students presidents of the respective campuses discussed issues concerning the forestry professions and the formation of a forestry society which in corperates all three campuses.

Unitech Forestry Students Society President, Tory Kuria thanked the Bulolo University College for a job well d. In organising the sports carnival.

"We would like to thank you for the hospitality, particularly the accommodation and food," Kuria said.

"Special thanks goes to the Principal Mr Nahuet for allowing the carnival to eventuate at the expense of the college.

"During our short stay at Bulolo, we have made new friends and we look forward to the next year's games which would be hosted by the champions, TFTC."

Bulolo Principal Nahuet who was pleased with the outcome of the games said the carnival was to bring together people who share a common interest to know each other and share ideas which relates to their future career.

Barbarians aim high in Union grand final

Unitech Barbarians have tucked in a few surprises for arch rival. Royals, when they do battle for their first premiership flag in the Morobe Rugby Football Union grand final clash tomorrow.

Although coming out victorious in their last three encounters against Royals, Barbarians player coach, Willie Arthur said that grand finals were a different story, and they would be throwing in everything to prove that their victories were no fluke.

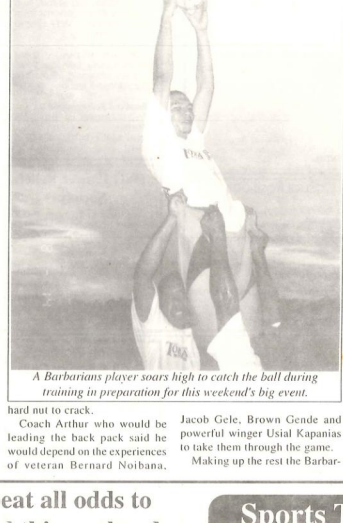
"This is our first grand final play off since the club's formation in 1996, and we won't be taking them easy," said Arthur adding that his club would be sticking to their game plan.

"However, we have in store a few surprises for them."

To lead up their charges in the front line, the Barbarian outfit would be depending on this year's Commonwealth Games 7s representative, Edeck Gula with fellow PNG international Norman Takunae.

Too give the students dominated team, the experienced support needed in the forward pack would be Samson Were and Jonathan Tolpare which would give the Barbarians the firepower during break downs, mouls and scrums.

Royals would have to be on the lookout for the two should they be given a clean break could prove a hard nut to crack.



A Barbarians player soars high to catch the ball during training in preparation for this weekend's big event.

Coach Arthur who would be leading the back pack said he would depend on the experiences of veteran Bernard Noibana, Jacob Gele, Brown Gende and powerful winger Usial Kapanias to take them through the game.

Making up the rest the Barbarians line up for this weekend's grand final encounter are: Chris Bobola (props) Albert Kaupa (hooker), Kumalau Gotahi (prop), Hane Moido (second row), Mela Klangit (second row), Samson Wena (number 8), Jerry Paissat (scrum half), Brown Gende (left wing), Bernard Noibano (inside center) and Michael Balakove (full back).

Royals, a more experience outfit would be using their heavier forward pack to break through Barbarians defenses, and the front man to take them through the game would be Brenden Ellis and Joe Toilop who have picked up form to be formidable combination.

At props would be July Birralla, Julius Tingaran, Puana Agi, Jacob Labi (locks) and the policemen would also depend on their big Kiwi Number 8 Mark Steward while at the flanks Joe Toilip, Sebastian Tony or Darius Miro.

Joe Asimda would look after the back while Hendrix Kafur and Lukie Kavon would be at center and Philemon Hulo at half back.

The team with the most ball procession and errors would run out victories.

Unitech Reds beat all odds to make grand final this weekend

Unitech Reds B Grade team has made it to the final after fighting through from fourth place to earn themselves the grand final berth.

The Reds team beat off 3rd Placers Pirates and then Royals to qualify to play off Telikom in the grand final at the Telikom grounds on Saturday.

Coach John Kirit said he has confidence in his players - after watching their performance over the last two weekends. He added that he was pleased that most of his players have improved their performance.

"We have respect for Telikom as they are a good team and they deserve the first placing up there, but we will not give them an easy run for their money," he said.

Uni Reds will have players like skipper Michael Morong, prop Vincent Pitar, scrum half Piki Ravusiro, fly half Makal Tamilong, winger Darius Waula and Hacker Kasi to lead them.

Telikom would have the advantage in the line outs but the Uni Reds have polished up Francis Mamia's throws and the heights of Henry Maita and Eliakim Tamur to match them.

Uni Reds A Grades were the premiers last year but couldn't make it to the finals this year but are happy that fellow campus team Barbs have made it and all will be out to support them in full force.

Transport to pick up supporters will be at the Coffee Shop at 12 noon.

Sports Toksave

Unitech Female Rugby Touch

Our training days are every Tuesdays at 5.00pm (Unitech Sports Field).

Please be punctual so that we start and finish on time.

Martin Kelei
Coach

Unitech Reds Rugby Union Club

The Unitech Reds Rugby Union will have a BBQ after the Grand final on Saturday 29 August 1998 between 6:00pm and 11:00pm. I apologise in advance to my neighbours in Ramu area for what might be excessive noise and disturbance.

Daniel Kumaina
Ramu 3

CAMPUS BULLETIN BOARD

SEMINAR

Department of Applied Sciences
Research Seminar

Meta-Synthesis: Patterns in Reaction Chemistry

By Dr Mark R Leach

Venue: Rose Kekedo Lecture Theatre
Time: 4:00 pm sharp
Date: Monday August 31st

All welcome.

Vacant Trainee and Casual Positions

National Institute of Standards and Industrial Technology is seeking suitable applicants to occupy following trainee and causal positions:-

(The Institute has a training scheme for Graduate Traning Cadets for a period of 3-6 months as casual employees.

The purpose of this scheme is for the cadets to undergo series of In-House and on Job training programmes to be qualified technical officers.

At the end of 6 months the cadets performance is assessed and recommended for appointed to NISIT permanent positions.)

Graduate Trainee (Food Technologist)

2 positions. Annual Salary: K7933 per annum. Location: NCD

Appropriate University Degree in Science (Food Technology) with average academic record of "B" (credit) or above. Industrial and research experience is desirable. Apttitude for Science and Research, high level of dedication and is creative. submits his/her work on time.

Graduate Trainee (Journalist)

1 position. Annual Salary: K7933. Location: NCD

Qualification:

University Degree in Journalism with average academic record or "B" (Credit) or above. Apttitude in Journalism activities and computer literate. Submits his/her work on time, high level of dedication and is creative.

Graduate Trainee (Engineers/Scientists)

6 positions. Annual Salary: K7933. Location: NCD

Qualification:

Appropriate University Degree in Science or engineering or Technology with an average academic record of "B" (Credit) or above. Industrial and Research experience is desirable. Apttitude for Science and Research, high level of dedication and is creative. Submits his/her work on time.

Graduate Trainee (Marketing & BDO)

1 position. Annual Salary: K7933. Location: NCD

Qualification:

Appropriate University Degree in Economics or business. Administration with an average academic record of "b) (Credit) or above. Experience in Planning and Research or related fields is desirable. Submits his/her work on time. High level of dedication and is creative.

Sales/Revenue Clerk

1 position. Annual Salary: K7933 Location: NCD

Qualification:

successful completion of Grade 12 or Public Service Higher Certificate or possession of other educational qualifications, good knowledge of Public Finances (Management) Act and has sufficiency experience in similar fields. High level of dedication and submits his/her work on time.

Duty Staten'ents for these positions can be obtained from NISIT Office on request.

For further information, please contact the Principal Human Resources Development Officer on telephone number 323-1360. PNG NISIT, PO BOX 3042, BOROKO, NCD.

Ilaiau M Angat
Director General

IF YOU CARE ABOUT LIFE, PLEASE READ THIS

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I can cure you within two weeks with local herbs from your garden. Very simple but it works.

Hundred per cent Community Service. No money charged. But 100% guaranteed results.

Asoka S Senevirat'ne
Department of Business Studies
Ph 473 4407 (b/h) or 475 7235 (a/h)

PNG Cancer Relief Society

On behalf of Cancer Relief Society, Unitech Clinic will be selling 'T'Shirts on awareness on types of Cancers.

'T' Shirts = K6.50 and hats at K5.00.

Please contact any of the nurses or Mr Rob Roy Keura for more information

Unitech Women's Craft & Social Club

This is Your Club, and open to all ladies in the campus. The club meets on alternate Wednesdays and aims to share or introduce new skills among the members. We are a friendly bunch and we extend a special welcome to any new ladies on the campus with or without small children who are also welcome.

On our next meeting one of our members, Kristina will give a demonstration on "crocheting". Kristina has also got some materials and extra crochet hooks if you want to practice. Hope all you ladies can make use of this great opportunity.

Meeting at:130, Sepik Drive
Time: 9:30 am
Date: 2nd September 1998

For Sale

Subaru 4WD Station Wagon.

Silver/grey - air conditioned, radio, power steering, central locking, in good running condition. K7000 ono. Contact J Sahumlal.

Lihir Gold Limited

The Lihir Management Company is seeking to recruit suitable candidates for the : 1999 Graduate Scheme.

Young and talented Papua New Guineans are sought to join the Graduate Scheme commencing in 1999. Students graduating in the following disciplines are invited to apply:

- Metallurgy
- Commerce/Accountancy
- Electrical engineering
- Applied Chemistry

The following criteria will apply:

- You must be a PNG citizen (Male or Female).
- Will graduate at the end of this year.
- You must have consistently scored above average grades in your four years study.
- Age between 21 and 25 years.

Written applications enclosing certificates, transcripts and a reference from Head of Department should be sent to:

Professional Development Co-Ordinator
Lihir Management Company
P O Box 380
KAVIENG
New Ireland Province.

Attention: DIURY TOLOPA

Closing date is September 04, 1998.

SHRM WOMEN BASKET BALL CLUb FUND RAISING DANCE
Saturday 29 August 1998

Venue:Bowling Club
Fee: K10.00
DJ: Excels
Tickets:.Joachim Dellawan (4246)

Transport:
Provided to and fro.

Tights security and lucky door prizes.

For Sale

Mitsubishi Pajero; air conditioned, 4 wheel drive, radio, good condition, regular servicing, Taxed and safety sticker until February 1999, K9000 ono. Phone 473 4439 (b/h) 475 7563 (a/h)

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday:**UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF

Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

)day Morning
9.00 CLC CHURCH

Unitech Staff Bible Study

The next meeting of the Unitech Staff Bible Study group will be held on Monday, 31 August at 7:00pm.

venue: 86 Fly Drive
For discussion: The History of the Christian church.

All interested staff are welcome.

Patrick Afenya (Tel. 4[illegible])

CLASSIFIEDS

Films for Rent

1.First Strike (Jackie Chan) full action film.
2.Face Off - full action film.
3.Fled - full action film.
4.Murder at 1600 (White House) action and spy.
5.I know what you did last summer - action and horror film.
6.Watcher - Horror film.
7.Hot Shots - full action.
8.Top Dog - full action.
9.Nothing to Loose - one of the best comedy films in 1997.
10.Flubber - comedy. It is good as nothing to loose.
11.Andre - Real story about a sea lion and her little girl friend. Very good for children.
12.Willy 3 - Real story based on a Blue Whale. Very good for children.
13.Alien Resurrection - Scientific Adventure.
14.Seven Days in Tibet - (Adventure) the first film to watch beautiful Tibet.
15.Airforce one - full action film. Released during the third week of July 1998 in New Zealand and therefore not shown or available in PNG. 1996 film but not available in PNG.

Two films in one tape K3 per day. Phone 473 4407 (b/h) or 475 7235 (a/h).

Position Vacant

Bursar's Department

Accounts Officer - Payroll

Applications are invited from experience personnel who have exposure to pay calculations and other relevant accounting duties.

He or she must have experience in use of PNG Payroll.

The applicants must have a Diploma or a Degree from a recognised Tertiary Institution and at least two (2) years relevant work experience in payroll system.

Salary level K9,148 to K12,955

Level of Appointment will depend on qualifications and experience.

"Previous applicants need not re-apply".

Assistant Accountant - Income

Applications are invited for the position of an Assistant Accountant - Income in the Finance Section of the Bursary Department

The candidate must possess a University Degree in Accounting or equivalent and have a strong working experience in Computer based Debtors system.

Persons currently holding supervisory positions are encouraged to apply.

Salary

Assistant accountant K9,935 - K14,960
domestic Market allowance of K1,500

Applications should be in writing no later than 11 September 1998 giving full details of qualification and experience plus names, addresses and telephone numbers of three referees.

Accounts Officer

Applications are invited from experience personnel who have relevant accounting experiences in accounts payable and receivable duties.

The applicants must have a Diploma or a Degree from a recognise:, Tertiary Institution and at least two (2) years relevant work experience in both accounts payable or receivable.

Salary level K9,148 to K12,955

Level of Appointment will depend on qualifications and experience.

"Previous applicants need not re-apply".

Interested person should submit their applications with names of three referees to the

The Registrar
PNG University of Technology
Private Mail Bag
LAE

Staff Changes

This is the information Summary of Staff Changes in respect of Appointments, Departures and Interdepartmental Transfers for the week-ending10/8/98 - 14/08/98

NAME	DEPARTMENT/SECTION	POSITION
Appointment		
Mrs E Nonie	Maths & Computer Science	P/T Teaching Staff
Mrs J Subasinghe	Maths & Computer Science	P/T Teaching Staff
Mrs L Kachinskaia	Maths & Computer Science	P/T Teaching Staff
C Mokogai	Elect & Comm Engineering	P/T Teaching Staff
Departures		
Mr A Hombo	Accounts Section	Accounts Officer 2

Staff Office

Bugandi Secondary School Association

NGI PARENTS FUND RAISING DANCE

Friday 28 August 1998

Where: Club 96 (Negiso)
Time: 7:30 pm - 2:00 am
Fee: K15.00 tasol
Dress: Neat Casual
Music: In-House DJ

Tickets: John Mara - West Pack Bank, Alfred Reu - Lae Police Station and Lucas Panau - Architecture & Building.

FOR SALE

Nintendo 64 (NTSE with Pal converter)

Almost new. Two controllers. Games included super Marion 64, cruise in USA and star wars shadows of the empire (Pal). Universal converter. Machine original price with converter and extra controller was K450 and three games cost K450. Now asking price is K450. Phone 473 4407 (b/h) or 475 7235 (a/h).

Opus Technology Computer: PCV 386 hard drive; Monitor (colour), Keyboard, Mouse, Fax Modem Microlin (Internal). Software includes Windows, Microsoft, Excel, Word. K500.

FUN WITH MATHEMATICS

Problem 16

At his usual rate a man rows 15 km downstream in 5 hours less time than it takes to return. If he doubles his usual rate, the time down stream is only one hour less than the time upstream. In km/hr what is the streams current?

Solution:

Let c = speed of current, and let m = usual rate of rower in still water. Then his downstream rate is m+c and upstream rate is m-c. After he doubles his usual rate, rate downstream = 2m+c and rate upstream = 2m-c. Since, distance = 15 km and time = (distance/rate); 15/(m+c)=(15/(m-c))-5 and, 15/(2m+c)=((15/(2m-c))-1 .

Solving the above two equations simultaneously gives c=2.

Problem 17:

The side of an equilateral triangle is S. A circle is inscribed in the triangle and a square is inscribed in the circle. Find the area of the square.

All interested staff and students should send their solutions to problem 17 before Wednesday September 2nd.

First correct entry wins a prize of K5.00.

John Wamil, Dept. of Mathematics and Computer Science,
Email: jwamil@cms.unitech.ac.pg

Air Mail

STAMP

If unclaimed please return to:
The Editor
Public Relations Unit
Papua New Guinea University of Technology
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PAPUA NEW GUINEA

PRINTED MATTER

The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1303 ISSN:10119-5354 04 September, 1998 WEEKLY

Unitech Biotechnology Centre secures international taro research

The Unitech Biotechnology Centre has been given the opportunity to participate in an international research project worth over one and half million kina.

The research project from the Australian Center for International Agriculture Research (ACIAR), on "Virus Indexing and DNA finger printing of taro germplasm," would combine the skills and resources of seven organisations.

The organisations are: Queensland University of Technology, University of Queensland (Australia), Department of Agriculture and Livestock (DAL) and Unitech (PNG), MAFF&M and University of South Pacific (Samoa) and the Secretariat of Pacific Communities (Fiji).

The three year research project would see Unitech with a budget of over a quater of a million kina (K250,000).

Under the program, Unitech would be responsible for the development of *in vitro* taro germplasm; index taro from PNG and Pacific Island Countries for viruses, identify accessions using molecular techniques and develop descriptor data base.

PNG's involvement through the DAL would be to breed taro resistance to leaf blight; maintain *ex situ* germplasm collection and collect seeds.

The responsibility for other organisations are:

University of Queensland would develop DNA fingerprinting technologies for taro while QUT would characterise taro viruses and develop diagnostic techniques for clones and seeds suitable for Pacific Island Countries.

Secretariat of the South Pacific Community, Fiji, would be the development of a Taro Regional Germplasm Center for taro and other root crops; expert advice on the international transfer of taro germplasm and the development of guidelines.

The University of South Pacific and MAFF&M, Samoa are reponsibile for the evaluation of seedlings and clones from the national breeding programs ; and investigations into transmission of viruses and effects on production.

The Acting Director of Unitech Biotech Centre, Dr Mohamed Wagih said that after the development of virus-indexing and DNA fingerprinting methods at the Queensland University of Technology (QUT) and University Queensland (QU) respectively, the technologies would be transferred to the Unitech Biotech Center for application.

Dr Wagih said that this project would also involve the upgrading of facilities at the Center and staff training.

He said basic equipment for tissue culture and capabilities would be enhanced in order to store taro collection *in vitro* and to provide the necessary quarantine security for imported germplasm.

Meanwhile, Dr Wagih said the Biotech Centre was also expecting an AusAID Taro project on the conservation of taro genetic resources.

"The conservation of local and indiginious crops and genetic resources was one of the aim the Biotech Centre would like to take role in," he said.

"We also have received word from Papindo to support a sugar cane breeding program in the Biotech Centre involving an Indonesian Ph.D student.

"The Minister for Agriculture has also indicated support for the centre, given that we are able to deliver directly to the farmers with no middle man."

The project was intiated when the Centre was proposed as the Agricultural Biotech Centre as part of the Agriculture Department. The Unitech Biotechnology Centre is now autonomous and will deal directly with the participants.

•Steven Busin



DAL REP VISITS RICE TRIAL SITE *DAL Secretary, Utula Samana and representatives from NARI and Trukai Rice Industry paid a courtesy visit to the rice project at Bugandi Secondary School. While on Site students from the Agriculture Department were on hand to brief the Secretary on their research finding so far.*

Unitech Biotech Center invited to host next biotechnolgy policy workshop

The Unitech Biotechnology Center has been invited to establish and initiate an Asian Pacific Economic Community (APEC) Biotechnology policy workshop.

The invitation came through the United States Department of Agriculture (USDA) in a bid to harmonise the regulations and policies of the 18 member economies of the APEC.

"We hope the workshop would be held in early 1999 if we get endorsement from the Agriculture Technical Cooperation of APEC," said the Acting Director for the Unitech Biotechnology Center, Dr Mohamed Wagih.

Dr Wagih said that the invitation was made after he had delivered a keynote speech in Georgetown University, Washington DC, addressing the issue of developing biotechnology policies in developing countries.

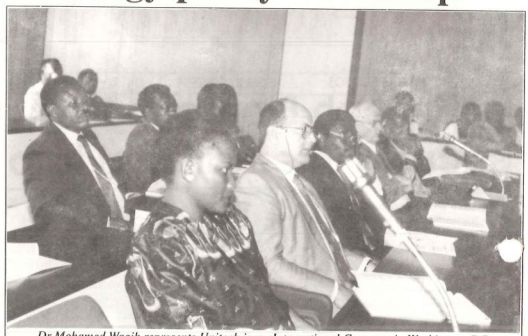
He said Georgetown University had also indicated its interest in linking its activities in Biotech policies with the Biotech Center, offering courses *via* the internet for students and policy makers in the country.

Dr Wagih said the center would also be heavily involved in genetic fingerprinting of crops of high value to the country to secure their ownership.

"There is no way that we can prove that these plants are of PNG origin without having characterised their genetic fingerprints," he said.

"Biotechnology is continuously and rapidly developing as an effective way in which products and services are provided.

"However, the transfer and development of biotechnology in an environmentally sound manner, requires a variety of conditions, including capital inputs and private sector involvement for delivery of new products, that in the case of many developing countries, are not readily available.



Dr Mohamed Wagih represents Unitech in an International Congress in Washington DC

"All countries require appropriate infrastructures that permit them to acquire, absorb, and develop technology; to manage it efficiently and systematically; and to build up local scientific and technological competence.

"The ability of any country - of a developing country in particular - to discern, choose, and adapt environmentally sound emerging biotechnology, can serve as a measurement of sustainable self-reliance that will allow it to fully participate in world-wide efforts to achieve sustainable development."

Dr Wagih said that important issues relevant to Research and Development of biotechnology in developing countries were:

- under investment in the research phase by private/public sectors
- lack of venture in biotechnology development and into commercial opportunities
- confusion over intellectual property rights
- need to negotiate available resources - biological and intellectual
- need to create legislative framework, regulatory and policy issues, and
- biosafety and risk assessment of genetic modified organisms.

Dr Wagih said PNG was one of the wealthiest countries in the world in its genetic resources.

"The wealth of PNG plant genetic resources now will be conserved and utilised using biotechnological means to protect them from extinction under the field conditions due to diseases, pests, land tenure, management, funding and etc," he said.

"Crops and horticulture plants indigenous to PNG would be a good asset for the country when biotechnology added value is considered.

"There is great potential for the development and growth of biotechnology in PNG.

"PNG's strength in relati[illegible] biotechnology lies in its wealth of genetic diversity of plants, animals and micro-organisms and its strong scientific will and belief in biotechnological applications to solving practical problems in Agriculture, Forestry, Conservation of environment, and human health care."

• **Steven Busin**

The Reporter is produced weekly by the **PUBLIC RELATIONS UNIT.**
Deadline 4pm on Tuesday weekly.

Editor: CORNEY LAHIES	**phones**	**473 4298**
Journalist:STEVEN BUSIN		**473 4290**
Secretary: ANGELA BOROMANA		**473 4291**

The Media is most welcome to use stories with due acknowledgement

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email: reporter@unitech.ac.pg or cklahies @global.net.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Unitech Savings and Loans ammends constitution for smoother operations

The Unitech Savings and Loans Society has made several amendments to its constitution to better serve its members demands.

At a Special Annual General Meeting with society members at the Duncanson Hall, last Friday, Society Chairman Paul Isan told members that the society had faced problems in its operations, and the amendments were necessary to help the smooth running of operations for the society.

He said that the society's Board of Directors met on 1st May and had reached six resolutions that were presented to members at the special AGM for their endorsement.

The resolutions presented to members for debate were:

• Fresh loans - all fresh loans were to be considered at a ratio of 1:2 . If there was evidence of sufficient university entitlements as security, the requirement of documentary evidence would not be stressed.

• Additional loans - all additional loans were to be considered strictly at ratio of 1:1. Documentary evidence was a pre-requisite. On special cases, the chairman of the Board may be required to make an input.

•Emergency loans - executive approval may be granted on Emergency Loans by the Chairman of the Board under resolution 1 and 2. These special cases would normally have an "Urgent" label with the Chairman's signature and date clearly marked on the top of the loan application form. In these cases, the Loans Committee would be required to endorse these loans without much delay because of their urgent nature.

The loans committee was expected to use "sound and humane" judgment in considering all loans request while striving to observe all guidelines of the Society.

• Appeals on Rejected Loan - A member would have the option to appeal on his/her loan if rejected. In the absence of a constituted committee and also a lapse in the guidelines, the Chairman of the Board will consider all appeals.

The Chairman of the Board after consultation with the Chairman of the Supervisory Committee will use his discretion to uphold or turn down the appeal and his decision will be final.

• Group Loans - In recent months, a number of people have applied for group loans. It has been obvious that the same reason was used to apply for loan. The loans committee is requested to be very conscious and careful with this type of loans as this sets a bad precedence. Each member should be given a loan in his or her own merits and a situation - no matter how desperate - should be allowed to dictate the loan.

•Operational procedures

(i) All documents should remain in the secretary's office, whilst only a summary of the loan request be forwarded to the members.

(ii) All document to and from the Society's Office should be handled by the Society's personnel.

(iii) The loans committee would meet normally on Wednesday every week and have an operation budget of K40,000 per forthnight. This would be in place until further notice.

• SB

*South Americans thank TFTC for quality training



Yaswant Kandhai and Roy Soerdjpal

Life in Papua New Guinea for the last six weeks has been quite an experience for two South Americans studying Advance Saw Doctoring at the University's Timber and Forestry Training College.

Messrs Mr Roy Soerdjpal and Yaswant Kandhai, employed by the Nooitgedacht N.V. Sawmill in Surinam, a country situated between Brazil, French Guiana and Guyana , hope to implement whatever they have learnt when they return to their sawmill.

"I think we have made friends with nearly all the college population, as they have been very friendly and kind to us, and they have done everything to make us feel at home," said Khandhai.

"We would be bringing back fond memories of this place when we leave on Friday.

"Out of all the sawmills in the country, we are very luck and thankful to Center for Development of Industry (CDI) in Belgium, for choosing us to come here for training.

"We have learnt a lot of things, some of which we have not been practising in our country, and we hope to implement these techniques once we get back to our country.

"One thing good about here is the way they teach, as they do a lot of practical work, rather than a lot of theory, and it has been very beneficial to us."

The Belgium based organisation, Center for Development of Industry provides training for people in less developed countries around the world.

The two students underwent courses in Advance Saw Doctoring, Mill Alignment and Installation and other specialist training in saw milling. • SB

Unitech hosts tree kangaroo workshop



Participants at the workshop

Scientists from all over the world have gathered at the Papua New Guinea University of Technology for a one week Tree Kangaroo workshop.

The international conference on the preservation of tree kangaroos is aimed at working out the threat stages of tree kangaroos, and formulate policies for their future conservation.

"We have brought together experts from PNG, landowners and scientists around the world who work with tree kangaroos in captivity," said Rainforest Habitat manager Peter Clark.

The conference was facilitated by Conservation Breed Specialist Group, an international organisation affiliated to the International Union of Conservation Nature.

The CBSG is an organisation dedicated to help facilitate groups of people to formulate policies for conservation of threatened animal species.

The conference was co-hosted by the National Museum in Port Moresby and the Department of Environment and Conservation.

"Papua New Guinea has six of the ten tree kangaroo species in the world, and out of those, nobody really knows which of the respective species are threatened with extinction," Clark said.

"However, it is likely that two of the species are threatened with extinction and it is one of the aim of the conference to focus on the known problem and try to address the problem."

He said that a policy on tree kangaroos would be drawn up immediately after the conference and would be presented to the national government.

Babarians wins MRFU grand final in style



Barbs captain, Bernard Noibano being presented the winning sheild

First time grand finalists, Barbarians out classed Royals 23-13 to take out the Morobe Rugby Football Union grand final on Saturday.

In front of a capacity crowd at the Telikom Training College Oval, the Unitech dominated students team shut off Royals in the second stanza after a 13-all dead lock at half time.

An emotional Barbarians captain , Bernard Noibano said after the match, that it was the spirit of comradeship that kept them going till the final hooter to give them their first ever grand final club victory.

"Our defence was very good and the boys played according to our game plan, which was to have our forwards lay the foundation and then to have the ball distributed to the backline," Noibano said.

In a spectacular grand final encounter, the students just proved too good for their opponents with their classy ball work and sleek footworks.

Captain Noibano praised Jonathan Tolpare, Norman Tokunai, Jacob Gele, Chris Bobola, Brown McGee and Willie Arthur for their outstanding grand final performance. He also thanked the rest of the team for doing such a wonderful job.

Four time unsuccessful grand final bidders, Royals opened the first five points onto the score books five minutes into the clash, when full back John Asimda sailed through the students' defence for a corner try.

About five minutes later, the students cut down the margin by three points when Michael Balakove successfully potted a penalty kick from 15 meters.

It was the wingers' tries that put Barbarians into a 13-3 lead when left winger Brown McGee and Usial Kapinias broke through their opponents defence to score ten minutes from apart from their respective tries.

Nevertheless, this did not deter Royals from fighting back to tie the scores 13-all just before half time through a penalty goal and a try from centre Hendrix Kafur.

The second stanza was Barbarians' all the way when PNG International Norman Tokunai just out paced his opponent with a 30 meter dash to touch down at the try line.

A few minutes later, replacement Charlie Robert went over for another five pointer after the ball changed several hands for the game's final try and to wrap up the premiership title for the students.

Meanwhile, in the B grade division, Telikom trashed Unitech 41-13 to take out this year's title. SB

Counselling Series

"Know Yourself"

In the series 2 topic: "Your greatest enemies," we learned that our greatest enemies are within us. What about the answer to our quest for the defeat and eradication of these enemies? Let me tell you, the potentials for defeat and eradication of these enemies, interestingly enough, are also within us.

The actuality of these potentials can be realized when we share the insight echoed by a great philosopher four centuries before Christ: "Know yourself." Socrates was not only the first to look within his heart and ponder the mystery of life," even "at least six centuries before Socrates, a wiser man - King David of Israel, pondered the nature of man." (Sala, 1988, pp.1-2); Cf. Psalm 8:3,4). This insight is also shared, affirmed and attained as reality by many of those who struggled, defeated and destroyed these enemies.

The measure of your happiness depends very much on the better understanding of yourself. This is confirmed by Dale Carnegie as he quotes Angelo Patri in his book: "How to stop worrying and start living" (1948): "Nobody is miserable as he who longs to be somebody and something other than the person he is in body and mind." "Understanding yourself is a step towards inner peace, and nearer achieving your unfulfilled ambitions." (Sala, 1988, p.3)

Who and what are you then? You are sensible and intelligent. A unique individual, "create in the image of God with the sensitivity and personality that came from His design." (Sala, 1988)

You are a spiritual being with a will power to live. The spirit that lives in us is powerful - "the Spirit God has given us does not make us timid, instead, his spirit gives us power and self control." (II Timothy 1:7).

You are capable of changing your gloomy and miserable situation which erodes your potential to live happily and meaningfully. You can make a difference to live.

Dr. Harold J. Sala states three things that one can do to change completely his situation: First, a desire to change, second, a commitment to change, and finally, follow-through. (p.12).

I like to further quote what he says as affirmation to change:

Changes involve the cooperation of man and God, your working with the Divine in working out His will in your life. Try to do everything in your own strength and you won't get very far, for you will very soon discover the weakness of human resolutions and good intentions.....The greatest force in all the world when it comes to personality and behavioural change is the Holy Spirit that works in the life of the believer to bring him into conformity with God's plan and purpose. However, power to change is activated only by man's complete cooperation with the Divine. (pp. 12-13).

In conclusion, I like to assure you that a person who understands oneself and appreciates one's potentials, loves himself and determines to make the best of life, will harvest and benefit from the steps suggested above.

Reference: Sala, Harold J (1998) "Winning Your Inner Struggles." Manila: OMF Literature Inc, Philippine.

Reverend W Siawong
A/Student Counsellor

Huon Seminar Program

RESOURCES FOR SCIENCE AND TECHNOLOGY IN DEVELOPMENT

7-11 SEPTEMBER 1998

SEMINAR

Monday 7 September 1998

08:00 - 09:30 am Registration

09:30 - 10:00 Welcome: Dr James Kaiulo, VC
Official Opening: Hon. Luther Wenge, Governor, Morobe Province
Chair: Dr Philip Siaguru, Chairman - Huon Seminar

10:00 - 10:30 Morning Break

10:30 - 12:00 Keynote Address: Dr Ila Temu Director, MRDC

12:00 - 01:30 Lunch Break

01:30 - 03:00 Session 1:
RESOURCES FORSCIENCE AND TECHNOLOGY IN DEVELOPMENT

Chair: Dr John Pumwa

1.Quality Assurance in a Poorly Funded Higher Education Sub-Sector in Papua New Guinea, *Dr P Siaguru, Unitech*
2.Commercialisation in Higher Education Institutions: Mobilising Private Resources for University Education, *Mr Guvi Gunemba, Unitech*

30 - 09:00 pm **Welcome Cocktail - Staff Amenities Centre**

(8:00 - 9:00 pm) - Welcome Remarks - Dr James Kaiulo, Vice-Chancellor, *Unitech*

Tuesday 8 September 1998

08:00 - 10:00 am Session 2:
RESEARCH QUALITY AND POLICY IN HIGHER EDUCATION

Chair: Professor M R Khan

1.Measuring Research; Benefits and Disadvantages, *Dr K M Anwar Hossain and Professor Howard Wright, Unitech*

2.Research an End in Itself? *Simon Sergi, Unitech*

3.Policy Creation and Implementation for Science, Engineering and Technology: Developing the Necessary Human Resources, *Dr Graham Atkins, G P Atkins Limited*

4.University-Industry Research Cooperation in PNG: The Current Situation, *Professor M A Satter and Associate Professor P Aleya, Unitech*

10:00 - 10:30 Morning Break

10:30 - 12:00 Session 3:
TECHNICAL AND CONTINUING EDUCATION IN PNG
Chair: Dr Renagi Sam

1.Distance Education at Papua New Guinea University of Technology: Delivery Mode on Focus, *Mr Atawe Kolgiri, Unitech*
2.Technical Training in Papua New Guinea, *Noel Mobiha, Unitech*
3.Technical and Continuing Education in Papua New Guinea, *Ms Pani S. Tawaiyole, National Research Institute, PNG*
4.Continuing Education for Practicing Engineers in PNG , *Professor M A Satter and Associate Professor P Aleya, Unitech*

12:00 - 01:30 Lunch Break

01:30 - 03:00 Session 4:
EMERGING TECHNOLOGIES IN HIGHER EDUCATION

Chair: Mr Wilson Tovinka

1.Current Teaching and Learning Practices and the Impact of Information Technology, *Mr Robert Songan, Unitech*

2.Assessing Quality in Engineering Education In PNG : A Perspective from the Teaching and Learning *John Sari, Unitech*

03:00 - 03:30 Afternoon Break

03:30 - 05:00 Session 5:
TECHNICAL AND ENVIRONMENTAL ISSUES IN PNG

Chair: Dr W Drake

1.Environmental Education Inservices for Primary School Teachers: The Key to Environmental Awareness in PNG, *Professor Rick Bein and Peter Clark, Unitech*

2.The Environmental Impact Statement in PNG, *Dr John Rivers and Professor Rick Bein, Unitech*

3.Knowledge of Traditional Agriculture in Training for Agricultural Rural Research and Development, *Dr Alan Quartermain, University of Vudal*

07:30 - 09:30 **Social Programme Activities at Duncanson Hall**

Wednesday 9 September 1998

08:00 - 08:30 am Session 6:
PLENARY SESSION

Keynote Address: Lady Carol Kidu MP
Chair: Dr Samual Koparnu

08:30 - 10:00 Session 7:
RESOURCES FOR SCIENCE AND TECHNOLOGY IN DEVELOPMENT
Chair: Professor M A Satter

1.Direction of Research and Resources for Research, *Prof C S Indulkar, Unitech*

2.Fusing the Challenges of Commercial Imperatives in Higher Education Funding, *Prof M Al-Dabbagh, Unitech.*

3.The Unitech DNE Centre - A Resource to Serve the Developing Industry, *Dr G S Gad and Dr J Pumwa,Unitech*

4.PNG National Agricultural Research Institute for Promotion of Excellence in Agricultural Research and Sustainable Development , *Dr Raghunath D Ghodake, NARI, PNG.*

10:00 - 10:30 Morning Break

10:30 - 12:00 Session 8:
WOMEN IN SCIENCE AND TECHNOLOGY
Chair: Ann Kila

1.Female Human Resources for the New Millennium, *Mrs Frieda Siaguru, Independent , Lae.*
2.Forestry As a Profession for Women in Papua New Guinea, *Mrs Sudesh Aggarwal, Unitech*
3.Women's Contribution to the Scientific and Technological Progress, *Dr Larissa Al-Dabbagh, Unitech*
4.Women's Participation in the North and South Simbu Rural Development, *Ms Sarah Garap, Simbu Rural Development Project, PNG.*

12:00 - 01:30 Lunch Break

01:30 - 03:00 Session 9: **WOMEN IN SCIENCE AND TECHNOLOGY**
Chair: Dr Betty Amoa

1.Women in Science and Technology, *Rev. Windiong L. Siawong, Unitech*
2.Science and Technology in Gender and Development, *Louise Aisi,*
3.Income Inequality in Papua New Guinea, *Mr Gomi Gipe, Unitech*
4.Equal Opportunities in Science and Technology Education, Fact or Myth?, *Ana Kila and Sisa Kini, Unitech*

03:00 - 03:30 Afternoon Break

03:30 - 05:00 Session 10: **RESEARCH QUALITY IN HIGHER EDUCATION**

Chair: Associate Professor Foad Seddigh

1.Quality Assurance in Higher Education, *Professor M A Satter, Unitech*
2.Research Quality in Higher Education: Where Should We Be Heading?, *Dr B Boeha, NRI*

Thursday 10 September 1998

08:00 - 10:00 Session 11: **TEACHING IN HIGHER EDUCATION**

Chair: Mr Robert Songan

1.Data Base Management System (DBMS) - Best Candidate for World Wide Web?, *Mr Samuel K Akoto, Unitech*
2.The Need For Student-Centred Learning in Technical Education in PNG, *Associate Professor P Buschenhofen, Unitech*
3.A New BSc Programme in Applied Physics With Electronics and Instrumentation, *Dr W Drake, Unitech*
4 Development of a Computer Science Degree, *Professor T Phythian, Unitech*

10:00 - 10:30 Morning Break

10:30 - 12:00 Session 12: **EDUCATION IN DEVELOPMENT**

Chair: Associate Professor Paul Buschenhofen

1.Bringing The Universities to the People: An Unaccomplished Mission, *Samuel Haihute and Paraka Pena, IDCE, UPNG*
2.What Does Accountability Mean to Universities in Papua New Guinea, *Allan K Sako, Unitech*
3.The Role of Development Studies in Papua New Guinea, *Dr John Rivers, Unitech*

12:00 - 01:30 Lunch Break

01:30 - 03:00 Session 13: **TECHNOLOGY IN DEVELOPMENT IN PNG**

Chair: Dr Anthony Harakuwe

1.TQM In Tertiary Institutions: An Approach to Cost Effectiveness,*Prof M A Satter and Dr John Pumwa, Unitech*
2.Land Resources Management and Customary Land In PNG: Issues and Prospects, *L Armitage, S Bannerman, F Ogisi, A Pai and J Sinne,*
3.Transfer of Appropriate Technology, *Mary Maima, Unitech*
4.The Relevance of International Accounting Standards to PNG, *Mr Mathew Kuusa, Unitech*

Friday 11 September 1998

08:00 - 10:00 Session 14: **PLENARY SESSION:**

2nd HUON SEMINAR CONCLUSIONS AND CLOSING

Chair: Dr Philip Siaguru

Topics for Discussions:

•Future Title for Huon Seminars or Huon International Conferences?
•General Business

10:00 - 10:30 Morning Break

10:30 - 12:00 **Closing: Mr Tofamo Mionzing - Lord Mayor Lae City**

INFORTAINMENT BOARD

Mining Engineering Staff and Students Association

Fund Raising Dance

DATE: FRIDAY 4TH SEPTEMBER 1998
TIME: 7:00 PM TILL LATE
FEE: K10

Dress: Formal (Neat)
Music: DJ Wheels

Tickets: Mining Dept. & MESSA Executives

Transport provided to and fro.
Pick-up point: Haus Kofi.
Security provided.

Tickets can be bought at the gate.

Apologies

To the residence of the Ramu Drive that the Applied Sciences Department will be having their annual end of year function at Dr Peter Sopade's residence on Friday 4 September (tonight) from 6:00pm to 8:00pm and would like to apologise in advance for any disturbance within that time.

Robert Naguri
President ASSSA

STAFF SOCCER

There will be a meeting on Monday 7/9/98 at 12:00 noon at the Civil Engineering Conference Room.

CLUB CAPTAINS ARE ASKED TO ATTEND.

Felix Bage
Interim Coordinator

CAMPUS TV USERS

A meeting is being organised for Wednesday 9th September 1998.

Venue: Mining Engineering Lecture Theater
Time: 4pm

Agenda

- **Changes to current services.**
- **Additional TV channels**
- **Election of user group representatives**
- **Fees**
- **AOB**

Everyone is invited to attend and contribute ideas

Chairman

Campus Bus Service Operation - Route One/11U

This is to advise the campus residents that the Land Transport board has just approved two operating PMV licences for us to operate the Campus Bus Service. The two licensees are Mr John Sari and Mrs Alusi. One of them is currently based on Campus while the other lives off campus.

Both operators have willingly agreed to reactivate and provide this service to the campus residents as part of the extended Campus Community Services. In the past there were two Campus Bus Services in operation, however, the operators discontinued the services due to socially unacceptable behaviours of some campus residents.

However, in view of the growing need for a public transport system on campus, the University has taken the initiative to reactivate the Campus Bus Service and has selected the above named operato. from a handful who have shown interested in providing the service because of past reputation of some campus residents.

To make this service viable for the two operators and to ensure its continuity, the University is hereby appealing to the general student body and campus residents, to strictly co-operate with the operators and the University so as to ensure that the service is not interrupted.

The bus service will commence at Housing Area Five and follow through to Eriku, Top Town and the main market, and then return to Campus terminating at Housing Area Five

The bus fares are fixed as follows:-

a.	Normal fare	K0.50
b.	Student fare	K0.30

It is envisaged that the Bus Service will operate on an hourly basis commencing at 0700 hours and terminating at 1900 hours each day. The timing may be altered subject to demand.

The Campus Bus Service is expected commence operation in mid September 1998. For the first month of operation there may be some difficulties in providing the service on schedule, however, the operators have given an undertaking to do their best to make the Campus bus service as efficient as possible.

Wilson F Tovirika
Pro Vice-Chancellor (Administration)

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:
Monday:UNITED CHURCH
Tuesday: ANGLICAN
Wednesday: LUTHERAN
Thursday: AOG
Friday: CATHOLIC

WEEK-ENDS
Saturday
AM -SDA
PM-TSCF
Sunday Morning
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL
Sunday Morning
9:00 CLC CHURCH

POSITION VACANT

Department of Electrical and Communication Engineering

Technical Assistant (Temporary)

Applicantions are invited for the position of Technical Assistant in the Department of electrical and Communication Engineering.

Main duties are to prepare and set up equipment for laboratory practical classes, repair simple test equipment, ist in student projects and assist in site survey and feasibility study of rural electrification.

Salary:
Technical Assistant I/II/III K5,947.00 - K9,696.00 PA (Level of appointment depends upon qualification and experience).

Detailed applications (two copies) with curriculumn vitae including certified copies of qualifications obtained and names and addresses, fax/phone numbers of three (3) referees and an indication of the earliest availability to take up the appointment should be received by: The Registrar,PNG University of Technology, Private Mail Bag, LAE by 08 September 1998.

CLASSIFIEDS

OPTIMUM HEALTH

WHAT ARE YOU DRINKING?

Have you ever realised the drinking water from your tap is still unsafe?

Through scientific research and medical studies, there is indication of an alarming number of health conditions caused by drinking water. This includes the municipal water supplies in PNG and overseas.

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These five simple questions will help you decide:

1.Does your water tap have an unpleasant odour or taste?
2.Do you believe unwanted chemicals are present in your tap water?
3.Have you every noticed impurities in the water you drink?
4.Do you drink eight glasses of water every day?
5.Have you experienced stomach upsets from your drinking water?Here is your chance to own one of the world's finest water purifier that is second to none.

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MITSUBISHI PAJERO;

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SUBARU 4WD STATION WAGON.

Reg No: AGF 239
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HUON SEMINAR LAPLAPS - K10 EACH AVAILABLE AT THE SEMINAR OFFICE OR VENUE

Position Vacant

Bursar's Department

Accounts Officer - Payroll

Applications are invited from experience personnel who have exposure to pay calculations and other relevant accounting duties.

He or she must have experience in use of PNG Payroll.

The applicants must have a Diploma or a Degree from a recognised Tertiary Institution and at least two (2) years relevant work experience in payroll system.

"Previous applicants need not re-apply".

Assistant Accountant - Income

Applications are invited for the position of an Assistant Accountant - Income in the Finance Section of the Bursary Department

The candidate must possess a University Degree in Accounting or equivalent and have a strong working experience in Computer based Debtors system.

Persons currently holding supervisory positions are encouraged to apply.

Salary level

Accounts Officer
K9,148 to K12,955

Assistant Accountant
K9,935 - K14,960
Domestic Market Allowance of K1,500

Level of Appointment will depend on qualifications and experience.

Interested person should submit their applications with names of three referees to the

Applications should be in writing no later than 11 September 1998 giving full details of qualification and experience plus names, addresses and telephone numbers of three referees.

Applications should be addressed to:

The Registrar
PNG University of Technology
Private Mail Bag
LAE

FUN WITH MATHEMATICS

Problem 17

The side of an equilateral triangle is S. A circle is inscribed in the triangle and a square is inscribed in the circle. Find the area of the square.

Answer: Area of square $= \frac{s^2}{6}$.

Eight correct entries were received. First correct entry was from Ronney Nengabo BEMP II .

Thanks to all those who have submitted solutions.

Problem 18

When the number 2^{1000} is divided by 13, what is the remainder in the division?

All interested staff and students should send their solutions to problem 18 before Wednesday September 23rd.

First correct entry wins a prize of K5.00.

John Wamil, Dept. of Mathematics and Computer Science,
Email: jwamil@cms.unitech.ac.pg

Air Mail

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The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1304 ISSN:10119-5354 11 September, 1998 WEEKLY

Govenor calls for investment in higher education at Huon Seminar

Morobe Governor Luther Wenge has called for increased investment in higher education in order to produce skilled human resources.

Mr Wenge in his opening speech at the Huon Seminar pointed out that the level of professionalism directly reflected the quality of education in the country.

"I must stress that quality education has a cost, and it is not cheap - quality means heavy expenses," Mr Wenge said.

"Teaching skills and philosophy is one thing, but complementing it with the appropriate technology and equipment is absolutely necessary.

"Good quality education is fundamentally based on the use of new and latest technology, and excellence can be achieved only through research and through this, perfection.

"We understand that whilst governments insist on higher education, at least in realistic terms, it is still not being seen.

I know that for a country to prosper, it must have not only knowledge, but the most important of all, is that, it must be of high quality."

Mr Wenge also reiterated Mr Baloloi's call for the National Government's attention to the problem.

"In 1994, then Vice Chancellor, made a strong call to the government to evaluate the realistic implementation of higher education policy to develop economies based on developing brains," he said.

"It is sad, four years later, and the situation has not changed very much.

"This is a clear case of stagnation and not progress in higher education.

"Stagnation can lead only to regression and it does no good for higher education."

Mr Wenge said that he hoped that this would be rectified as soon as possible.



Morobe Governor Luther Wenge opening the Huon Seminar

Papers in the Seminar, he said, would address some of these concerns facing higher education in PNG.

He called on leaders to act now to harness these resources as PNG moved into the next millennium.

"As a nation, PNG is moving towards a destiny that is unpredictable," he said.

"A nation that continues in attempting to design a path that must appropriately cater for its people's aspirations.

"This may mean shedding old cultural and life long habits, and that is how we will find our place in the world of growing and developing nations."

Mr Wenge also said that gender issues had become house hold discussions and a university was where such thoughts could be discussed openly and positively.

He said that there were several good thought provoking papers in the Seminar that would challenge people to rethink cultural habits, and focus on the new millennium as equal partners in nation building.

"Women all over the world are showing their worth, and PNG is no exception," Wenge said.

"Collectively as human resource of this country, man and women must ensure that this nation progresses for the better."

Meanwhile, Unitech Vice Chancellor Dr James Kaiulo said that all the Huon Seminar Themes should be related to the University's mission which is to produce graduates and research of high standard in development, critical evaluation and application of science and technology in PNG and the Pacific.

"We realise the mission and objectives of the University cannot be achieved without support and input from the wider Papua New Guinea community," Dr Kaiulo said.

"Resources for science and technology in development, has been selected as the main theme for the second Huon Seminar.

"It is subdivided into three general sub-themes reflecting on issues relating to; women in science and technology; technical and continuing education; and research quality in higher education.

"These are issues which this University and the nation must address as we progress into the new millennium.

"As this young nation develops, it must attempt to design a path that will appropriately cater for its people's aspirations.

"The new modern values should be integrated with our cultural heritage and this should form the basis of any new direction this young country wishes to take into the next millennium.

"As a nation, PNG must realise that a better future lies in educating its younger generation.

"It is crucial that we debate ideas/concepts that will expand and sustain the limited resources we have for the development of the country.

"For too long we have all talked about development that is relevant to the needs of our people and somehow, along the so called path of development, we all get entangled due to weakness of man himself.

"The Universities must continue to play their part by reminding the leadership of this country that we must be seen to serve the needs of our people.

"The Government of any day must accept this particular role of the universities."

Dr Kaiulo said that the University saw itself as a partner with the industry and the wider community in the training and development of PNG's human resources for the next century.

Dr Kaiulo acknowledge the following organisations for their kind and generous assistance in cash or kind towards the seminar costs:

- Office of the Lord Mayor, Lae City - K5000
- Unitech Development and Consultancy - K10,000
- Unitech Printery - K8000 equivalent in equipment
- Computer Spot - K2000
- University Booksiop -K2000
- Shell PNG - K1000

LADY KIDU CALLS FOR MORE OPPORTUNITIES FOR WOMEN

Papua New Guinea women who have reached tertiary level have excelled in their own respective fields, according to Lady Carol Kidu.

During her key note speech at the Huon Seminar, Lady Kidu said while most women were above average academically, there were others who had the determination, encouragement and opportunities to "break the barriers" in the male dominated society.

"Women who have broken the barriers in fields of science and technology must also be given the opportunity to 'break the glass ceiling' in employment in science careers," Lady Kidu said.

"It is important that women are given equal opportunities for research grants and scholarships for further studies and employment so that they can break the 'glass ceiling' which may women face when seeking promotion to positions of influence.

"I know some cases of women who should have gained employment or research/study grants on merits but were bypassed because male selection panels made gender biassed decisions that favoured lesser qualified males.

"But I am told that this is far less common in science and technology careers than in the humanities.

"Perhaps it is because women have already learnt to survive in a male- dominated environment and thus have learnt to be assertive.

"Women scientist must gain equal access to the higher decision making ranks of scientific professionals, so that they can influence the future of our society.



Lady Carol Kidu

"Modern science can bring many benefits but it can also bring much biological and environmental destruction.

"Sometimes male dominated, excessively competitive and profit oriented science and technology ignores social consequences.

"It is hoped that greater participation of women at high levels of decision making will bring a new approach to the human and social impact of science and technology."

Lady Kidu said that negative effects on the lives of women in PNG were also caused by Government neglect of educational opportunities for girls.

She quoted PNG researchers, Dr Naomi Martin and Angela Mandie who claimed that colonial education had a detrimental effect on women's social progress because it limited the educational opportunities of women, emphasizing their secondary importance in society.

The long term negative consequences of over looking women in PNG were now becoming obvious, she said.

"Any Government serious about development in PNG must make the empowerment of women a high priority, even if it challenges male attitudes," Lady Kidu said.

"To ignore the talents of half our population and condemn the majority of them to a life of drudgery is madness."

In her speech, she pointed out particular reasons that were urgent for women to be involved in science and technology. There were:

- science and technology change society - the change can be both good and bad and can have major impact on the lives of people. Since science technology has more real influence over lives, women should have a say in policy making because technology equals power.
- as societies become more dependent on technology, there will be fewer unskilled jobs available. If women want a fair share of employment they will have to train for technological jobs alongside men.
- as a developing nation, we should be making conscious choices of the technology that we want to import to PNG. Does PNG want all high level technology or more appropriate technology with an emphasis on cottage industry? As women are half of PNG's population, they should be there making their voices heard when choices were being made.

TARAKA LEADER THANK'S UNI SECURITIES

A community leader at West Taraka has applauded Unitech securities in apprehending suspects involved in a break in on campus.

Mr Sila Giri said as a leader he supported the action by Unitech security against those involved in the break in on early Wednesday.

According to Chief Security Officer, Patrick Sakail, five suspects are now in police custody following a raid at East Taraka with the help of the Task Force.

He said two houses at Mumeng drive were broken into at about 3:30 on Wednesday morning. One of the suspects who was caught helped identified other members involved.

The Reporter is produced weekly by the PUBLIC RELATIONS UNIT.
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email: reporter@unitech.ac.pg or cklahies @global.net.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Quality dropping in higher education

Concerns over declining standards in Higher Education in PNG were raised by Unitech Pro Vice-Chancellor (Academic), Dr Philip Siaguru, at the Huon Seminar this week.

He said there was a strong view that training programs in some institutions may have already, dropped below the required quality level due to successive government's negligence by reducing funds.

If this was so, Dr Siaguru called on the Commission for Higher Education to take stock and down grade institutions that were not meeting up to expectations.

"The Commission for Higher Education must begin the process to put in place a quality criterion for Universities, teachers, health and technical colleges," Dr Siaguru said.

The three main areas the review need to be based on are;

• The Content - the areas where broad training (knowledge and skills) is set for students

• The Performance - where firm examples and explicit definitions are made of what students must know and be able do to show that they are proficient and can adopt the knowledge gained in the content phase.

• The Learning Opportunity - this phase must concentrate on providing that opportunity to learn. Standards for this would be set by the resources that are available, both human and equipment.

"These areas define what is to be learned, performed (proficiency), while the learning opportunity judges where institutional resources are sufficient to impart the expected training that will meet standards," he said.

Dr Siaguru made this remarks as part of his Huon Seminar presentation titled:" Quality assurance in a poorly funded higher education subsector in PNG."

In reference to Unitech's situation and how to achieve the above, he said the University should begin the process of

• breaking from traditional practices (waiting for government handouts)

• begin designing academic and research programs that are market driven,

• academic departments must set mission objectives and review it every 5 years,

•allow peer review on all academic and research programs,

•set up establishments and organisations that would promote industry interactions (such as Science and Technology Parks)

•restructure and reorganise to improve efficiency,

•improve customer facilities on campus, such as accommodation and recreation, through partnering with the Industry.

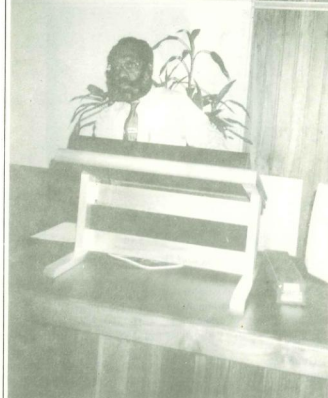
Dr Siaguru said that Unitech must be innovative, creative and market driven to be more competitive in the next millennium.

He said Universities must seek partnership with industry and break the tradition of totally reliance on government support, and must set its own standards to be more transparent, and open to peer review.

The value for money concept was the mechanism that must drive the quality package for education beyond 2000, he said, adding that quality education would ensure PNG was accepted as a country equal to the best.

"This means identifying the special skills and quality we can be good in, and developing the best we can in it," he said.

"Such a mission almost demands government commitment and one of priority and vision.



Pro Vice Chancellor (Academic) Dr Philip Siaguru

"We need to progress higher education towards a path that will maintain quality balanced with the funding provided."

He warned however, that since four other universities had been established, the problems of and funding has increased and the question of quality more pressing.

"Higher education is vital for development in PNG and must produce top quality human resource that will ensure sustainability in skilled manpower," Dr Siaguru said.

"Universities should adopt the user pay -user gets-user say policy in order to be innovative and market driven.

"The user pay - user gets - user say policy was a focus that pushes value for money and allows the users and buyers to evaluate the quality of education that was bought."

He said universities should allow its academic and research packages to be reviewed and change with the trends of the market place.

"PNG Unitech is no exception as we are responsible for the quality of our academic and research programs, which in turn influence the quality of our graduates," Dr Siaguru said.

"Social equity therefore in this new quality control model will be a hindrance and has no place.

"If government support is not correctly targeted at higher education, then, the unfortunate will stay unfortunate.

"Unitech must now look to team with the industry, and allow our programs to be reviewed and molded by market influence.

"We should improve quality internally and sell our programs for equivalent money value and to those that can afford it.

"We must move away from community services and assistance mentality, and concentrate on raising funds to sustain standards of research and academic excellence that is acceptable to scrutiny.

"It has been stated by the Department of Education (1996), that though higher education may be important to PNG's future, Government policy and relevant activities in relation to higher education has both lacked focus and direction.

"It further stated that, quality of education programs and the standards of graduates produce fall well short of what is required for self reliance and national development."

Dr Siaguru said the Government's shift in focus from higher education to lower education was due to the World Bank's condition and arguments that returns from investment in higher education were lower than those from primary and secondary education.

"This was based on economic and social benefits and equity distribution," he said.

"Whatever the validity of the theoretical arguments are, the facts are clear.

"Any reduced investment in education will most certainly weaken PNG's attempts to overcome the deficiency in creating a pool of local expertise needed to progress this nation.

"While we have shifted resources and focus away and concentrated on secondary and primary education, those of us involved with disseminating knowledge at the university level know that we have to work twice as hard to upgrade and enhance secondary level education to meet the expectations of university education.

"The demand on manpower and skilled knowledgeable human resources is more pressing and we can't wait for benefits of improvements in lower education to tickle up."

Commercial practices in higher education mooted

Unitech and other higher educations institutions could be more enterprising, according to Unitech Director of Planning and Development, Gunn Gunemba.

However, cultural and political aspects were probably hindering the University from pursuing full commericalisation.

Gunemba made these remarks in his Huon Seminar paper titled:"Commercialisation in higher education institutions: Mobilising private resources in Universities."

Gunemba also said University managers needed mentality from being mere bureaucratic to entrepreneurial

"Workers are conditioned to think and behave as public servants, doing things that needed to be done and nothing more," he said.

"To be entrepreneuring means instituting business practices, as well as acquiring appropriate skills and knowledge to make the practices work.

"This requires strategic leadership at all levels of higher education institutions to provide the right kind of direction."

He also called for more dialogue between the University and the private sector, and facilitate more intensive and wide ranging engagement with business and government research, training and consultancy.

"No doubt, the University will compete with other tertiary institutions, such as research institutes, private consultancy firms and private training companies," he said.

"On the other hand, this university may look to link itself in tighter net-



Director of Planning and Development, Gunn Gunemba

works, or even joint ventures with similar institutions with which it can strike up complementary relationship - eg in management consultancy, research and course offering."

Gunemba said that commercialization may lead to greater collaboration within the University system, and more autonomy for those Departments within the University which were successful in mobilising extra resources.

Such Departments, he said, should be encouraged through appropriate financial incentives to play lead role in income generation.

"This is particularly true for those universities which have emphasised vocationalisation as a strategy to bring in industrial and private sector support.

"Steps can be taken to protect the University from threat of lowering the academic standard through establishing and enhancing quality control mechanisms."

He said the anticipated outcomes of the proposed Unitech approach to commercialisation would see increases in; student number; student fee payment; research income; net contribution from courses and consultancies; trust receipts; conference income; grant income; and corporate support.

Gunemba said the positive implications of commercialisation are; greater independence from Government policy and meddling; greater engagement with the real world, at least perceived by business sector; greater integration of knowledge creation processes with social and economic perspectives on 'relevance'

However, he said that, the negative implications were; curriculum distortion (business mania), student recruitment biased towards those able to pay or wish to earn more; staff recruitment distortion - 'slickness' rather 'scholarship'; distortion of message contained and interpreted on courses and research - 'selling out'.

Gunemba said the shift in trend of the University's approach to commercialisation was due to cut in government funds to the University.

"Commercialisation in the University systems should be seen as one part of a wider back cloth of changes affecting the public sector," he said.

"In PNG, the origin of the current interest in commercialisation in the public sector lie in the last ten ye public expenditure restra which this country has experienced.

"Statutory and semi-government bodies have been especially short of capital to undertake investment projects and have been strictly rationed in their ability to borrow money, because of concerns with the effects of public borrowing on the money supply and the potential 'crowding out effect' of private investment.

"Emphasis is now based on cost reduction, based on adoption of 'private sector management techniques' into the higher education system.

"It is about making university management more commercial.

"Management grades are firmly defined, and their incumbe under pressure to identify with roles appropriate to new organisational mission, material incentives have been given through new contractual arrangement and salary increases for top managers.

This has been achieve through strategy of 'restructure' towards commercialisation.

Furthermore, universities themselves express the desire to bring commercial managers from the private sector directly into certain aspects of university policy and management.

"Appointment of corporate representatives on University committees and the Council and the recruitment of managers from the private sector are seen as effective transfer of corporate practices into the university system."



National Agriculture Research Institute's display being discussed

RESEARCHERS NEED MULTIDISCIPLINARY SKILLS

A former academic has called on the higher education sector to develop other relevant skills to address research issues in Papua New Guinea.

Dr Ila Temu, Managing Director of Minerals and Resources Development Company (MRDC), made the call during his keynote address at the 2nd Huon Seminar this week.

The address read by the Director of the National Research Institute, Dr Beno Boeha also called for the setting up of the National Research Council.

"Developing, enhancing and managing higher education research and its resources have become more complexed in recent years," Dr Temu said.

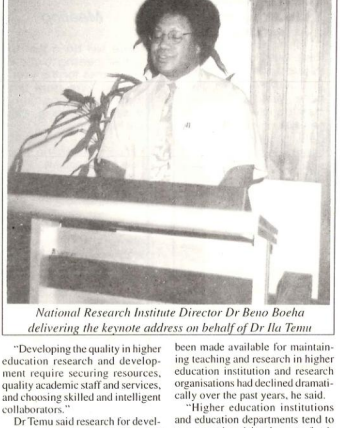
"Increases in reporting activities alone call for more effective methods to organise and manage research groups and the resources.

"Academic staff, post graduate staff and students have been calling for more multi disciplinary and interdisciplinary approaches to research and development in recent years.

"Increased collaborative efforts in research and development with industry require contractual agreements on patents, proprietary rights and publication issues.

"Increased sensitivity to minority and women's rights should heighten the awareness of academics and researchers to improve methods for recruiting and retaining academic and research staff.

"These issues require improved and increased management skills and it is my view that good management practices are necessary for modern research efforts, if quality research and development output is to be achieved with minimum and appropriate resources.



National Research Institute Director Dr Beno Boeha delivering the keynote address on behalf of Dr Ila Temu

"Developing the quality in higher education research and development require securing resources, quality academic staff and services, and choosing skilled and intelligent collaborators."

Dr Temu said research for development should be the life blood of academics in higher education and research institutions.

He said that despite the importance of research, universities and research institutions in PNG do not receive sufficient financial resources to fully finance teaching and research activities.

The amount of funding that has been made available for maintaining teaching and research in higher education institution and research organisations had declined dramatically over the past years, he said.

"Higher education institutions and education departments tend to cut research and development funds during times of financial hardships," he said.

"However, this issue can be remedied by grants of various types - grants - in aid; cooperative agreements, contracts, fellowships, and scholarships.

"However, it has become obvious, that most teaching and research projects in higher education institutions and research organisations which have quality, are those financed by donor organisations that are primarily interested in their own agenda.

"Most research are aimed at developing needs, establishing programs, and monitoring and evaluating those programs on the donors terms rather than encouraging independent research activities."

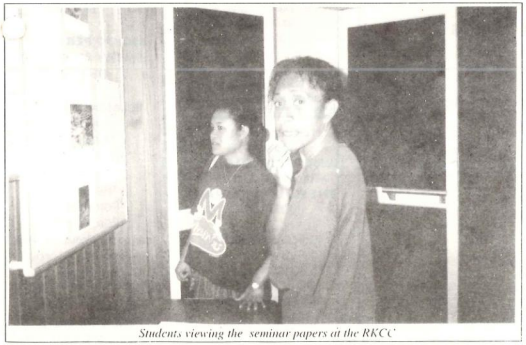
Dr Temu said the main thrust of research in PNG Higher Education and other research institutions should be quality and relevance.

He said research activities in these institutions should adopt in terms of direct commercial and industrial outcomes, especially in economic related enterprises

Dr Temu said that while he recognised the importance of the outcomes of applied research for development and commercialisation purposes, policies of quality and relevance should also be stressed.

These, he said, should include;

- the establishment of the National Research Council, whose primary function would be to identify and regularly review a limited number of priority research areas to which resources are to be focused, either on a competitive or cooperative basis;
- the importance of multi disciplinary research, which is of vital significance to the nation's future development and competitiveness;
- the national ethos of innovation depends upon fundamental research training provided by higher education institutions and research organisations;
- PNG scientist and engineers should be encouraged to participate in the international world of scientific, technological, social, and human discourse;
- the need for advanced bread based, scientific and technological capabilities beyond the narrower scope of industrial and commercial applications, and;
- the contribution of research in the social sciences and humanities in enabling our people to understand the nation's current situation and potential, and to deal effectively with the social policy and social justice issues of a complex and changing society.



Students viewing the seminar papers at the RKCC

INFORTAINMENT BOARD

Election Itinerary Schedules for SRC

1.Candidates nominations open - Monday 28th September, 1998

2.Candidates nominations close - Friday 2nd October, 1998.

3.Candidates campaign speech - Tuesday 6th October 1998 at the Duncan Hall at 7:00pm till 10:00pm.

4.Polling begins on Thursday 8th October 1998 (Matheson Library foyer) at 8:00am. Two day polling Thursday 8th and Friday 9th October, 1998.

5.Counting starts on Friday 9th October 1998 at 1:00pm and declaration of elections results straight after the completion of counting on Friday 9th October 1998.

Philip Lavatu
SRC Executive Officer

UNITECH WOMEN'S CRAFT & SOCIAL CLUB

This is Your Club, and open to all ladies in the campus. The club meets on alternate Wednesdays and aims to share or introduce new skills among the members. We are a friendly bunch and we extend a special welcome to any new ladies on the campus with or without small children who are also welcome.

On our next meeting one of our members, Kristina gave a demonstration on "crocheting". It was so popular that we are going to have one more session on our next meeting.

If you are good at any craft and would like to teach please come and give us a demonstration.

In the meantime Happy Crocheting!

Meeting at: 130, Sepik Drive
Time: 9:30 am
Date: 16 Sept 1998

See you there!

Staff Changes

This is the information Summary of Staff Changes in respect of Appointments, Departures and Interdepartmental Transfers for the week-ending 17/8/98 - 28/08/98

NAME	DEPARTMENT/SECTION	POSITION
Appointment		
Oleg Kachirski	Surveying & L/Studies	Temp. TO II
Anton Mais	Applied Sciences	P/T Teaching Staff
Mrs Sandy Puy	Applied Sciences	P/T Teaching Staff
Mrs A Kumar	Applied Sciences	P/T Teaching Staff
Ms N Ealedona	Mining Engineering	Temp Lecturer I
Mrs Nagat Wagih	Applied Sciences	P/T Teaching Staff
Departures		
Henry Mune	Housing & Property	CE I
Herman Diawo	Security Services	Patrolman I
Shirley Wandau	Medical Services	Temp Admin Clerk
Peter Kimbe	Security Services	Patrolman
Mun Mubin	Bulolo Uni College	CE I

Staff Office

Admin Soka Club

Meeting

There will be a get together meeting to discuss our games for this year's session. We note that there was no good turn up since the beginning of the last two games.

Venue: Under the Rain Tree (Buai Market)
Time: 12:30 pm
Date: Tuesday 15th September 1998

Please note that our next game is scheduled Wednesday 9th September 1998 beginning at 4:30pm.

Rupa Kila
Captain

Staff Male/Female Volleyball Teams for the 1998 Intervasity Game

The annual intervasity games which will be hosted by UNITECH this year is just around the corner, which is 7 weeks from now.

So if you know that you are a good volleyball player, please give your name to the volleyball Coordinators.

Volleyball Coordinators

HUON SEMINAR LAPLAPS IN ASSORTED COLOURS ARE AVAILABLE AT THE HUON SEMINAR OFFICE.

PRICE: K10 EACH

SEE JOY SAHUMLAL FOR FURTHER INFORMATION

PH 4244

Unitech Women's Basketball Association

Fund Raising Dance

VENUE: UNION HALL

Date:
Saturday 12 Sept 98

Time: 7:pm to 1:am

G/fee: K5.00 Tasol

DJ: Michael Matsi

UNITECH FEMALE STUDENTS ASSOCIATION

Fundraising Dance

VENUE: LAE BOWLS CLUB

Date: Saturday 12th September 1998

Time: 7:pm till late

Music: Wheels

Dress: Formal Neat

K10.00 PER HEAD (ENTRY BY TICKET ONLY)!

Ticket available at:
*Tuluan 10
*Tuluan 15
*Poroman 102
*Poroman 46
*Hetura 12
*Poroman 97
*Poroman 98

Transport Provided; Pick up: Poroman Carpark. & Coffee Shop

Happi 23rd INDEPENCE ANNIVARSARI PNG

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday: UNITED CHURCH
Tuesday: ANGLICAN
Wednesday: LUTHERAN
Thursday: AOG
Friday: CATHOLIC

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF

Sunday Morning
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

Sunday Morning
0 CLC CHURCH

Unitech Staff Bible Study

The next meeting of the Unitech Staff Bible Study group will be held on Monday, 14 September, 1998 at 7:00pm.

Venue: 86 Fly Drive

For Discussion:
The History of the Christian Church

All interested staff are welcome.

Patrick Afenya (Tel: 4674)

WAIL PREDIKSEN

Sat: CANTEBURY DOGS TO MAUL NEW CASTLE

Sun: BRONCOS TO CALM BAI'S STORM

CLASSIFIEDS

PUKMAN KATU
LECTURE SERIES

SPEAKER:

LADY MINA SIAGURU

TOPIC:

VALUES OF GOOD GOVERNANCE

DATE: 15-9-98
TIME: 7:00PM
VENUE:

ROSE KEKEDO CONVENTION CENTRE

FOR SALE

Bass Guiter Amplifier ROSS (USA) but made in Taiwan.

60 Watt RMS

Excellent Condition

K350 ono

Contact Russell 4734954 (B/Hrs)

FOR SALE

POWER ADAPTOR (9 V)

GOOD FOR MUSICAL INSTRUMENTS ETC SEE CORNEY LAHIES AT THE PUBLIC RELATIONS UNIT AND MAKE HIM AN IRRESSISTIBLE OFFER

EXT: 4298

TENDER

Construction of 1 x 20 room students accommodation unit at Unitech, Taraka Campus, Lae.

Building Contractors in Lae City area invited to submit Tenders for the erection and Commissioning of 1 x 20 rooms students accommodation unit at Unit.

Project Description

- Single story construction of reinforced concrete blockwork, reinforced concrete ground floor, reinforced concrete first floor and zinc roofing.
- Building pad to be raised 900mm above existing level.
- Storm water drainage required.
- Electrical and plumbing installation.

Tender documents will be available at the Buildings and Grounds Office Fax: 475 7625, telephone: 473 4333; upon payment of K60.00 non refundable fee.

Tenders should include company profile stating experience, capabilities, financial capacity, referees, labour force etc. and addressed to:

The PVC-Admin, PNG University of Technology, Private Mail Bag, LAE

Tender for: Construction of 1 x 20 Room, Students Accommodation.

Attention: Head of Buildings and Grounds "Confidential"

Tenders should be delivered to the Tender Box Buildings and Grounds Office on or before 3.30pm, 30th September, 1998.

FUN WITH MATHEMATICS

Problem 16

At his usual rate a man rows 15 km downstream in 5 hours less time than it takes to return. If he doubles his usual rate, the time down stream is only one hour less than the time upstream. In km/hr what is the streams current?

Solution:

Let c = speed of current, and let m = usual rate of rower in still water. Then his downstream rate is m+c and upstream rate is m-c. After he doubles his usual rate, rate downstream = 2m+c and rate upstream = 2m-c. Since, distance = 15 km and time = (distance/rate); 15/(m+c)=(15/(m-c))-5 and, 15/(2m+c)=((15/(2m-c))-1 .

Solving the above two equations simultaneously gives c=2.

Problem 17:

The side of an equilateral triangle is S. A circle is inscribed in the triangle and a square is inscribed in the circle. Find the area of the square.

All interested staff and students should send their solutions to problem 17 before Wednesday September 2nd.

First correct entry wins a prize of K5.00.

John Wamil, Dept. of Mathematics and Computer Science,
Email: jwamil@cms.unitech.ac.pg

Air Mail

STAMP



If unclaimed please return to:

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The Reporter

INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU

ISSUE No:1305 ISSN:10119-5354 18 September 1998 WEEKLY

Review of University research needed

A thorough review of research purposes and practices at Universities was required, said National Research Institute Director, Dr Beno Boeha.

He said that the review should also be extended to consider ways of gaining additional funding from new sources.

He added that the strengthening of procedures for determining institutional priorities with reference to national needs, and ensuring the primacy of teaching over research was also required.

He said that it was envisaged that a better directed, more competitive and enterprising research program would be developed.

Dr Boeha made this comments while presenting his paper " Research quality in higer education; Where are we heading" during the Huon Seminar.

"Relevance and acquiring research quality in higher education is an integral part of developmental goal of a nation, and PNG is no exception," Dr Boeha said.

"One of the most important traits and objectives of any higher education institution in the world today, must be to undertake research, as it is an integral part of any academic institution's mission.

"The current trend in higher education institutions in PNG, which are engaged in research, are experiencing problems in the provision of research infrastructure in their research and research training activities."

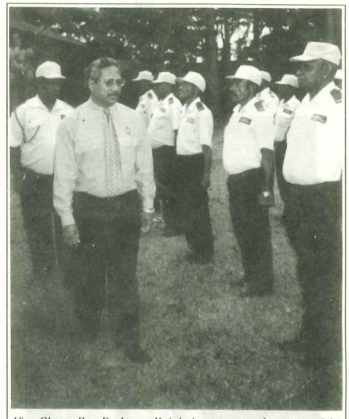
Dr Boeha said that the Commission for Higher Education (CHE), however, had commenced major initiatives to rationalise its activities and review major policy areas including Higher Education, Research, and Science and Technology.

He said that the main thrust of research activities in higher education and research institutions must be productivity; quality and relevance in research to be undertaken by such institutions.

He said that the specific objectives of CHE in the areas of research are;

- increase the responsiveness of government funded research institution to government priorities;
- increase returns on government investment on research;
- concentrate limited resources on research programs that address national problems, challenging issues, and priorities;
- create an open, competitive research "market" in which government funded institutions compete for commercially funded contracts, and commercially funded research institutions are able to compete for government funded contracts;
- achieve prompt, accurate reporting of all significant research activities and results;
- gain more benefit from scholarship and research capacities of higher education institutions, where they are being bypassed through preference for overseas institutions and consultants;
- secure increased private sector support for research in PNG;
- improve access to databases and research networks throughout PNG; and
- obtain optimum benefit from overseas researchers

•Cont Page 2•



Vice Chancellor, Dr James Kaiulo inspects guards as part of the Independece Flag raising ceremony

Re-examine one self for country's prosperity says VC

All Papua New Guinean Citizens should re-examine themselves on how they could contribute to re-building the country again, was the Independence message delivered by the Vice Chancellor, Dr James Kaiulo on Wednesday.

During the Independence Flag Rising ceremony, the Vice Chancellor said all citizens should look sensibly at a new direction to improve the country morally and ethically.

"We should pull ourselves together, and let us look at ourselves on how we can help rebuild this nation," Dr Kaiulo said.

"We all should have this mentality of what I can do for the country and not what the country could do for me as it is important for further prosperity of this nation."

Dr Kaiulo reflected that while attending the Pukman Katu Lecture Series delivered by Lady Mina Siaguru, a student pointed out that there was no role model leader for Papua New Guineans to look up to.

While reflecting on the student's comment, he commented that all citizens should be their own role models, and through this, make a positive contribution to the nation.

"Leaders are not born or elected but a true leader has the respect of his or her peers," Dr Kaiulo said.

whose active in PNG.

Bocha said that in one of his brief for the National Research Committee for CHE, he recommended a number of policies and strategies to be implemented in the area of research, including:

- establishment of the National Research Council;
- strengthening of research into higher education;
- supporting priority research programs
- encouraging grassroots research
- establishment of a Papua New Guinea Academy of Arts and Science
- cooperation with overseas researchers; and
- research allocation to establish a National Research Council (NCR) Secretariat.

A National Research Council would be established as a means of:

- creating an open and competitive research market;
- increasing responsiveness and accountability of government funded research institutions to government policies and priorities;
- coordinating research undertaken by government and non- government institutions; and
- optimising benefits from its outcomes.

"The most important function of the new National Research Council would be to identify and regularly review a limited number of priority areas to which resources are to be focused, either on a competitive or cooperative basis," Dr Boeha said.

"There would be an annual round of competitive bidding for funding in these areas, and over time, it is envisaged that the proportion of funding allocated in this way would increase in relation to the annual institutional allocations.

"Consistent with the emphasis placed on increasing and improving teaching and learning, institutions of higher education should be funded primarily for the services which they provide for students."



Dr Beno Boeha delivering his paper

Dr Boeha said that the Commission for Higher Education (CHE) was now attempting to ensure that the overall objective of the exercise would be to ensure that:

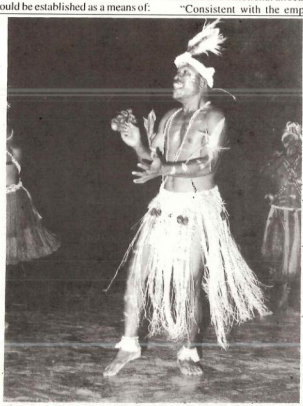
- Academic staff are not just assumed to be engaged in research;
- Relief from teaching is provided for staff who are active and productive, and whose research is considered worthy of support; and
- Resources which have been previously allocated to non-existent research are released to help with teaching.

"Through representation on the National Research Council, CHE and higher education institutions should optimise links between post graduate studies and priority research programs," Dr Boeha said.

"Some areas of research are so vital to the nation that they should be funded for their own sake, particularly, when they concern serious problems, issues, and challenges that are widespread in PNG, and lacking glamour or relevance elsewhere, and thus are otherwise unlikely to attract the attention they desire."

He said the productivity, excellence, and continuing relevance of such research should be tested and ensured through:

- providing institutions, programs and staff with minimum guaranteed (or core) funding, and encouraging/requiring them to seek additional resources on a competitive basis
- regular review by the most eminent available experts from abroad on the basis that institutions, programs and staff are assessed for their very right to continue receiving funding; that is, the reveiw should be "zero based", and staff would, obviously, not be assured of continuing employment in the same positions.



Duadua Theatre member entertaining staff and student as part of the social activities during the Huon Seminar.

The Reporter is produced weekly by the **PUBLIC RELATIONS UNIT.**
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Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Quality of higher education must not be compromised

The quality of higher education must not be compromised if higher education institutions were forced to seek alternate source of funding.

The pressure to seek alternate funding was leaving no option to university management but to seriously consider other sources and methods of funding.

It must be emphasised that any change in funding arrangement must not compromise quality of higher education.

These remarks were expressed by Prof Al-Dabbagh in his Huon Seminar paper " Facing the challenges of commercial imperatives in higher education funding."

"It has to make education accessible to all people wishing to ...ther their education equitably," Prof Al-Dabbagh said.

"However, there is a possible risk that these traditional values related to higher education may be endangered.

"The notion could be that higher education should be provided only to those who could afford it, or it has to be at a price.

"The price so far, has been carried by the public (taxpayers), and whether this should or would continue, remains unknown.

"The debate about this is capturing all the attention of managers and educators, due to the high pressure from governments through continuous funding cuts to higher education."

...rof Al-Dabbagh said that ...gher education can be regarded as the true foundation on which the prosperity of any nation largely depended on.

In fact, the progress of any country these days is measured by the number of per capita graduates of universities, he said.

"Unfortunately, when governments are in financial troubles, the first they target to cut are education and health, which are the most important aspects of modern societies," he said.

"It is not right to reduce funding in these two areas which are the most vulnerable and always targeted by different governments.

"Some governments decided to introduce major cuts in higher education funding, some are considering different options.



Prof Al-Dabbagh delivering his paper

"In some cases, students were requested to to contribute to their education, as in Australia in which the Higher Education Contribution Tax has the notion of 'study now and pay later' "

It was a fact that universities, or higher education establishments were becoming a heavy burden on the governments, Prof Al-Dabbagh said.

"While the cost of producing graduates is increasing, government funding is decreasing," he said.

"As a result of this, higher education establishments can no longer provide quality education, without some fundamental changes in the way universities are run.

"Until not long ago, financial and business related activities were separate from the academic matters of Universities.

"Today, a large number of well and credible university operations, are involved in looking at alternative sources to resource university operations, in addition to government funding.

"In view of reduced funding from governments to higher education, it makes it essential that universities rethink their traditional activities to include the so called 'real world commercial expertise to the traditional financial management practices."

Prof Al-Dabbagh said that by bringing the academic world more and more "commercial like activities", universities become more like private enterprises, and they should not forget their primary duty and responsibility to the public and the professional expectations to serve their students.

"The challenge of the senior management of universities is the ability to better manage the limited resources in order to maintain and enhance an environment that will deliver high quality educational outcomes, and to continue motivating and promoting competitiveness and excellence.

"In order to meet these challenges, it is required to put a lot of emphases on finding other sources for funding, better marketing of our activities, more relevant teaching programs dictated by the market forces, rationalisation of assets and human resources.

"The rapid change in the information technology and the necessity to know how to use it for our needs is the key factor in the future development o higher education.

"As we consider the future o scenarios for higher education it is essential to be able to adap and develop, because whethe we like it or not, the world is changing and we simply canno close our eyes.

"By proper strategic planning of our operations to meet market needs, by implementing the new information technology facilities, and with the right vision adopted by our management, we could shape our future to provide the most efficient services to our students."

He said that there was a need for a careful survey of the operations of higher education establishments.

He said that Governments want these institutions to be more accountable to the tax payers, and to be more transparent.

The old notion, he said, of total isolation from the real world was difficult to justify.

"The demand for more relevant and responsive to market needs, to be more competitive and efficient, present new requirements for higher education establishments.

"They demand a new approach in conducting our duties and new approach in management of all assets and human resources.

"There is a need to reconsider our options for the future by properly planning the necessary changes to reflect market forces.

Our control on our assets will be more reliable when proper quality assurance schemes are implemented, when our operations are fully accountable and transparent, and when resources are directed for more efficient management and reliability assurance in the use of modern technology.

"Information technology is not meant to cause painful and constant frustration or embarrassment.

"Hence, proper training in the use of modern technology is vital, if we really want to use these technologies for the benefit of advancing our educational programs."

Mechanical Engineering offering modern equipment for industry's use

The Department of Mechanical Engineering has embarked on a marketing drive for the use of its modern equipment and expertise for commercial purposes.

According to Head of Department, Prof Satter, the Department has acquired -through various funding agencies - various modern facilities that could be used for commercial purposes.

Prof Satter said that the Department's laboratories have a large range of teaching and test equipment in various areas of Mechanical Engineering.

"There are extensive facilities for teaching workshop technology including a CNC machine center, Computer Aided Design (CAD) facilities and the latest addition is the Non Destructive Engineering facility which is still being developed," Prof Satter said.

"The staff from the Department can offer services to industry in the form of consultancy, personnel training and short courses on a wide range of topics in mechanical engineering."

The areas, he said, may include: materials testing, failure analysis, noise measurement, tribology (friction, lubricating and wear), solar energy applications, alternative fuels and renewable energy sources, including charcoal and pyrolytic liquid fuels, micro hydro power, production systems including manufacturing processes, plant layout, production planning and control, and computer aided design and drafting, Total Quality Management (TQM), statistical process control and ISO 9000 and etc.



CNC Lathe Machine

According to Prof Satter, Machining facilities and services available at the Department are:

- Lathe Machines
- Milling machines
- Radial drilling machine
- CNC milling machine
- CNC lathe machine
- EDM machine

Precision manufacturing includes:

- Dies for press tool
- Multi cavity moulds for injection molding and many other complex shapes
- Mass production of electric shovel track pins and electric drill track pins.

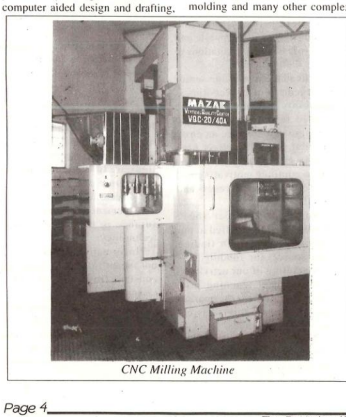
The Department has also Materials testing facilities and services which could be utilised are;

- 50 ton universal testing machine (tensile, compressive & testing)
- Impact testing machines (charpy and izod)
- hardness testing machine (Rockwell A&B, Brinell, Vickers & Shore)
- Heat treatment facilities (gears and small components)
- Nondestructive facilities (being developed for liquid penetrants testing, magnetic particle testing, ultrasonic testing, eddy current and radiography.)

Measurement facilities available are:

- Portable sound level meter
- Portable temperature and humidity measuring instrumentations
- Temperature measurements
- Relative humidity
- Stress/strain measuring instrument
- flow meters
- viscosity measurement
- pH meter
- light level measurement
- coating thickness measurement
- RPM measurement (rotational speed)

The Department has been active in several research and development projects in the Department, centered on problems of special interest in PNG, including the development of low cost solar heating systems and space cooling, Prof Satter said.



CNC Milling Machine

Other projects include structural vibration analysis, vibration monitoring in machine maintenance, applications to transport and farm machinery and the development of low cost water wheels for hydropower, copra drying and energy auditing.

The equipments are used as part of the Department's courses leading to Degree of Bachelor of Engineering in Mechanical Engineering and Master of Technology (M.Tech) in Engineering, he said.

"The under-graduate teaching in the department is aimed at providing a broad and solid base in fundamental mechanical engineering and at the same time offering relevant workshop experience and management studies," Prof[illegible] said.

"The Master of Technology program is a post-graduate degree course of two to three years duration.

"It is essentially a non-residential course, composed of course work and a dissertation.

"The overall objective is to further develop practicing engineers in industry and government bodies.

"The program has been designed to function with cooperation from overseas universities, which would also moderate the curriculum, dissertation, and examinations.

"The programs also provides incentives to industry in that the selection of dissertation topics is chosen jointly by employers and university staff, with the aim of being able to assist in the solution of specific industrial problems."

Vanuatu students celebrate Independence

Unitech Vanuatu students last Wednesday celebrated their 18th Independence Anniversary by staging a small feast to commemorate the event.

The Vanuatu Independence falls on 30th July, however, due to study commitments, the students had to postpone their celebration to last week.

Vanuatu Students Association President Micheal in his occasional speech pointed out to fellow students that they would one day be making decision for their country, therefore, they should take their studies seriously.

"We are now at the University - a training ground for all of us - and, the time will come when we will assume responsibilities and make decisions that will determine the destiny of our ple and nation," he said.

"With this obligation, we have to give the best we have in ensuring that our nation is truly, economically independent.

"Are we ready to give the best to our people and our nation? If not. Are we making use of the opportunities available directly and indirectly to equip ourselves for this big service?

"I believe that its time we start living with visions and start becoming a living part of our visions, and a living part of the future changes that we want to make for the good of our nation.

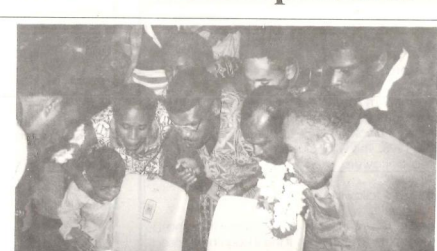
"Only if intellectuals like you and I who have a greater degree of influence in the society could take the lead in the right direction.

"Only if we could train ourselves to live on principles and become thinkers and not mere reflectors of other people's ideas."

He told the students that they would one day be in a position to exert a positive influence to lead their nation into the right direction.

"A truly independent nation was a nation that was not only free from foreign domination but a nation that was also free from foreign aid obligations," he said.

"I don't think we have reached that stage yet, and I think we can to certain extent reach this status if everyone could join hand in hand in tackling national issues."



Vanuatu students blowing off the 18th Independence cake

Sobou secures K5000 sponsorship



Cellnet Marketing Manager, Charles Hayes presenting the set of Uniforms and equipment to Sobou

Cellnet has renewed its sponsorship with Sobou soccer club for the third consecutive year.

Cellnet Marketing Manager, Charles Hayes while presenting club officials K5000 worth of uniforms and sports equipment said the company was proud to be associated with a champion team.

"Being minor premiers last year and this year, while being under our sponsorship, has made the company proud and we will continue to sponsorship commitment to the club," Hayes said.

"We are trying to establish ourselves in the market, and Sobou club has been a very good ambassador for us."

Hayes wished the club all the best in the coming finals which all divisions of the have entered.

Sobou is currently leading the Lahi Soccer Association competition ladder.

Arabasti tops women b/ball competition

Arabasti, after three rounds of competition, tops the Unitech Women's Basketball Association competition with 27 points.

They are followed by SHRM on 26 points.

Also on 26 points but settling on the third spot is Busary.

Engineering follows with 24 points.

These top four teams will play each other in the coming finals to see who would be throned this year's basketball queens.

The rest of the table has Registry settling in on the fifth place with 21 points, followed by Natres with 16 points, Hausbuk with 10 points and Essential Services with 10 points.

Association President Veronica Micheal says that they would be naming two squads for the Intervarsity Games.

INFORTAINMENT BOARD

Matheson Library

Overdue Fines For Special Reserve

As a control measure, and for fair access, the Library will start implementing overdue fines for special reserve books only as from Monday 21st September 1998. This will include all students, staff and external borrowers.

The fine is as follows:

All special reserve books are for use within the Library for strictly 2 hours only. If the 2 hours has lapsed, the Library will impose a fine of fifty toea (50t) per book per hour.

Please observe and return all books on time to avoid embarrassment.

Library Management

East New Britain Students Association

The East New Britain Students' Association will be celebrating the twin Volcanic Eruption, 4th anniversary on Saturday 19th September.

The service will start at 9:00 am. All East New Britain students and East New Britain community are asked to attend.

Executives 1998

HOUN SEMINAR LAPLAPS ARE AVAILABLE AT THE SEMINAR OFFICE.

K10 TASOL

PLEASE CONTACT JOY SAHUMLAL ON 4244 FOR INFORMATION

INTERVARSITY DART FUNDRAISING DANCE

Venue:
Staff Amenities Centre

Date:26 September, 1998
Time: 7:00 pm to 12:00am

Gate Fees:
Ladies: K5.00

Gentlemen:
K10.00

Tickets are available from:

P Dam	4280
Z Sombo	4959
D Kumaina	4320
C Taudoga	4321
M Kodiwa	4341

CATV User's (Subscribers) Group

During the TV User's (Subscriber's) meeting on the 9th this month, I was voted in as the Group's Acting Chairman. I will be standing in for our Chairman - Mr Luke Wangi will be away on study leave for at least three months.

I hope to meet with representatives of the User's Group from various section of the campus community to find ways to better organize ourselves to serve our cable TV network subscribers and to provide the service and necessary assistance and/or co-operation required from us.

Meanwhile, may I take this opportunity to appeal to all the subscribers for their co-operation in filling out the additional Pay-TV Channel Preference Registration form correctly and return it to the Electronic Service Unit as soon as possible before the end of this month.

Do not leave it to the last minute. Your input to this survey may very much determine the kind/and or quality of programs suitable for your family, especially your children's viewing.

If anyone is excluded from this poll, or does not even understand what is going on, call into the Electronic Service Unit or call me on Extension 4721 for more information.

Mathew Civil
A/Chairman - TV User's Group

Unitech Cable TV (CATV) Subscriber Poll for additional Pay-TV Channels:

The CATV User Group met on 9th September 1998, at Mining Engineering. At this meeting it was explained that the method of delivering the satellite TV signals are in the process of being changed from analogue to digital.

This has several implications. Firstly, we will not be able to receive ABC, SBS and QTV from its current source after February 1999.

An alternative source for ABC and SBS has been found but no alternative for QTV has been found so far. Secondly, the additional channels that were voted upon last year have not been made available.

The TV Management Committee decided, it would be a waste of time and money to make the changes until the new digital sources were fully implemented by the providers and they were stable.

That time has now arrived. Because of the significant increase in costs associated with the extra channels, the meeting decided to carry out another survey by preference vote.

This Monday we posted the Preference Registration Forms to all CATV subscribers. By this time all members should have received the forms. If you haven't received one, please come and get a copy from ESU. Completed forms should be handed over before 30th September, 1998.

Uni CATV Management.

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday: **UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**
WEEK-ENDS
Saturday
AM -SDA
PM-TSCF
Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

...day Morning
...0 **CLC CHURCH**

Unitech Women's Basketball

Draw - Finals

Mon 28/9/98
SEMI FINALS

Game 1 at 5pm
Arabasti vs SHRM

Game 2 at 6pm
Bursary vs Engine

MAJOR SEMI

Wed 30/9/98
Loser Game 1 vs Winner Game 2

GRAND FINAL

Mon 4/10/98
Winner Game 1 vs Winner Game 3

GOOD LUCK

CLASSIFIEDS

TENDER

Construction of 1 x 20 room students accommodation unit at Unitech, Taraka Campus, Lae.

Building Contractors in Lae City area invited to submit Tenders for the erection and Commissioning of 1 x 20 rooms students accommodation unit at Unit.

Projection Description

- Single story construction of reinforced concrete blockwork, reinforced concrete ground floor, reinforced concrete first floor and zinc roofing.
- Building pad to be raised 900mm above existing level.
- Storm water drainage required.
- Electrical and plumbing installation.

Tender documents will be available at the Buildings and Grounds Office Fax: 475 7625, telephone: 473 4333; upon payment of K60.00 non refundable fee.

Tenders should include company profile stating experience, capabilities, financial capacity, referees, labour force etc. and addressed to:

The Registrar, PNG University of Technology, Private Mail Bag, LAE

Tender for: Construction of 1 x 20 Room, Students Accommodation, UNITECH.

Attention: Head of Buildings and Grounds 'Confidential'

Tenders should be delivered to the Tender, Box Buildings and Grounds Office on or before 3:30pm, **30th September, 1998.**

GUITAR TEACHER WANTED

A guitar player who can teach a high school student who very interested in learning to play guitar.

Please call 473 4500 (BH)
or 475 7268 (AH).

FOR SALE

OPTUS COMPUTER

PCV 386 Hard Drive; Monier (Colour), Keyboard, Mouse, Fax Modem Microlin (Internal).

Software inclues Windows, Microsoft Office, Excel, Word.

K500 tasol

MITSUBISHI PAJERO

4-Wheel drive, radio, good condition, regular servicing, taxed and safety sticker until Feb 1999.

K9000 ONO

Phone 473 4459 (B/H)
475 7563 (A/H)

SAC KNOCKOUT PRESENTATION

Presentation for the SAC knockout competition will be held tonight (18/9/98) at the SAC commencing at 7pm.
Members welcome

FUN WITH MATHEMATICS

Problem 18

When the number 2^{1000} is divided by 13, what is the remainder in the division?

Soln: We make use of the following fact. If n_1, n_2 are integers whose remainders, upon division by d are r_1 and r_2 , then the products $n_1 n_2$ and $r_1 r_2$ have the same remainder upon division by d . In symbols: if $n_1 = q_1 d + r_1$ and $n_2 = q_2 d + r_2$,then

$$n_1 n_2 = (q_1 d + r_1)(q_2 d + r_2)$$
$$= (q_1 q_2 d + q_1 r_2 + q_2 r_1)d + r_1 r_2$$

and the last expression clearly has the same remainder as $r_1 r_2$.

Among the few powers of two, we find that 2^6 has the convenient remainder 12 [or -1] upon division by 13,so $2^{12} = 2^6 . 2^6$ has the same remainder as 12.12[or (-1)(-1)], namely 1. We now write $2^{1000} = (2^{12})^{83} . 2^4$,and conclude that the remainder upon division by 13 is $(1)^{83} . 3 = 3$, since $2^4 = 16 = 1.13 + 3$.

Correct solution was submitted by Ngiya Alina, FYE.

Problem 19.

Let

$s_n = 1 - 2 + 3 - 4 + \ldots + (-1)^{n-1} n, n = 1,2,\ldots.$

Then what is the sum of $s_{17} + s_{33} + s_{50}$.

All interested staff and students should send their solutions to problem 19 before Wednesday September 23rd.

First correct entry wins a prize of K5.00.

John Wamil, Dept. of Mathematics and Computer Science,
Email: jwamil@cms.unitech.ac.pg

Air Mail

STAMP

If unclaimed please return to:
The Editor
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Papua New Guinea University of Technology
Private Mail Bag
LAE 411, MOROBE PROVINCE
PAPUA NEW GUINEA

PRINTED MATTER

The Reporter

INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU

ISSUE No:1306 ISSN:10119-5354 25th September, 1998 WEEKLY

Unitech Development Company review calls for more autonomy

The Unitech Development Consultancy (UDC) Pty Ltd Board of Directors have endorsed in principle the company's operational review recommending it to operate as a fully commercial entity.

The review report containing detailed recommendations would presented to the University of Technology Council for approval.

According to the report prepared by consultant Tony Javis, as far as consultancy was concerned, UDC was used as a vehicle for the University's contract staff to derive additional income from the Government and the private sector.

However, the report pointed out that UDC needed to be the driving force behind consultancy projects, and UDC should adopt a more aggressive approach to marketing and its own profitability.

"As the commercial arm of the University, charged with the responsibility of generating additional income, the company needs to maximise returns on investment," Mr Javis said.

"It also needs to fully develop the potential revenue raising opportunities afforded by proper utilisation of both the talent and facilities available at the University.

"The company must be seen by the community at large, especially the business community, as not deriving an unfair advantage from its association with the university and, as such must bee seen to be trading 'at arms length'.

"In order to accomplish this, UDC should pay, to the University, commercial rents and leases for all university assets and property used by the company.

"An immediate stock take needs to be carried out to properly establish the ownership of company assets and to form the basis of an agreement with the University in relation to rental and lease payments.

"Therefore, UDC, needs to retake the initiative to be the driving force behind the provision of consultancy services for PNG, especially, in services related to development and implementation of technology and infrastructure development."

Among the general recommendations, all consultancy request must now be channeled through the UDC, which would negotiate with clients initial terms of reference.

Heads of Departments would be involved with negotiation relating duration of consultancy and expertise required while the company would negotiate with client for total project fees and with client consultants.

This would allow the UDC to employ the consultants on an agreed fee for each individual project.

The report further recommended that UDC acts as project manager for each consultancy project and would provide support service for consultants through its own staffing structure ie secretarial, accounting, etc.

"The current arrangements for the provision of consultancy services are unsatisfactory in that neither the University nor the company has any direct control," Javis said.

"Further, it would appear that even though the protocol for consultancy was agreed in 1992, whereby all agreements would be in the name of UDC and that contracts would be framed to reflect this, the individual consultants seem to have continued to make arrangements themselves.

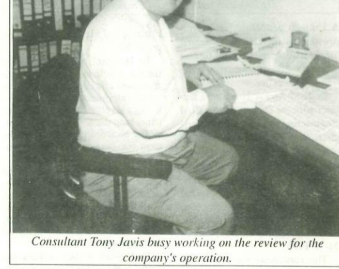
"In most cases these arrangements are verbal with the only authority being an approval document signed by the Vice Chancellor and Executive Manager UDC.

"This lack of formal contractual arrangement between the client and the company creates a situation whereby neither party has any rights or obligations.

"The company has no legal remedy, for example, should a client fail to settle an account issued by the Company.

"Further, it is doubtful if the company has any legitimate right to invoice clients directly as there have been no contractual agreements negotiated between the two parties.

"It would appear therefore that when it suits the individual consultants they utilise the services of UDC but, in general, the company is used as a vehicle to legitimise income generation for staff of the University.



Consultant Tony Javis busy working on the review for the company's operation.

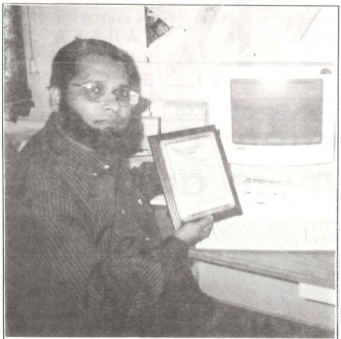
"It is imperative therefore that the original intention be strictly adhered to and that for each consultancy project a formal contract setting out rights and obligations between both parties be signed prior to commencement of consultancy.

"In all case, the contract needs to be arranged between Unitech Development and Consultancy Ltd."

Amongst other recommendations concerning short courses, UDC would have to establish a separate training entity, initially, it would use the training facility at the Rainforest Habitat.

- UDC to establish an office and training facility in Port Moresby
- UDC either lease, purchase or build its own training and accommodation facilities in Port Moresby. As the main center for Government and the private sector, there is considered to be more opportunity for the development of training in Port Moresby.
- UDC through its own staff develop schedules of courses and contracts with University Departments to create the courses and to provide teaching.
- UDC becomes the course provider and assumes responsibility for all administration, marketing, accounting and support.
- Teaching staff be contracted, at set negotiated fees for preparations and teaching of courses.
- Write into University staff contracts that they will be expected to contribute to short course preparation and deliver as part of their normal duties albeit that they will receive additional remuneration for the provision of their services
- Facilitate and encourage the attendance of overseas students on such courses especially students from near neigbours (Solomon's, Vanuatu, Indonesia etc).

Unitech academic wins international award



Dr Hossain with the Ken Francis Award.

A Unitech academic has won a prestigious international award for presenting an outstanding and original paper during an international conference.

Dr K.M Anwar Hossain, a lecturer with the Department of Civil Engineering received the prestigious "Ken Francis Award" for his research paper on " Volcanic Ash and Pumice Based Blended Cement."

He presented his paper in the 23rd International Conference on Our world in concrete and structure, held in Singapore on from August 24-26 1998.

The conference has been a major international event which has focused on world-wide concrete research for the last 23 years.

This year, the theme for the conference was "New Horizons in Concrete and Structures."

High quality papers in the diverse fields of concrete and concrete structures including ready mixed concrete and blended cement were presented.

Dr Hossain's research work on the use of volcanic ash and pumice in cement and concrete production gained international recognition for its high level of excellence and his paper won the Ken Francis Award.

The awarded is presented to the most outstanding and original paper presented at the Conference.

Dr Hossain's work is part of the research that is now under progress in the Department of Civil Engineering under the title "Thin Walled Composite Elements," and a full time MPhil student is now involved in this project.

Dr Hossain wishes to thank the Unitech Research Committee for providing financial support for this project.

He also expressed deep gratitude to the Head of Civil Engineering Department, Colleagues and the Technical Staff of the Concrete Laboratory for providing support and assistance.

STUDENTS URGED TO REKINDLE PNGs SPIRIT



Lady Mina Siaguru

The Papua New Guinea National Constitution should be used a guide for all Papua New Guineans for the prosperity of the nation.

Lady Mina Siaguru in her Pukman Kaiu Lecture series talk on the eve of the Country's 23rd Independence, said that National Constitution provided for Papua New Guineans to enjoy leaving in peace and harmony with each other.

"It talks about keeping the best of traditional PNG, and marrying it with the best of the modern world, in order for us all to find our new identity, unique to PNG, and yet, being part of the international scene," Lady Siaguru said.

"It is very visionary, it touches on issues like environmental protection for future generations; it talks about our culture, our inheritance, and how do we Papua New Guineans, should feel proud as a nation.

"PNG is well endowed with natural resources, with a relatively small population, we really ought to be one of the best countries in the world.

"The National Constitution has given us all the essence of building a harmonious society, however, what has gone wrong, we are 23 years old and we are getting worse."

The reality was totally different, she said. Lady Siaguru also challenged students - the future leaders - to make a difference when they go out to join the work force.

She said that all citizens should be guided by self respect, self discipline, dignity, to be an appropriate citizen in helping to build a better Papua New Guinea.

"We all have an important role to play in improving the image and credibility of this nation.

"As soon as you graduate, you would be taking your place in the work force - most likely as a junior professional.

"Being a graduate myself, we can't wait to to get stuck into our respective jobs and we will be in receipt of that forth nightly salary which we have worked so hard for while being a student.

"We are all fired up and burning with enthusiasm to get out there and conquer the world.

"This is a good omen. Being youthful - and an educated one and rearing to go.

"My only hope is that would that enthusiasm remain with you forever, guided very much by the qualities and attitudes mentioned.

"The essence of any communal organisation to function well, everybody has to pull together for the sake of the group, and it is a team work where everybody has their part to play.

"I think that is how you should conduct yourself in this situation as it will reflect on the values and attitude of the individual

"Doing the 'right thing' by you, may not always be the most popular decision and it is a test of your character."

The Reporter is produced weekly by the **PUBLIC RELATIONS UNIT.**
Deadline 4pm on Tuesday weekly.

Editor: CORNEY LAHIES phones 473 4298
Journalist:STEVEN BUSIN 473 4290
Secretary: ANGELA BOROMANA 473 4291

The Media is most welcome to use stories with due acknowledgement

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email: reporter@unitech.ac.pg or cklahies @global.net.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

UDC awarded K100,000 contract for UPNG master plan development

The Unitech Development and Consultancy (UDC) Pty Ltd has been awarded a contract for over K100,000 to begin phase one of the University of Papua New Guinea's (UPNG) Master Plan Development Program.

UDC Executive Manager, Esekia Warvi said that this was the first project that UDC has been engaged as project manager to the ject , and is worth about K124,000.

Consultants engaged in this project are Kora Korawali, and Professor Mc Ruff from the Department of Architecture and Building, and Smyly Bannerman and Bob Curley from the Department of Surveying and Land Studies.

Mr Warvi said under the contract, UDC would be required to under-take a review of the existing and ancillary buildings, roads, parks and gardens, paths and oughfares, discharge fares, pedestrian access, sporting fields, courses and other recreational facilities.

He said the review would also determine appropriate improvement and developments, consistent with the institutional needs, and be environmentally friendly.

UDC consultants would also be engaged on assessing the existing car parks and recommend improvements on capacity and locations, he said.

"Beautification plans for the main campus and related environment would also have to be developed," Warvi said.

According to Warvi the current buildings at UPNG would also be reviewed and architectural design guidelines would be developed for new constructions.

Warvi said that the UPNG project was one of the many future projects that UDC would act as project manager, adding that it was in line with the current UDC review, which was endorsed principally by the UDC Board of Directors.

Under the review, UDC would now be engaged in project identification, proposal and then academics would be asked to act as consultants to those projects.

"This was part of the major recommendation for UDC to diversify its operations in view of the continuous decline in Government funding, which has meant the University had to develop income generating activities," Warvi said.

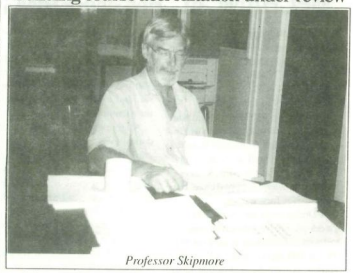
"UDC was initially set up to supplement income of academics through consultancy, however, it cannot further act as a supplement source of income for academic staff.

"Since , its establishment in 1992, there had not been any major review of the organisation's corporate objectives.

"The review is just a snap- shot of the company's operation, and it is not expected to please everyone and a lot of people may not like it.

"But the important thing is that this review has been principally endorsed by the board."

Building course accreditation under review



Professor Skipmore

A visiting academic, Professor Skipmore from Queensland University of Technology is currently reviewing the Building Course in the Department of Architecture and Building.

The Building course, received its accreditation last year, from the Australian Institute of Builders, and as part of the accreditation process, the course is reviewed yearly, to ensure it maintains its current quality.

Professor Skipmore is also on campus to act as judge for the Building students project week, and also as external course advisor.

According to Architecture and Building Deputy Head of Department, Ken Polin, the Building course project week would allow students to prepare hypothetical cases for a construction project in town.

He said students have been divided into six groups and, by today , the teams would be submitting their tender proposals for the project.

"By Friday, the six groups would contest against each other to see which group comes out with the best solution to the proposed construction project," he said.

"Prof Skipmore and Building staff would act as the tender board and would judge from the students' presentations, taking into account all aspects for tendering, and the client groups that present the best solution would be awarded the tender."



Students busy preparing th documents for the Tender bidding

MECHANICAL ENGINEERING DUO GAIN MASTERS IN STYLE

Trying to gain your Masters in a foreign language was not an easy experience, as was the case for two Department of Mechanical Engineering lecturers who recently obtained their degrees in Indonesia.

The two, Brian N'Drelan and Karo Komuna, sat for their Masters at University of Gajah Mara and Bandung Institute of Technology respectively.

Both said that their initial days in Indonesia was an experience they would never forget.

N'Drelan and Komuna were notified a week prior to their departure that they had won scholarships to do their Masters in Indonesia, and they had to finalise everything within that week, prior to their Indonesian bound flight.

"Our first days over there were something, we didn't even understand a single Bahasa Indonesian word nor did most of the Indonesian people understand English," N'Drelan said, adding as if they were speaking to aliens.

Komuna recalled their first few days over there when they had to look for accommodation as the University did not provide accommodation for its students.

"We were only a few days there and they told us to look for our own accommodation, which was not the problem, however, the problem was that we did not understand their language and to bargain with the land lords for rates when neither of us understood anything was quite an experience," Komuna said.

Fortunately, they met a fellow Papua New Guinean student from Vanimo who spoke Bahasa Indonesia, and took them around looking for accommodation.

All foreign students going into Indonesia were given an eight month crash course in Bahasa Indonesia.

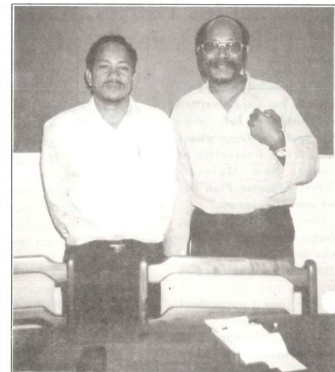
During their eight months course in learning to speak Bahasa Indonesia, both admitted that communicating was difficult as some of their language teachers were not English speakers.

" I can remember an incident where one lecturer, came in, and started off with Bahasa Indonesia until the end, just imagine you don't understand anything about the language, not even a word," Komuna said.

"It was difficult for us to ask straight forward questions, however, eventually we managed to speak the language, but not fluently," N'Drelan said

"I can recall, after we had completed our eight months of language training, we were told to do a group assignment, by which we had to write reports. When I showed my friends what I had written they just laughed from the beginning till the end because my sentence construction was all over the place."

Course work, lectures, examinations, assignments, tests, including the minor thesis all were done in Bahasa Indonesia, N'Drelan said.

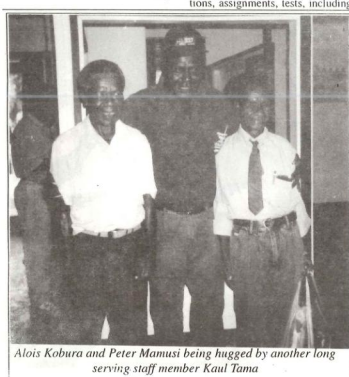


Karo Komuna (left) and Brian N'Drelan

But, despite the minor initial hiccups, both have come to appreciate the language and the country's unique culture, by overcoming all odds and completing their studies. They also graduated from their respective institutions.

N'Drelan and Komuna recommended that if in future if any academic was thinking of going over to Indonesia for studies, it was advisable for them to start learning the language for a year first before they go there.

"We are prepared to give tutorials in Bahasa, now that we think we can fluently speak and write the language," they said.



Alois Kobura and Peter Mamusi being hugged by another long serving staff member Kaul Tama

TFTC farewells two long serving members

The Timber and Forestry Training College recently farewelled two of its longest serving members.

The two are Alois Kobura and Peter Mamusi for serving the college 22 and 10 years respectively.

Kobura, a pioner employee of the college served the college since its intial construction stages and has witnessed all changes occuring to the college.

Mamusi served as the college driver for the last 10 years.

In a small farewell function at the college, Principle, Frank Corin thanked both men for their hard and commitment to the college.

He wished both all the success in the future and well deserved rest.

Others staff members also praised the two men for their oustanding perfomance

SPORTS KONA

Female Staff Soccer for Intervarsity Games 1998

This notice goes to all the Unitech Female Staff who wish to take part in playing soccer during the Annual Intervarsity games from 23-25 October this year. If you are interested, please give your name to Freda Y Doe on ext. 4901 or turn up for training at the Soccer Field on Tuesdays and Wednesdays.

Freda Y Doe
Coordinator (Female Staff Soccer)

Council and Council Committees' Elections

1.Nominations are being called for elected staff representatives for vacancies on the Council and the Staffing Committee as follows:

1.1Council - Section 9 (1) (h): one vacancy for a Professorial representative, ex-Professor T Phythian, whose term will expire on 31/12/98.

1.2Staffing Committee - Section 2 (c-g): one vacancy each for: (c) Professorial HOD representative, ex-Professor R Milani, whose term will expire on 31/12/98; (d): Non Professorial HOD representative, ex - Ms A Kila, whose term will expire on 31/12/98; (e): Academic Staff respresentative, ex - Mr s Bannerman, whose term will expire on 31/12/98; (f): Technical Staff representative, ex - Mr B Isom, whose term will expire on 31/12/98; (g) Admin Staff representative, ex - Mr C Lahies, whose term will expire on 31/12/98.

2.Nominations will open on 5th October and will close on 9th October. Nominations forms are available from my Office.

3.Depending upon the nominations being received, elections would be held on the following week.

4.Staff participation in this matter in previous instances was below normal expectations. I feel the outcome could have been better and am thus urging for a better degree of participation for a better result.

Peter Wandau
SAR (Council)

POSITION VACANT

Department of Mathematics & Computer Science

Technical/Senior Technical Officer (Computing)

The University seeks to fill the above post to support day to day running of the Department's computer laboratories supporting service and degree teaching.

Duties include day to day management of the running of one staff and three student computer laboratories, purchasing suitable hardware and software and its installation and maintenance, file maintenance, virus protection, documentation and tutorial support for students.

The person to be appointed could be someone with experience in managing computing networks and or a recent graduate in a computer science related discipline.

It is expected that further training in either software or hardware will be available for the appointee.

Salary

Technical Officer I/II K7,933 - K11,179 plus DMA of K1,000 pa
Senior Technical Officer I K10,599 - K12,955 plus DMA of K1,000 pa
Senior Technical Officer II K12,288 - K15,017 plus DMA of K1,500 pa

(Level of appointment depends upon qualification and experience)

Detailed applications (two copies) with curriculum vitae including certified copies of qualifications obtained and names and addresses, fax/phone numbers of three (3) referees and an indication of the earliest availability to take up the appointment should be received by: The Registrar, PNG University of Technology, Private Mail Bag, LAE by 6 October 1998

Security Matters: Request for Cooperation from Campus Residents

The University Security reports have indicated that an increasing number of Campus residents and off-campus visitors have been using the public places and sports fields on campus during the day, in the evenings and at night to engage in consumption of alcohol and other activities. In some instances it was observed that such activities have also taken place in offices.

For security reasons and to assist University security, campus residents and visitors are strongly advised to stay off public parks and sports field especially at night. Those who have the preference to consume alcohol under the trees and in the sports fields are advised to do so at their residences.

The Campus Residents and Campus visitors are hereby advised that the Vice-Chancellor's Office has empowered the University Security to undertake the following measures:

1.Campus residents and off campus visitors who park under the trees and in the sport fields during the day and at night and get involved in activities as stated above will be requested to go to their respective residences and those from off campus will be required to leave campus.

2.Security will question staff who sue offices for activities as stated above.

3.All vehicles with tinted glass entering campus after 2100 hours will be required to wind down the windows for inspection before they are allowed entry into campus. No visitors will be allowed entry into campus after 21 hours.

Campus residents are advised to observe the aforesaid measures so as to avoid any likely embarrassment when approached by the University Security.

The Staff Associations have been consulted and have given their support for the best interest of the University.

Clearing of Gardens and Bushes between SAC and IFTA

This is to advise staff who make gardens between Staff Club (SAC) and Insect Farming and Trading Agency (IFTA) that this whole area will be cleared in December 1998 or January 1999. In this respect you are requested to harvest what you currently have in your gardens and do not replant as the area will be cleared.

For the best interest of the Campus Security you are requested to cooperate and take appropriate action.

Wilson Tovilika
Pro Vice-Chancellor (Administration)

Research and Conference Reports

Recipients of Research Committee funds, please note that it is a requirement under the conditions for the use of Research funds, that you are required to provide reports on conference attendance or progressive/final reports on research project undertaken to the Research Committee.

Please ensure that your reports should reach me before the end of the academic year.

Primus Dam
Executive Officer
Research Committee

INFORTAINMENT BOARD

Unitech Cable TV (CATV) Subscriber Poll for additional Pay-TV Channels:

The CATV User Group met on 9th September 1998, at Mining engineering. At this meeting it was explained that the method of delivering the satellite TV signals are in the process of being changed from analogue to digital. This has several implications. Firstly, we will not be able to receive ABC, SBS and QTV from its current source after February 1999. An alternative source for ABC and SBS has been found but no alternative for QTV has been found so far. Secondly, the additional channels that were voted upon last year have not been made available. The TV management committee decided, it would be a waste of time and money to make the changes until the new digital sources were fully implemented by the providers and they were stable. That time has now arrived. Because of the significant increase in costs associated with the extra channels, the meeting decided to carry out another survey by preference vote.

Monday 14 September we posted the Preference Registration Forms to all CATV subscribers. By this time all members should have received the forms. If you haven't received one, please come and get a copy from ESU. Completed forms should be handed over before 30th September, 1998.

Uni CATV Management.

Natschol Renewals

Natschol Renewal applications are invited from eligible students.

Applicants must have self-sponsored for at least two semesters.

Attach your academic transcripts and receipts of payment of University fees for the semesters you self-sponsored, with a covering letter.

Applications must be addressed direct to:

The Scholarships Officer (OHE)
Office of Higher Education
P O Box 5117
BOROKO NCD

Deadline: September 30, 1998

Yawi Rapi
Academic & Student Administration

Intervarsity Dart Fundraising Dance

Venue:
Staff Amenities Centre

Date: 26th September, 1998

Time: 7:00 pm to 12:00 midnight

Gate Fee:
Ladies: K5.00
Gentlemen: K10.00

Tickets are available from:

P Dam - 4280
Z Sombo - 4959
D Kumaina - 4320
C Taudoga - 4321
M Kodiwa - 4341

SEMINARS

ERMC Environmental Seminars

Maria Franke - Zenag Farm Tree Kangaroo Sanctuary

"How Captivity Can Help Save The Tree Kangaroo"

Date: Wednesday 30 September 1998

Time: 4 - 5 pm

Venue: Mining Engineering Lecture Theatre (MNOO1)

All Environmental Lecture Series are free and open to the public. For more information please call 473 4686

Department of Business Studies

Staff Seminar

Topic:
Dr Rad and the PNG Economy

Speaker: Asoka S Seneviratne - Head of Economics

Date: 30 September 1998
Time: 12:00 to 1:00 noon

Venue: Duncanson Hall

All are welcome.

Associate Professor Anthony Agyei
Seminar Organiser

PNG Mathematics Competition 1998

This nationwide contest for university students in PNG will be held on Thursday 1st October at their respective campuses. For students at University of Technology Taraka campus, the competition will be held between 3:00pm and 5:00pm in the following venues.

Category I - Duncanson Hall

Category II - Mining Engineering Lecture Theatre

Open Category - Mining Engineering Lecturer Theatre

Those students who have formally expressed their intention for participation, by the completion of entry forms, are reminded to present themselves for this examination.

Dr Samuel Kopamu
Deputy Head
Department of Mathematics & Computer Science

HUON SEMINAR LAPSLAPS AVAILABLE AT THE HUON SEMINAR OFFICE.

PRICE: K10 TASOL

HURRY WHILE STOCKS LAST

CALL JOY ON 4244 FOR INFORMATION

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday:UNITED CHURCH
Tuesday: ANGLICAN
Wednesday: LUTHERAN
Thursday: AOG
Friday: CATHOLIC

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF

Sunday Morning
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

Sunday Morning
9:00 CLC CHURCH

Unitech Staff Bible Study

The next meeting of the Unitech Staff Bible Study group will be held on Monday 28 September, 1998 at 7:00 pm.

Venue: 86 Fly Drive

For Discussion: The History of the Christian Church

All interested staff are welcome.

Patrick Atenya (Tel 4674)

Unitech Catholic Community

Our Rosary Nite will begin next Friday 2nd October at 7:30 pm at the Chaplain's Residence.

You are all welcome.

President

CLASSIFIEDS

Fundraising Dance

DATE: FRIDAY SEPTEMBER 25, 1998

VENUE: UNION HALL

MUSIC: DEE JAY WHEELS

GATE FEE: K5 TASOL

BUS FOR DROP OFF.

REFRESHMENTS AVAILABLE WITHIN.

Fundraising Dance

Hiritano Students Club

DATE: FRIDAY 25 SEPTEMBER 1998
VENUE: LAE BOWLING CLUB
TIME: 7:00PM TILL LATE
MUSIC: DJ WHEELS
DRESS: TROPICAL (NEAT)
FEES: K10.00 PER PERSON

Transport to and from the Bowling Club is provided. Pick-up point is at the front of Haus Kofi at 7:00pm.

Tickets can be purchased at the gate or from the following:

Edward Nicholas - Lihir 6, Vagi Boga - Tuluan 12, Margaret Kassman - Poroman 98, Carolyn Piafu - Poroman 44, Magdalene Iko - Hetura 42, Lucy Augustine - Mining Engineering, Patrick Oai - Civil Engineering, Edward Bona - Misima 3, Jayleen Oaniu - Tuluan 18 and Kavona Aihi - Misima 16.

Lost & Found

A black bag has been lost outside the Admin Building on Monday 21/09/98. Reward of K10.00 is offered.

Kaspar Karap
Grounds

Unitech Manus Students Association

Fundraising Dance

Venue: Lae Bowling Club
Date: Saturday 26 September 1998
Time: 7:00pm till late
Entry Fees: K10.00 per person
DJ: Master Blaster
Dress: Neat/Formal
*Entry Fees:*K10.00 per person

TRANSPORT PROVIDED - BUS PICKUP COFFEE SHOP
SECURITY GUARANTEED.

Ticket Sales:
Jacinta Kasou - Hetura, Niakitap Kumalau - Poroman, Hedwig Kembek - Poroman, Lesieli Moala - Tuluan, Charlie Changei - Lodge 9, John Sitapai - Vewala, Ian Semer - A Block, Eliuda Usu - Koni, Michael Pokanau - Lodge 3 and Peter Molean - D Block.

Tickets will also be sold at the gate.

POSTION VACANT

The position of Veterinary Epidemiologist with the Secretariat of the Pacific Community (SPC) will become vacant in December 1998 and it is desirable that an appointment be made before that time.

A statement setting out the duties, responsibilities, qualifications, experience and skills required for this position plus terms and conditions of employment is available at the Public Relations Office.

For Sale

486 DX Mini tower Computer with 260 MB HDD 1.4 MB FDD, 8MB RAM, VGA Monitor, Keyboard, mouse, windows 95 and office 95 installed. Going for 650 or nearest offer. Contact 475 7181 (A/H)

Trade Fare and Cultural Show

The Catholic Technical Centres will be putting up trade displays and provide cultural dances at St Theresa (Kamkumung) on Saturday 26/09/98. The show starts at 0900 hours.

The following Centres will take part:

1.St Joseph's (8 Mile)
2.Youth Development Centre (3 Mile)
3.St Theresa (Kamkumung)
4.St Michael's Study Centre (Kamkumung)
5.St Francis (West Taraka)

This is an occasion to bring along the family for the weekend.

Transport will be provided. Please give your names to Mr Tobias Masi at his Laloki Street residence.

Tobias Masi
Chairman
St Francis Technical Centre

For Sale

TOYOTA HILUX (GREEN) 4 X 4 K20,000 ONO. CONTACT ROSE ON 473 4314.

****

Scanner (suitable for Macintosh) K350. trampoline (K10). Bicycles (3-8 years) K25/K40. Esky large Thermos 26 litre (excellent condition) K100. Phone 473 4459 (B/H).

****

Automatic Washing Machine (Sanyo Turbomatic) K400. Microwave Oven (Samsung 700w) K220. Tiffany Steam/dry iron K25. Breville Pie Maker K60. Breville Pie & Pizza Maker K80. Exercise Bicycle K90. Water Bed - Queen size - require assembling, includes mettress, heater and wooden frames K100.

Contact Phone 473 2545 or 473 2650

****

FUN WITH MATHEMATICS

Problem 19.

Let

$s_n = 1-2+3-4+\ldots+(-1)^{n-1}n, n = 1,2,\ldots..$

Then what is the sum of $s_{17} + s_{33} + s_{50}$.

Soln:

When n is even, grouping the n terms into $\frac{n}{2}$ pairs gives

$S_n = (1-2)+(3-4)+\ldots.+[(n-1)-n]$

$= \underbrace{-1-1.\ldots\ldots-1}_{n/2 \text{ terms}} = -\frac{n}{2}.$

When n is odd, grouping the terms after the first into $\frac{1}{2}(n-1)$ pairs gives

$s_n = 1+(-2+3)+(-4+5)+\ldots.+[-(n-1)+n]$

$= 1+\underbrace{[1+1+\ldots+1]}_{(n-1)/2 \text{ terms}}$

$= 1+\frac{1}{2}(n-1) = \frac{1}{2}(n+1)$

Hence;

$S_{17} + S_{33} + S_{50} = \frac{18}{2} + \frac{34}{2} - \frac{50}{4}$

$= 9 + 17 - 25 = 1$

Joint prize winners are Lawrence Kumbin (BEME 4) and Bata T. Micheal (DIPC I) Other entries with correct solutions are Ngiya Alina (FYE) and Durawa Peter (BSCS2).

Problem 20.

If a number is selected at random from a set of all five-digit numbers in which the sum of all the digits is equal to 43, what is the probability that this number will be divisible by 11?

All interested staff and students should send their solutions to problem 20 before Wednesday September 30th 1998.

First correct entry wins a prize of K5.00.

John Wamil, Dept. of Mathematics and Computer Science,
Email: jwamil@cms.unitech.ac.pg

Air Mail

STAMP

If unclaimed please return to:

The Editor
Public Relations Unit
Papua New Guinea University of Technology
Private Mail Bag
LAE 411, MOROBE PROVINCE
PAPUA NEW GUINEA

PRINTED MATTER

The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1307 ISSN:10119-5354 2 October, 1998 WEEKLY

Educators focus on communication for development issues at meeting

Issues on communication for development was the subject for discussion at the First International Conference on Building Partnerships for Better Development, held in Bangkok recently.

The conference attracted participants from the Asia-Pacific region, who are currently offering courses in their respective institutions, which are similar to the one offered at this university, but with more emphasis on developmental issues, according to Unitech's representative.

Mr Justin Kehatsin, a lecturer in the Department of Language and Communication presented a paper titled "Resource developers building partnership with local communities for better development and the 'Communication for Development' program".

According to Mr Kehatsin, changing economies, shifting focus in the political arena, as well as social impacts and environmental concerns, will continue to influence decision - making process in any major development.

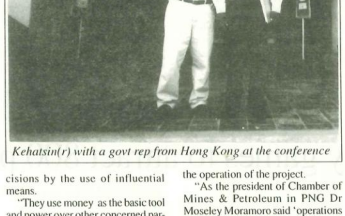
"In the world today, especially in the Asia-Pacific region, there is a need to find an Asia-Pacific way to get people, governments and resource developers working together for better development for all to share," Kehatsin said.

"Building partnership amongst major players in any developmental project will go a long way towards finding a working atmosphere conducive to any development to better the livelihood and or aspirations of all concerned parties."

Citing PNG's past experience, Kehatsin said interactions between the resource developers and resource owners were minimal and in most cases decisions and activities were dictated by the developers and national governments.

"Local resource owners were often pushed to the side, giving way to easier and speedier means to communication," he said.

In the present scenario, most resource developers and other corporate organisations tend to dictate decisions by the use of influential means.



Kehatsin(r) with a govt rep from Hong Kong at the conference

"They use money as the basic tool and power over other concerned parties, and instead of dealing with the local inhabitants, they bypass the process of identifying the various groups of concern and deal directly with the national government."

Certain features which were highlighted in the paper also supported the claim that certain businesses were dictating their preferences to deal directly with the national governments.

These included negotiations and agreements with the central government; taxes and royalties are paid to the central government;in-house services are dedicated to the needs of the company; training is dedicated to the needs of the company; employment positions are filled by new comers or outsiders; inputs are sourced from outside the community.

Mr Kehatsin said that while companies gained from such arrangements, communities lacked sustainable development and developed a culture of dependency.

On the question of what resource developers could do to deter unwanted confrontation with landowners, Kehatsin said landowners must be kept informed at all times during the operation of the project.

"As the president of Chamber of Mines & Petroleum in PNG Dr Moseley Moramoro said 'operations cannot occur unless the community is supportive of such operation. This support is necessary because it is the final outcome we all want to see'," he said.

"In the Century project in Queensland, Australia, in 1994 when the company declared its intention to develop the mine, it added the proviso 'subject to broad community support'.

"It took at least two years to develop this support and a further one year to finalise an agreement satisfying both community and statutory requirements.

"Parties must be willing to review and modify if it proves to be inadequate or fails to meet the changing circumstances.

Governments should also do their part to work closely with their local communities before committing themselves to developing the intended projects, by setting up guidelines and policies for developers to operate.

"in particular, governments can put in place administrative procedure that make sure information sharing and consultation takes place at key stages," Kehatsin said.

"At the project design stage for major developments, governments can require that the project design process includes adequate baseline environmental and social studies and both environmental and social impact assessments."

In recent years a growing number of communities with the help of non-government organisations have become more involved and organised in representing their interests in major operations.

"Communities can take the initiative to educate themselves so that they become better prepared to respond as operations are planned," Kehatsin said.

"Communities can develop mechanisms to resolve internal differences and conflicts, when communities cannot resolve their own internal differences and speak with one voice, it becomes difficult for them to present their concerns to governments or investors in a meaningful way."

Against those backgrounds, the University has developed this unique course which has also attracted the attention of other international universities.

The role envisaged for student places them at critical interface between multi-national companies and local landowner and village groups, Kehatsin said.

Whichever side they work for ... students will spend a considerable part of their working lives acting as translators and communicators, communicating the goals and aspirations of each side to the other.

"Each country should develop similar program like 'Communication for Development' to enhance the desired need of each in building harmonious relationship between resource developers, resource users and local communities," he concluded.

• CORNEY LAHIES

CAMPUS SECURITY SERVICE HAS IMPROVED

Unitech campus security has improved significantly however, there was still room for further improvements, according to Pro Vice Chancellor (Administration) Wilson Tovirika.

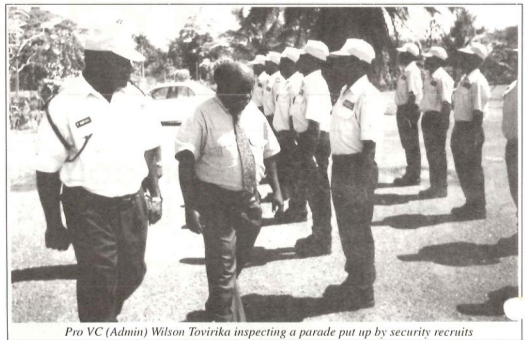
During a special induction ceremony for 11 new security recruits, Tovirika told security staff that any improvement on the security operations depended on how they professionally carried out their duties.

The new recruits were also reminded to make better use of their training to enhance their job performance.

Mr Tovirika reminded the security officers that their performance would be constantly monitored by University Community and even the Council.

As a result of growing security related problems, the University Council considered privatising security operations on campus, however, the administration gave the undertaking to improve the operations.

"I am proud that it has improved, and I would like to see the standard maintained, however, there was still room for further improvements," Tovirika said.



Pro VC (Admin) Wilson Tovirika inspecting a parade put up by security recruits

"Security risk on campus would continue as more and more people have access, however eventhough it being difficult, you are to protect the lives and property at the University."

As an act of support from the University Administration, Tovirika said that as of October 1st, the University's senior executive management would be rostered on evenings to give them an overall view on how security operations were functioning.

He also warned the security officers that their presentation would reflect on their attitude to work.

"When you come to work, you should be properly attired because the way you dress would one way or another reflect on the operations on campus," he said.

"When visitors come in and see that you are not properly attired then it would reflect back to the security operations as being slack, however, it you are well groomed then people will know that the security operations here are of a high standard."

Intervarsity games to attract 800 participants

About 800 participants are expected to participate in the 1998 Intervarsity Sports Carnival hosted by the Papua New Guinea University of Technology.

The Games scheduled for October 23rd -24th would feature participants from the University of Goroka , University of Vudal, Divine Word University, University of Papua New Guinea, Medical Faculty, Forestry (Taraka, Bulolo, and TFTC) and Unitech.

According to Unitech Sports Coordinator, Philip Lavatu, UOG is expected to come with 100 participants, UPNG - 100 participants, Divine Word - 100, Forestry -100, Vudal - 30, Medical Faculty - 50 and Unitech 250.

The sports that would be competed over the two day carnival are: Soccer, Netball, Touch Rugby, Basketball, Volleyball, Cricket, Dart, Tennis, Softball, Athletics and Tug of War.

Lavatu urged all teams to have their final list of players to be submitted by next Wednesday 7th October in order to distribute uniforms and finalise draws.

He said that uniforms would be distributed to players who have paid their K12 levy.

"Those who do not pay their K12 player levy would not receive their uniform," he said.

"Sports coordinators would be asked to submit their list of players who have paid their K12 levy. Each sport would also be asked to pay their K20 lev

Lavatu meanwhile urged all sports to take their training seriously in preparations for the carnival.

"Last year we came out second, and this year, I would like to see Unitech take out the overall prize and that must be our ultimate aim," Lavatu said.

The Reporter is produced weekly by the **PUBLIC RELATIONS UNIT.**
Deadline 4pm on Tuesday weekly.
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Secretary: ANGELA BOROMANA 473 4291
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Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

TFTC offers logging code course to industry



The first batch of course participants from the industry for the logging code of practise course

The Timber and Forestry Training College (TFTC) in conjunction with the PNG Forest Authority (PNGFA), for the first time are conducting a PNG Logging Code of Practice for the industry.

The two weeks course, designed for managers, field supervisors, operations managers and planners within the logging industry to help them understand and help implement the PNG Logging Code of Practice, kicked off on Monday.

TFTC Principal, Frank Corin, said that he was pleased that the College was able to conduct such a course for personnel within the PNG logging industry.

The College used to conduct the course however, it was conducted specifically for National Forestry Service personnel.

"The aim of the course is to give the industry, landowners and Non Government Organisation (NGO) groups an understanding on key standards of the logging code of practice, and that all stake holders understand correct implementation of the codes", Corin said.

PNGFA National Forest Service Senior Training Officer, Augustine Pokera, who is one of the course facilitators, said that the code was recently implemented and it was necessary for the logging industry understanding of its code of practise.

"The logging industry would be the practitioners of the code, while the National Forestry Service are the custodian of the code," Pokera said.

"It is important that the industry should understand the code.

"This course is especially for senior management and planners as they would be the ones designing and planning companies operations, and through their understanding of the code, they would try to plan their projects in line with the key standards of the code.

"The PNGFA recognises that we are all in this together and we should be working hand in hand together for the sustainability of our resources.

"This is the start of a series of courses to be conducted for the industry."

The course program would cover: Key Standards; Watershed Management; Planning - requirements of National Forestry Service; Technical skills; training - supervisors procedure. The major component of the course would be practical hands on field training.

Course participant, Nelson Dindillo, a forester with Alotau based company, South Pacific Timber Exports said, the course was very helpful and would greatly help resolve issues and conflicts at work.

"It would be better if we, from the industry and those from the National Forest Service have the same definition to the code, which would then greatly help us reach compromise whenever issues arise," Dindillo said.

Dominic Remel, a surveyor with Cakara Alam, said that the course would be very beneficial as it would give them an understanding of the code and of new ideas being introduced in the field.

Ron Wilson, Resource Manager with Turama Forest Industries said that the course was very good idea.

"It would give us a new perspective and idea on how to interpret the regulations," Wilson said.

"This was something that was lacking before as there was no dialogue on the grassroots level, such courses could help us filter the information to them."

Another participant, Jonathan Bird, Operations Manager with Turama Forest Industries said that such courses would greatly help in the sustainability of the forest industry In the country.

Participants attending the course came as far as Vanimo, Alotau, Port Moresby, Madang and West New Britain.

• STEVEN BU'SIN

Women's B/ball Semi final ends prematurely

The Unitech Womens Basketball Association (UWBA) major semi finals ended prematurely when violence erupted at the courts over several rulings made the the umpire on Wednesday evening.

The game between SHRM and Busary already in its second half ended prematurely only 10 minutes before the final whistle when SHRM decided to walk out of the game over allegations of biased rulings by the referee.

SHRM was leading then with 15 points to Bursary's 12.

The walkout sparked heated verbal exchange between players and supporters from both teams, forcing officials to call off the major semi final play off.

The play off to see who meets Arabasti in the Grand final on Monday is rescheduled to be played this afternoon at 5.30 pm.

UWBA President, Veronica Michael said that the games committee and executive met after the incident and decided have a rematch with two neutral professional referees from outside to control the game.

Ms Michael urged players from both teams not to let their emotions over run their judgment. She also urged supporters to control themselves whenever supporting their team.

She said she wanted to see the finals played in the true spirit of sportsmanship as they would also be a winner and looser.

The Grand final is scheduled for Monday afternoon.

PNG ECONOMIC PRESCRIPTION UNDER FIRE

Dr Rad's employment as economic advisor to the Skate Government has [e]stabilised the long term prospects [o]f the recovery of the PNG economy, [a]ccording to an economist.

Currently, there are no other immediate or magical solution to overcome the present economic problems, Head of Economics at the Department of Business Studies, Asoka Seneviratne said, in his seminar paper titled "Dr Rad and the PNG Economy."

Seneviratne said that if the International Monetary Fund (IMF)/World Bank loan was not available, not only the 1998 Budget would fall short of K200 million but the presentation of the 1999 budget would be beyond comprehension.

"Dr Rad has not suggested or indicated suitable economic policies to overcome the present economic problems on a sustainable basis," Seneviratne said.

"Dr Rad has access to the entire data base of the PNG economy and this is his main advantage as he can study the economy in a general equilibrium model compared with other advisors or policy makers in the country.

"But, I have my doubt as to whether Dr Rad has analysed the behavior of the PNG economy in terms of commodity markets, foreign exchange market, money market and the influence of the crisis of Asian economies and the emerging uncertainty of the economies of Australia and New Zealand."

Seneviratne said that Dr Rad's economic policies introduced as the Prime Minister's Rescue Package were:

• A 10 per cent interest free cash reserve to be deposited by all commercial banks with the Bank of PNG, replacing the Minimum Liquid Assets Ratio (MLAR)

• Establishment of 10 new foreign exchange dealers to increase the competition in the foreign exchange market.

• Limit the budget deficit to 2 per cent of GDP of 1998.

• Shortening of the period for exporters to keep their foreign currencies or export proceeds off-shore from 3 months to 2 months

• Selling of US$ 50 million by the Bank of PNG to commercial Banks or the foreign exchange market.

"As a central Banker, the first policy is not familiar to me, and I assume this is the first time this sort of policy was introduced in PNG," Seneviratne said.

"When 10 per cent of commercial Banks' deposit is kept with the Bank of PNG without interest, commercial banks have to increase their interest rate for lending to cover the loss of interest on free deposits.

"Therefore, the purpose of this policy measure is to realise a correct or suitable interest rate for lending by commercial banks because according to some comments that were made by Dr Rad, more money were borrowed by people due to the lower interest on commercial banks lending.

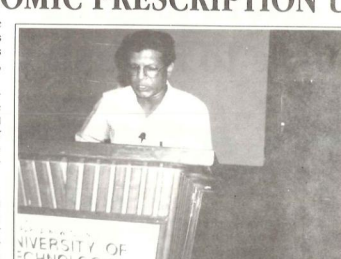
" According to Dr Rad during the policy regime, deposits increased by 11 percent, while lending by commercial banks rose by 43 percent ..... monetary policy had to be corrected, we had to prescribe what was working for PNG.

"In fact, Dr Rad expected that the interest rate of commercial banks lending to increase but it declined from its average of 27 per cent to 24 per cent.

"The above policy measure is self defeating because it paved the way to increase the money supply due to low interest rate.

"The policy proposal to establish 10 new foreign exchange dealers must have been originated due to the fact that the existing dealers or commercial banks keep a very large profit margin in their foreign exchange transaction.

"This influences the value of Kina to decline. This is restricted information but people like Dr Rad have been accessed to such information and Dr Rad can introduce changes to generate favourable results.



Business Studies Head of Economics, Asoka Seneviratne presenting his paper

"When the competition is there among many dealers, profit margins become very small and as a result the value of the Kina will increase in the foreign exchange market.

"Since, the above information is very well known to the Bank of PNG, it could have introduced the same earlier, before Dr Rad offered the advice for K7 million."

Shortening the period for exporters to keep their foreign currencies with foreign banks from three to two months was a very good proposal, because the Bank of PNG could have introduced the same, Seneviratne said.

"In fact, the role of the Bank of PNG is in question for me, because it looks to me that it did not play its role to establish the stability of the value of the Kina," he said.

"After the devaluation, the Governor of the Bank was changed four times, but the Central Bank did not look into other ways and means to stabilise the external and the internal value of the kina except increase the Minimum Liquid Assets Ration from time to time to control to the money supply.

"It is too early to asses the impact of this policy on the value of the kina.

However, if this policy is going to work it will improve the value of kina in two ways.

• First is to the extent that exporters speculate that the value of Kina would appreciate soon, they would rush to sell their foreign currencies to the Commercial Banks to get more Kina.

• Second, if importers or buyers of foreign currency speculate that the Kina value would increase, they would not rush to buy foreign currencies. If they wait for the exchange rate to increase, they can get more foreign currencies per unit of Kina.

Seneviratne said that the Central Bank's intervention by selling its reserves was not a magical policy.

He said that if the Bank wanted to, this could have been introduced before Dr Rad's arrival in PNG, even though it was totally against the condition of the IMF/WB to float the kina and allow it to find its value through the supply and demand in the foreign market exchange.

During the time of the Hard Kina Currency Policy, Seneviratne said, the Bank's intervention maintained the external and internal value of the kina.

"However, this sort of intervention should be introduced when a substantial foreign reserves are in hand," he said.

"In fact, the advance from the Australian Government was to support this policy, therefore, the success of this policy depends on the ability of the Central Bank to accumulate foreign reserve.

"The longer the intervention by the Central Bank by selling its reserves to the foreign exchange market, the more stable the value of the Kina.

"However, in an environ[ment] where the country's exchange rate policy is devoted to floating of its currency to find its value, this sort of intervention would destroy confidence of investors.

"From the investors' point of view, the PNG economy is a sinking ship and thus will not transfer any money into it."

Seneviratne said that Dr Rad's policy have worked to increase or stablise the value of the kina on a short term, however, was short lived unless the situation was analysed and other policies are introduced.

"The thrust of Dr Rad's policy lies in the ability of the Central Bank to accumulate and selling of its reserve which is not a good policy and cannot be sustained in the long run", Dr Seneviratne concluded.

• STEVEN BUSIN

Women have potential in development of PNG science and technology

Female students enrolled in engineering courses have the potential to take leadership role in the development of PNG Science and Technology.

This was expressed by Dr Larissa Al-Dabbagh in her paper "Women's contribution to scientific and technological progress of the nation."

She said it was important to encourage female students through some formal recognition, and give them all the protection and support to succeed with competence.

"The University may nominate prizes for the best female students completing science and technology courses, council medals and scholarships for the best female student," Al Dabbagh said.

"Equal opportunity in employment of female graduates at all levels and equal pay for the same type of job would be the best form of recognition and will improve women status in all aspects of the country's development.

"In order for women to truly make their mark in science and technology, they must apply their particular strengths and promote their own gender - not against men, but with them to give power to and enable women to influence decision making in scientific and technological fields.

"It is important to encourage young women to enter to the science and technology course, specially it is essential to give women power to decide, recognition and opportunities, not as gifts or hand outs, and doing this in a proactive way primarily through education and leadership."

Dr Al-Dabbagh said that it was not necessary for women to wait until they reach a critical mass in all fields of science and technology.

She said that women should organise now to influence decision - making levels especially at the policy level of influential organisations, universities and government departments.

"This could make a difference in important science and technology related fields, such as engineering, ecology, agriculture, health, education and planning," she said.

"There is no doubt that the world has known many women who played a major role as leaders in different aspects of life, whether politics, economic or science and technology."

She gave some examples of women who have won Noble prizes. They were: Marrie Curie (Physics, 1935), Maria Goeppert - Mayer (Physics, 1963), Marie Curie (Chemistry, 1964), Irene Joliot - Curie (Chemistry, 1935), Dorothy Crowfoot Hodgkin (Chemistry, 1968), Grety Theresea Cori (Physiology or Medicine, 1947), Roslyn Yallow (Physiology or Medicine, 1977), Barbara Mclintock (Physiology or Medicine 1983), Rita Levi-Montackini (Physiology 1986).

The above women were amongst the most active scientists who spent all their lives to advance science and technology for the benefit of human kind.

"All these happened in spite of the fact that according to United Nations estimation, women although constituting just over half of the world's population, perform nearly two thirds of the world's labour," she said.

"On the other hand, women only receive one-tenth of its income and own less then one-hundreth of its property.

"Their numbers represent the undeniable fact that, globally, women have had much less access to education and vocational training."

Over the last two decades were concerned with the issue of economic equality and independence of women, as well as, their full integration into the decision making process of society, she said.

"These two decades had a major impact in raising awareness of the position of women and gaining government commitment to address their needs," Dr Al-Dabbagh said.

"Women have since been recognised as the major working subjects in agriculture and health.

"Everywhere they are beginning to work increasingly in non traditional sectors such as industry, trade, marketing and services.

"It is well known that this important contribution from omen is too often undervalued by the existing systems."

She said that there was a need for real discussion on the role and status of women in science and technology development, adding, that women were under represented worldwide as students in the science programs, in employment as scientists and in decision making areas in the science field.

COUNSELLING SERIES

Topic: Learning to accept yourself

In series topic: "know yourself, we leaned I believe some principles that helped us to know ourselves, which now set us to "learn to accept ourselves"

Understanding ourselves, is actually talking about knowing our strengths and weaknesses. Hence to know and appreciate our strength and to learn and accept our weaknesses. In series 4: "Learn to accept yourself" we will look into our weaknesses and their natures and the effects on our personalities and lives. In order to find alternative values to improve these weaknesses or to accept and live with them.

Weaknesses are character deficiencies or deformation of our physical being or biological order in us. These deficiencies and deformation may reflect in our behaviour and performances, especially in our social encounters or in a work performance. Which may make us feel abnormal and unwanted, that may further result in us that we may unconsciously and willfully reject ourselves.

Weaknesses are normal part of human beings. Unless they are not identified and conscious efforts are not made to improve them, or accepting them as natural part of the person to live with, they can be detrimental to us.

Weaknesses naturally create two characteristics (1) The feelings of inadequacy and (2) pretentious self justification and arrogance. The feelings of inadequacy lead to worthlessness and self justification leads to pride and arrogance.

There are two basic principles on which one bases and accepts oneself. (1) Self acceptance on the basis of personal attainment, inherited wealth and possessions and our social standing through family background, education, position in the community, business, politic, or religious affairs; And (2) self acceptance on the basis of how God sees us - from the God's perspective.

The assessment criterion on the personal attainment is based on the personal opinions and outward material and social position one holds. Which consequently offers a high degree of indifference of the opinions, therefore, it is not a best criterion. This criterion unfortunately thus offers other negative possibilities of injustices and imbalance sharing wealth and possessions.

The assessment criterion based on God's perspective, is based on how God sees a person regardless of wealth and possession she or he has or social standing in the community. How God sees us must bee seen in the light and activities of Jesus Christ. God sees everyone equally as sinners and need of God's help and grace. God reaches out and offers grace and help on His own standard, only by and through faith in Christ Jesus.

Degrees of our understanding of ourselves and our experiences of grace of God may differ from each other, but the criterion of assessment is profoundly the same Jesus Christ. This offers the best and acceptable standard as the assessment criterion.

One of the reasons that we find it difficult ourselves and have a positive mental image of ourselves is that we do not realise how important we are in the sight of God. Failing to sense our importance before God, we consider ourselves of no practical value. Therefore, feeling of inferiority and inadequacy result. No matter how many shortcomings or failures you have in your live, have you ever asked yourself, "How does God look at my life? How important am I to God anyway?" Jesus never lost sight of the importance of a single persons no matter how lowly his position was in life.

You are a person of worth in God's sight

Jesus' attitude towards the individuals was but the reflection of His Father's attitude revealed in the pages of the Old Testament and amplified by the writings of the New Testament.

Apostle Paul emphasises the importance of the individuals and stresses in Ephesians 1: 1-7 that if was the sacrifice of Christ which enabled God - not only forgive us but to accept and receive us as His adopted children. Knowing and believing that God accepts you on the basis of what Jesus did for you is the key to self acceptance.

The New Testament teaches that acceptance before God is never based upon our performance - negatively or positively. Actually, our essential goodness or lack of it has nothing to do with God's accepting us (Titus 3:5)

The Gospel is Good News because it proclaims that no self improvement program is necessary before you come to the Father for forgiveness and help. Understanding God's point of view is essential to understanding and accepting yourself. One of the reasons why people face an identity crisis today is that they have never gained God's perspective.

Until we come to grips with the fact that God has completely accepted us because of what Christ did, you will never full accept yourself. If you refuse to believe or accept the fact that God has received us, our self image will be affected negatively.

Minimising our importance

When we minimise our importance the following things happen:

1. We depreciate our worth before God
2. We come to have a negative self image
3. We are bufleted by undeserved guilt
4. Our personal appearance becomes neglected.

Acceptance in a Biblical perspective

Following are profoundly what happens when we accept God's offer from the biblical perspective;

1. Self acceptance in the context of Christian faith is that god will freely accept me because of what Christ has done. This result in an inner radiance which comes from the indwelling presence of Christ in a life. There is an inner tranquility and peace, a measure of security that results from being in touched with the Divine and knowing that He is fully in control of circumstances.
2. Self acceptance to a Christian is that God is at work in my life.
3. Self acceptance in the Christian faith produces maturity and different value system. One that puts the emphasis on character, integrity and spiritual values.

A regenerated value system always reflect the security and self acceptance from God's point of view. A Christian's perspective views of life as a cooperation of the human and divine. Self acceptance and a joyous radiant life go hand in hand. They aren't synonymous but they compliment each other.

Reference: Sala, J Harold (Dr) (1998) "Winning Your Inner Struggles." Manila: OMF Literature Inc, Philippines.

Reverend Windiong L Siawong
A/Student Counsellor

INFORTAINMENT BOARD

SEMINARS

Department of Agriculture

Speaker: Mr Keith Galgal from the SRPM, Lae

Subject: Supplementary Feeding for Cattle in the Markham Valley

Venue: RKLT
Date: Thursday 8th October, 1998
Time: 11:00 am

All welcome.

Applied Physics Department

Date: Wednesday 7 October, 1998
Time: 2:00 pm
Venue: AP115

Seminar Topic: Photoelectrochemical Solar Cells

Photoelectrochemical (PEC) cells or liquid junction solar cells are attractive alternative to Solid-state photovoltaic cells. In this talk, the fundamentals behind the operation of these cells will be discussed. The selection criteria for the potential materials will also be described.\

Speaker: Dr Atul K Raturi
Duration : 1 hour

All interested are welcome to the Seminar.

Associate Professor I M Kachirski
Departmental Seminar Co-ordinator

Unitech Womens Basketball Fundraising Dance

DATE: SATURDAY 3 OCTOBER 1998
VENUE:STAFF CLUB

DJ: LUNU BOYS
FEE: K8.00
TIME: 6:30 PM

DOOR PRIZES OF WHISKY.

RAFFLE TICKETS FOR WATCH AND BEER.

Word of thanks & Appreciation

The Arabasti Basketball Club members would like to take this opportunity to thankj the following Departments and others for their kind donations.

Department of Surveying & Land Studies, Architecture & Building, Maths and Computer Science and Arabasti Soccer Club.

We also would like to thank our supporters for cheering us at the semi-finals especially our comrades at SLOG1 and others.

Without your support we wouldn't have had a successful semi-finals. We are now standing by the the Grand Final which will be on Monday 5th October, 1998 at 5:00 pm.

Esther Collin
Team Captain

Research and Conference Reports

Recipients of Research Committee funds, please note that it is a requirement under the conditions for the use of Research funds, that you are required to provide reports on conference attendance or progressive/ final reports on research project undertaken to the Research Committee.

Please ensure that your reports should reach me before the end of the academic year.

Executive Officer

Security Matters: Request for Cooperation from Campus Residents

The University Security reports have indicated that an increasing number of Campus residents and off-campus visitors have been using the public places and sports fields on campus during the day, in the evenings and at night to engage in consumption of alcohol and other activities. In some instances it was observed that such activities have also taken place in offices.

For security reasons and to assist University security, campus residents and visitors are strongly advised to stay off public parks and sports field especially at night. Those who have the preference to consume alcohol under the trees and in the sports fields are advised to do so at their residences.

The Campus Residents and Campus visitors are hereby advised that the Vice-Chancellor's Office has empowered the University Security to undertake the following measures:

1.Campus residents and off campus visitors who park under the trees and in the sport fields during the day and at night and get involved in activities as stated above will be requested to go to their respective residences and those from off campus will be required to leave campus.

2.Security will question staff who sue offices for activities as stated above.

3.All vehicles with tinted glass entering campus after 2100 hours will be required to wind down the windows for inspection before they are allowed entry into campus. No visitors will be allowed entry into campus after 21 hours.

Campus residents are advised to observe the aforesaid measures so as to avoid any likely embarrassment when approached by the University Security.

The Staff Associations have been consulted and have given their support for the best interest of the University.

Clearing of Gardens and Bushes between SAC and IFTA

This is to advise staff who make gardens between Staff Club (SAC) and Insect Farming and Trading Agency (IFTA) that this whole area will be cleared in December 1998 or January 1999. In this respect you are requested to harvest what you currently have in your gardens and do not replant as the area will be cleared.

For the best interest of the Campus Security you are requested to cooperate and take appropriate action.

Wilson Toviiika
Pro Vice-Chancellor (Administration)

Research Committee Meeting

The next Research Committee Meeting will be held on 15th October, 1998.

Intending applicants for research and conference funds please ensure that your applications should reach me no later than 8th October, 1998.

Please note that limited funds are available for distribution.

Primus Dam
Executive Officer
Research Committee

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday:**UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF
Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

[illegible]nday Morning
[illegible]0 **CLC CHURCH**

UNITECH CATHOLIC COMMUNITY

Our Rosary Nite will begin tonight 2nd October at 7:30 pm at the Chaplain's Residence.

You are all welcome.

For Sale

POWER ADAPTOR (9 V)

GOOD FOR MUSICAL INSTRUMENTS ETC

[illegible] CORNEY LAHIES AT THE PUBLIC RELATIONS UNIT AND MAKE HIM AN IRRESSISTIBLE OFFER

EXT: 4298

CLASSIFIEDS

Position Vacant

Secretariat of the Pacific Community

1.The position of Veterinary Epidemiologist with the Secretariat of the Pacific Community (SPC) will become vacant in December 1998 and it is desirable that an appointment be made before that time.

A statement setting out the duties, responsibilities, qualifications, experience and skills required for this position plus terms and conditions of employment is available at the Public Relations Office.

For Sale

1.**TOYOTA HIACE** diesel 15 seater bus in good condition with dual PMV Licences. Reg. till November 1998. Make instant cash and own a family PMV Bus at a bargain price of K15,000 ono.

2. **4 X 4 NISSAN S/CAB** coffee body in good condition, reg till November 1998. Bargain at K5,000 ono.

3. **OTHERS -** mats from Daru at K5 - K10 each in varying sizes. Stockman's shoe size 3, secondhand K25.

4. **EXPRESSION OF INTEREST** to operate Unitech Bus service partnership with ABA Bus, phone 473 4719. For enquiries contact B.Alusi on phone 473 4719 or ext 4719.

Rainfall Readings for 24 hours to 0900 on: 29/09/98

Wednesday	23/09/98	1.0 mm
Thursday	24/09/98	0.0 mm
Friday	25/09/98	1.0 mm
Saturday	26/09/98	0.0 mm
Sunday	27/09/98	1.0 mm
Monday	28/09/98	1.0 mm
Tuesday	29/09/98	8.4 mm
Total rainfall for week-ending		29/09/98 12.4 mm
Total yearly rainfall up [illegible]		22/09/98 3,458.8 mm
Total yearly rainfall up [illegible]		29/09/98 3,471.2 mm

Sali Baifinu
Civil Engineering Department

SPORTS

Unitech Staff Soccer

Ladder after six games played. One more game before knockout (finals) start.

Team	Win	Draw	Lost	Points	Ladder
Natres	4	-	2	12	1
Mechlib	4	-	1	12	2
Elemaphy	4	-	2	12	3
Civil	3	-	2	9	4
Grounds	3	-	3	9	5
Admin	2	1	3	7	6
Transmain	2	1	3	7	7

Note: Training starts on Tuesday 6/10/98 at 5:00 pm at Soccer Pitch 1 for players selected in the Intervarsity Soccer squad. All selected players must attend. Intervarsity squad meeting next week Tuesday, soccer field one, 4:30 pm.

Interim Chairman
USSA

Staff Table Tennis

In preparation for Intervarsity games Unitech wants interested staff members sign up. You can do on Saturday at the Union Hall from 2:30pm, onwards when a practice/coaching session is to be held. For further information contact:

Joe Yale - Central Engineering Workshop or Edmond Nonie - Applied Physics Department.

Unitech Women's Basketball

Grand Final Day

Monday 5th October 1998
5:00 pm sharp

Arabasti Vs the winner of (SHRM Vs Bursary) this afternoon

COME AND WATCH THE BATTLE FOR THE REGISTRAR'S SHIELD.

UNITECH CATHOLIC WOMEN'S CLUB

Fund Raising Dinner Dance

Date: 14th Nov 1998
Time: 6pm till late
Venue: Staff Amenities Centre
Dress: Smart dressing
DJ: MASTER BLASTER

DOUBLE: K25.00
SINGLE: K15.00

Come along and enjoy PNG food and more - cooked in a mumu and prepared in a typical PNG style.

You will also be entertained by a Dance Group

Tickets available from:
M.Panau 473 4289
Lucia Nakau -St Mary's School
Joanne Tziu - 473 4501
Maria Dam - PNGBC- Town
Lucas Panau - 473 4506
Charles Nakou - 473 4775

FUN WITH MATHEMATICS

Problem 19.

Let

$s_n = 1-2+3-4+\ldots+(-1)^{n-1}n, n = 1,2,\ldots..$

Then what is the sum of $s_{17} + s_{33} + s_{50}$.

Sóln:

When n is even, grouping the n terms into $\frac{n}{2}$ pairs gives

$S_n = (1-2)+(3-4)+\ldots.+[(n-1)-n]$

$= \underbrace{-1-1\ldots\ldots-1}_{n/2 \text{ terms}} = -\frac{n}{2}.$

When n is odd, grouping the terms after the first into $\frac{1}{2}(n-1)$ pairs gives

$s_n = 1+(-2+3)+(-4+5)+\ldots.+[-(n-1)+n]$

$= 1+\underbrace{[1+1+\ldots+1]}_{(n-1)/2 \text{ terms}}$

$= 1+\frac{1}{2}(n-1) = \frac{1}{2}(n+1)$

Hence;

$S_{17} + S_{33} + S_{50} = \frac{18}{2} + \frac{34}{2} - \frac{50}{4}$

$= 9+17-25 = 1$

Joint prize winners are Lawrence Kumbin (BEME 4) and Bata T. Micheal (DIPC I) Other entries with correct solutions are Ngiya Alina (FYE) and Durawa Peter (BSCS2).

Problem 20.

If a number is selected at random from a set of all five-digit numbers in which the sum of all the digits is equal to 43, what is the probability that this number will be divisible by 11?

All interested staff and students should send their solutions to problem 20 before Wednesday October 7th 1998.

First correct entry wins a prize of K5.00.

John Wamil, Dept. of Mathematics and Computer Science,
Email: jwamil@cms.unitech.ac.pg

Air Mail

STAMP

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R/F
The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1308 ISSN:10119-5354 9th October, 1998 WEEKLY

Unitech administration restructure undergoes review after operation

The Bursary Department has called for the return of the old order claiming that the restructure was counter productive.

The Department is opting for structural changes that would cater for proper delegation of duties through a pyramid structure, or chain of command, rather than the flat structure recommended by consultant Colin Baker last year.

Unitech Bursar Mesengi Aniong, said that after a year of trying to fit into the new administration structure, the Department could not operate effectively.

The Bursary staff expressed their views with another consultant, Tony Javis, who is here to review the restructure prior to presenting his report to Council in November.

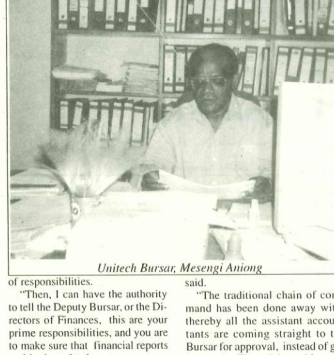
Mr Aniong, however, welcomed the transfer of other sections (transport, stores, building and maintenance) to the responsibility of the Pro Vice-Chancellor (Admin), as it had enabled Bursary to concentrate its core financial functions.

He said that his Department preferred the old structure, however, he has recommended the creation of two new positions; Director of Finance - Recurrent Operations, and Director of Finance - Non Recurrent Functions.

"Non recurrent functions compose of the Unitech Foundation, Unitech Savings and Loans, Union Board, SAC plus trusts accounts, these functions are not financed by the Government as they are self financing organisations," Aniong said.

"We have already separated the bank accounts, one for re-current and one for non- recurrent, so we want to come up with a structure to suit that situation, we found out that the flat structure did not work with us and we think that this structure would work."

He said that the old structure with the inclusion of the two directors of finance would ensure the delegation of responsibilities.



Unitech Bursar, Mesengi Aniong

"Then, I can have the authority to tell the Deputy Bursar, or the Directors of Finances, this are your prime responsibilities, and you are to make sure that financial reports and budgets for those two areas are prepared.

"The Bursar is not going to do these things, however, he would delegate the necessary resource support and manpower to make sure tasks are performed.

"I would get the end results, and report to the University Council on policy matters, assist the Vice Chancellor in writing up financial policy decisions."

Aniong said that the proposed restructure did not allow for a proper chain of command forcing the Bursar to operate the day to day running of the finance sections which could have been easily done by senior officers.

"The proposed restructure did not allow for senior staff to make decisions, recommendations, financial authority as all these were absorbed by the Bursar," Mesengi said.

"The traditional chain of command has been done away with, thereby all the assistant accountants are coming straight to the Bursar for approval, instead of going to the Financial or Management Accountant or Deputy Bursar."

According to Aniong the restructure under the flat structure did not allow for a career path for staff.

"If there was a career path, you would have a Bursar, Deputy Bursar, Management Accountant, Financial Accountant, and those down the line.

"If any of the senior officers go, then one of the assistant accountants would act on their positions or take up the position when we advertise.

"Similarly, it would be for the Bursar's case, but the restructure has made things complicated for us and we feel that it is unjustifiable."

The Bursar also said that he would like to see a proper training program for administrators in the University.

He said that the University should balance its priority on both academics and nationals in regards to further training.

"At the moment, a lot of priority is given to academics to go overseas to further their qualifications while administrators and technical officers were given low priority," he said.

Meanwhile, Javis has already gauged the views of various departments and sections as part of his review on the reports by Baker and Filer.

He met with senior members from the Registry, Bursary and support sections in the administration with a view of developing an integrated structure focusing on what are important and relevant.

He will later proceed onto the academic departments.

"Some parts of the reports have been implemented with varying degrees of success," Mr Javis said.

"However, virtually non of the report on the academic restructure has been implemented.

"What I am now looking at is the total review of the University operation and because the University has to be looked at as an entity, we cannot look at anyone department in isolation.

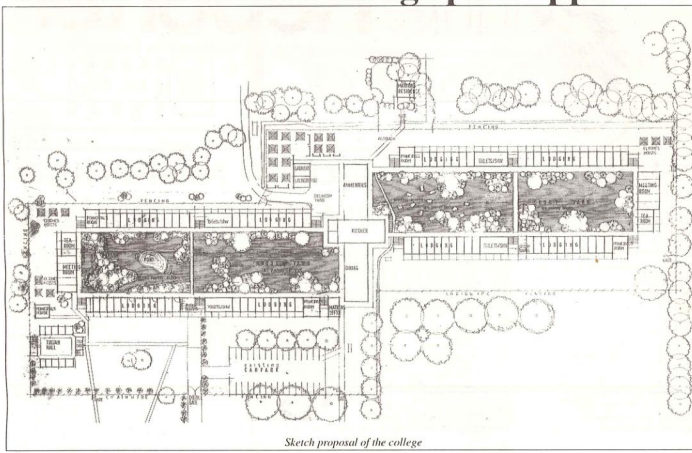
"Various attempts have been made to restructure departments but these restructuring exercises have been done from a 'top-down' basis, where a structure has been developed and imposed from the top."

Mr Javis said his approach to the review was to consider it on a bottom-up approach, but within PNG's context and situation.

"I've got a different attitude, the bottom-up approach, and I've asked the staff to identify problems, because they are constantly involved with the work of the university they know where the problems are.

"One of the advantages is that they will identify the work that needs to be done and they will develop a structure that will be able to cope with that work."

Female residential college plan approved



Sketch proposal of the college

The planned development of the new K300,000 female residential college has been approved by the University.

The project has been awarded to Sippy Owen Architects, and construction work for the conversion of the Hetura, Poroman and Tuluan Halls into college style development is expected to begin next month and to be completed before the 1999 academic year.

According to Unitech Facilities Planner, Mr Lou Pipi, the general philosophy of the design was to encourage community residential living to help residents develop, think, change, asses and identify their life styles while being aware of the similarities and differences of other residents.

He said that the college is being designed to promote academic, social and spiritual values, thus fulfilling the basic student development needs of the University, at the same time, the college is expected to incur low maintenance costs and be energy efficient.

"The proposed college would have the capacity to accommodate up to a maximum of 500 students," Pipi said.

"However, at this point in time and for the purpose of the project, we will design for a maximum capacity of 436 single female students with appropriate habitable, study as well as recreational facilities."

The development of the college facilities would include the provision of; a college matron's office, self contained units for college principals, fully furnished kitchen and dining area, general laundry, laundromat, security and security fencing, meeting rooms, tea and coffee areas, TV and Video space, computer area/rooms, telephone booths/stands, parks and gardens.

The residential college would be managed by a matron answerable to the Director of Student Services.

"The matron's responsibility would be to co-ordinate the operations of the college, and would be assisted by five college principals whose role would be to co-ordinate each section of the college.

Pipi said they would be accommodated within the college in self-contained units which the design has also made provisions for.

"Dining and kitchen facilities have also been incorporated into the design which would cater for 436 students to have their meals there.

"Due to costs, the current Student Facilities Office would serve for this purpose, however, this would eventuate only after the Student Facilities Section move to their new office space."

According to Mr Pipi, general improvements would include the general laundry area, laundromat, TV and Video space for each hall, general landscaping; increased nun of phone booths; tea and coffee areas, and drainage.

As part of the overall security measures of the residential college, all halls and facilities would be connected onto a master panic/burglar alarm system network including flood lighting and security fencing around the college perimeter.

The Reporter is produced weekly by the PUBLIC RELATIONS UNIT.
Deadline 4pm on Tuesday weekly.
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Journalist:STEVEN BUSIN 473 4290
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PNG University of Technology
Private Mail Bag Lae- PNG
Fax: (675) 4757 667
email: reporter@unitech.ac.pg or cklahies @global.net.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

UNITECH SUBMITS K43m BUDGET FOR '99

The University's budget estimates of K43 million for 1999 has been submitted to the Department of Treasury and Corporate Affairs.

This is an increase of K18 million from this year's budget ceiling of K25 million from the National Government. This increase reflects on the general increase in the level of goods and services in the country.

The objectives of the 1999 budget are to consolidate the infrastructural base for the development of research character and capacity of the University, and introduce definite strategies for the development of entrepreneurial character of the University for addressing the budgetary shortfall on a long term basis.

To achieve its objectives, the University has itemised its budget estimates in the following priorities; Fixed Recurrent Budget - K33 million; Variable Recurrent Budget - K5 million; Capital Formation Budget - K 3 million and; Maintenance Budget - K2 million.

Fixed recurrent budget represents 76 per cent of the total budget estimates which was estimated at the actual 1998 expenditure level.

Dr Kaiulo in his budget presentation commented that in light of continuous economic restraints facing the country, and the pressure on the distribution of limited annual budget, the University's 1999 budget was designed to provide a basis for the University to shift its emphasis from relying on government grant and move towards broadening revenue sources of financing the university.

He said that this approach was inevitable as resources available to the University become scarce each year.

Dr Kaiulo said that these estimates were believed to be realistic and sound, reflecting on the major role and mission statement of the University in producing technical human resource requirement for Papua New Guinea.

He said that the last four years' budgets (1995-1998) were designed to support the development programs formulated in the University's plan, however, fiscal restraints facing the country during the same period has forced the University to abandon many of its planned programs.

"All available cash had been choked up by the salaries, wages and other personal entitlements for the employees," Dr Kaiulo said.

"Nevertheless, Unitech is fully committed to the future planned developments as outlined in its "Development Objectives and Strategies 1994 - 2000," Dr Kaiulo said.

"These strategies and objectives reflect the aspirations and strategies established in the National Higher Education Plan of 1990 and in Government policy on Higher Education.

"The University's actual expenditures on personal emoluments alone has increased rapidly from K18.5 million in 1995 to K22.4 million in 1998, whereas the budget ceiling has remained relatively stagnant resulting in the reduction on operational budgets.

"In 1995, the University received K24 million which became a ceiling for the 1996 and 1997 budgets.

"In 1988, the University revised its budget to a realistic K27.5 million level, however, it only received a K25 million grant from the Government, which has resulted in the K2.5 million shortfall.

"The University raised K1.8 million from its income generation activities to supplement the grant received from the government.

"Despite this, the shortfall has increased due to the drastic increases in Exchange Rate Stabilisation Allowances (ERSA), Elcom tariffs, airfares and the declining kina."

Dr Kaiulo said that university education was essential for the development of qualified and skilled labour force, as this country required qualified and skilled people to meet the demands of the market place, as well a providing cultural and political leadership in society.

Since 1995, the University took a tough stance on limiting expenditure and measures included downsizing of certain academic support service through retrenchment and restructuring, merging and integration of Bulolo and TFTC with Unitech, and reductions of administrative overhead costs due to the freeze on capital expenditure since 1995, reduced overtime, deferred maintenance of many staff housing, reduced spending on consumables and supplies, he said.

"Despite the austerity measures taken by the University, the operational costs continue to escalate due to factors beyond our control," he said.

Sogeri drive youths give market facelift



Some of the completed benches at the background

Unitech Sogeri market has received a facelift with the construction of several food benches by youths living within the vicinity.

The construction of the benches with the use of bush materials was part of a community project instigated by youths residing around Sogeri Drive.

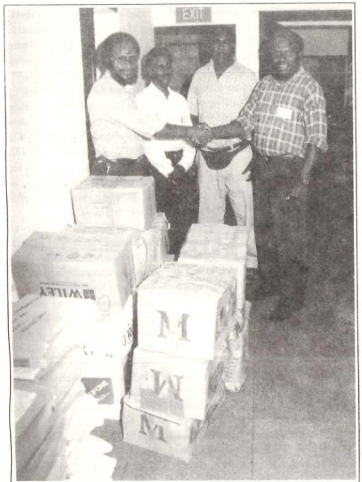
Spokesman for the group, Rupa Kila, said that the youths decided to carry out the self help project to help mothers display their goods on the benches.

Rupa said that Lae is renown for its high rainfall and most times, the ground around Sogeri Market is wet and muddy, forcing market vendors, mostly mothers to sell their produce in these wet and muddy conditions.

"We decided that there was a need for benches to constructed so that market vendors could put their produce on benches which would help keep them clean and presentable," Rupa said.

The youths have appreciated to all market vendors to take care of the benches.

PAPINDO DONATES BOOKS TO MATHESON LIBRARY



Acting University Librarian, Raphael Topagur receiving the cartons of books from Papindo representative

Lae based company, Papindo Trading Company has donated 15 cartons of text books worth about K7000 to the Matheson Library.

Acting University Librarian, Raphael Topagur said that the donation was timely as the library was struggling to meet academic departments' request for text books.

He said that the University's allocation of K100,000 for text books was not enough, as it was used to offset previous years book orders, thereby, orders for text book this year would have to wait for the 1999 allocation.

"The library cannot meet its annual target of acquiring 2000 volumes because of the decline in the budget," Topagur said.

"Papindo Trading's donation is highly appreciated and the library looks forward to the company's continuing support in contributing to education in the country.

"The pre-requisite of a clever country is the availability of information, and information in books is a vital part."

Apparently, the devaluation of the kina has adversely affected the library forcing it to buy less number of books then the required number for each academic department.

The library has also taken cost cutting measures to reduce its expenditure.

As part of its cost cutting measures, the library, would reduced its number of subcription to journal as of next year, and the cut in the number of journals would the second time in recent years.

The library is also setting up an internet site for staff and studens to gather information

Topagur said that the use of the Internet was a less expensive excercise of gaining addtional information, and he encouraged students and staff to make good use of the technology that was available

TFTC instructor returns from Fiji Course

A senior instructor with the Timber and Forestry Training College has returned from a week of Timber Drying Using Kilns and Airdrying workshop at Fiji.

Ben Vali, attached to the Wood Preservation Section, said that the workshop had given him an in-depth view into timber drying using kilns.

The workshop, sponsored by Brussels based organisation, CDI, attracted participants from Solomon Islands, Vanuatu, Fiji and Papua New Guinea.

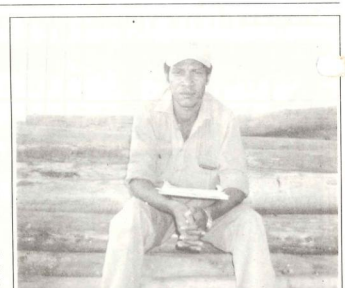
"It was an intensive workshop that covered various aspects of timber drying and it was very helpful, and I am hoping to implement some of the new things learnt at the workshop in our courses at the College," Vali said.

"It was a good opportunity for participants from the Pacific Island countries that attended, to share ideas and views on various aspects on timber drying."

Vali said that one of the course facilitators would be in the country to conduct a course on Kiln drying and he urged timber companies using kilns for timber processing to attend the course as it would be very helpful.

"There are about 10 companies within Papua New Guinea using various kilns for drying and treating their timber, and I urge each one of them to send their participants to the course," Vali said.

"Although, there are many types of kiln dryers in the country, the theory and principle and application are all the same."



Ben Vali

SHRM '99 BASKETBALL QUEENS

SHRM women basketball club are now the new queens for the Unitech Women's basketball competition after defeating Arabasti 37-26 in the grand final on Monday evening.

An elated SHRM coach, Joachim Dellawan after the match was lost for words to describe his team's first grand final victory in four years, adding " I cannot describe how happy I am for such a deserving win for my players," Dellawan said.

Since the club's formation in 1994, the SHRM team has always been at the bottom of the competition ladder, and this year's competition was the most successful for the team, Dellawan said.

"I am proud of the girls who are mostly grassroots mothers who put up a good performance by fighting our way through the semi finals to earn ourselves the grand final berth, and finally, the premiership title for this year," Dellawan said.

He singled out Florence Gedisa, Jessica Minim Rhaneal Konmil and Mary Ume as the main driving force behind their win.

Florence Gedisa's combination with Jessica Minim that afternoon proved to be a formidable pair with both pumping in 14 and 9 points respectively, with Rhaneal Konmil 8 and Mary Ume 6.

In front of a packed basketball courts, the grand final was kicked off by Bursar Mesengi Aniong, saw Arabasti the first to find the ring to pin points onto the scoreboard to take the lead in the early part of the first half.

However, SHRM jumped into the lead, after counter attacking by making use of Arabasit's silly mistakes and passes.

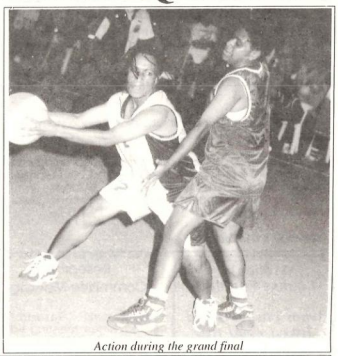
SHRM took a 15-12 lead in the first half with scores from Florence Gedisa (4), Mary Ume (2) captain Jessica Minim (9) while Arabasti's came from: Rebeca Saia (2), Anita Kami (4), Milfred (4) and Esther Colin(2)

Although, Arabasti's Esther Colin was awarded three sets of free throws which if utilised could have earn them the comfortable lead, she just failed to pot the balls into the ring.

This was also the case for SHRM whose Rhanel Komnil was awarded five sets of free throw, and neither she could sink the balls.

The second stanza was a game that was riddled with fouls from both sides, but nevertheless, SHRM managed to pin more points on the board then their opposition to claim this year's basketball queen title.

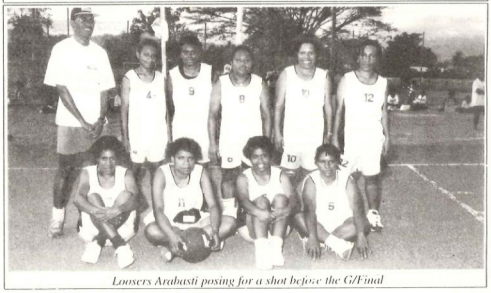
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Action during the grand final



1998 Unitech Basketball Queens, SHRM. Photo By Paul Wagum, AV Unit



Loosers Arabasti posing for a shot before the G/Final

INFORTAINMENT BOARD

Garden Refuse (Pipia) Dumping

All Campus residents are reminded again to dump garden refuse on designated areas only, and no where else. Please read the signs.

Do not dump house hold garbage and rubbish on garden refuse pipia collection area.

Planting of food gardens, shrubs/plants along storm water drains, security access roads.

Planting of food gardens, shrubs and plants along and on storm water drains or road reserves are discouraged. Buildings and Grounds will not be responsible for damage or removal of gardens, shrubs and plants in the course of maintaining drains and roads.

Buildings & Grounds

Students Counselling Unit

When Life Hurts and Talking would Help

The Student Counsellors are there to listen to you. So don't delay, see them soon.

Ms Anna Wakana
Students Counsellor

Rev Windiong Siawong
Assistant Student Counsellor

Unitech Learn Drive School Bookings

The Unitech Learn Drive School bookings coordinated through the Bursary Department, has now been transferred to the Union Board, housed at Student Services as of Monday 05 October, 1998.

For your learn drive bookings, please see the Acting Manager - Union Board, Mr Wilford Kodiwa at the Union Board Office, or contact him on telephone 473 4239.

We regret any inconvenience this may cause.

Bryan Yapa
Bursary Department

Research Committee Meeting

The next Research Committee Meeting will be held on 15th October, 1998.

Intending applicants for research and conference funds please ensure that your applications should reach me no later than 8th October, 1998.

Please note that limited funds are available for distribution.

Primus Dam
Executive Officer
Research Committee

1999 School Year Enrolment

The Unitech Pre/Play School is now open to any parents who wish to enrol their child/children in for 1999 School Year. Take note, that your child must be 3 year old and above.

For more information, contact us on phone # 473 4296.

ligwatz
OZ TO SKIP OVER KIWIS IN TEST MATCH TUNAIT

SEMINARS

TLMU SEMINAR

Student-Centred Learning

Overview: The seminar will consider Student-Centred Learning in the context of the overarching philosophy of education and learning theories. In the main, discussions will discriminate Students-Centred learning from others in order to determine why this form of teaching and learning is encouraged and dominates other education provision in higher education throughout the world.

Staff and students are welcome to attend.

Date:Wednesday 14 October 1998
Time: 1200 noon
Venue: Rose Kekedo Conference Theatre

Light Refreshments will be served.

Department of Agriculture

Speaker: Mr Steve Vaux from Ramu Sugar Ltd

Subject: Ramu Sugar-Its History and Its Future Role in PNG Agriculture

VENUE: RCKK LECTURE THEATRE

DATE: THURSDAY 15TH OCTOBER, 1998

TIME: 11:00 AM

All interested, are most welcome.

Rainfall Readings for 24 hours to 0900 on: 06/10/98

Wed	30/09/98	42.6 mm
Thurs	01/10/98	38.8 mm
Fri	02/10/98	6.6 mm
Sat	03/10/98	0.0 mm
Sun	04/10/98	0.0 mm
Mon	05/10/98	5.0 mm
Tues	29/09/98	4.2 mm

Total rainfall for week-ending 6/10/98 107.2 mm
Total yearly rainfall up to 29/09/98 3,471.2 mm
Total yearly rainfall up to 6/10/98 3,578.4 mm

Safi Bafinu
Civil Engineering Department

Research and Conference Reports

Recipients of Research Committee funds, please note that it is a requirement under the conditions for the use of Research funds, that you provide reports on conference attendance or progressive/final reports on research projects undertaken, to the Research Committee.

Please ensure that your reports should reach me before the end of the academic year.

P.DAM

Position Vacant

Secretariat of the Pacific Community

1.The position of Veterinary Epidemiologist with the Secretariat of the Pacific Community (SPC) will become vacant in December 1998 and it is desirable that an appointment be made before that time.

2.The position of Demographer at the Secretariat of the Pacific Community (SPC) has been extended for one month to Friday 16 October, and that previous applicants need not re-apply.

This will become vacant in February 1999 and it is desirable that an appointment be made well before that time. A statement setting out the duties, responsibilities, qualifications, experience and skills required for these positions, plus terms and conditions of employment, is available at the Public Relations Unit.

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday: **UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF

Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

Sunday Morning
10 **CLC CHURCH**

Unitech Staff Bible Study

The next meeting of the Unitech Staff Bible Study Group will be held on Monday 12 October, 1998 at 7:00 pm.

Venue: 86 Fly Drive

For Discussion: The History of the Christian Church

All interested staff are come

Patrick Afenya (Tel 4674)

Unitech Catholic Community

Our Rosary Nite will be at 7:00 pm tonight at the Chaplain's Residence.

You are all welcome.

CLASSIFIEDS

Unitech Female Students Association

1998 BALL

VENUE: LAE INTERNATIONAL HOTEL

Date: Saturday 10 October 1998

Dress: Formal

DJ: Excess

TICKET:
DOUBLE - K60
SINGLE - K35.00

For Sale

Two packing boxes each 1.2 x 1.2 x 1.2m built out of 20mm thick plywood. Each selling for K220. Call 473 4208 or 473 4335 for details

Intervarsity Cricket Team

Joshua Beraro, Joe Fisher, James Dugumari, Naime Boga, Colin Mokagai, Goodnews Anual, Frank Ogisi, Suvenia Hatsiata, Kila Kalimu, Loa Hebou, Igua Morea, John Tau, Philip Dennis, Morea Dogo, Veare Rova, Lou Pipi and Lawrence Mwayubu.

The above listed and others who wish to play for Unitech should contact me to confirm their participation. Look out for the training program in the next week's Reporter.

We will be using maroon T'Shirts, but I would very much appreciate if you could all get yourselves white trousers for the games.

Joshua Beraro
Cricket Coordinator

APPROPRIATE TECHNOLOGY & COMMUNITY DEVELOPMENT INSTITUTE

LIKLIK BUK INFORMATION CENTRE

SCIENTIFIC OFFICER I/II (COMMUNITY PUBLICATIONS OFFICER)

The Liklik Buk Information Centre is a Library, Bookseller and Publisher servicing rural communities in PNG and the South Pacific. It is a division of the Appropriate Technology and Community Development Institute at the University of Technology, Lae.

A bright, energetic person with excellent communication skills in Tok Pisin and English, a proven commitment to community development (through information dissemination and production), and business sense, is sought for the above position. The appointee should have a tertiary qualification in a relevant discipline and/or at least three years work experience in two of the following broad areas: Community development work; Marketing and distribution; Writing and editing; Project management; Publications production using PageMaker or Quark Express. The position reports to the Manager of the Centre and is currently funded for a two year period. Salary will depend on qualifications, experience and ability. On-the-job training will be provided.

SALARY:

SCIENTIFIC OFFICER I K9,149 - K11,179 p.a.
SCIENTIFIC OFFICER II K12,288 - K15,017 p.a.

(Level of appointment depends upon qualifications and experience)

Detailed applications (two copies) with curriculum vitae including certified copies of qualifications obtained and names and addresses, fax/phone numbers of three (3) referees and an indication of the earliest availability to take up the appointment should be received by: The Registrar, PNG University of Technology, Private Mail Bag, LAE, PAPUA NEW GUINEA by 23 October, 1998.

UNITECH Cable TV (CATV) Subscriber Preference Poll results and Additional Pay TV Channels:

According to the recent survey carried out by the preference vote, 131 preferences were registered at the ESU, out of about 320 membership. Results of Pay-TV Channels preference poll:

CHANNEL	% VOTED "FOR"	F/NIGHTLY CHARGE
Discovery	70	K1.25
HBO	58	K4.00
Hallmark	53	K0.75
ESPN	42	K2.00
Starworld	39	K2.10
Cinamax	37	K1.50
TNT	39	K1.60
Animal Planet	36	K0.75
Star Movies	24	K2.10

Only three channels preferred by more than 50% of the received votes. Implementation will now commence for the following three most preferred Pay-TV channels, as soon as possible.

1. Discovery
2. HBO
3. Hallmark

Once the implementation is complete, the fortnightly subscription fee will be increased up to K11.50.

If you need any other information please call Pauline on ex. 4721 or email esu@global.net.pg

UNITECH CATV MANAGEMENT.

FUN WITH MATHEMATICS

Problem 20.

If a number is selected at random from a set of all five-digit numbers in which the sum of all the digits is equal to 43, what is the probability that this number will be divisible by 11?

Soln: Since the largest digit in base 10 is 9, the sum $d_1 + d_2 + d_3 + d_4 + d_5$ of the five digits can be at most 45. The given sum is 43, is two less and can come out in two different ways;

(i) One of the digits is 7 (two less than 9), all others are nine. The different combinations are 79999, 97999, 99799, 99979, and 99997.

(ii) Two of the digits are 8 (each one less than nine), the other three are nine. These can happen in (5x4)/2= 10 different ways, 88999, 89899, 89989, 89998, 98899, 98989, 98998, 99889, 99898, 99988.

Thus; we find that only 3 of the 15 numbers are divisible by 11, so the required probability is 3/15=1/5.

Only two correct entries were received. Joint winners are Kenneth Naso, BASC I and Duruwa Peter BSCSII.

Problem 21.

Find the smallest natural number n which has the following properties:

(a). Its decimal representation has 6 as the last digit.

(b). If the last digit 6 is erased and placed in front of the remaining digits, the resulting number is four times as large as the original number n.

All interested staff and students should send their solutions to problem 20 before Wednesday October 21st 1998.

First correct entry wins a prize of K5.00.

John Wamil, Dept. of Mathematics and Computer Science, Email:jwamil@cms.unitech.ac.pg

Air Mail

STAMP

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Papua New Guinea University of Technology
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The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1309 ISSN:10119-5354 16th October, 1998 WEEKLY

Rich sponsorship forms alliance with Unitech and communication giants

Communication corporations Telikom PNG and Ericsson Australia have created history through a joint sponsorship of the Foundation Chair Communication Engineering at Unitech.

Mr Colin O'Reilly, Ericsson's Director of International Customer Unit, and Mr Lalatute Avosa, Managing Director of Telikom PNG with representatives from both organisations were on campus to formally hand over their annual sponsorship commitment totalling K124,333.32. The initial agreement is to continue sponsorship for 3 years.

Speaking at the presentation ceremony, the acting Vice-Chancellor Dr Philip Siaguru said the University and the Department of Communication & Electrical Engineering were grateful for the sponsorship in the face of sever financial constraints facing not only the University, but the country as a whole.

"This University, like other government funded organisations, had to operate with reduced funding this year," Dr Siaguru said.

"Over the last four years, this University has cut off a lot of fat, however, my worry is that we are now getting down to the muscles and in some academic sections we are now beginning to see the bones.

"That is the situation in this University and one that I am sure many other government funded agencies are facing."

The sponsorship has also set a new phase in the direction the University is taking to align itself with the industry for cooperation

"Your gesture in donating this money to assist us in the Department of Electrical & Communication Engineering, is very much appreciated," Dr Siaguru said.

"The route you have professionally chosen to take this path that this University will be looking to enhance and develop in the future.



Now we're really talking- Telikom's MD Lalatute Avosa and Dr Philip Siaguru cement the alliance as Colin O'Reilly and representatives of three organisations look on

"I believe there is a lot of good skill potential in the University in terms of research and specialised skills which should be used by the industry.

"Similarly, the University stands to gain by associations with industry. hence here in the University, we will be embarking on furthering and strengthening such associations with the industry.

"Partnerships between university and industry is occurring globally, and it is a good progressive and developing formula."

The Acting Vice-Chancellor also used the opportunity to invite the industry to contribute more to the development and expansion of the curricula in the Department.

"I am sure your experience and field of knowledge will be useful to us to develop and train our students appropriately," Dr Siaguru said.

"I believe you have a say in the development and review of our curriculum so that we continue to stay on-course and remain effective and up-to-date with the fast changing technology in the workplace.

The Telikom PNG/Ericsson Personal Chair sponsorship is now the second in PNG to be secured by the University, after the MRDC Chair in Mining Engineering.

Meanwhile, the Head of Department, Professor Al Dabbagh said that the move by the Department to forge new alliance with industry was in line with the University's overall corporate objectives.

"This move is consistent with the third research and development objective of the University -to develop further strategic alliance with the industry, commerce and community," Prof Al Dabbagh said.

"The future development of PNG is dependent upon the nurturing and growth of local knowledge in some key areas.

"It is acknowledged that Information Technology will play a major part in providing the communications infrastructure for public and private sectors in PNG.

"The University must become involved in the design of these new systems in order to train local staff at a high level and to provide trained engineers for industry and the academic life.

"To ensure the deepest involvement with the communication industry, it is believed that the new chair should be funded by the industry and therefore be accountable to it.

"There is no point in academic ivory tower isolation, as this could prevent the University from developing expertise in communication engineering, and in such environment our students will also be close to real problems and better understand the telecommunication needs of government, industry and commerce."

Furthermore, Telikom as one of the

major employer of Unitech graduates in communication engineering, would benefit from the training received under the new arrangement.

"PNG through Telikom has one of the most advanced telecommunication network in the developing nations of the world." Prof Al Dabbagh said.

"The network is designed, installed, maintained, operated and owned by Telikom on behalf of the PNG Government, it has some of the latest state of the art digital technology.

"Citizen staff who perform all the above network functions are trained in PNG institutions with only a handful with overseas post graduate qualifications."

Professor Al Dabbagh said that the Department was already providing assistance to government departments on issues concerning information, technology and communication in PNG.

"Government Departments are already consulting Unitech staff, especially in the Electrical & Communication Engineering Department, where we have considerable experience in Communication Engineering." Prof Al Dabbagh said.

"The Department has operated an e-mail service via the Australian AARNET systems since 1992.

"Unitech's leading international role in research and development in telecommunication area is signified by the active participation of Electrical and Communication Engineering as part of the 'POST-PARTNERS PROJECT', on "International cooperative experiments of communication technologies and application by satellite".

Unitech also represents the Country in the Asia-Pacific group of countries involved in the development of an Asian Information Infrastructure project aimed at developing satellite communication as the most effective and important netlevel in the region.

The project is sponsored by the Ministry of Post and Telecommunication Association Radio and Businesses (ARIB), Tokyo, Japan. The project involves, Indonesia, Thailand, PNG (PNGUT), Fiji and Japan.

TRIO LINKED-NOW WE'RE REALLY TALKING

The Telikom PNG/Ericsson Personal Chair in Communication Engineering the Department of Electrical Engineering & Communication at Unitech would enhance alliance between the University and Industry.

At the presentation ceremony two communication companies, Telikom PNG and Ericsson Australia invested K62,166.66 each towards the sponsorship.

Telikom PNG Managing Director Lalaitute Avosa said the Telikom supported the move as an investment for training of the future human resources of the Country.

Quoting the National Government's policy on the development of communication in the country, he pointed out that for telecommunication to be accessible to the majority of the people in PNG, that service was just as good as its manpower.

"This policy had an implication for this University, and implication for Telikom, as this policy gave us the mandate and challenge to get the best possible manpower to provide service to our people," Mr Avosa said.

"It also enhances the reform exercise of the National Government through the Provincial Governments in order to make accessible an affordable service for our people."

While Telikom was able to meet its technical requirements through its in house training, from the management perspective the human resources still lacked the analytical skills to solve major problems.

"We have our own institution, Telikom Training College which meets the need of technical expertise, however, we have seen time and again that we need the analytical capacity in place, instead of being very narrow in terms of doing what you are told to do," Avosa said.

"We need to find out why things have gone wrong and whether there is a better technology or a better way of doing things."

He said such scenario provided the opportunity for Telikom to develop its expertise to address those issues at a professional level.

"The only option available to us was this University, therefore, we became interested in the interface of this University and the communication industry," Avosa said.

"It became an important factor to make that link, so when it came to the offer of the chair, the academic council seized upon the opportunity.

"We have invested with the intention that graduates will be produced here through the curriculum development by Telikom and our partners, Ericsson.



R-L; O'Reilly (Eric), Avosa (Teli), O'Connor (Eric) and Kuliniasi (Tel)

Meanwhile, Ericsson's Director of International Consumers, Colin O'Reilly reiterated his counterpart's call for greater partnership between the University and the Industry.

"It is so important that the Industry gets much closer together with the education institutions in the world and give an input and try to get you into the direction we are going, to met our goals," Mr O'Reilly said.

"In engineering, what we have found is that there is a tremendous shortage of players around the world today," adding that the rate of change in the market place has also impacted on the delivery of goods and service offered by the industry.

"We are getting out of typically manufacturing, we are out sourcing that to other people and are tapping into the brain power area using engineers in the designing of our products, in service and after sale support of our products, therefore we need highly competent people to come to this industry," Mr O'Reilly said.

"We are finding that the industry is changing so fast, we need good competent people to bring the products to us, and I think that's the challenge on universities, and so we need to work closer with you, that we have to learn to teach our people quickly on these new technologies that are coming up just as fast.

"That's the magnitude of change, that's the paradigm that we have to get into, and I think universities like yourself have to take that on board, and the only way to do that is for us to work closer with you, so that you can see the environment we're working in and bring out the students that have the confidence to help us along the path we're after."

Mr O'Reilly was also on the prospect of working together with Unitech Telikom PNG in producing engin which were market driven.

"We will definitely work together with our partners to assist you, and give you input from our industry, to help you position your syllabus and put you in the direction that we need as an industry, and I hope it works out to be extremely successful," O'Reilly said.

The Head of Electrical & Communication Engineering Department, Prof Al Dabbagh also pointed out that Telikom PNG was the major employer of the engineers and diploma holders with option in Communications from Unitech.

"Since Independence PNG has relied heavily on overseas technology and expertise for consultancies in the area of computer science and information technology," Prof Al Dabbagh said.

"A lot of money has been spent on foreign expertise when there is no reason why we cannot produce our own in the first place.

"It must be noted that human resource development requires considerable amount of investment, and this investment can be made through the normal annual budget allocation, external grants and foreign aid.

"Communication engineering will continue to have a significant impact on the government, commerce and industry in this Country.

"With the current estimate of K200 million a year on this technology, it is of great significance that this problem is addressed now before it is too late."

The Reporter is produced weekly by the **PUBLIC RELATIONS UNIT.**
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Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Tertiary students end boycott over user pay policy

Education Minister, Muki Taranupi would ask the National Executive Committee (NEC) from further implementing the 10 percent increase in User Pay Policy next year.

The Education Minister also assured the National Union of Students leaders that he would also ask the NEC to possibly abolish the User Pay Policy.

The NUS student leaders met the Education Minister yesterday, to present their petition to scrap the User Pay Policy.

Mr Taranupi stressed to the students that it was up the the NEC to decide whether or not to impose the the existing 10 percent.

Following the Education Minister's assurance, tertiary students have returned to classes today.

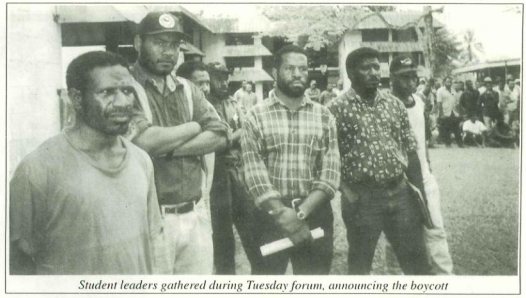
The boycott stemmed from an earlier National Union of Students petition in June to the Prime Min-. Bill Skate, asking his Govern-ent to shelve the User Pay Policy.

As a follow-up to the petition, student leaders met the Education Minister seeking his assurance that the Government would not implement any further increase to the user pay fees, and that the Government reviews its policy.

As part of the boycott, students have carried out massive public awareness campaigns to secondary and primary school education level and the general public on the effects of the User Pay Policy.

The User Pay Policy was introduced in 1996 for education and health by the Chan/Haiveta Government as part of the Structural Adjustment Program (SAP) imposed by the World Bank and the International Monetary Fund (IMF).

Subsequently, the Government ...ed the 10 percent user pay fee ...udents, with the under-taking that each year, the user fees would increase by 10 percent until tertiary students met the whole cost for their education.



Student leaders gathered during Tuesday forum, announcing the boycott

However, in 1997 and 1998, the Government did not increase the percentage of education fee payment by another 10 percent due to the nation-wide drought and National Elections.

Apparently, the student body strongly believes that the Government would stick to its commitment to the Structural Adjustment Program, and would most likely increase the user pay percentage by another 10 percent for next year.

The anticipated increase in user fees would mean that University students would have to pay K600 while college students pay K300. This is 20 percent of the Government's K3,000 and K1,500 respective sponsorships to University and College students.

In a joint petition to the Prime Minister, NUS executive and SRC presidents stated: " The only long term investment in PNG to attain total economic independence, technologically innovated citizens, competitive international trades, natural resources development and effective resource management is investment in higher education."

"The students and parents of primary, secondary and tertiary institutions are ready to bring the education system of this nation to a halt and we are here to reach an agreement to prevent this to happen."

"Therefore, the NUS which represents the students and disadvantaged parents stand united, and requests the Government to respond favourably, that there will not be any 10 percent increase in school fees and the User Pay Policy is reviewed.

"The User Pay Policy was detrimental to the development of human resources in the country as stipulated by the Five National Goals and Eight Directive Principles of the National Constitution."

The petition further claimed that the policy was untimely and abrupt, and it was depriving the rights of the poor and disadvantage to access in tertiary education.

"We would like to let this Government know that the average Papua New Guineans are only struggling to cope with the ever-rising cost of basic goods and services today," the petition said.

"The Government is doing a total injustice when it is asking them to dig deeper into their empty pockets to pay for the basic needs, as well as education, hence, the policy is totally impractical in this regard.

"Therefore, we call on the Government to be honest with its people and not implementing policies on the assumption that every citizen is in the same boat and they can swallow everything that is given to them.

"We do not wish to see any other alternatives to go with the Natsch ol scheme until 80 - 90 percent of the population are fully prepared to accept the User Pay Policy and this should be left to Papua New Guineans to decide and not dictated by World Bank or IMF or any giant foreigner.

"Other people know less about PNG and PNG Government implementing their policies without due consideration to its people, is only adding salt to the wounds in the people.

"We reserve the right to know what happens to the money generated from our vast natural resources.

"If the money is in the Government's purse, then we would like this money to be fairly distributed to benefit the people.

"This means that the people need not to pay for their education, hence, we strongly condemn the Government for implementing the policy and we would like to see the government do away with this policy."

In the petition, the NUS suggested that the Government;

• Prioritise Education - so that PNG do not only have universal education but can also produce adequately skilled and technologically orientated citizens to bring the country into the next century; should the Government anticipate competition and academic excellence for quality graduates from our tertiary institutions, it is recommended that a reward system based on merits in academic performance go with the Natschol scheme.

• Encourage more private sector sponsorship - because this sector absorbs most of the products from our tertiary institutions, the Government should make sound policies which can encourage more private sector participation in the sponsorship, not only in third or final year of studies but in the entire length of the course.



Part of the student crowd during Tuesday's forum

SRC constitution out of date - president

Unitech SRC president has called for changes to the SRC Constitution following his visit to Australia.

Mr John Kelly Kaio highlighted this in his report on his visit to the University of New England, which was purposely to study the constitutional structure of the Student Unions and other students organsations at the University.

The SRC Constitution has not changed over the last 22 years.

"This reviewing of the constitution is currently being done as the current regulations and policies were restrictive, and do not allow for flexibility of performance of duties and responsibilities," he said.

"The current Constitution only deals with the political welfare of the students and there is no proper emphasis on social, physical and student support services.

"The change would also train the students to be more confident, responsible and disciplined young men and women.

"I prefer to borrow the concept the Student Unions in the University of New England which would be constitutionally structured and modified to suit the PNG University of Technology.

"If the Unitech student body constitutionally restructured itself and has aims and objectives now, it would be a long time before we would get there to achieve what we aim, however, it needs proper management, money and resources to achieve its aims.

"We should accept and allow changes now, as tomorrow will never come for change.

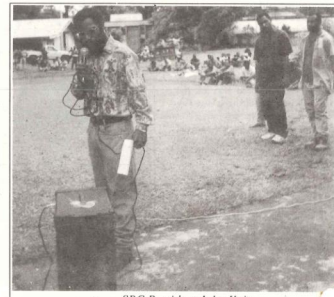
He also called on the University administration to build confidence and trust in its young people as intellectually educated future leaders who were capable of managing themselves.

Meanwhile, John Wemin has been declared winner for the 1999 SRC President's post with 346 votes beating the this year's President, John Kaio by 45 votes who managed to secure 301 votes.

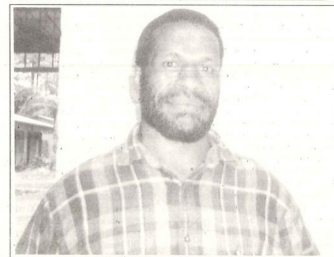
The Vice-President's post goes to Killen Tanuve who secured 510 votes, beating his only rival Benjamin Naris by 59 votes. Narris secured 448 votes.

The formal hand over ceremony would be made soon.

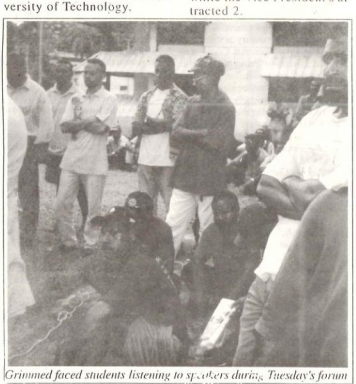
A total of 4 candidates contested the President's post while the Vice President's attracted 2.



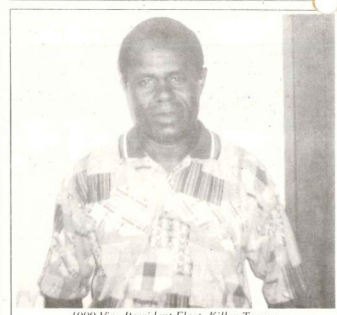
SRC President John Kaio



1999 President Elect, John Wemin

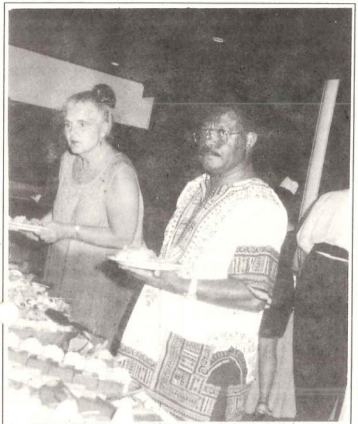


Grimmed faced students listening to speakers during Tuesday's forum

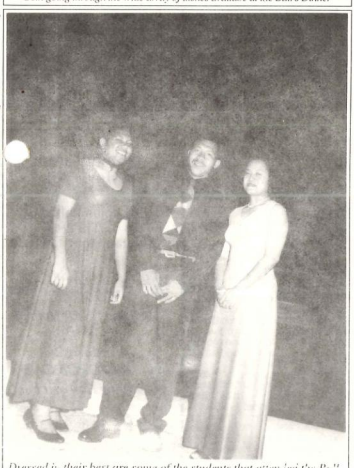


1999 Vice President Elect, Killen Tanuve

Female students hold ball to raise funds for new domitory



Lord Mayor, Teffey Miomzing flanked by Lae branch, Soroptimist president Mrs Bein going through the wide array of dishes availabe at the Ball's Dinner



Dressed in their best are some of the students that attended the Ball

The Unitech Female Students Association (FSA) staged a major fund raising drive to help build a new dormitory for future female students.

As part of the fund raising drive, the FSA organised a ball on Saturday night at the Lae International Hotel, where money raised would be used to establish a trust account for the new dormitory.

FSA President, Ms Schola Maru, during her speech at the Ball, said that after the opening of the account, donor agencies would be approached to aid help build the planned dormitory.

"This is a long-term project, however, we cannot sit back and wait for help but to take the initiative ourselves, and to achieve such a goal, it has to take sweat and hard work," Ms Maru said.

She said that the female students took the initiative to start the fund drive because the current female residence could not accommodate all female students, also in anticipation of future increase in the number of female students studying at the University.

"There are about 30 students currently residing at the Telikom Training College, while we have quite a number of female day students who would like to be accommodated at the University, however, due to lack of bed spaces, this was not possible," Ms Maru said.

She said that the initiative to raise funds for the dormitory was in place before the Student Facilities Center made the announcement of converting the three female residential halls into colleges.

Meanwhile, guest speaker at the Ball Nite, Soroptimist International President, Mrs Maryellen Bein, said that women and men need to work as partners or team members in life as both cannot live without each other.

"We are in this world to work and communicate together and let us recognise the jewel within each one of us which radiates love, light and energy," Mrs Bein said.

"Now that we see ourselves as a treasure to be discovered, let's look at this gem called me and you, gem grows deep within and when they are discovered they are cleaned, cared for and polished to shine, some are so valuable they have them insured.

"So let's see ourselves as that jewel, family loves nurtures and discovers who we are, here our values and roots were established, here our parents choose to support us to go perhaps beyond they have gone, and now that that he have entered Unitech, it is the polishing time.

"This is where you can shine, time is a time to get all you can get from your lecturers make them earn their pay and provide you all you desire to know.

"This is your insurance for the future.

"Put forth all you have to make these years your learning steps for the future, see yourselves as complete, competent, happy well paid women in your careers.

"See yourselves as working beside your male peers valuing who you are but first you must value yourselves and then value all others and your example will plant the seeds for the future for your generations and those to follow."



FSA President Scholar Maru delivering her speech

INFORTAINMENT BOARD

Council & Council Committees Elections

Following the close of nominations on 9th October, the following valid nominations were received:

a) Election to Council - Section 9 (1) (h): Heads of departments Representative: 2 Nominations: Professor M R Khan/Professor R Milani

b) Election to Staffing Committee - Section 2 (c): Professorial Heads of Departments Representative: 2 Nominations: Professor M Al-Dabbagh and Professor B W Young. - (e): Academic Staff Representative: 2 Nominations: Mr S Bannerman and Mr N Mobiha. - (g): Administrative Staff Representative: 1 Nomination: Mr L Kelegai.

c) Declarations - (i) In accordance with the election rules and procedures, I hereby declare that Prof R.Melani is duly elected unopposed to as the second Professorial Heads of Departments' Representative on the Council and Mr L Kelegai is duly elected unopposed to represent the Administrative Staff in the Staffing Committee for the period 1/1/99 - 31/12/2000. (ii). I also declare that the other stated nominations for the Council and the Staffing Committee are valid and elections for the posts would be contested on Monday 19 October in my Office commencing from 8:00 am - 4:00 pm.

d) Further nominations would be called in November for the Technical Staff Representative on the Staffing committee (again), and nominations for the Council Committee on Salaries & Conditions of Service (CCSCS).

Peter M V Wandau
Returning Officer

Rainfall Readings for 24 hours to 0900 on:

Wednesday	7/10/98	0.0 mm
Thursday	8/10/98	13.6 mm
Friday	9/10/98	41.8 mm
Saturday	10/10/98	0.0 mm
Sunday	11/10/98	0.0 mm
Monday	12/10/98	12.6 mm
Tuesday	13/10/98	19.6 mm
Total rainfall for week-ending	13/10/98	87.6 mm
Total yearly rainfall up to	16/10/98	3,578.2 mm
Total yearly rainfall up to	13/10/98	3,666.0 mm

Samie Isaac
Civil Engineering Department

Mungkas Soccer Club (Unitech)

Grand Final, Lahi, Division 2.

GRAND FINAL TO BE PLAYED AT KILAGE STADIUM, LAE - 10:30 AM ON SATURDAY 17TH OCTOBER.

Transport leaves Haus Kofi, 8:30 am.

SUPPORTERS WELCOME.

Staff Changes

This is the information summary of staff changes in respect of appointments, departures and interdepartmental transfers for the week-ending 28/9/98 - 9/10/98

NAME	DEPARTMENT/SECTION	POSITION
Appointment		
Nelly Napitalai Ms	Matheson Library	CE I Temp
John Arikana	Security Services	Patrolman
Departures		
Kaitu Kaitung	TFTC	CE I
Susan Low Mrs	Agriculture	Lecturer
Goli Damud	Arch & Building	Admin Off

Unitech Catholic Women's Club

Fundraising Dinner/Dance

Date: 14th Nov 1998
Time: 6.30pm till late
Venue: Staff Amenities Centre (Unitech)
Dress: Smart Dressing
DJ: Master Blaster

DOUBLE: K25
SINGLE: K15

COME ALONG AND ENJOY PNG FOOD (TARO, KAUKAU, BANANA, PORK, CHICKEN) AND MORE COOKED IN A MUMU AND PREPARED IN A TYPICAL PNG STYLE.

You will also be entertained by a Dance group.

So why don't You take your partner out on the night of 14th November. We assure you that, this will be a night you will not easily forget.

There are limited tickets on sale so get yours NOW!

Tickets are available from the following people: Magdalene Panau - 473 4289, Lucia Nakau - St Mary's School (Eriku), Joanne Tzilu - 473 4501, Teresa Kiap - 473 4561, Anito Kani - 473 4501, Maria Dam PNGBC (Top Town), Evelyn Noni - 473 4807, Jane Moshi - 473 4751, Lukas Panau - 473 4506, Charles Nakau - 473 4575, Peter Sopade - 473 4575, Godfrey Lantry - 473 4413 and Peter Kami - 473 4863, Veronica Michael - 473 4364, Carolyn Dakta - 473 4751, Dianne Raka - 473 4364, Alice Maiby - 473 4213, Justin Helele 4858 and Elizabeth Apes - 473 4206.

Unitech Boxing Club

PRESENTATION NIGHT

When: Sat 31st Oct 1998
Where: Unitech Staff Club
Gate Fee: K10.00 per head

Door prices to be won. Transport and Security provided.

All welcome.

Tickets are available from the following people: Dominic Nimbi - Language Department, Lonial Nuali - MSQ 2, Molly - SRC Office, Frank MSQ 17, Esther - Surveying & Land Studies and Carol - Language and Communication.

UWBA

Fund Raising Movie Nite

Union Hall at 7:30 PM Sunday Night 17/10/98

Movie 1
TOOTSIE
Starring Dustin Hoffman

Movie 2
AIRFORCE ONE
Starring Harrison Ford

K1.00 only

Ol i kam tasol!!

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday:UNITED CHURCH
Tuesday: ANGLICAN
Wednesday: LUTHERAN
Thursday: AOG
Friday: CATHOLIC

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF

Sunday Morning
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

nday Morning
.0 CLC CHURCH

GREAT COMMISSION COMPANY

PRESENTS:

Come and enjoy your Sunday morning for a change.

Be our guest as the Sunday School Kids perform creative dance, skids and much more.

are most WELCOME to worship the Lord our God.

Venue: Duncanson Hall
Time: 9:00 am

ADMISSION - FREE

Unitech Catholic Community

Our Rosary Nite will be at 7:00 pm tonight at the Chaplain's Residence.

You are all welcome.

CLASSIFIEDS

Intervarsity Sports

Friday 23rd - 25th October 1998

Unitech - Lae

WHAT IS IT?

IT IS A SPORTS CARNIVAL WHICH INVOLVES ALL UNIVERSITIES NATIONWIDE.

WHO WILL BE INVOLVE?

The staff of the Universities and their spouses are eligible to participate.

WHICH SPORTS CONTESTED?

Soccer, volleyball, basketball, netball, touch rugby, tennis, table tennis, dart, cricket, softball, 100 metres sprint and snooker.

Registration: All participants of Unitech are levied K12; respective sporting codes pay K20.

Presentation:

The presentation will take place at the official stage straight after the finals followed by a dance at the SAC. The dance is K10 per head.

LIGWATCH PREDIKSENNNNN

THE DECIDER-TUNAIT

KANGAROOS TO HOP OVER KIWIS

Research and Conference Reports

Recipients of Research Committee funds, please note that it is a requirement under the conditions for the use of Research funds, that you provide reports on conference attendance or progressive/final reports on research projects undertaken, to the Research Committee.

Please ensure that your reports should reach me before the end of the academic year.

Primus Dam

Unitech Tennis Club

This is to advise the Tennis Players, men and women to please pay in your affiliation fee (player levy) @ K20 per player (K12 to USOC) and K8 to the Tennis Club) for 2 x nets and balls. Deadline no later than 19/10/98.

There will be a working bee on Saturday 17/10 at 7:00 am at the Tennis Courts and everyone is urged to attend.

Paul Pasen
Tennis Co-ordinator

For Sale

TOYOTA CORONA SELLING FOR K9,000.

CONTACT ON PHONE 475 7979

For Sale

MINI-BUS 9 SEATER, MAKE: MAZDA E1800

White in colour. Mileage: only 50800 km. Registration: till October 1999.

One owner only and in very good condition. Bought new 4 years ago.

Price K16,000 ono. Contact: J Chan, Phone 472 1866

MAZDA 323 STATION WAGON

White - Reg # LAE 928. In good running condition.

Contact 473 4757/473 4751and make an offer.

Offer must not exceed K3500 and must not subside K2500.

FUN WITH MATHEMATICS

Problem 21.

Find the smallest natural number n which has the following properties:

(a). Its decimal representation has 6 as the last digit.

(b). If the last digit 6 is erased and placed in front of the remaining digits, the resulting number is four times as large as the original number n .

Solution: Answer 153846. The desired result can be obtained by successive multiplication. Since the original number ends in 6, the new number ends in 4. Since the new number begins with 6 and ends with 4 , the old number must have ended in 46. Now successive multiplications give in succession, he remaining digits of the original number. The process is as follows:

Original Number	New Number
. . . . . .6 x 4	= 6..... 4
. . . . . .4 6 x 4	= 6. . . . . 8 4
. . . . 8 4 6 x 4	= 6. . . . . .3 8 4
. . . 3 8 4 6 x 4	= 6. . . . .5 3 8 4
. . 5 3 8 4 6 x 4	= 6. . . 1 5 3 8 4
1 5 3 8 4 6 x 4	= 6 1 5 3 8 4

Only two correct solutions were received. Joint Winners are Thorald Quicho BSCSI and Xin Luo BSCSIII.

Problem 22.

In a Mathematical contest , three problems, A, B,C were posed. Among the participants there were 25 students who solved at least one problem each. Of all the contestants who did not solve problem A, the number who solved problem B were twice the number who solved problem C. The number of students who solved only problem A was one more than the number of students who solved A and at least one other problem. Of all the students who solved just one problem, half did not solve problem A. How many students solved only problem B?

All interested staff and students should send their solutions to problem 22 before Wednesday, 28th October 1998.

First correct entry wins a prize of K5.00.

John Wamil, Dept. of Mathematics and Computer Science,
Email:jwamil@cms.unitech.ac.pg

Air Mail

STAMP

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The Reporter

INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU

ISSUE No:1310 ISSN:10119-5354 23rd October, 1998 WEEKLY

Academic blames PNG economic woes on international institutions

Foreign interference in the Country's economic affairs and successive governments' weakness have been blamed as the cause of the Kina crisis by an academic.

The policies and roles of the International Monetary Fund (IMF), World Bank and the World Trade Organisations were also criticised during the Evangelical Lutheran Church Seminar on the Kina and the Millenium Bug, at the Ducanson Hall on Saturday.

Acting Head of Department of Business Studies, Gomi Gipe, in his seminar paper " Why is the PNG Kina in crisis? said that 85 percent of the country's population were villagers and rural agriculturalists and policies should be designed to benefit them, and the National Government should seriously begin serving its own people.

He said the decisions and actions of successive Governments have tended to reinforce or aid the crisis that was affecting the Kina.

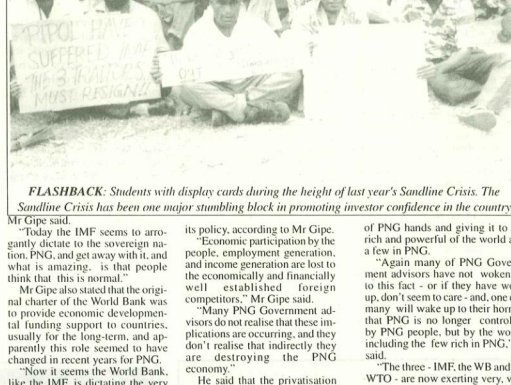
"PNG needs to seriously search for an alternative or new approaches to solve the crises," Mr Gipe said.

These new methods should not involve tired old Western concepts and paradigms, which seem to be failing any way, the alternative should be need-oriented, people oriented, imaginative, pragmatic, and effective, otherwise, the future is not bright."

PNG's own inadequacies and weaknesses have allowed foreigners and their agencies to interfere in the working of the PNG economy, Mr Gipe said, adding that while one recognised the importance of the role of these agencies, PNG would have not needed them in the first place had she managed her economic affairs well

He said that the IMF's role was to assist PNG "tie over the balance of payment problems", under its original charters of operations, and subsequent amendments.

"Recently, the role of the IMF has become entrenched, mainly because of PNG's inability to manage its economic affairs, and she has played into the hands of the IMF."



FLASHBACK: Students with display cards during the height of last year's Sandline Crisis. The Sandline Crisis has been one major stumbling block in promoting investor confidence in the country

Mr Gipe said.

"Today the IMF seems to arrogantly dictate to the sovereign nation, PNG, and get away with it, and what is amazing, is that people think that this is normal."

Mr Gipe also stated that the original charter of the World Bank was to provide economic developmental funding support to countries, usually for the long-term, and apparently this role seemed to have changed in recent years for PNG.

"Now it seems the World Bank, like the IMF, is dictating the very terms of economic development for PNG, and is getting away with it, " he said.

Another foreign agency that was dictating its policy to PNG was the World Trade Organisation (WTO), which seemed to be asking PNG to free its trade in terms of removing tariffs and other trade barriers, in its aim to free world trade of the trade barriers.

However, the WTO does not seem to realise the implications of its policy, according to Mr Gipe.

"Economic participation by the people, employment generation, and income generation are lost to the economically and financially well established foreign competitors," Mr Gipe said.

"Many PNG Government advisors do not realise that these implications are occurring, and they don't realise that indirectly they are destroying the PNG economy."

He said that the privatisation concept was an indirect strategy of the WTO and the United Nations, to ensure that the sovereignty of PNG was destroyed in order to promote the now glorified New International Economic Order.

Mr Gipe said that under the concept of privatisation, though it may seem rational, the underlay principles effectively involve taking away the ownership and control of the PNG economy out of PNG hands and giving it to the rich and powerful of the world and a few in PNG.

"Again many of PNG Government advisors have not woken up to this fact - or if they have woke up, don't seem to care - and, one day many will wake up to their horrors that PNG is no longer controlled by PNG people, but by the world, including the few rich in PNG," he said.

"The three - IMF, the WB and the WTO - are now exerting very, very powerful influences on PNG economy and its people at this time.

"These influences, in turn are, directly or indirectly, making PNG Government policies redundant, or obsolete, for all practical purposes.

"That is one reason why many of PNG's economic policies cannot work because they are window dressing exercises.

"Whilst there are genuine foreigners who have the development of PNG and its people at heart, the

majority of the money men in PNG, are not to develop PNG or its people, but to make quick money and get out.

"However, their expectations and values systems often become stumbling blocks to PNG's economic development.

"For example, they keep talking about money, whereas, the 85 percent of our people rarely deal with money.

"The Government tends to serve the interest of the money men, more than the majority of the people of PNG.

"That is one reason why the views and the visions of members of successive National Governments have been clouded by false visions, false hopes, and false priorities.

"That is also one reason why when newly elected members enter the National Parliament, they seem to make a complete about-turn in their attitudes and views to the people who have elected them into office.

"Thus in one sense, the kina crises is a crisis for these money men, not the majority of the people."

Mr Gipe said that successive National Governments' lack of basic credibility and competence to plan efficiently, has led to many problems including a fall in investor confidence.

He said that successive string of controversies including Sand line Crisis, and serious corruption allegations, Muja Sefa Tape and more, have been a major blow to investor confidence.

These and many other actions which have added to a plummeting of confidence in the National Government and the PNG Economy.

"PNG should stop pretending to be like a mini-Australia in economic policies," Mr Gipe said.

"PNG should search more for realistic, pragmatic, down to earth economic policies, to help her weather the economic storms of late 1990s.

"She should not emulate the monetary, fiscal, exchange rate policies of the West.

"As a non-Western country she should try out non-Western economic policies.

"This has been the main psychological obstacle to genuine macro economic and exchange rate policy in PNG since Independence.

"Nevertheless, whatever PNG tries out, will be patch-up work only, because of the impending."

Alternative student funding report to be presented to Government

The Office of Higher Education's Tertiary Education Student Support Initiative Committee is finalising its report on alternate student funding to be presented to the National Government for consideration.

This was revealed by Education Minister, Muki Taranup in his letter to National Union of Students President, Daigo Kumugaul while assuring students that he would be making a recommendation to the National Executive Council not to increase the User Pay fee by another 10 percent next year.

The Office of Higher Education was instructed by the National Government to establish a committee to review the current student financing scheme and recommend alternatives to the Government for consideration.

The committee was established and its members earlier in the year conducted visits to the various centers in the Country including Rabaul, Lae, Mount Hagen and Port Moresby to gauge views from stake holders, education administrators, academics and the industry on current student financing, and suggested alternatives.

The views and alternatives collected were to be compiled into a final report and presented to the Office of Higher Education, who would then present the report to the National Government on alternate funding for tertiary students in the Country.

It is understood that the current Natschol Scheme has become too expensive for the Government to maintain, with the current trend of decreasing funding to tertiary education, it is anticipated that the Natschol scheme may be abolished in the near future.

Moreover, Natschol funding may benefit fewer students under specific cases, such as students from families with very low income, or students who come from remote areas or disabled students.

The Government was concern about spending tax payers' money and was looking for ways on how money spent could be recycled in the system to fund other unfortunate students.

Therefore, there was a need to look into other options as part of educational reforms, to be implemented as the Country moves into the next century.

Options on student financing discussed during the workshop carried nationwide were;

- student loans - where tertiary students were to be given loans and upon graduating, repay the Government;
- graduate tax - where tertiary students are to be given loans and upon graduation, repay the loan as part of their tax contribution to the National Government if they secure employment;
- bonding - where students sponsored either through company sponsorship or government sponsorship, are required to serve their sponsor for a given period of time.
- Work - Study - where student work in their institutions for their school fees;
- Vacation employment - students work during ho[illegible] days to earn money to pa[illegible] their school fees; and
- Full fee payers - where students meet the full fee for their education.

The Office of Higher Education would reccomend alternatives to the National Government based on discussions on these and other student financing options.

Meanwhile, student leaders thanked the student body for their intellectual and professional manner during the three day student boycott over the user pay policy issue.

The SRC President, John Kelly Kaio said that as [illegible]cated elites of the Cou[illegible], students should maintain their credibility and integrity whenever solving problems.

He said that by solving problems intellectually, people gain more than trying to destroy property or create violence.

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email: reporter@unitech.ac.pg or cklahies @global.net.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Education catalyst for women's changing role in PNG

Education has been the major catalyst for the changing role of women in Papua New Guinea, coupled with western influence and the changing attitude in society.

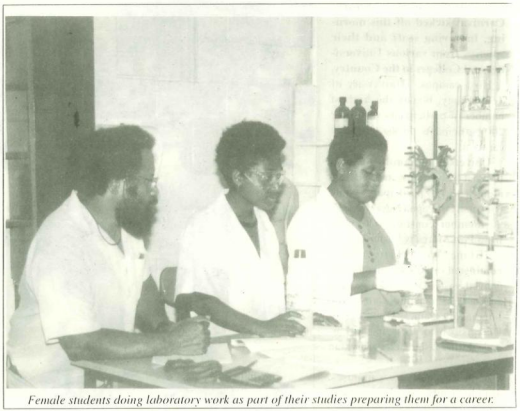
According to a research paper "Changing Roles of Women in PNG" by Business Studies student, Laurine Pindaluh, all these factors have given women the encouragement to pursue their goals as they are no longer content being just what society in the past has molded them to be.

Ms Pindaluh, said that women have a role to play in the development of the country and the roles they play, both domestically and in the work force, was of great importance to the prosperity and advancement of the country.

She stressed that education was the major catalyst for the changing roles of women in country.

"As more and more Papua New Guinean women receive the benefits of education their views are broaden and they realise that they were capable of much more," Ms Pindaluh said.

"Education gave women the opportunity to widen their horizons and it gave them the opportunity to attain the same level of education as their male counterparts.



Female students doing laboratory work as part of their studies preparing them for a career.



"As a result, there are more and more career opportunities for women than before."

According to her survey, 100 percent of her respondents have indicated that roles of women have changed more in the urban areas than rural areas because education was more readily available in urban areas.

"They also agreed that women who were educated women's role change more than women who were uneducated," she said.

"The influence of western culture and ideas was another reason why roles of women have changed.

"As western values and ideas became integrated into PNG society, women began to see what their western counterparts were achieving and these influenced them greatly.

"It made them see that they didn't have to confine themselves to society 's preconceived view about them.

"They could become something more than just being house wives.

"The attitude of the society that people live goes a long way in determining people's behavior and actions.

"Just as the traditional PNG society cast women in their roles, it has now allowed them to change.

"The changing attitude of the PNG society we live in has changed, therefore, allowing them to accept more readily the changing roles of women.

"Society is more open minded and ready to accept that women are capable of much more they were allowed to achieve in the past."

She said that these changes to women's roles such as women becoming career women was beneficial to the PNG society, and although, it may be a big step, it has its advantage.

LET THE VARSITY GAMES BEGIN

The Intervarsity Sports Carnival kicked off this morning, involving staff and their spouses from various Universities and Colleges in the Country.

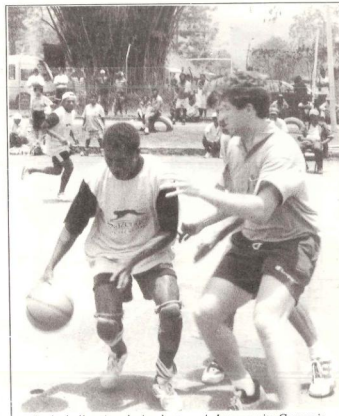
Host campus, University of Technology, boasts the highest number of participants with over 200 participants in the three day carnival.

University of Goroka the next biggest contingent arrived last night with 120 participants while University of Papua New Guinea's 90 member contingent flew in from Port Moresby yesterday.

Divine Word University's contingent of 80 participants also arrived yesterday, making their second appearance in the Intervarsity Games. Divine Word University made their first appearance during last year's carnival in Goroka.

Unitech's forestry campuses, Bulolo, Timber and Forestry and Training College, and Taraka would also be competing in this year's tournament with a total of 150 participants, while Vudal University who would be taking part only in darts have engaged a 20 member squad to try their luck out in carnival's darts competition.

According to Unitech Sports Coordinator, Philip Lavatu, all sports or games would be played at the main Taraka campus, and games would be conducted using the round-robin system.



Basketball action during last year's Intervarsity Games in Goroka. This weekend's Games are sure to be action packed.

Mr Lavatu said that the round robin system did not allow for finals to be played but which ever team tops the respective sports would be declared winners.

Sports that would be played during the carnival are: soccer, volleyball, basketball, netball, touch rugby, tennis, table tennis, dart, cricket, softball, 100 meters sprint and snooker.

Mr Lavatu urged the Unitech community to go and support their teams taking part in the competition.

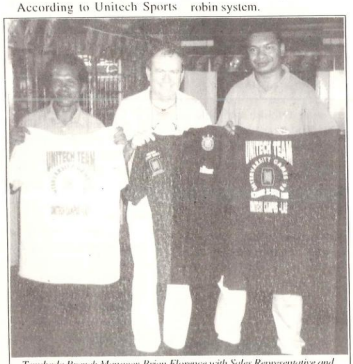
He said that as the host center, it would be excellent if Unitech comes out as overall winner, adding that participants needed the moral support of the Unitech community.

Tomorrow, games would begin at 8 am while Sunday's games would kick off around 10 am, Mr Lavatu said.

The presentation of prizes would take place around 4 pm on Sunday in front of the official stand, followed by dance at the SAC in the evening.

Mr Lavatu said that the Intervarsity dance would be only for participants and a fee of K10 is being charged and tickets can be purchased from members of the organising committee.

He said that money raised from the dance would be used for Unitech's participation in next year's intervarsity games.



Tambuda Branch Manager, Brian Florence with Sales Representative and Unitech Darts player, Conrad display T'Shirts being sponsored by the company.



Final touches being done at the SAC before the Intervarsity Darts Competition kicks off today

Unitech boxers get training stints with Ipera

Commonwealth Bronze Medalist, Lynch Ipera has been invited by the Morobe Unitech Boxing Association to give exhibition fights during the Unitech Boxing Club Presentation night next Saturday.

Prior to his exhibition at the Staff Amenities Center on Saturday night, Ipera with other members of the Unitech Boxing Club would also be putting up exhibition fights during the Morobe Show.

The exhibition with PNG's boxing sensation, would feature Unitech boxers, Ronnie Noan gold medalist at the 1991 South Pacific Games, Washington Banian, SP Games medalist and last year's Commonwealth representative, Washington Banian.

Unitech Boxing team coach, Lohial Nuau said that Ipera's trip to Lae, funded by the Unitech Boxing Club, was purposely to conduct training clinics with Unitech's team of boxers for the National Boxing Championships in Buka from December 21 - 23.

According to Nuau, Ipera's exhibitions was also part of the association's fund raising efforts for the Buka National Championships. The National Championships would coincide with the annual Buka Show.

Unitech boxers that would be taking part in the National Championships are: Rex Waisu (light fly weight), Charlie Salin (Bantam weight), Joe Aufa (middle weight), Robert Kanawi (Walter weight), Casper Uma (light welter weight), Ronnie Noan (fly weight), Gili Yama (fly weight).

The Unitech Boxing Club presentation night would kick off at 6:30 pm with dinner till 7:30 pm. Between 7:30 pm and 8 pm, would be the feature event of the night which would feature Ipera with other boxers doing exhibition bouts.

Nuau said that the presentation night was the first of its kind organised by Unitech, and it was one way to show our boxers their achievement for the year.

He said prizes to be awarded during the presentation night are; Best Boxer of the Year; Best Looser of the Year; Most Improved Boxer of the Year and the Most Committed and Disciplined Boxer.

Lohial thanked sponsors, SHRM for providing the venue and door prizes; STS Engineering for employing four boxers to raise funds for their travel to Buka; Big Rooster for providing the presentation night's dinner ; Lae Sports Store for providing printed T'Shirts for the National Championships and the SRC for the donation of trophies.

Intervarsity Sports

Friday 23rd - 25th October 1998
Unitech - Lae

WHAT IS IT??

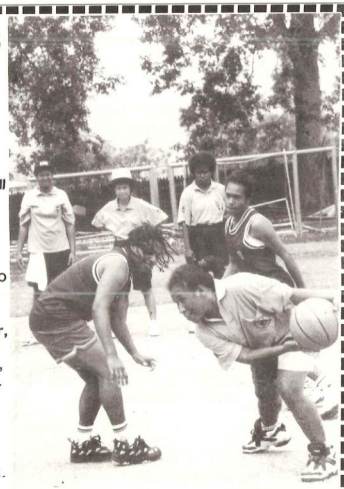
It is a sports carnival which involves all Universities nationwide.

Who will be involved?: The staff of the Universities and their spouses are eligible to participate.

Which Sports would be involved?: Soccer, volleyball, basketball, netball, touch rugby, tennis, table tennis, dart, cricket, softball, 100 metres sprint and snooker.

The presentation will take place at the official stage straight after the finals followed by a dance at the SAC. The dance is K10 per head.

COME ALONG AND CHEER & SUPPORT YOUR TEAMS



INFORTAINMENT BOARD

SEMINAR

Research Committee

SOILS AND SUSTAINABLE AGRICULTURE IN PNG

Dr Alfred Harlemink
Agriculture Department

The seminar will discuss the issue of sustainability and describe two research studies at Ramu and Hobu.

Date: Wednesday 28th October
Time: 4.15pm
Venue: MN001 Mining Engineering

Afternoon tea will be served

SEMINAR

Teaching and Learning Methods Unit

Topic: Student-Centred Learning

Overview: The seminar will consider Student-Centred Learning in the context of the overearching philosophy of education and learning theories. In the main, discussions will deal with Students-Centred learning and reasons why this form of teaching and learning is encouraged and dominates other methods in education provision in higher education throughout the world.

STAFF AND STUDENTS ARE WELCOME TO ATTEND.

Date: Wednesday 28th October, 1998
Time: 12:00 noon
Venue: Rose Kekedo Conference Theatre

Light refreshments will be served.

Staff Changes

This is the information summary of staff changes in respect of appointments, departures and interdepartmental transfers for the week-ending 12/10/98 - 16/10/98

NAME	DEPARTMENT/SECTION	POSITION
Appointment		
E Nonie (Mrs)	DODL	P/Time Tutor
Departures		
Pius Yawi	Grounds & Gardens	CE 5

Research Committee

The Research Comittee has some money left after the last meeting. The money needs to be spent and as such, the committee is calling for applications for research and conference funds.

Primus Dam
Executive Officer
Research Committee.

BEST WISHES TO ALL PARTICIPATING TEAMS AT THE INTERVARSITY GAMES.

ENJOY THE SPORTSMENSHIP AND MAY THE BEST TEAM WIN.

Non Citizen Staff Association

End of the Year Party

Will be held in the Staff Club on 7 November 1998 at 7 pm

Members and guests will enjoy dinner, dance and The Jazz Band Playing All Night. Tickets are K20 per person. They could be purchased from AV Unit (4364), Lena Young (4365), Rose Kekedo Centre (4366).

MATHESON LIBRARY

LIBRARY PATRONS ARE ASKED TO RETURN ALL LIBRARY BOOKS TO THE LIBRARY BEFORE THE END OF THE SEMESTER.

PLEASE, NOTE, THA THERE WILL BE NO MORE RENEWALS.

Reader Services
Matheson Library

All Unitech CATV Subscribers

During CATV Management Committee meeting on the 8th of October, the committee discussed among other things, the implementation of the 3 new channels.

The committee wish for subscribers to understand that the existing channels are all free and as such there is no advantage to removing any of them. The existing charge of K7.50 pays for maintenance, staff, spare parts, registration with various statutory bodies to enable us to receive and distribute TV channels, and repayment of the cost of upgrading the distribution network. The repayment of this cost will continue for another three years yet.

1.The three (3) channels namely, HBO, DISCOVERY and HALLMARK have been approved for inclusion amongst he existing channels and the ESU will proceed with the implementation as soon as sible. Other channels of interest could not be accommoda because they did not muster enough votes to qualify. However, they can be reconsidered in twelve months, when the channels we pay for come under review.

2.A user subscription fee to be charged at the rate of K12.00 per fortnight has bee approved. Payment will be through normal fortnightly salary deduction. This deduction becomes effective after the additional channels are in place and as soon as a signed 'Authority to Deduct' form is received from the user/subscriber.

The subscription rate is subject to review every six months thereafter.

3.The forms to authorize salary deduction will be sent out to all subscribers. They should be returned to ESU by 19th November. Anybody not completing a revised salary deduction approval will be disconnected from the TV system as soon as the new channels are implemented. Staff wishing to reconnect to the system at a later date will be charged a further reconnection fee.

The Management requests for your full cooperation and support to ensure that these additional services are provided without unnecessary delays.

Unitech CATV Management Committee.

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday: **UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF

Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

Sunday Morning
9:00 CLC CHURCH

Unitech Staff Bible Study

The next meeting of the Unitech Staff Bible Study group is scheduled for Monday 26 October, 1998 at 1:00pm.

Venue: 86 Fly Drive
For Discussion: The History of the Christian Church

All interested staff are welcome.

Patrick Afenya - (Tel: 4674)

THANK YOU ACADEMICS

Tenk yu tru to those 50 at Unitech, 8 of TITC and 2 of Bulolo. It has indeed been a delight to have such a support and response. We lost by 5 votes.
Congratulations to Bannerman. "The Titanic has set sail"

N Mobiha
1999 Academic Rep Norminee.

CLASSIFIEDS

Position Vacant

Unitech Development & Consultancy Limited

ACCOUNTS CLERK (TEMPORARY)

One only Senior Accounts Clerk, required for 6 months (November 1998 to April 1999). Considerable MYOB experience is a distinct advantage.

Reporting directly to the Company Accountant, the incumbent will be responsible for ensuring that all accounting transactions are maintained, but more specifically with respect to the following.

1. maintaining and updating of creditors and debtors accounts including receipting and invoicing requirements;

2.provide assistance as required to the Accountant to input data using MYOB programme;

3.payroll preparation and updating of personal records in respect of leave entitlements, overtime, NPF contributions, Sales Tax calculations, Unitech Savings and Loans contributions, Income Tax, and other related deductions and payments;

4. Other duties directed.

Enquiries in the first instance to the Company Accountant. Written applications to:-

Executive Manager
Unitech Development & Consultancy Limited
Private Mail Bag
Unitech
Lae

Telephone: 473 4202

NATIONAL ANALYSIS LABORATORY

The National Analysis Laboratory is seeking a motivated chemical analyst who can produce accurate chemical testing results in a timely manner with a minimum of supervision.

Ideally, the candidate will be a recent graduate with a Science Degree, possibly with some relevant experience in the fields of analytical chemistry, microbacteriological work and or laboratory quality control.

Duties are varied but are very much bench oriented with emphasis being placed on classical wet chemistry and instrumental analysis of waters, foods, soils etc. The laboratory is equipped with modern instrumentation. Full on-the-job training will be given.

Salary and level of appointment will depend upon qualifications and experience.

Please forward all applications by November 30th to the following address:

The Chief Chemist, National Analysis Laboratory, P O Box 79, UNITECH Post Office

At lease three referee reports are required together with their phone numbers and addresses. Copies of University qualifications are also required.

Please note that accommodation is not provided.

FOR SALE

Two packing boxes each 1.2 x 1.2 x 1.2 m built out of 20mm thick plywood.

Each selling for K220.

Call 473 4208 or 473 4335 for details.

FOR SALE

Portable Sawmill (Lucas Mill) 16 HP, 160 mm (6 inch) Cut. Selling in very good condition (11/2 years old). Ready to work. Complete with; frames, tracks, track extensions, 16 HP engine C/W blade, extra blade - 6 inch, operation manual, 12V mini grinder, plus extras. Contact L. Anota at Unitech on phone 473 4466/4451 bh only

MADANG STUDENTS ASSOCIATION

End of Year Function

The Madang Students would be having their end of year functions tommorrow - Saturday 24/9/98.

Venue: Union Hall
Time: 6 pm till late.

The Special Guest of Honor would be Madang Governor Jim Kas including members of the Madang Administration.

This special occassion is to commemorate the first would be degree students from the Malala Seconday High School.

MADANG COMMUNITY MEMBERS ARE MOST WELCOMED TO ATTEND.

Unitech Boxing Club

Presentation Night

When: Saturday 31st October, 1998
Where: Unitech Staff Club
Gate Fee: K10.00 per head

DOOR PRICES TO BE WON. TRANSPORT AND SECURITY PROVIDED. ALL WELCOME.

Tickets are available from the following people: Dominic Nimbi - Language Department, Lonial Nuali - MSQ 2, Molly - SRC Office, Frank MSQ 17, Esther - Surveying & Land Studies and Carol - Language and Communication.

FOR SALE

MITSUBISHI PAJERO

4-Wheel drive, radio, good condition, regular servicing, taxed and safety sticker until Feb 1999.

SELLING AT K7000

Phone 473 4459 (B/H)
475 7563 (A/H)

FUN WITH MATHEMATICS

Problem 21.
Find the smallest natural number n which has the following properties:
(a). Its decimal representation has 6 as the last digit.
(b). If the last digit 6 is erased and placed in front of the remaining digits, the resulting number is four times as large as the original number n.

Solution: Answer 153846. The desired result can be obtained by successive multiplication. Since the original number ends in 6, the new number ends in 4. Since the new number begins with 6 and ends with 4 , the old number must have ended in 46. Now successive multiplications give in succession, he remaining digits of the original number. The process is as follows:

Original Number	New Number
. . . . . .6 x 4	= 6..... 4
. . . . . .46 x 4	= 6. 84
. . . . 846 x 4	= 6. 384
. . . 3846 x 4	= 6. 5384
. . 53846 x 4	= 6. . . 153846
153846 x 4	= 615384

Only two correct solutions were received. Joint Winners are Thorald Quicho BSCSI and Xin Luo BSCSIII.

Problem 22.
In a Mathematical contest , three problems, A, B,C were posed. Among the participants there were 25 students who solved at least one problem each. Of all the contestants who did not solve problem A, the number who solved problem B were twice the number who solved problem C. The number of students who solved only problem A was one more than the number of students who solved A and at least one other problem. Of all the students who solved just one problem, half did not solve problem A. How many students solved only problem B?

All interested staff and students should send their solutions to problem 22 before Wednesday, 28th October 1998.

First correct entry wins a prize of K5.00.

John Wamil, Dept. of Mathematics and Computer Science,
Email:jwamil@cms.unitech.ac.pg

Air Mail

STAMP

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The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
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Morobe Government gives additional K138,000 for student accomodation

The Morobe Provincial Government has further committed K138,000 for the construction of a student residential hall, bringing its total commitment for the project to K438,000.

The Morobe Provincial Government in its 1998 Budget allocated K300,000 for the construction of a students residential hall at Unitech.

Subsequently, the University advertised for tenders for the construction of the residential hall, however, the project's cost, based on its original designs, had now increased by K138,000 due to the fall in the value of kina, and the rise in the cost of materials.

The Acting Vice-Chancellor, Dr Siaguru during his speech at the project's ground breaking ceremony on Tuesday, thanked the Morobe Provincial Government for the additional money located for the project.

Dr Siaguru said that the University when faced with the problem of the additional increase in construction cost, decided to have the project redesigned so it was within the K300,000 budgetted amount.

"The University, then notified Morobe Governor, Mr Luther Wenge, of the problem faced by the University and our intention of reducing the size and number of bed spaces for the residential hall," Dr Siaguru said.

"However, the Governor instructed us to stick with the original design, and that his Government was prepared to pump in the additional K138,000.

"We are very appreciative of the Provincial Government for the additional funding, as we believe that the Provincial Government had to sacrifice some other project to make the money available to the University."



Morobe Governor, Luther Wenge using the tractor to for the ground breaking.

He said that the National Government's directive that the students residing in Lae would not be accommodated at the campus, had put the University at an odd situation as the directive was not conducive to the students' learning process.

"The unloading of Morobe students still did not alleviate the problem as there were still accommodation problems, and as was such, for the last two years, about 100 students were accommodated at the Telikom Training Center, " Dr Siaguru said.

He also told the delegation gathered at the ground breaking ceremony, that there were two corresponding projects currently being undertaken by the University.

The first one is the construction of the male student residential hall and the other is the conversion of the Poroman and Hetura Halls of Residence into a female residential college.

He said that the conversion of female halls into a residential college was in line with University practices abroad.

"The residential colleges would have their own messing, recreational and counseling services," he said.

"These two projects are to run concurrently, and hoped to be completed before the new academic year commences as it would give us additional 40-50 bed spaces."

Morobe Governor, Honorable Luther Wenge, said that his Government's commitment to have a dormitory constructed was directly as a result of the National Government's directive which he described as short sighted.

His hope was that the residential hall would not accommodate students from Morobe alone, but students from other parts of the country as well, adding that Morobe was proud to have such a national institution in the province.

"This institution would not benefit only Morobe Students but the Country as a whole." he said.

"The Government's directive on accommodation was shortsighted, and a lot of leaders did not see the importance of higher learning institutions, despite many of them having attained degrees and higher degrees from such institutions.

"Higher learning institutions are the pillars of society that would provide the human resources to help decide the future course of this country, and the Government's priority on education is wrong, and it must invest more in higher education," Wenge said.

Mr Wenge later assured the University administrators that the Morobe Provincial Government would be committed to assisting the University in whichever way it could.

Meanwhile, SRC Vice-President, Kihan Tanuve who is also the President of Morobe Students said thanked the Morobe Provincial Government for coming to the aid of Morobe Students.

ERMC seminar looks at Environmental Law

Philippine Ambassador Amado S Tolentino, Jr. was lecturer at the Environmental Research Management Centre's seminar on "What the Hell is Environmental Law" held at the Rose Kekedo Lecture Theatre on 16 October 1998.

The lecture elucidated on natural resources law vis-à-vis environmental law, national and international environmental law, "brown" and "green" legislation as well as hard and soft law.

Among the emerging environmental law trends discussed were:

•Crystallization of environmental issues in Constitutions;

• More comprehensive coverage of environmental issues:

• Establishment of environmental standards and norms;

• Use of economic instruments,

• Recognition of international norms;

• Environmental impact assessment;

• Effective coordination of environmental management;

• Establishment of mechanisms for compliance and measures for effective law enforcement.

Mr Tolentino likewise touched on the human right to a healthy environment as an independent right, as part of an existing right and as a right belonging to the grey zone between a political guideline and a rule of law.

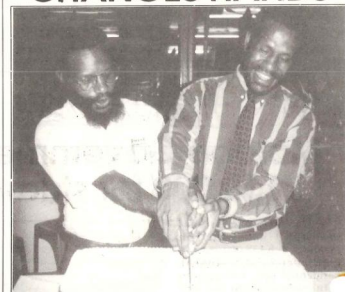
Simply stated: a law still in the making. He pointed at the very interesting interpretation drawn from the preamble of the 1982 World Charter for Nature which declares "Every form of life is unique, warranting respect regardless of its worth to man..."

The statement, he said, had led to the issue of awarding the right to subjects other than man, e.g. legal standing to natural entities such as rivers and mountains, the right of species to survive.

A pioneer in the field of environmental law, Mr Tolentino was first director in his country's environmental Management Bureau, former Coordinator of the Asian Experts Group on the environment and served as environmental law consultant to UNEP and UN/ESCAP.

The seminar was the latest in the environmental lecture series seminars being undertaken by Unitech's ERMC Director, Professor FL Rick Bein.

SRC LEADERSHIP CHANGES HANDS



Kaio (left) and Wemin cutting the cake to signify the change in leadership

The Student Representative Council leadership has officially changed hands with President elect John Wemin taking over the reign from John Kaio.

The SRC also witnessed the change of hands at the Vice President's seat with Killian Tanuve officially taking over from Henry Takoin.

During the hand over ceremony, outgoing President, Kaio thanked the students for their support during the year and urged them to give the same support to the incoming student leaders.

Kaio also thanked the various committee chairmen, SRC executive officer Philip Lavatu and SRC Council Members who have helped him set up and achieve the SRC visions and strategies.

He said that he had no regrets bowing out of the leadership, but he would like to see the SRC as not merely being a student political body, but one that has vision and strategic planning.

He said that he would work along-side Wemin in drafting the new SRC Constitution and also his support in other student activities.

Meanwhile, Wemin thanked the student body for their confidence in him by giving him the mandate to head the SR

Wemin said that his leadership would be committed to service, justice, student power and effective communication.

He urged the student body to give him all the necessary support next year during his time as the president.

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Editor: CORNEY LAHIES phones 473 4298
Journalist:STEVEN BUSIN 473 4290
Secretary: ANGELA BOROMANA 473 4291
The Media is most welcome to use stories with due acknowledgement
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email: reporter@unitech.ac.pg or cklahies @global.net.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

UNITECH ARE VARSITY CHAMPS

Unitech was the overall winner of the two day Intervarsity Carnival held over the weekend.

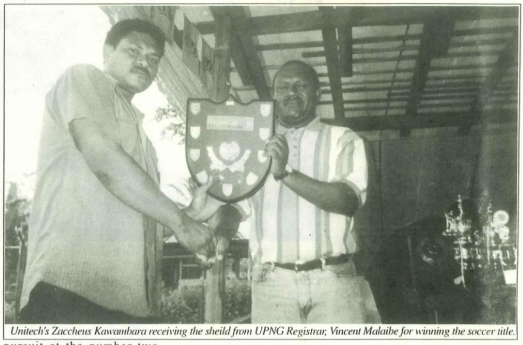
Unitech took the top spot after securing 111 points followed by University of Papua New Guinea with 79 points, University of Goroka 55 points, Divine Word University 20, Forestry Campuses - 19, and Vudal 3 points.

In the overall points collected for the women's competition, UPNG took out the trophy for that category.

In the Darts competition, Unitech won the overall women's competition followed by UPNG at second place while in the men's competition, Unitech Maroon Team also topped the table followed by Vudal.

Unitech was declared overall winners for the Darts competition with Vudal, settling in for the second place.

In soccer, Unitech team one came out overall winners with brother team, Unitech team 2, in close pursuit at the number two position, however, Unitech women although trying their best settled for the number two seat with the ladies from Uni of Goroka being declared soccer queens for this year.



Unitech's Zacchews Kawambara receiving the sheild from UPNG Registrar, Vincent Malaibe for winning the soccer title.

In basketball, Unitech women defeated their opposition to reign as this year's champions while UPNG was slotted in to take the runner up position. In the men's basketball competition, despite putting up a good fight, Unitech was relegated to the second place by UOG who claimed this year's trophy for the sport.

In cricket and table tennis, Unitech came out as this year's Games champion.

However, this did not prove to be so in the mixed touch competition with Uni of Goroka winners of their matches while Unitech settled for the number two post.

UPNG took out the number one place in Lawn Tennis and Netball, while Unitech were runners ups.

UOG came out tops in Softball and Volleyball while UPNG could only managed the second place for both sports. UPNG, however, in the men's volleyball just manage to edge out Unitech to take out the top spot.

The Games Organising Committee Chairman, Lucas Panau thanked all participants, committee members, sports coordinators and supporters for making the carnival a success, despite the little hiccups faced during the competition.

"Participants enjoyed their games and the spirit of sport despite having only two days for the competition," he said.

He also thanked the Unitech Administration through the Union Board for the sponsorship of the Unitech team T'shirts, sporting equipment and resources, and the major sponsor SP Holdings and co sponsors IFC and SHRM for their assistance.



UPNG participant being handed the sheild for the Overall Women's prize

Intervaristy games council plans mooted

Plans are being mooted for the formation of an Intervarsity Games Council to oversee the running of future Intervarsity Games.

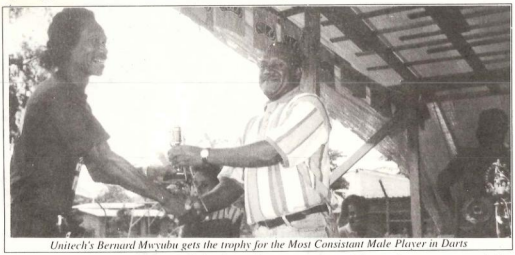
University of Papua New Guinea, Registrar, Vincent Malaibe, during his closing remarks at this year's Intervarsity Games, said that he would be pushing for the formation of the Games Council, to cater for both technical and administrative functions of the Games.

Under the proposal, Mr Malaibe said that Universities would be required to contribute financially for the council to operate.

The council, he said, would then use the money for further fund raising activities to support the staging of the Intervarsity Games, where-ever it was staged.

According to Malaibe, host University for the Games had to work hard to raise the required funds, and with the formation of the council, including the initial seed contribution from Universities, it would ease the burden on the host center.

Mr Malaibe said that although, times were hard with increasing budget cuts to Universities, the Intervarsity Games was the only event in all universities' calendar that allow for social interaction between staff from different Universities.



Unitech's Bernard Mwyubu gets the trophy for the Most Consistant Male Player in Darts

He also noted a recent trend that the host University was winning the Games and with the formation of the Council, it would allow for impartiality through-out the Games.

Meanwhile, Unitech's Acting Vice-Chancellor, Dr Philip Siaguru, during his opening speech, said that it was very satisfying to see the Intervarsity Games develop from a simple darts game to the size, quality and quantity it enjoys today.

" Sporting events have increased and participating institutions have increased, and this is encouraging and positive, that the spirit of togetherness among higher education institutions is active and alive," Dr Siaguru said.

"It is in events like this that we seek encouragement and hope to build a relationship that can be taken into the workplace and cultivated to better participating institutions.

"We have a common objective, that of educating the elite who will become leaders of this nation.

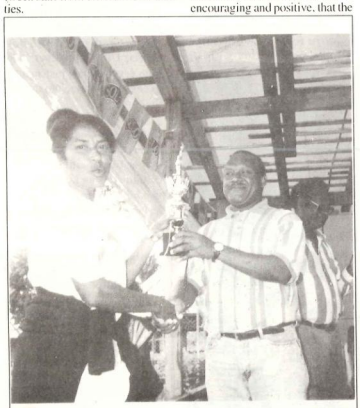
"That is our goal, of delivering an education that is equal to the best in the world."

He said that each person has his or her own speciality, irrespective of position, as each person was contributing to developing and furthering educa in Papua New Guinea.

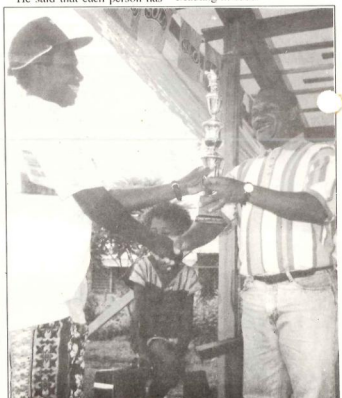
Dr Siaguru said that he noted the absence of Pacific Adventist University at the Games and challenged the next host to make it a point to get PAU to participate.

" This will complete the competition and make it a true PNG Universities competition," he said.

Meanwhile, the next Intervarsity Games will be held at DWU in Madang in 1999



It's all smiles for this UPNG representative being presented the trophy for Netball



A Goroka Uni representative being presented the prize for overall winner in Volleyball

Siaguru Trophy to spark Sepik Soccer

The Siaguru Trophy for the Sepik Students Soccer Competition was officially launched last Thursday.

The Cup carved out of solid wood depicting a young crocodile holding onto a soccer ball was officially handed over by the Acting Vice Chancellor, Dr Philip Siaguru.

Dr Siaguru, during the launching, said that it was pleasing to note that the Sepik Soccer Competition did not only involve Sepik students but students from other provinces and abroad.

Dr Siaguru said that he was also pleased that the soccer competition has been officially sanctioned as an SRC organised sports competition.

Dr Siaguru said that initially he was a bit hesitant to donate a trophy to the competition when he was approached by SRC President as he was of the impression that the competition was for only Sepik students.

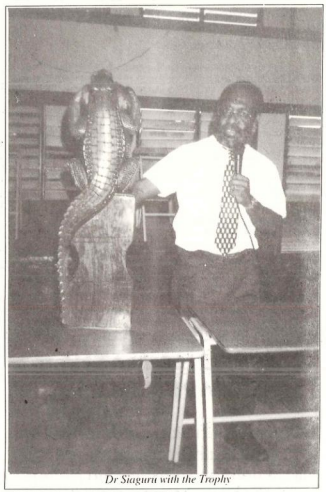
He added that he did not want to donate something that would only benefit a single group of students but rather something that would cover a wider audience of students.

When later informed that the competition had spread its wings to involve other provincial groups, he said that it would be a worthwhile donation.

The competition now includes 10 male clubs and 5 female clubs involving students from Morobe, Madang, Sandaun, Northern Province, Miline Bay and Solomon Islands.

"The Sepik Soccer Competition was not like competition in my days as a student here, where we had six clubs which players were selected according to the provincial high schools we attended," he said.

"It is pleasing to also note that the competition has grown and also includes a women's competition, and I am pleased to announce that the Director of the National Agriculture Research Institute would donate a trophy for the women's competition."



Dr Siaguru with the Trophy



Dr. Siaguru presenting the Trophy to East Sepik Students' Association President Kenneth Koyama

Meanwhile, Sepik Students' Association President, Kenneth Koyama challenged Sepik students to work had to make the competition bigger and better next year.

Sepik Soccer Organising chairman, Gilbert Luke said that there were plans in the pipe line to make the competition bigger and better run next year.

He said that he has already secured sponsorship from Wills (PNG, adding that he would be approaching other business houses for their help.

INFORTAINMENT BOARD

ENVIRONMENTAL DRAMA

Environmental Enthusiasts,

Your presence is requested at the drama "SAVE OUR ENVIRONMENT" performed by the grade six students of the Nanduo Primary School. The staff and students of Nanduo Primary School wish to extend their pleasure by having your company at the performance.

The Environmental Research Managment Center endorses this activity and is supporting it by arranging logistics at Unitech. This performance offers you the opportunity to see what is taking place in environmental education in Morobe Province and how children are capable in promoting environmental awareness

Time: 7pm
Date: Monday, 9 November 1998
Venue: Duncanson Hall

We of Nandou also take this opportunity to ask for your kind support in cash donations at the time of your presence. A K2 admission fee will help pay the costs of Duncanson Hall. Any proceeds will go towards the setting up of a rainforest habitat at the school.

Headmaster.

1998 PNG MATHS COMPETITION

The prize distribution ceremony of the 1998 PNG Mathematics Competition will be held on Thursday 5th November in the Mining Engineering Lecture Theatre between 3-4pm.

Refreashments will be available before the prize distribution. Everyone is welcome

Samuel Kopamu
Deputy HOD
Mathematics Dept.

Rainfall readings for 24 hours to 0900 on: 27/10/98

Wednesday	21/10/98	2.4 mm
Thursday	22/10/98	32.2 mm
Friday	23/10/98	0.0 mm
Saturday	24/10/98	0.0 mm
Sunday	25/10/98	0.0 mm
Monday	26/10/98	61.6 mm
Tuesday	27/10/98	0.0 mm

Total rainfall for week-ending	27/10/98	96.2 mm
Total yearly rainfall up to	20/10/98	3,762.2 mm
Total yearly rainfall up to	27/10/98	3,858.4 mm

Samie Isaac
Civil Engineering Department

Supplementary Examinations

Students are advised that all supplementary exams will now be held on the 11th and 12th of February 1999.

Supplementary examinations scheduled for 26th and 27th November 1998 as indicated in this year's Calendar will not take place.

Final year students who will be required to sit for supplementary examinations will have to make their own travel and accommodation arrangements including attending the Graduation Ceremony. The University will not be responsible for this.

All queries must be directed to my office.

Goodnews Aruai
Senior Assistant Registrar (Academic)

HOUSING APPLICATIONS

Applications are invited from eligible officers of the University for the following High cost Houses to become available shortly:

HCH	12	Ramu Drive	4 br
HCH	91	Fly Drive	4 br
HCH	92	Fly Drive	4 br
HCH	98	Fly Drive	3 br (s)
HCH	118	Purari Drive	3 br
HCH	102	Purari Drive	3 br
HCH	110/1	Purari Drive	3 br
HCH	148	Oxford Drive	3 br
HCH	132	Sepik Drive	2 br
HCH	23	Warangoi Drive	2 br
HCH	189/4	Markham Place	2 br
HCH	189/5	Markham Place	2 br
HCH	64	Mumeng Drive	2 br
HCH	10/2	Warangoi Drive	1 br
HCH	5	Finnisterre	1 br

Staff members who have their family status changed but are continuing to reside in larger houses should now apply for appropriate housing within their current entitlement.

This implies to such persons as having:-

1.Husbands and wife only living in a 4 br and 3 br houses.
2.Husband only living in a 3 br houses.

This will allow the larger houses they occupy become avail so that staff who are now residing in smaller houses can be relocated.

Applications close with the Housing Officer as of close of business 13/11/98

Mr Ham Wallum
Housing & Property Manager

Union Hall

The Union Hall will be closed for all other business due to 2nd Semester Examination as of Monday 2nd November 1998 until Friday 13th November 1998 at about 4.00pm.

Philip Lavatu
SRC Executive Officer

Non Citizen Staff Association

End of the Year Party

Will be held in the Staff Club on 7 November 1998 at 7 pm

Members and guests will enjoy dinner, dance and The Jazz Band Playing All Night. Tickets are K20 per person. They could be purchased from AV Unit (4364), Lena Young (4365), Rose Kekedo Centre (4365).

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday: **UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF

Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

Monday Morning
CLC CHURCH

YEAR 2000 MILLENIUM

Come along and watch this very interesting program by Dr Dwaight Nelson at the Open Air Ampitheather.

It starts at 7pm.

This program will go on every night until the 10th of November

ALL WELCOME.

MOROBE SHOW

Go along to the Show Ground this weekend and see the amazing displays by the Departments.

You'll be amazed.

CLASSIFIEDS

Position Vacant

Unitech Development & Consultancy Limited

ACCOUNTS CLERK (TEMPORARY)

One only Senior Accounts Clerk, required for 6 months (November 1998 to April 1999). Considerable MYOB experience is a distinct advantage.

Reporting directly to the Company Accountant, the incumbent will be responsible for ensuring that all accounting transactions are maintained, but more specifically with respect to the following.

1. maintaining and updating of creditors and debtors accounts including receipting and invoicing requirements;

2. provide assistance as required to the Accountant to input data using MYOB programme;

3 payroll preparation and updating of personal records in respect of leave entitlements, overtime, NPF contributions, Sales Tax calculations, Unitech Savings and Loans contributions, Income Tax, and other related deductions and payments;

4. Other duties directed.

Enquiries in the first instance to the Company Accountant. Written applications to:-

Executive Manager
Unitech Development & Consultancy Limited
Private Mail Bag
Unitech
Lae

Telephone: 473 4202

For Sale

Video Sony K300, Printer Epson Stylus Color - K250. UV crystal dish dryer (stainless steel) - K250, Toyota Corona 1.8 executive, white sedan Aircon, radio, power steering, central lock, low mileage, reg. Feb 1999, going K9,000 ono. Contact 475 7979.

Suzuki 4 seater, dark blue van mini bus - K3,000. Contact Taho on Phone 473 4366

RKCC& DH Visual Arts Group

Central Teaching Facilities Information

Dear Students! Film shows during the exam weeks will be restricted to weekends only. Good luck!

Tok Save. Planti lain bilong staff askim mipela long baim films long K1. Mani bilong olgeta i sot. Planti pikinini na manmeri i laik go long Rose Kekedo tasol ol i les long baim K3. Rait olgeta. Staff tiket nau K1 tasol.

Many thanks to he students who returned their questionnaires. We have received 300 in 3 days. Your answers contain a lot of humour, honesty and hopes. We will analyse them during the break and publish the results.

Lena Young
Director

Morobe Students Association

End of Year Function

A reminder to all our membars that our End of Year function is rescheduled for Sunday 1st November 4:30 pm at Union Hall. Our Guest Speaker will be Mr G a Gunemba, Director Planning, Unitech.

Please be there.

Executives '98

Unitech Catholic Women's Club

Fundraising Dinner/ Dance

Date: 14th November 1998
Time: 6.30pm till late
Venue: Staff Amenities Centre
Dress: Smart Dressing
DJ: Master Blaster

Double: K25
Single: K15

Come along and enjoy PNG food (taro, kaukau, banana, pork, chicken, fish) and more, cooked in a mumu and prepared in a typical PNG style.

You will also be entertained by a Dance group.

So why don't You take your partner out on the night of 14th November. We assure you that, this will be a night you will not easily forget.

There are limited tickets on sale so get yours NOW!

Tickets are available from the following people: Magdalene Panau - 473 4289, Lucia Nakau - St Mary's School (Eriku), Joanne Tziu - 473 4501, Teresa Kiap - 473 4561, Anita Kami - 473 4501, Maria Dam - PNGBC (Top Town), Evelyn Noni - 473 4807, Jane Moshi - 473 4751, Lukas Panau - 473 4506, Charles Nakau - 473 4575, Peter Sopade - 473 4575, Godfrey Lantry - 473 4413 and Peter Kami - 473 4863, Veronica Michael - 473 4364, Carolyn Dokta - 473 4751, Dianne Raka - 473 4364, Alice Maiby - 473 4213, Justin Helele 4858, Elizabeth Apes - 473 4206, Daphne and Veronica - students and from club members

Word of Appreciation

On behalf of the softball ladies I would like to thank the cricket boys for helping us out to make up the combined softball team especially; Suve, Joshua, Lawrence, David, Morea and Philip. Also not forgetting Paul Pasen who pitched for us to win the game against UPNG.

I would also like to take this opportunity to extend our invitation to you (cricket team) to join us for a combined team for the next intervarsity games in 1999.

Thanks guys, it was great fun having you on the team.

Na tingim!! Next time please catch the ball with a glove.

Jill Bebe
Coordinator - Softball
Intervarsity Games

UNITECH STAFF GOLF COMPETITION

The annual Unitech Staff golf Competition, kindly sponsored by SHRM, will take place on Wednesday 18th November 1998 from 2.00 pm. It will be a 3-ball event for interested Unitech staff and their spouses.

Join this fun day for golfers and non-golfers.

Register now to take part.

Call Smyly on 4941 or 4951 or send an e-mail confirming your participation to sbamerman@survey.unitechchacpg

Unitech Women's Craft & Social Club

This is our last meeting for this year. We will combine the X'Mas Party and farewell to our vital members; Sharifa Kristina and Nevenka. Hope you all can join us on Wednesday 4 November, 12.30pm at 130, Sepik Drive. Please bring along a dish to share as we have done in the past.

Wish you all a Merry Christmas and a Prosperous New Year 1999.

FUN WITH MATHEMATICS

Problem 21.

Find the smallest natural number n which has the following properties:

(a). Its decimal representation has 6 as the last digit.

(b). If the last digit 6 is erased and placed in front of the remaining digits, the resulting number is four times as large as the original number n.

Solution: Answer 153846. The desired result can be obtained by successive multiplication. Since the original number ends in 6, the new number ends in 4. Since the new number begins with 6 and ends with 4 , the old number must have ended in 46. Now successive multiplications give in succession, he remaining digits of the original number. The process is as follows:

Original Number	New Number
. . . . . .6 x 4	= 6..... 4
. . . . . .4 6 x 4	= 6. . . . . 8 4
.. . . 8 4 6 x 4	= 6. . . . . .3 8 4
. . . 3 8 4 6 x 4	= 6. . . . .5 3 8 4
. . 5 3 8 4 6 x 4	= 6. . . 1 5 3 8 4
1 5 3 8 4 6 x 4	= 6 1 5 3 8 4

Only two correct solutions were received. Joint Winners are Thorald Quicho BSCSI and Xin Luo BSCSIII.

Problem 22.

In a Mathematical contest , three problems, A, B,C were posed. Among the participants there were 25 students who solved at least one problem each. Of all the contestants who did not solve problem A, the number who solved problem B were twice the number who solved problem C. The number of students who solved only problem A was one more than the number of students who solved A and at least one other problem. Of all the students who solved just one problem, half did not solve problem A. How many students solved only problem B?

All interested staff and students should send their solutions to problem 22 before Wednesday, 4th September 1998.

First correct entry wins a prize of K5.00.

John Wamil, Dept. of Mathematics and Computer Science,
Email:jwamil@cms.unitech.ac.pg

Air Mail

STAMP

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Papua New Guinea University of Technology
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The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1312 ISSN:10119-5354 6th November, 1998 WEEKLY

Director recommends student centered learning for Unitech

Student centered learning has been recommended for implementation next year by Teaching and Learning Methods Unit (TLMU) Director, Mr Robert Songan.

This recommendation was made in his seminar paper "Students-Centered Learning: trends and practices and learning in higher education" presented last Wednesday.

In his paper, Mr Songan further recommended that lecturers produce course/subject plans and programs for all courses/subjects and provided to respective students at the beginning of each semester.

He also reccommended that student contact hours with lecturers be reduced to allow students more time to work by themselves, and that students be given access to e-mail and the Internet.

He said that student-centered learning did not require a major expansion of resources on what currently existed in respective academic departments.

The philosophy of teacher- centered learning was the belief that students were naive, lack basic knowledge and understanding of what to learn and therefore needed coaching by teachers, who are experienced and experts, he said.

On the other hand, the belief that underpin Students-Centered Learning was that students have the necessary mental attributes for learning and therefore needed only to be guided and supported for them to learn.

"In its initial stages, it requires the lecturers and departments to be transparent about what the courses are and how students are going to learn during their courses," Songan said.

"The library I am convinced, and with the introduction of the electronic media, has the capacity to source current documents, containing information relevant to the courses for teaching and students learning.

"Given the above, students do not have to rely on the lecturers for information, will work more independently and learning will be meaningful and useful."

In July this year, the Vice-Chancellor, Dr James Kaiulo advised all sections of the University, including Academic Departments to revisit their missions and ascertain their clarity and appropriateness to the University's mission, and determine how they were contributing to its achievement.

In the same document, he requested the Departments to explain how they could assist the University to shift the teaching and learning practice from teacher-centered learning to students-centered learning, in order to address what he stated as lack of appreciation for team work, limited problem solving skills and improper work ethics being the short comings of Unitech graduates perceived by others.

Significant in these responses, Songan said, there was a high level of reluctance to the request to assist change of teaching and learning practice from teacher-centred learning to students-sentred learning.

He highlighted some of the reasons for resistance were:

- that Departments were not adequately resourced with funding and or equipment to accommodate the change.
- that the students in Unitech are incapable of learning through themselves. For example, they lack comprehension and research skills to embark on self learning.
- that the library was not resourced or incapable of resourcing itself with relevant books and materials to enable students to learn through themselves.
- that students were academically weak and had to be drilled/coached to acquire necessary basic facts and knowledge to enable them to do engineering courses.

"It is important that we have to assist and prepare both students and staff to change and adopt this different approach to learning," Songan said.

"For students, this means that they have to take the responsibility for their learning.

"This includes taking advantage of the opportunities/courses that equip them with skills to learn with minimal encouragement from the lecturers, and they will also have to do much of the work of informing and learning themselves from other sources beside the lecturer.

"In order for the students to assume responsibility for learning and do it themselves, the lecturers should provide sufficient information about courses of study, sources of information that are relevant and up to



Unitech on Show

Mechanical Engineering students explain to show goers a display at their section more pictures at the Morobe Show on page 5

date, ensure availability of teaching materials and equipment, and improve students self esteem."

He said that it was important that a course plan, course program and course outline be prepared for each course or subject.

The course plan should contain the description of: the students who will be taking the course/subject including their formal background; their learning needs; the aim of the course, learning objectives, detailed descriptions of the topics to be covered in the course or subject; the content of the topics selected; the teaching methods-lecture, project, excursions, industrial training...etc, assessment system; and evaluation of the course for success and short comings.

This document is for the Department and for the staff to use a a guide for teaching.

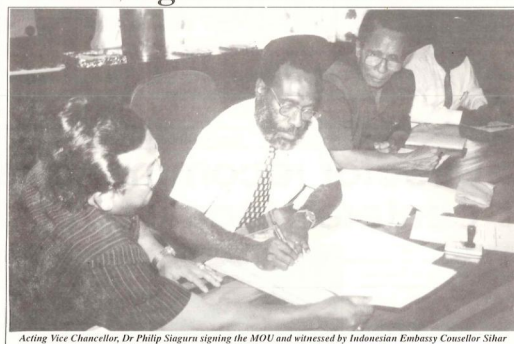
He said the course program should contain the description of: the students who are going to take the course and their previous learning; how the course or subject fits with others that make up the course of study offered by the department; the general methodology to be used, aims and objectives; a list that sequence the time with the topics to be learnt; the details of the assessment system including what each assessment item is about and how it is going to be assessed; and the sources of study materials.

This document must be given to each of the student who is taking the course for the semester/year to guide him/her through the course. It should not be changed without the consent of the students, the lecturer, the department and the university.

He reiterated that the library should be resourced or have the capacity to acquire necessary books and relevant academic documents essential for the courses conduced by the University with students having access to these when required.

He added that information technology, in particularly the e-mail, should be made available to students in order for them to access sources and get current up-to-date documents and information for students to use.

Unitech signs MOU with Indonesia



Acting Vice Chancellor, Dr Philip Siaguru signing the MOU and witnessed by Indonesian Embassy Counsellor Sihar Nadeak and Educational & Cultural Attache Dr Muhammad Renur.

Unitech and the Consortium of the State Higher Educational Institutions of Eastern Indonesian have renewed a Memorandum of Understanding (MOU) for educational exchanges.

The Acting Vice Chancellor, Dr Philip Siaguru signed on behalf of Unitech, while the Chairman of The Consortium of the State Higher Education Institutions of Eastern Indonesia, Prof Mus Haliselan will later sign the MOU which endeavors to encourage and facilitate, as appropriate the development of effective contracts and cooperation in educational exchanges.

Under the MOU, both parties would facilitate activities on exchange of information on study, curriculum, research findings, training programs and other academic matters.

It also covers the exchanges of students, graduates, academic and non academic staff for study programs at all levels, either regular or sandwich program procedures.

Both organisations have already benefited from the MOU- two academic staff have since returned from Indonesia with masters degrees, while an Indonesian student is currently undergoing PhD in the Agriculture Department at Unitech.

The MOU would also facilitate for joint development and or exchange or publications either for academic or business purposes; development of joint research; vocational training and other kinds of short term professional training; and other fields of interest as mutually agreed by the two parties.

However, the implementation of this agreement would be subject to the availability of appropriate funding and personnel.

The MOU signing is a direct response to the two countries commitment to enhance beneficial cooperation as manifested in an agreement between the Papua New Guinea and the Indonesian Governments concerning Technical Cooperation of 1979, the Treaty of Mutual Respect, Friendship and Cooperation of 1986 and the MOU between the Department of Education and Culture of Indonesia and Papua New Guinea.

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Private Mail Bag Lae- PNG
Fax: (675) 4757 667
email: reporter@unitech.ac.pg or cklahies @global.net.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Student calls for more reps on disciplinary committee

The Students Disciplinary Committee should be given more power to deal with student disciplinary cases, according to SRC Disciplinary Committee Chairman, Jackery Kolkia.

Kolkia said that there were a lot of minor cases that could be dealt with by the student disciplinary committee but had to be referred to the University administration.

Kolkia made this remark during the SRC end of year function for various committee chairmen at the Staff Amenities Center on Wednesday evening.

He called on the SRC to push for changes in the structure in the formation of the disciplinary committee to enable fair student representation on the committee.

He said that at the moment there were only two representatives on the committee which were not enough for them to properly defend students' cases.

Meanwhile, SRC president John Kaio thanked all SRC committee chairmen for their hard work that had ensured a good year for the student population.



Disciplinary committee chairman, Jackery Kolkia receiving his Certificate of Appreciation from Student Facilities Director, Alan Sako

Kaio also thanked the Vice Chancellor and the two Pro Vice Chancellors for working closely with leaders which has promoted a healthy working relationship between the students and the administration.

Kaio described 1998 as a very good year, and he attributed this year's success to the hard work and dedication showed by the various committee chairmen.

"It had not been an easy year, it had been a year of challenge with its short comings but with the cooperation and dedication of student leaders and chairmen, we have made it through.

"There have been doors opened, doors that have been knocked on and doors yet to be knocked on, and through such healthy working relationship that would make things easier for us.

"The empire of the future is the mind, and student leaders must be thoughtful and visionary to plan for the future."

SRC President elect, Johnny Wemin said that there had been no major student disciplinary problem or unrest during the year, and it was a reflection on how well the student leaders were able to contain the students.

However, he said that next year might not be the same, and he asked for all the cooperation and dedication of the various committee chairmen to make next year a good year.

"I ask you to give me the same support that you have given this year's executive to make it more successful," he said.



Religious Chairman and SRC Advisor, Philip Samson receiving his Certicate from, Acting Union Board Manager Wilford Kodiwa

THE REPORTER WOULD LIKE TO WISH ALL STUDENTS ALL THE BEST IN YOUR EXAMINATIONS.

FOR THOSE TRAVELLING OUT EARLY, WE WISH YOU A MERRY CHRISTMAS AND A HAPPY NEW YEAR.

WE ALSO WISH THOSE GRADUATING STUDENTS, ALL THE BEST IN YOUR FUTURE ENDEAVOURS, AND THOSE CONTINUING, SEE YOU AGAIN NEXT YEAR IN ONE PIECE.

HAVE A TROUBLE FREE HOLIDAY.

EDITORIAL TEAM

Morobe villager invents grating machine

A Morobe sub-district villager, fed up with his wife going around the village asking for grater to prepare their tapioca, turned his energy to inventing his own grating contraption from wood, sheet metal, iron rods and sticky tape.

Although his invention had stirred a lot of interest during the 1998 Morobe Show over the weekend, the inventor Koibi Boiyo, from Dona Village, Morobe Sub District was still not satisfied with his design.

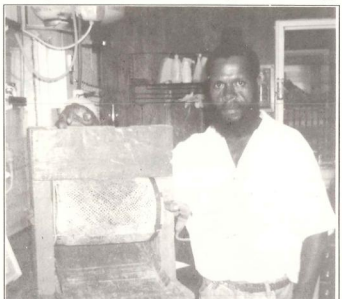
He then approached the Unitech's Appropriate Technology and Community Development Institute (ATCDI) for help as to how he can improve his grating equipment.

"At the moment, it can grate however, food being grated fill up the drum too quickly and it is a time consuming effort cleaning waste formed in the drum," Mr Boiyo said.

"I have approached Unitech to help with ideas that can help me solve this problem and I am happy that they have given me ideas which I will try out when I go back to my village."

The idea of designing a grating equipment came to him about two years ago after his wife's unsuccessful search for a grater from fellow villagers.

"My wife had to go from house to house asking for a grater to use and when she returned empty handed I just told her to boil the tapioca," Boiyo said.



Koibi Boiyo with his invention

"It was during our meal that the idea got into my head.

"I used to be work on a Tea Plantation in Mount Hagen, and during that time have also witnessed villagers using the coffee pulping machine to dehusk coffee beans.

"I tried using the design concept of the coffee pulping machine but with a little modification to enable it to grate."

Every morning, he said, before he went to the garden, he would nail holes into a piece of tin sheeting, and upon covering the whole tin sheeting with holes, he then proceeded onto designing the stand.

It took him a few trials and modification for the grater to operate smoothly, by then the word of his invention had spread throughout the village.

"Village women began approaching me to use the equipment to grate their tapioca, taro, kaukau and all sorts of things," he said.

"Consequently, I began charging them K1.00 for the use of the equipment, however, more and more women came to use it, so I increased the user fee to K1.50 then further to K2.00.

"The money collected was used to buy kerosene, soap sugar or whatever we need in the village."

One of his in law, working with the Department of Primary Industry (DPI), during his le heard of his invention and approached hin and asked him to have it on show during the 1998 Morobe Show.

"The equipment stirred a lot of interest during the show and many people, especially women from coastal villagers wanted to buy one, however, I told them that this was the only one that I had and it was for demonstration purposes only.

"With the help from Unitech, I am thinking of building some more graters, which I intend to sell at the show next year."



Brown Lodge representative, John Kainem presenting their cleaner, Peni Namos with a box of gifts.

Brown lodge residents thank cleaner

Students residing at Brown Lodge in appreciation of their cleaner's commitment and dedication to serving them, have presented him with a carton of various items.

Speaking on behalf of the Brown Lodge Sub Warden, Johnny Wemin, John Kainem thanked Peni Namos for always keeping their lodge clean compared to other halls of residents.

"We do not have any valuable items to give him to show our appreciation, but we are only donating some things like bed sheets, shirts, trousers etc," Kainem said during the brief presentation emony at the Brown Lodge.

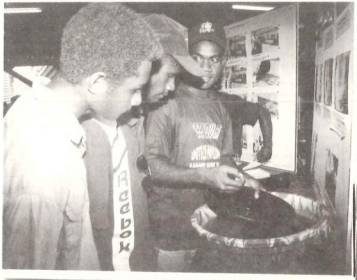
The occupants were very pleased with his humble efforts and presented him with the carton of gifts which would be useful to him."

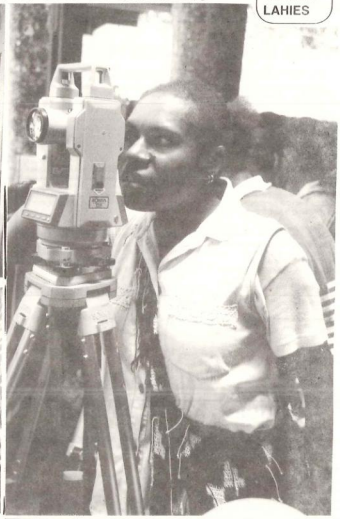
Brown Lodge Cleaner, Namos said thanked the residents of the lodge for recognising his services to them.

"I have served the Students Services for nine years, and this is the first time that I have been presented something in recognition of my services and all I can say is thank you very much," Namos said.

MOROBE SHOW IN PICTURES

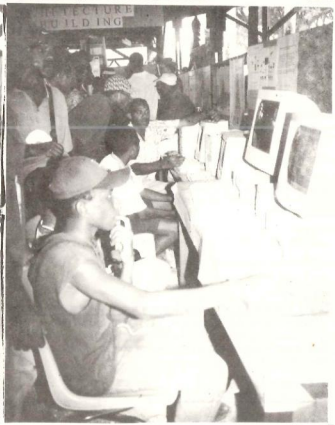
photos by CORNEY LAHIES













INFORTAINMENT BOARD

Conservation Melanesia Fellowship Programme

Conservation Melanesia, with generous support from the World wildlife fund for Nature (US), is pleased to announce a series of fellowships available for the period up to June 1999.

These fellowships have the broad objective of strengthening the capacity of individuals or organisations to manage and conserve biological diversity within the context of sustainable community development. applications that are targeted on building linkages between research and training or business organisations and the individuals or community groups in achieving the above objective are, particularly welcome.

The fellowship programme will support a wide range of educational and training linkages. These might include training of local community associations on how to set up and manage an eco-business ent rprise, funding field work as part of a water supply improvement production of environmental education materials, or support for an individual from an ICAD area to participate in an overseas resource management programme.

The application process is loosely structured and can run the gamut of a series of discussions with DM staff aimed at developing an innovative project, to the submission of a letter of intent with support materials. However, the Selection committee will be looking for such things as originality of the proposal in contributing to community biodiversity conservation, feasibility of the proposal, the candidate or organisation's background in relation to the proposal and the strengthening linkages involved.

The Fellowship programme will make every effort to support Fellow's needs during their tenure. However, depending on the circumstances, fellowship applicants are encouraged to access support linkages with established research, educational or training institutions. Where possible, the fellows are expected to make these linkages. Submissions for 'scholarship' support must provide evidence of acceptance into the intended programme. These various arrangements will need to be agreed upon by the Selection committee prior to the disbursement of funds.

The recipients of fellowships will be expected to provide regular written reports as mutually agreed between the Selection committee and the recipient and a fully documented financial acquittal of funds allocated.

Applications should be send to Conservation Melanesia or contact can be made through phone or fax.

Conservation Melanesia Inc.
P O Box 735
BOROKO. NCD

Phone: 323 2758/323 3068
Fax: 323 2773
Email: conmelpng2@global.net.pg

HOUSING APPLICATIONS

Applications are invited from eligible officers of the University for the following High cost Houses to become available shortly:

HCH 12	Ramu Drive	4 br
HCH 91	Fly Drive	4 br
HCH 92	Fly Drive	4 br
HCH 98	Fly Drive	3 br (s)
HCH 118	Purari Drive	3 br
HCH 102	Purari Drive	3 br
HCH 110/1	Purari Drive	3 br
HCH 148	Oxford Drive	3 br
HCH 132	Sepik Drive	2 br
HCH 23	Warangoi Drive	2 br
HCH 189/4	Markham Place	2 br
HCH 189/5	Markham Place	2 br
HCH 64	Mumeng Drive	2 br
HCH 10/2	Warangoi Drive	1 br
HCH 5	Finnisterre	1 br

Staff members who have their family status changed but are continuing to reside in larger houses should now apply for appropriate housing within their current entitlement.

This implies to such persons as having:-

1.Husband and wife only living in a 4 br and 3 br houses.
2.Husband only living in a 3 br houses.
3.Persons residing in Study Leave houses should also apply for their permanent allocation.

This will allow the larger houses they occupy to become available so that staff who are now residing in smaller houses can be relocated.

Applications close with the Housing Officer as of close of business 13/11/98

Mr Ham Wallum
Housing & Property Manager

Intervarsity Alkan Tololo Shield

If any University staff and Community know the whereabouts of the Intervarsity Alkan Tololo shield, please contact Philip Lavatu on phone 4238.

Philip Lavatu
Executive Officer (Sports)

Some Facts on Effective Study Habit

Since we are approaching a crucial period in our academic calendar - the exam week, it is only proper to be acquainted with some research facts on 'effective study' and in so doing, I hope we can improve our study habits and there is no one effective way of studying for an academic test/exam.

I would like to share with you some empirical facts on effective studying as 'food for thoughts' by introducing a self-test which you are expected to do to assess where you stand in terms of effective studying habits and learning.

In attempting the above, it is necessary to be introduced to the psychological notion of surface learning (studying) versus Deep Approach Learning (studying). Please note that research has proven convincingly that Deep Approach Learning (studying) leads to effective studying and eventually effective learning. It demonstrates in a student, subject mastery, integration and appreciation of the principle (s) learnt into ones value domain (and become part of ones personality traits). Eventually, this is the ultimate goal of learning, to value what you have learnt and be seen not only to practise it, but most importantly to be proud of what you are because of what you have learnt (or acquired cumulatively over the years).

Self Test

Below is a series of study habits which determines whether one is a deep approach learner of surface approach learner.

1)Tick ( ) the statements if it applies to the way/or pattern of your study habit.

•I tried to relate ideas in one subject to those in others, whenever possible;
•I usually set out to understand thoroughly the meaning of what I am asked to read;
•In trying to understand new ideas, I often try to relate them to real-life situations to which they might apply;
•When I'm tackling a new topic, I often ask myself questions about it which the new information should answer,
•In reading new material I often find that I'm continually reminded of material I already know and see the latter in a new light,
•I spend a lot of my free time finding out more about interesting topics which have been discussed in classes.

2.•I find I have to concentrate on memorising a good deal of what we have learn,
•I usually don't have time to think about the implications of what I have read;
•Although I generally remember facts and details, I find it difficult to fit them together into an overall picture;
•I find I tend to remember things best if I concentrate on the order in which the lecturer presented them;
•I tend to choose subjects with a lot of factual content rather than theoretical kinds of subjects;
•I find it best to accept the statements and ideas of my lecturers and question them only under special circumstances.

Answers

1.If you have ticked all habits in section one (1), you are deep approach learner;

2.If you have ticked all six habits in section two (2), then you are a surface approach learner (surface approach) study habit and for your good you must change your habits for the first one.

John Sari
TLMU

UNITECH SAVINGS AND LOANS
Freezing of Loans

The Society wises to inform its valued members of its latest Devlopments with regard to the subject matter.

The Board of Director had resolved to cease further loans to its valued members with immediate effect. However, this will be lifted by the first working day of January 1999. This will allow the society to attend to School Fee loans for the forthcoming school year.

Bod op Darektos ibin bungim maus long pasim loan igo long ol membas bilong ol, long stat blong dispela toksave. Loan bai iop gen long namba 4 deit bilong January 1999. Displa hap taim bai alivim society long lukluk long ol skul fee loan bilong 1999 skul yia.

Dispela notis igo long yumi olgeta bilong gutpela, stretpela rot blong alivim yumi yet.

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday:**UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**
WEEK-ENDS
Saturday
AM -SDA
PM-TSCF
Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

[illegible]ay Morning
9:00 **CLC CHURCH**

UNITECH STAFF BIBLE GROUP

The next meeting of the Unitech Staff Bible Study group is scheduled for Monday, 9 November 1998 at 7:00 pm.

Venue: 86 Fly Drive
For Discussion: The History of the Christian Church

All interested staff are welcome

Patrick Afenya (Tel. 4674)

F[illegible]romental Drama

Students from Nanduo Primary School, Finschafen would be performing an environmental drama SAVE OUR ENVIROMENT. This performance offers you the opportunity to see what is taking place in environmental education in Morobe Province and how children are capable in promoting environmental awareness.

Time: 7:00 pm
Date: Monday, 9 November 1998
Venue: Duncanson Hall, Unitech Campus

A K2.00 admission fee will help pay the costs of Duncanson Hall. Any proceeds will go towards the set up of a rainforest habitat at the school.

We thank you in supporting us to "Save Our Environment"

CLASSIFIEDS

Unitech Catholic Women's Club

Fundraising Dinner/ Dance

Date: 14th November 1998
Time: 6.30pm till late
Venue: SA C (Unitech)
Dress: Smart Dressing
DJ: Master Blastor
Transport: will be provided

Double: K25
Single: K15

Come along and enjoy PNG food (taro, kaukau, banana, pork, chicken, fish) and more, cooked in a mumu and prepared in a typical PNG style.

Program (for the night)

5:00 pm -Gates open
6:30pm -Dinner
8:00 pm -Traditional Dances

a) Trobrian Island Tapioka dance
b) Manus Garamut dance

8:30 pm - 12 midnight - Dance and enjoy the rest of the night

There are limited tickets on sale so get yours NOW!

Tickets are available from the following people: Magdalene Panau - 473 4289, Lucia Nakau - St Mary's School (Eriku), Joanne Tzilu - 473 4501, Teresa Kiap - 473 4561, Anita Kami - 473 4501, Maria Dam - PNGBC (Top Town), Evelyn Noni - 473 4807, Jane Moshi - 473 4751, Lukas Panau - 473 4506, Charles Nakau - 473 4575, Godfrey Lantry - 473 4413 and Peter Kami - 473 4863, Veronica Michael - 473 4364, Carolyn Dokta - 473 4751, Dianne Raka - 473 4364, Alice Malby - 473 4213, Bernard Tzilu - 473 4340, Justin Helele 4858, Elizabeth Apes - 473 4206, Daphnie and Veronica - students and from club members.

Going Finish Sale

Furniture: Dining table + chairs, Lounge Chairs, display unit, Book shelves. Children's bicycle, gas cylinder 9kg and cooker. Car: Subaru 4WD, Station Wagon, Power steering, air condition, radio/cassette, K3200 ono. Registered till November 1999.Nissan Primera, Sedan, air condition, power steering, p/windows, central locking, p/ mirrors, radio/cassette K6500. Contact W. Subasinghe (Mining Engineering) Phone: 473 4676 b/ h or 475 7334 a/h.

Position Vacant

Chemical Analyst

The National Analysis Laboratory is seeking a motivated chemical analyst who can produce accurate chemical testing results in a timely manner with a minimum of supervision.

Ideally, the candidate will be a recent graduate with a Science Degree, possibly with some relevant experience in the fields of analytical chemistry, microbacteriological work and or laboratory quality control.

Duties are varied but are very much bench oriented with emphasis being placed on classical wet chemistry and instrumenta' analysis of waters, foods, soils etc. The laboratory is equipped with modern instrumentation. Full on-the-job training will be given.

Salary and level of appointment will depend upon qualifications and experience.

Please forward all applications by November 30th to the following address:

The Chief Chemist, National Analysis Laboratory, P O Box 79, UNITECH Post Office

At lease three referee reports are required together with their phone numbers and addresses. Copies of University qualifications are also required.

Please note that accommodation is not provided.

Bugandi Secondary School Association

NGI Parents Fundraising Dance

DATE:FRIDAY 6TH NOVEMBER 1998
TIME:7:30 PM - 2:00 AM
FEE: K10 TASOL
VENUE: CLUB '96 NEGISO
DRESS: NEAT CASUAL
MUSIC: IN HOUSE DJ

Purchase tickets from Lucas Panau on Ph: 4506

FOR SALE

Going Finish Sale

Large study desk - K40. Bicycles, man's K120, lady's K50. 3 Tennis rackets (Head, Slaz'r) K20 & K10. Badminton set - K10. Skateboard K10. Bench & 2 Bar bells K200. Microwave oven & accessories K400. Electric frying pan K100. Gas stove, 2 burners + bottle K100. Compact Video Camera Nat. Panas'c, VHS-C format, case, extra battery, as new K1,400. SHARP Radio/ Cass. Rec./CD - K20. TV set Hitachi 20", perfect condition K500. Microwave Oven Samsung 311/650W + access's K350. Tel 475 7065

FOR SALE

TOYOTA LANDCRUISER; PHILIPS FAX-PHONE, SOFA, BOOKSELF, HP PRINTER 5L, OFFICE CHAIR AND A FEW OTHER THINGS.

PHONE ALFRED (473 4451 B/H), 23 WARANGOI DRIVE.

HOUSEHOLD ITEMS

Cutlery, crokeries, carpet, children's bike, gardening tools etc. Please come to 130/2 Sepik Drive on Saturday (7/11/98) morning, 9:00 - 12:00 or call 475 7434 for your chance to purchase any of these items at give-away prices.

SUZUKI SAMURI 4 WD 1989 MODEL

Red, 5 Speed gearbox, hi-top, with rear seat, very well maintained clean vehicle. Registered till June 1999. 81,500 kms. Price K7000 ono.

Microwave oven. Sharp 17L 700W K280. TV. Sony 'Triniton' 21"/51 cm screen K860. Both one year old. Contact. W Dobkins, Architecture and Building Department on phone 473 4515, 473 4501 b/h or 475 7537 a/h.

FUN WITH MATHEMATICS

Problem 22.
In a Mathematical contest , three problems, A, B,C were posed. Among the participants there were 25 students who solved at least one problem each. Of all the contestants who did not solve problem A, the number who solved problem B were twice the number who solved problem C. The number of students who solved only problem A was one more than the number of students who solved A and at least one other problem. Of all the students who solved just one problem, half did not solve problem A. How many students solved only problem B?

Answer: Only six students solved problem B. The solution is quite long and there is not enough space to write all down. Interested persons please see me for the solutions to problem 22. Only correct winner was Thorald Quicho BSCS1.

This is the end of the competition for this year. I would like to take this opportunity to thank the students and staff who have shown a keen interest in the fun with mathematics problems and have provided solutions to the problems.
Congratulations to the following prize winners.

Ngiya Alina FYE	K20.00
Lawrence Kumbin BEME 4	K05.00
Bata Micheal DIPC I	K05.00
Kenneth Naso BASC I	K05.00
Duruwa Peter BSCS II	K05.00
Thorald Quicho BSCS I	K10.00
Xin Luo BSCS III	K05.00
Masi Narewe BSCS I	K05.00
Sipa Benny BSCSI	K05.00
Ronney Nengabo BEMP II	K05.00

John Wamil, Dept. of Mathematics and Computer Science,
Email:jwamil@cms.unitech.ac.pg

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The Reporter
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BULOLO
BUMBU
ISSUE No:1313 ISSN:10119-5354 13 November, 1998 WEEKLY

PNG Institute of Building launched to promote professionalism

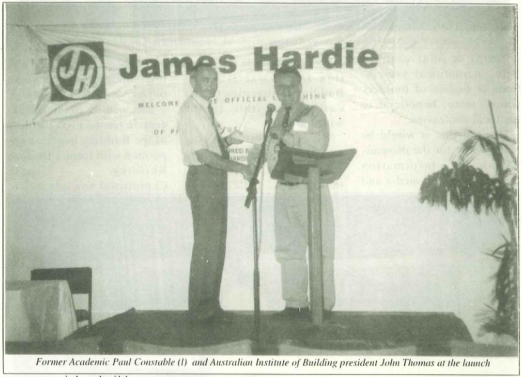
Builders in the country now have a professional association, the PNG Institute of Building, to help maintain professionalism within the building and construction industry.

The PNG Institute of Building was launched in two different centers, Port Moresby and Lae, on the 20th and 30th of October respectively. The launch in Port Moresby at the Travelodge, was sponsored by James Hardie, while the Lae launching was sponsored by BHP Steel.

According to PNG Institute of Building Publicity Officer and Unitech Building Course Lecturer, Lucas Panau, the institute's purpose was to regulate and serve as a professional body for builders in the country.

He said that, according to the aims and objectives of the institute, it was established to promote the profession of Building in Papua New Guinea, with the aim of fostering nation-building through the building of quality structures to meet the requirements of the nation.

Amongst other objectives, he said, it would also represent the growing body of professional builders, to unite them into one entity and to protect their professional interest in order to allow them individually or collectively to realise their true potential as builders.



Former Academic Paul Constable (l) and Australian Institute of Building president John Thomas at the launch

"The institute would also make policy recommendations to all levels of Government and all relevant public and private entities involved in any way whatsoever with the building industry for the purpose of promoting the quality of buildings of whatsoever kind and of whatsoever purpose or purposes," Mr Panau said.

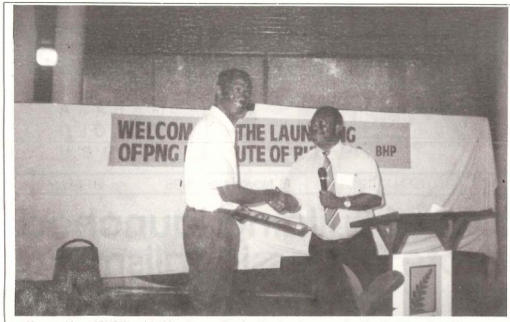
"The institute would make and set down a code of ethics, and set standards of conduct for members of the profession to comply with in order to allow for a professional and quality discharge of services to the private sector and public at large and legal entities.

"It would make rules and regulations for the efficient running of the proposed association.

"It would enquire into the quality of the service discharged by the profession for the purpose of identifying areas in the profession that need to be upgraded, reviewed, attended to, omitted, altered, emphasized and to conduct continuing building education in seminars or conferences in order to improve the quality of the services provided by members of the profession and also to recommend to appropriate faculties and departments in Universities, areas in the curriculum that should be taught to building students in order to improve the quality of graduates from the building schools."

Amongst these objectives, the institute would also conduct research to determine the appropriate building techniques, design and structures as well as materials suitable for use in buildings in the country in both urban and rural areas.

Mr Panau said that the institute would also endeavor to create and enter into part-



Vice-president of PNGIB and Building lecturer Kwadwo Ahenkorah congratulated by City Mayor Toffy Mionging

nerships or joint ventures with international associations or bodies of builders which were beneficial to the local profession.

He said that it would be responsible for the dissemination of information through the mass media and making available information thus establishing a Building Information Center easily accessible to the world at large.

He said that building research programs in collaboration with research institutions, colleges and universities, nationally and internationally was also an objective of the institute.

Meanwhile, an interim executive for the PNG Institute of the Building has been appointed with former Unitech Building Course Coordinator now attached to the European Union, Paul Constable as its president.

Unitech Department of Architecture and Building lecturers Kwadwo Ahenkorah was appointed interim Vice President, Ken Polin as Secretary/Treasurer and Panau as its Publicity Officer.

The Institute would be located at the Department of Architecture and Building.

Mr Panau said that the Institute would stage its first Annual General Meeting soon for the election of proper Office Bearers.

"The institute is something that a lot of people within the building and construction industry in the country have been waiting for," Mr Panau said.

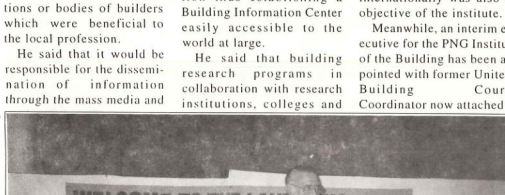
"Prior to its launching we have had a lot of calls from the industry asking about the institute as most of them see it as a vehicle to benefit from.

"For example, it is similar to the Australian Institute of Builders, where a system of awarding of contract is being done on behalf of the Government through the Institute.

"The Institute could screen contractors and only those qualified would be awarded contracts.

"It can also, in one way or another, inform the Government that the contractor is affiliated to the institute and has credibility.

"Another major task for the institute is to run short management courses for small and medium scale contractors."



LBC proprietor Bob Sinclair speaking at the launching ceremony at LIH

The Reporter is produced weekly by the **PUBLIC RELATIONS UNIT.**
Deadline 4pm on Tuesday weekly.
Editor: CORNEY LAHIES phones 473 4298
Journalist:STEVEN BUSIN 473 4290
Secretary: ANGELA BOROMANA 473 4291
The Media is most welcome to use stories with due acknowledgement
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PNG University of Technology
Private Mail Bag Lae- PNG
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Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Unitech students win PNG Maths competiton

Two Unitech students, Ignatius Nakuri and Meck Rumints have been declared winners of the PNG Mathematics Competition for category one and two respectively.

During a brief presentation ceremony at the Mining Engineering Lecture Theater last Thursday, Rumints, a fourth year Mechanical Engineering Student and Nakuri, a second year student in Electrical and Communication Engineering, both walked away with their prize money of K100.00 each.

It was also revealed during the presentation ceremony that the Open Category has been scraped due to lack of interest and would be replaced by a category for National High School students.

This year's competition was divided into three categories. Category one was for first and second year students while category two was for third and fourth year students and the open category was for members of the public or academics who want to try their mathematical abilities.

The Papua New Guinea Maths competition is a contest held for college and University students, and is arranged by Unitech's Department of Mathematics and Computer Science.

Acting Vice-Chancellor, Dr [illegible]p Siaguru, during the presentation ceremony said that it was satisfying to see such a competition continue to be organised for students to try out and further develop their mathematical abilities.

Dr Siaguru said that although the University was facing serious resource constraints, it was pleasing to note that the Department of Mathematics and Computer Science had put in its resources to make the competition successful.

He added that the due to the financial constraints, the University was also not able to finance many of its initiatives proposed by various academic departments.

"It is also pleasing to note that the competition has spread to include National High School Students where next year, they would have a category of their own, because when they were put into the general pool, a lot of them did not show their true skills," Dr Siaguru said.

"The PNG Mathematics Competition is a useful avenue where our students continue to develop their skills in Mathematics, and I congratulate the winners."

The other winners of the competition are: Xin Luo, a third year Computer Science student who was awarded the K75 second prize for category two while third year Electrical Engineering student Kemathan Sibunakau took out the third prize of K50 and Peter Kenos, a Mechanical Engineering student settled for the fourth place, collecting K25.

Consolation prizes for category 2 went to John Wau from Divine Word University and James Pope Gore, fourth year Accounting student.

The second prize for category one went to Sipa Benny who also collected K75, while Telekom Training College student Lothat Serum was given the third place prize of K50 and Thorald Quicho of the Mathematics and Computer Science settled for fourth place.

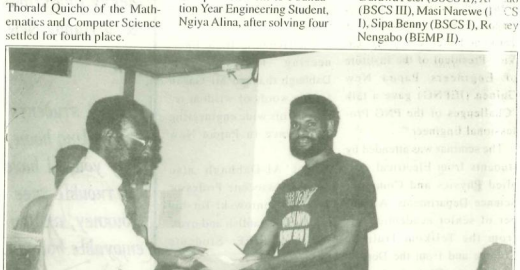


Ignatius Nakuri winner of Category 1 being congratulated by Dr Neela Sukthankar, who returned from abroad to witness the occasion

Both consolation prizes for the category were collected by Telikom Training College students, Gedisa Yalambing and Rhyan Tokeap.

This year's overall winner for the Fun with Mathematics Competition went to Foundation Year Engineering Student, Ngiya Alina, after solving four of the competition's probl[illegible]

Running second was Th[illegible]ald Quicho who solved two problems while the following solved a problem each, Lawrence Kumbin (BEME 4), Bata Micheal (DIPC I), Kenneth Naso (BASC I), Duruwa Peter (BSCS II), Xi[illegible]uo (BSCS III), Masi Narewe (i[illegible]CS I), Sipa Benny (BSCS I), R[illegible]ey Nengabo (BEMP II).



Meckeng student Meck Rumints, first prize winner of category 2 congratulated by Dr Siaguru

Engineering ethics stressed at IEEE seminar



Electrical engineering students with their lecturers and the guest speaker at the seminar

The importance of ethics in everyday engineering practices was emphasised during the Institute of Electrical and Electronics Engineers (IEEE), Unitech Students Branch's last seminar for this year.

Invited speaker,was Steven Gagau, Executive Director of Telikom Training College and Vice-President of the Institute of Engineers Papua New Guinea (IEPNG) gave a talk "Challenges of the PNG Professional Engineer."

The seminar was attended by students from Electrical, Applied Physics and Computer Science Departments. A number of senior academic staff from the Telikom Training College and from the Department of Electrical and Communication Engineering also attended the seminar.

In his talk, Mr Gagau called upon the student members of IEEE to follow the code of ethics of engineering institutions, in particular the IEEE and IEPNG.

He also underlined the importance of IEEE publications and facilities for electrical engineers world-wide including Papua New Guinea.

The HOD Electrical Engineering Professor Al-Dabbagh thanked Mr Gagau for his words of wisdom related to his wide engineering experience in Papua New Guinea.

Prof Al-Dabbagh also thanked Associate Professor Kris Korzeniowski for his efforts to establish and oversee the IEEE Students Branch.

Dr Korzeniowski, who has been the Student Branch counsellor since the establishment of the IEEE Student Branch, thanked the invited speaker.

He reiterated Mr Gagau's words on IEEE being "a window to the world" for the PNG electrical engineering and computer science students.

Finally, the IEEE Student Branch Chairman, Mr Tony Morisause thanked Mr Gagau for giving the interesting talk.

He also thanked IEEE student members for participating in this year's IEEE activities.

He acknowledged the support of the staff, Prof Al-Dabbagh and Associate Prof Korzeniowski.

Office Bearers of the IEEE branch who are in their final year, Tony Morisause (Chairman), Joseph Yeou (V. Chairman), Dorothy Ambuk (Secretary), and Brian Ephreim were also thanked for their excellent work in making IEEE activities a success, and arrangement for further development of the IEEE student branch next year.

Merry Christmas & a Happy New Year

To all students travelling home, may you all have a trouble free journey, and an enjoyable holiday.

See you all in one piece next year

KRISMAS HELO

***Send a Christmas Hello** to your friends or special message to your family and workmates this Christmas thru The Reporter.*

***Special Issue** with Christmas Greetings will be published on the final issue of The Reporter, Friday 5th December,1998. To include your message, enquire at Public Relations NOW. Deadline Friday 27th November,1998. Editor*

End of Year Travel

Air Niugini Flight Schedule - Effective 25th October 1998

All students are urged to peruse this Air Niugini Schedule thoroughly in Order to know when your flight departs at Nadzab. According to the Air Niugini Schedule issue No. 85 effective 25th October 1998, if you are travelling beyond Port Moresby your next flight to your final destination will connect via Port Moresby. You must also see the second or third copies of your ticket coupons to confirm next flight or carrier to your final destination.

Friday 13th November

FLIGHT NO.	ROUTE	DEPARTURE FROM NADZAB	BUS DEPARTURE UNITECH CAMPUS
PX 128	Lae-Mag-Wwk	0640 am	0400 am
PX 208	Lae-Hkn -Rab	0655 am	0400 am
PX 101	Lae-Pom	0710 am	0500 am
PX 129	Lae-Pom	1045 am	0800 am
PX 105	Lae-Pom	1325 pm	1100 am
PX 209	Lae-Pom	1610 pm	1400 pm
PX 109	Lae-Pom	1805 pm	1500 pm

Saturday 14th November

PX 128	Lae-Mag-Wwk	0640 am	0400 am
PX 208	Lae-Hkn-Rab	0655 am	0400 am
PX 101	Lae-Pom	0710 am	0500 am
PX 129	Lae-Pom	1045 am	0800 am
PX 105	Lae-Pom	1325 pm	1100 am
PX 209	Lae-Pom	1610 pm	1400 pm
PX 109	Lae-Pom	1805 pm	1500 pm

Sunday 15th November

PX 128	Lae-Mag-Wwk	0640 am	0400 am
PX 208	Lae-Hkn-Rab	0655 am	0400 am
PX 101	Lae-Pom	0710 am	0500 am
PX 129	Lae-Pom	1045 am	0800 am
PX 105	Lae-Pom	1325 pm	1100 am
PX 209	Lae-Pom	1610 pm	1400 pm
PX 109	Lae-Pom	1720 pm	1500 pm

Monday 16th November

PX 128	Lae-Mag-Wwk	0640 am	0400 am
PX 208	Lae-Hkn -Rab	0655 am	0400 am
PX 101	Lae-Pom	0710 am	0500 am
PX 129	Lae-Pom	1045 am	0800 am
PX 105	Lae-Pom	1325 pm	1100 am
PX 227	Lae-Pom	1410 pm	1200 noon
PX 209	Lae-Pom	1610 pm	1400 pm

Tuesday 17th November

PX 128	Lae-Mag-Wwk	0640 am	0400 am
PX 208	Lae-Hkn-Rab	0655 am	0400 am
PX 101	Lae-Pom	0710 am	0500 am
PX 129	Lae-Pom	1045 am	0800 am
PX 105	Lae-Pom	1325 pm	1100 am
PX 209	Lae-Pom	1650 pm	1400 pm
PX 109	Lae-Pom	1805 pm	1600 pm

Wednesday 18th November

PX 128	Lae-Mag-Wwk	0640 am	0400 am
PX 208	Lae-Hkn-Rab	0655 am	0400 am
PX 101	Lae-Pom	0710 am	0500 am
PX 227	Lae-Mas-Kvg	0950 am	0700 am
PX 129	Lae-Pom	1045 am	0800 am
PX 105	Lae-Pom	1325 pm	1100 am
PX 209	Lae-Pom	1610 pm	1400 pm
PX 109	Lae-Pom	1805 pm	1600 pm

Thursday 19th November

PX 128	Lae-Mag-Wwk	0640 am	0400 am
PX 208	Lae-Hkn-Rab	0655 am	0400 am
PX 101	Lae-Pom	0710 am	0500 am
PX 129	Lae-Pom	1045 am	0800 am
PX 105	Lae-Pom	1325 pm	1100 am
PX 209	Lae-Pom	1610 pm	1400 pm
PX 109	Lae-Pom	1805 pm	1600 pm

Note:

The travel arrangement will continue till Sunday 22nd November 1998. Please follow the same schedules stated above for Friday 20, Saturday 21st and Sunday 22nd November 1998.

Thank you and Merry Christmas All

Philip J Lavatu
SRC Executive Officer

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

IN-HOUSE COMPUTER TRAINING COURSE FEBRUARY 1999

The Department of Mathematics and Computer Science will offer seven training ses, for high school staff, teachers and administrators; running from Monday 1st F ary to 5th February 1999. All lab work in Maths & Computer Science Labs. Le in Rose Kekedo Lecture Theatre. A charge of K20 per course is made towards for tea, biscuits and issue of certificates.

1.Word for Windows: Afternoon Course: Mr Roy Lewis/Alan
Monday 1st Feb to Friday 5th Feb
Start: 1.00pm - Monday 1st Feb, RKLT
Time: 1:00pm - 4:00pm daily
1:00pm - 2:00pm Lectures (Rose Kekedo)
2:00pm - 4:00pm MA78
Prerequisite: Prior use of PC Computers with Windows
Maximum Participants: 30

2.Visual Basic 5 (Windows)Programing: Dr Chris Wilkins
Monday 1st Feb to Friday 5th Feb
Start:9.00am - Monday 1st Feb, RKLT
Time:9:00am-12:00 noon daily
9:00am-10:00am Lectures (Rose Kekedo)
10:00am-12:00pm MA79
Content:Concepts of Visual Basic. Programing in Visual Basic 5.
Prerequisite: Working knowledge of Windows environment.
Maximum Participants: 15

3.Using Excel 5 for Statistics: Prof. Phythian/Dr. Alan Oxley
Monday 1st Feb to Friday 5th Dec
Start:8.00am - Monday 1st Feb, MA22
Time:10:00am -11:00am Lectures (Rose Kekedo)
8:00am-10:00am MA78 Lab & MA22
Content: Creating a table, use of absolute cells, sum and function wizard, statis ul functions incorporating charts. Inserting tables into a word document. Spinner. S ul bars, Macros.
Prerequisite:Working Knowledge of Windows environment.

4.Creating Database and Reports: Dr. Alvin Bampton
Monday 1st Feb to Friday 5th Feb
Start:1.00pm Monday 1st Feb, MA22
Time: 1.00pm - 3.00pm - Lab Sessions
3.00pm - 4.00pm - Lectures (Rose Kekedo)
Content: Use of Foxpro to create a data base, queries of the database and re based on these queries.
Prerequisite: Idea of Tables and a database.

5.Mathcad/Derive: Dr Alan Oxley
Tuesday 2nd Feb to Friday 5th Feb
Start: 1.00pm Tuesday 2nd Feb, MA79
Time: 1:00pm - 4.00pm Lab times (MA79)
Content: Use of Mathcad or Derive for derivatives, symbol manipulation, graphics, matrix operations.

6.Creating a Web Site: Douglas Sil Kala
Monday 1st Feb to Friday 5th Feb
Start: 9.00am Monday 1st Feb, MA78
Time: 9.00am - 12.00pm MA78 Lab
Content:Communications to a Web site, creating Web pages, links and extra pages

7.Minitab Statistics: Mr John Wamil
Monday 1st Feb to Friday 5th Feb
Start: 9.00am Monday 1st Feb, MA21
Time: 9.00am - 12.00pm MA21
Content: Use of minitab for general statistics, data diagrams, regression, hypothesis testing, Anova (if time).

These will be run in the week 1 Feb - 5 Feb 1999. We plan to offer (subject to sufficient interest)

Word for Windows. (Plus Windows 95)
Visual Basic 5
Excel 5 or 7: Statistics and charts
Database: Creation and Reports
Mathcad/Derive
Minitab Statistics
Delphi (if enough interest)
Power Point (if enough interest)

These are open to Unitech staff and their immediate families, high school teachers and administrators. A charge of K20 is made towards the cost of materials, tea and biscuits and certificates.

Morning: Excel 5 or 7, Website creation, Minitab and VB5.
Afternoon: Word 6 or 7, Database, Mathcard and power point.

Staff who wish to attend for either of these courses should register interest with Maria Sam on Extension 4801 (Phone 473 4801 / Fax 475 7458) email: msam@cms.unitech.ac.pg

PROFESSOR J.E. PHYTHIAN
Head of Department
Mathematics and Computer Science

INFORTAINMENT BOARD

School Fees Subsidies

This notice is to those Non Citizens Staff whose children will be attending the International School of Lae in 1999, that the application for School Fee subsidy forms are available from the Staff Officer for collection.

After completing the form and the Principal of TISOL has endorsed them, please return the forms to the Staff Office for processing and then to Accounts for payment.

For those staff whose children are attending school abroad, payments will be made on production of Invoice or Statement supplied by the school the child is attending.

John B Geyasca
Acting Staff Officer

Intervarsity Participants

Official Presentation to the University

Wednesday 18 November 1998

Time:5:00pm

Venue:SAC

Reminder: Those with Trophies, bring it with them.

Philip Lavatu
Sports Coordinator

National Academic Staff Association

Acknowledgement

The National Academic Staff Association (NASA) expresses it's gratitude to Professor B. Young, Head of Department, Civil Engineering for his kind and timely donation of K200 towards the Association's coming Christmas Party.

Michael Kiap
President, NASA

Ceasing of Transport bookings for Private Hire

We are now at the peak of the Academic Year and the end of the Semester Two.

At this time of the year the Transport Department will be fully committed in transportation of Students to Nadzab Airport. That means all buses and trucks of the Transport Pool will be in full use with no vehicle to spare, beginning on the 13th to the 22nd of November, 1998. Private hire of vehicles will commence again on 23rd November , 1998.

Therefore, the Transport Department wishes to advise all University Staff and Students that No Private Bookings will be Granted.

For those who had paid through the Stores and Transport Secretary, please present your receipt and collect your refund.

The Management and Staff of the Transport Department apologise for any inconveniences caused.

Sabua Monaki
Acting Transport Manager

HOUSING APPLICATIONS

Applications are invited from eligible officers of the University for the following High cost Houses to become available shortly:

HCH	12	Ramu Drive	4 br
HCH	91	Fly Drive	4 br
HCH	92	Fly Drive	4 br
HCH	98	Fly Drive	3 br (s)
HCH	118	Purari Drive	3 br
HCH	102	Purari Drive	3 br
HCH	110/1	Purari Drive	3 br
HCH	148	Oxford Drive	3 br
HCH	132	Sepik Drive	2 br
HCH	23	Warangoi Drive	2 br
HCH	189/4	Markham Place	2 br
HCH	189/5	Markham Place	2 br
HCH	64	Mumeng Drive	2 br
HCH	10/2	Warangoi Drive	1 br
HCH	5	Finnisterre	1 br

Staff members who have their family status changed but are continuing to reside in larger houses, should now apply for appropriate housing within their current entitlement.

This implies to such persons as having:-

1.Husband and wife only living in a 4 br and 3 br houses.
2.Husband only living in a 3 br houses.
3.Persons residing in Study Leave houses should also apply for their permanent allocation.

This will allow the larger houses they occupy to become available so that staff who are now residing in smaller houses can be relocated.

Applications close with the Housing Officer as of close of business 13/11/98

Residential Furniture

1.Due to funding situation, we are unable to cater for furniture requests being received.
2.The requisitions will be held over until next year (1999) pending funds.
3.Whatever furniture which are now in the house's should be taken care off.

Ham J Wallum
Housing & Property Manager

CHRISTMAS MESSAGES

Staff and students wishing to have their christmas messages printed in the Reporter could front up at the Public Relations Unit.

Normal charges would be applied.

National Masters Basketball Titles

November 27 - 29, 1998

This is to advise the Unitech Masters Team that the dates for the National Masters Basketball Titles has been changed from 6 - 8 November as earlier reported and is now be held on the 27 - 29 1998, in Lae.

All teams must pay in their K150.00 registration fee by 13th November, 1998. This will enable the organising committee to set up draws. To be eligible, all women must be 30 years and above and men 35 years and above and not 35 and 40 as previously reported.

For more information, we can be contacted: Gewa Saking - 473 1713, Yapi Delabu - 472 2777/3985 or Martin Surab on 472 4311/9686.

Molly Geno
National Masters Basketball Organising Committee
Phone 473 4237

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday:**UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF
Sunday **Morning**
8:00 **UNITED CHURCH**
9:30 **CATHOLIC**

DUNCANSON HALL

Sunday Morning
9:00 CLC CHURCH

Unitech Laplaps just arrived and are selling very fast.

Limited stock so hurry while they last. K10 Tasol long wanwan. Come and buy one for your friends or relatives

CLASSIFIEDS

Position Vacant

The Secretariat of International Atomic Energy Agency (IAEA) has vacancies for;
Legal Officer and Safeguards Analyst till 22 January 1999.

Interested persons collect information sheets from the Public Relations Unit.

FOR SALE

TV 14" colour in very good condition - K400.
Fish Tank - K70
Cassette Player/Radio "Sony" - K85
Clothings/toys/kitchen wares (cheap)
AC Power Transformer (Converts 220 to 3.0, 4.5, 6.0, 7.5, 9.0
Battery Charger 4 x AA size K20

And many more

Telephone 475 7243

For Sale

LARGE STUDY DESK - K40.
BICYCLES with gears, unisexs, K95.
BENCH & 2 BAR-BELLS - K200.
MICROWAVE Samsung 31 litres, 650W + access's - K350.
ELECTRIC FRYING PAN - K100.
COMPACT VDO CAMERA Nat. Panas'c, VHS-C format, case, extra battery, as new K1,400.
TV Set Hitachi 20", perfect condition, K450. Telephone 475 7065, Kris

Expression of Interest

1) NET 98 - BIBLES (NIV) - GIFT OR AWARD BIBLES TO NON-ADVENTIST VIEWERS OF NET-98 SATELITE TV PROGRAMS AT DISCOUNT PRICE K10.00.
Limited Stock - So Hurry and Get One.
2) PMV BUS - TOYOTA 15 SEATER BUS WITH ROUTE 1 AND 3/100 LICENCES. URGENT SALE AT VERY LOW PRICE
3) BUY A 25 SEATER BUS FOR UNI-BUS SERVICE:
PRICE: K15,000 ONO

Save more kina. contact B Alusi on Phone: 473 4719

Arabasti's Basketball Fundraising Dance

Venue:	Negiso Club 96
Date:	Friday 20th November. 1998
Time:	Starting at 6:00 pm till late
Gate Fee:	K10.00 per head (both male and female)

Dressing:Formal

TRANSPORT WILL BE PROVIDED
PICK UP AT COFFEE SHOP, STARTING AT 6.30 PM

Unitech Catholic Women's Club

Fundraising Dinner/Dance

DATE:	**14TH NOVEMBER 1998**
TIME:	**6.30PM TILL LATE**
VENUE:	**STAFF AMENITIES CENTRE (UNITECH)**
DRESS:	**SMART DRESSING**
DJ:	**MASTER BLASTER**
TRANSPORT:	**WILL BE PROVIDED**

DOUBLE:K25
SINGLE: K15

Come along and enjoy PNG food (taro, kaukau, banana, pork, chicken, fish) and more, cooked in a mumu and prepared in a typical PNG style.

Program (for the night)

5:00 pm -Gates open
6:30pm -Dinner
8:00 pm -Traditional dances
a) Trobriands Island Tapioka dance
b) Manus Garamut dance

8:30 pm - 12 midnight - Dance and enjoy the rest of the night

There are limited tickets on sale so get yours NOW!

Tickets are available from: Magdalene Panau - 473 4289 and Joanne Tzilu - 473 4401

Position Vacant

CHEMICAL ANALYST

The National Analysis Laboratory is seeking a motivated chemical analyst who can produce accurate chemical testing results in a timely manner with a minimum of supervision.

Ideally, the candidate will be a recent graduate with a Science degree, possibly with some relevant experience in the fields of analytical chemistry, microbacteriological work and or laboratory quality control.

Duties are varied but are very much bench oriented with emphasis being placed on classical wet chemistry and instrumental analysis of waters, foods, soils etc. The laboratory is equipped with modern instrumentation. Full on-the-job training will be given.

Salary and level of appointment will depend upon qualifications and experience.

Please forward all applications by November 30th to the following address:

The Chief Chemist, National Analysis Laboratory, P O Box 79, UNITECH Post Office

At lease three referee reports are required together with their phone numbers and addresses. Copies of University qualifications are also required.

Please note that accommodation is not provided.

LOGO COMPETITION

Lae Tech and Unitech are conducting a Workshop next year. The mission statement is "To enhance the quality of village life in PNG." A competition is being conducted to find a logo depicting this mission statement. Closing date 8/1/99. Send your entries to Joe Fisher, Electrical Engineering Dept, Unitech, Lae or Tel 473 4729.

FUN WITH MATHEMATICS

Problem 22.
In a Mathematical contest , three problems, A, B,C were posed. Among the participants there were 25 students who solved at least one problem each. Of all the contestants who did not solve problem A, the number who solved problem B were twice the number who solved problem C. The number of students who solved only problem A was one more than the number of students who solved A and at least one other problem. Of all the students who solved just one problem, half did not solve problem A. How many students solved only problem B?

Answer: Only six students solved problem B. The solution is quite long and there is not enough space to write all down. Interested persons please see me for the solutions to problem 22. Only correct winner was Thorald Quicho BSCS1.

This is the end of the competition for this year. I would like to take this opportunity to thank the students and staff who have shown a keen interest in the fun with mathematics problems and have provided solutions to the problems.
Congratulations to the following prize winners.

Ngiya Alina FYE	K20.00
Lawrence Kumbin BEME 4	K05.00
Bata Micheal DIPC I	K05.00
Kenneth Naso BASC I	K05.00
Duruwa Peter BSCS II	K05.00
Thorald Quicho BSCS I	K10.00
Xin Luo BSCS III	K05.00
Masi Narewe BSCS I	K05.00
Sipa Benny BSCSI	K05.00
Ronney Nengabo BEMP II	K05.00

John Wamil, Dept. of Mathematics and Computer Science,
Email:jwamil@cms.unitech.ac.pg

Air Mail

STAMP

If unclaimed please return to:
The Editor
Public Relations Unit
Papua New Guinea University of Technology
Private Mail Bag
LAE 411, MOROBE PROVINCE
PAPUA NEW GUINEA

PRINTED MATTER

The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1314 ISSN:10119-5354 20 November, 1998 WEEKLY

Budget cuts in education sector paints bleak future for Unitech

UNITECH ASKED TO LAY OFF 170 EMPLOYEES

The Papua New Guinea University of Technology's 1999 budget has been reduced by K5 million from this year's allocation of K25 million to K20 million.

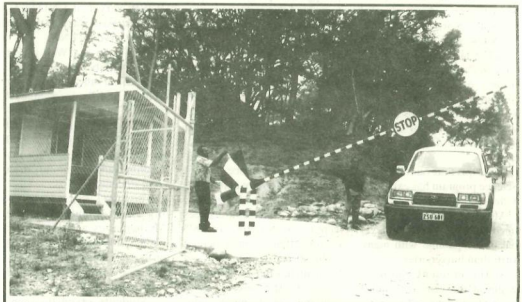
On top of that, the University has also been instructed by the National Government to cut down its work force by 170 as a result of the decline in funding to the University.

This is a result of the Government's action in down sizing of the Public Service work force, and the abolishment of several key research and training institutes.

This gloomy picture was painted during the handing down of the 1999 National Budget on Monday with most Government departments also having their budgets slashed.

Unitech's budget plight is also shared by other sister Universities - University of Papua New Guinea, University of Vudal and University of Goroka - who would also experience budget cuts next year.

UPNG's appropriation has also been reduced to K20 million from K25 million while University of Goroka has been allocated K4.5 million, a reduction of K500,000 and University of Vudal K2.6 million, a reduction of K270,000 respectively.



The new look gate of Bulolo University College. See stories on further developments at the college on Page 4 & 5.

The significant cut in budget allocation for Universities may severely affect the 1999 academic year.

The Office of Higher Education's appropriation has also been slashed from last year's allocation of K15, 706, 900 to next year's K15,700,000.

This cut may severely affect Government sponsored students under Natshol for Universities and Colleges.

Treasury and Planning Minister, Mr Lasaro in his budget speech told Parliament that appropriation for tertiary education had been cut to encourage a major rationalisation of both the administrative costs and the degree programs at the Universities.

Unitech, over the last four years, has been receiving a decline in funding from the National Government, and this trend is still continuing.

However, the short falls in the budget over the last four years which may worsen next year were;

- a significant short-fall in emoluments budget which has impacted on the University's teaching operations, staff recruitment and ability to meet emoluments obligations
- a most erratic and uncertain cash-flow situation resulting in the threat of institutional closure on several occasions in a year, through the inability to meet salary and operational commitments,
- a deteriorating Kina which has severely affected employees emoluments packages, some of which have resulted in SCMC approvals for rectifying allowances but without any resources being provided to implement them,
- a diminishing University purchasing power through both internal inflationary trends and the exchange rate deterioration on overseas purchases,
- the non-provision of funds for any teaching equipment replacement for three years in a row.
- an increased student intake with five new degree courses operating, but with no additional funding to provide for those additional student courses.

Academic highlights his experience at Unitech

By Dr Mirek Majewski (Associate Professor)

When I came to the UNITECH in 1992, Department of Mathematics was a small department with a number of service courses mostly related to Mathematics or Statistics.

In 1993 we started the undergraduate Computer Science program with a number of introductory subjects.

The same year I started teaching my first postgraduate Computer Science subject at UNITECH - it was MAP75 - Significant Aspects of Computer Science.

A few staff members from UNITECH enjoyed programming in Pascal and discovering some other secrets of computing. This subject also had operating systems and database topics, taught by other staff members of Maths Department.

Since this time our Computer Science program has expanded widely.

After a few modifications we tuned this program to the level that is comparable with many Australian universities.

At the moment, subjects taught at the year 1, 2 and 3 cover a large range of Computer Science topics including most of the fundamental directions in computing.

Subjects for the 4th year cover a number of advanced topics in Computer Science starting from database and networking applications up to computer graphics and animation.

During the last graduation in November 1997, a group of eleven students obtained the B.Sc. degree in Computer Science. These all readily obtained jobs in computer companies, industry and elsewhere.

Since the beginning, many people were asking about the possibility of doing postgraduate study in Computer Science. We developed a number of postgraduate subjects, and now we have a program for postgraduate Diploma and M.Sc. in Computer Science and Information Technology. There are only a few students at present on this postgraduate program. We plan to expand this following many inquires.

Looking back, my stay with UNITECH was full of very interesting experiences both professional and personal.

In August 1994 we organized our first computing conference "Computing Innovations in PNG High Schools". It was amazing how many people attended this conference and how many of them were enthusiasts about computers and computing education. Next conferences were not less exciting. In 1995 we organized a conference on "Educational Computing and Mathematics Before 2000" and in 1997 the international conference on "Computer Education in the South Pacific".

Now we have a feeling, that we need to support mathematics and teachers of mathematics in PNG. We decided to organise next year a conference with the theme "Mathematics Teaching - Innovations and Technology".

In 1994 I begun editing and publishing a new edition of the PNG Journal of Mathematics, Computing & Education. The new formula of the journal and its professional contents gained a favourable acceptance in the ISSN International Centre. We have recently obtained an ISSN number and our journal has come of age as an international publication. In last issue of that journal I published a Ph.D. thesis by Dr Len Raj. This thesis was completely done here at UNITECH. Len showed us that it is possible to work at UNITECH and to do research on a good world level.

In 1997 I started running first WWW server at UNITECH, and I believe it was also the first WWW server in PNG.

Very soon my Web server found a number of enthusiasts. Some of our 4th year Computer Science and Business Studies students made web pages related to their personal life and places of their origin. I started using this Web server for my teaching and communication with students.

This year I used it for teaching two subjects: Discrete Mathematics and Computer Graphics. In both cases I placed on the server: my lectures, questions for students, quizzes and tests.

Students saved their answers, assignments and projects to my network directory. In the case of Computer Graphics the whole University community could see on my Web site works of students - pictures showing their graphical creations.

This kind of display significantly improves the confidence of students in their skills and knowledge. Publishing mathematical lectures and tutorials is much more difficult and demanding task than giving face to face classes. For this purpose we used Scientific Notebook a very powerful tool in mathematics education.

Using this program students can access any mathematical document in LaTeX format on the web, open it, read, perform mathematical operations, experiment with graphs etc. Such documents are like an alive and interactive white-board.

Very specific thing are my quizzes on the web. Each time when a student loads it into his computer, there is created a test document with randomly generated data. This means that each time a student gets a quite different test, but still related to programmed topic. Such test ... wonderful drill tools and using them, students are revising and learning a specific topic. In July, this year, I presented my experiences in using WWW for teaching mathematics at the International Conference in Mathematics Education in Greece.

Using WWW in education is a very hot topic nowadays. Many people were surprised that I was able to use WWW in teaching mathematics here, in Papua New Guinea. Personally, I am very proud that I could use such modern teaching tools here at UNITECH. Very soon I will be leaving UNITECH. I hope somebody else will continue veloping my Web site.

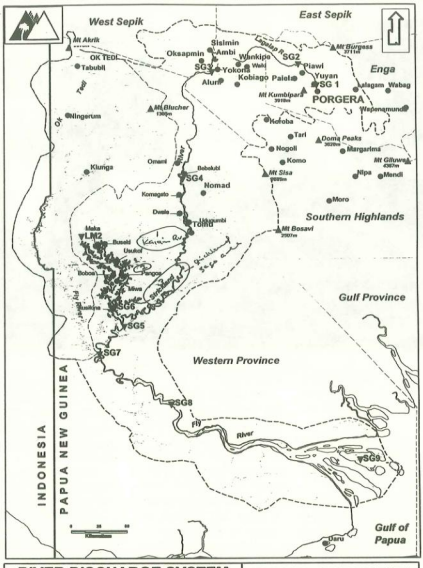
Finishing this short article, I wish to take the opportunity to thank many wonderful people I meet here. It was very nice to be here, to work with you, and to live with you. I hope that one day I will come back to UNITECH.

The Reporter is produced weekly by the **PUBLIC RELATIONS UNIT.**
Deadline 4pm on Tuesday weekly.
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PNG University of Technology
Private Mail Bag Lae- PNG
Fax: (675) 4757 667
email: reporter@unitech.ac.pg or cklahies @global.net.pg

Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Applied Science Department to carry out independent pollution research for Pogera



Map of the River Discharge System and where the study is to be carried out

The Department of Applied Sciences has been engaged to carry out a research to determine whether there were any mine derived metals from Pogera Mine affecting Sago Starch in the Strickland River and Lake Murray areas.

The research into sago starch for mine derived metals subsequently stems from complaints from villagers along the Strickland and Lake Murray areas that mine wastes were polluting their Sago thus resulting in most of them falling ill after eating sago.

The Pogera Environmental Advisory Komiti (PEAK), an independent group that advises the Pogera Joint Venture on environmental issues, then engaged the services of academics, Dr Peter Sopade and Michael Kiap to be on its sub-committee for the sago research.

PJV have also carried out risk assessment and dietary (or food) surveys and sago starch have featured prominently.

However, the PEAKs want to be seen as independent of PJV for public credibility thus research would be equally independent, and results obtained would be interpreted professionally.

The report would then be presented to PEAK which would make recommendations to PJV.

The Sago research would trace metals in sago starch and products from selected villages in the area of interest.

The first phase of the research would include:

- Documentation of traditional processing and utilisation of sago starch.
- Sampling to include fresh and processed sago as well as the process water.
- Analysis of mine derived metals - zinc, lead, copper, arsenic, cadmium, iron, and silver - in the sago samples.
- pH and acidity levels in the samples.

The first phase would be fully funded by PJV and is strictly a chemical analysis which the National Analysis Laboratory would be fully involved.

The Second phase of the research would be on the human health concern on sago starch and products.

"The extent of PJV support for this phase will depend on the results of the first phase but there will be financial support particularly from its community support vote," Dr Sopade said.

"The chairperson of PEAK, Ms Meg Taylor, showed a keen interest in this phase and felt that Conservation Melanesia, of which she is a key figure, will provide financial support.

"This phase is expected to include the bulk of our present study, microbiology, aflatoxin and selected physico-chemical properties.

"To put the results of both or ether phase(s) in a proper perspective for practical inference, the level or contribution of sago starch and products in the overall diets of the villagers needs to be ascertained or estimated."

Bulolo Uni College to witness last graduation under old curriculum

Bulolo University College will graduate about 30 students under the old curriculum during its 34th Annual Graduation, next Friday.

According to Mr Steven Sangau, this ceremony is one of the challenges the college had achieved during the last 12 months under his capacity as Acting Principal.

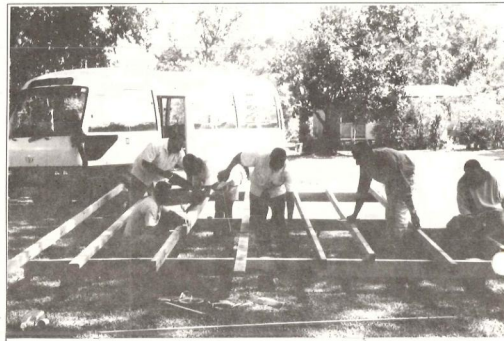
Under the integrated forestry curriculum, the exam results for this year will determine whether students in their 2nd year at Bulolo University College will proceed with their degree programme at the main campus or will conclude their diploma at Bulolo University College.

Under the new academic programme, Diploma students will under-go compulsory 6 months industrial attachment with the Industry according to Sangau.

"The 6 months industrial programme is more focused than the previous programme," Sangau said.

"It is a structured work experience, designed by staff supervised by staff and assessed by staff.

"The first batch of students undergoing industrial training in the plantations during the first semester next year would return to join the rest of the University Students at the main campus in the March 2000 graduation ceremony."



Graduation preparation at the College

Meanwhile, the College had also undergone noticeable physical infrastructural changes during the year.

The entrance to the College received facial surgery with the erection of the new-look design including the sign board and the security gate.

The campus ground was also fenced, to provide protection to the University property and residents.

Interviews were also conducted last week to potential security guards who will provide security service for about 300 residents on campus for the first time.

The Counselling Service at the College also received a major boost through AusAID funding, which enabled a national specialist counsellor appointed on gender issues to the students.

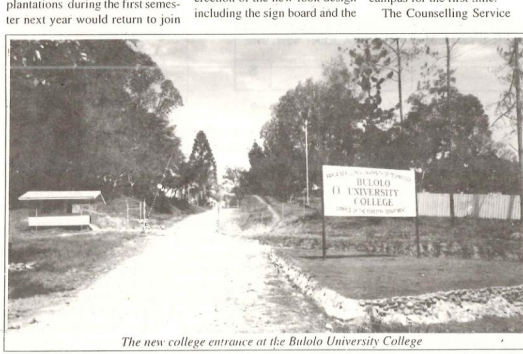
This new service according to Sangau, will be headed by Mr Lavong and his wife.

Six members of staff also benefited from short-term attachments in Australia under the AUSAID Staff Develop Program, under the twi. arrangements between BUC, Australian National University and Melbourne University.

According to Sangau, staff on attachment in Australia were there to observe their counterparts at workplace and gain more exposure on the methods of delivery of their subjects.

Meanwhile, staff at BUC also undertook short courses on Teaching Methods Skills conducted by the University's Teaching and Learning Methods Unit.

One of the achievements of the College was the return of the Principal, Tony Nahuet after completing his MBA at Queensland University of Technology within 18 months.



The new college entrance at the Bulolo University College

Bulolo Principal completes Masters

Bulolo University principal Tommy Nahuet recently returned from Queensland University of technology with a Master of Business Administration.

Nahuet left on an 18 months MBA course in January 1997 and was relieved of his duties as principal to pursue studies when scholarship became available and graduated in September this year.

Commenting on the course where he was among over 300 students from different background and nationalities, Nahuet said he benefited greatly from the MBA programme by course work.

"The MBA programme targets those in managerial positions and I believe what new knowledge I have acquired has made me a better manager,as the course itself also covers a wide range of areas," Nahuet said.

"The course through its human resource component has assisted me to gain new insight into better understanding various issues affecting staff and students and how to handle them in a more professional manner. "When dealing with students you try to understand where the students are coming from and you resolve the problems they have, and when dealing with staff in areas such as filling in promotions and yearly appraisals, and how these sensitive issues are communicated to staff will help them take the decision calmly instead of being reactive.

"As the course was management oriented, coming from a forester's background, I did encounter some difficulties in areas such as managerial accounting, managerial economics and managerial finance."

Moreover the MBA has imparted a new lease of life and Nahuet plans to make the college more 'useful' next year by implement various action plans to raise more revenue internally to complement budgetary support.

A seasoned forester, Nahuet launched his lifelong career back at the same college in 1975 as a cadet forest officer following his first year at the University of Papua New Guinea.

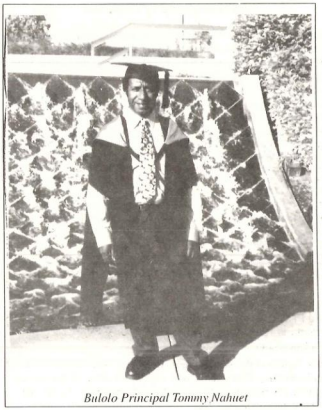
He graduated in 1979 at Unitech after the Forestry Course was transferred from UPNG and worked for two years with the Division of Forest in East New Britain at Open Bay.

From 1979 to 1981 Nahuet was transferred to Keravat Forest Plantation where he handled a number of responsibilities such as monitoring logging operations of companies in the Gazelle area of East New Britain, and conducting of assessment surveys in the Pomio District.

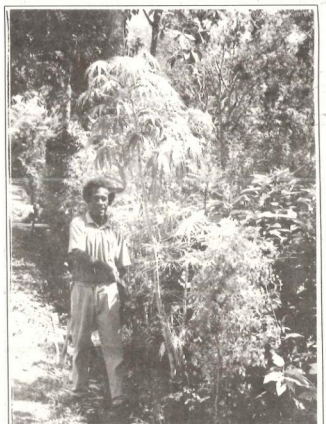
On the 14th of October 1981, Nahuet moved to Bulolo Forestry College as a lecturer and later became the principal in 1989.

Mr Tommy Nahuet is from Maprik in East Sepik province, and is married with six children.

Congratulations Tommy!!!



Bulolo Principal Tommy Nahuet



Bulolo college long serving cleaner, Dambung Bang prunning hedges in preparation for next week's graduation.

INFORTAINMENT BOARD

UNITECH CATV USERS

Additional Pay-TV Channels:

Please note that the Salary Deduction authorisation forms should be completed and returned to ESU as soon as possible.

ESU will issue a receipt for every completed authorisation form.

If you haven't received this form, please come and collect one from ESU.

At present only half of the membership have returned their authorisation forms.

We are planning to implement the three new Pay-TV channels (HBO, Discovery and Hallmark) from 1st December 1998. All the subscribers who haven't given their authorisation to deduct the revised subscription (K12.00 per fortnight), will be disconnected from the CATV network from Monday, 7th December 1998.

If any disconnected subscriber want to re-connect to the network, they will have to pay the normal reconnection fee K25.00.

UNI CATV Management

ASSOCIATION FOR TERTIARY EDUCATION MANAGEMENT (ATEM).

The PNG Chapter of the Queensland Branch of ATEM will be holding its 1998 Workshop at the Bulolo University College from 1-4 December.

The Theme of the Workshop is: University Restructuring (PNG Experiences). This theme was chosen in view of the current actions on management restructuring undertaken by the major tertiary institutions in PNG.

A number of prominent speakers from Unitech and UPNG have been invited to the workshop. Up to 30 participants are expected to attend including the Lord Mayor of Lae, Mr T Mionzing who is also a member of ATEM (PNG).

Peter Wandau
Chairman
ATEM (PNG) Chapter of Queensland Branch

School Fees Subsidies

This notice is to those Non Citizens Staff whose children will be attending the International School of Lae in 1999, that application for School Fee subsidy are available from the Staff Officer for collection.

After completing the form and the Principal of TISOL has endorsed it, please return the form to the Staff Office for processing and then to Accounts for payment.

For those staff whose children are attending school abroad, payments will be made on production of Invoice or Statement supplied by the school the child is attending.

John B Geyasca
Acting Staff Officer

For Sale

HOME TV/STEREO CABINET.
STACKS YOUR TV/VCR, STEREO AND CDS CASSETTES IN ONE SPOT.
GOING FOR K300 ONO
CALL IN CORNEY LAHIES EXT 4298

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
IN-HOUSE COMPUTER TRAINING COURSE
FEBRUARY 1999

The Department of Mathematics and Computer Science will offer seven training courses, for high school staff, teachers and administrators; running from Monday 1st February to 5th February 1999. All lab work in Maths & Computer Science Labs. Lectures in Rose Kekedo Lecture Theatre. A charge of K20 per course is made towards costs for tea, biscuits and issue of certificates.

1.Word for Windows: Afternoon Course: Mr Roy Lewis/Alan
Monday 1st Feb to Friday 5th Feb
Start: 1.00pm - Monday 1st Feb, RKLT
Time: 1:00pm - 4:00pm daily
1:00pm - 2:00pm Lectures (Rose Kekedo)
2:00pm - 4:00pm MA78
Prerequisite: Prior use of PC Computers with Windows
Maximum Participants: 30

2.Visual Basic 5 (Windows)Programing: Dr Chris Wilkins
Monday 1st Feb to Friday 5th Feb
Start:9.00am - Monday 1st Feb, RKLT
Time:9:00am-12:00 noon daily
9:00am-10:00am Lectures (Rose Kekedo)
10:00am-12:00pm MA79
Content:Concepts of Visual Basic. Programing in Visual Basic 5.
Prerequisite: Working knowledge of Windows environment.
Maximum Participants: 15

3.Using Excel 5 for Statistics: Prof. Phythian/Dr. Alan Oxley
Monday 1st Feb to Friday 5th Dec
Start:8.00am - Monday 1st Feb, MA22
Time:10:00am - 11:00am Lectures (Rose Kekedo)
8:00am-10:00am MA78 Lab & MA22
Content: Creating a table, use of absolute cells, sum and function wizard, statistical functions incorporating charts. Inserting tables into a word document. Spinner. Scroll bars, Macros.
Prerequisite:Working Knowledge of Windows environment.

4.Creating Database and Reports: Dr. Alvin Bampton
Monday 1st Feb to Friday 5th Feb
Start:1.00pm Monday 1st Feb, MA22
Time: 1.00pm - 3.00pm - Lab Sessions
3.00pm - 4.00pm - Lectures (Rose Kekedo)
Content: Use of Foxpro to create a data base, queries of the database and reports based on these queries.
Prerequisite: Idea of Tables and a database.

5.Mathcad/Derive: Dr Alan Oxley
Tuesday 2nd Feb to Friday 5th Feb
Start: 1.00pm Tuesday 2nd Feb, MA79
Time: 1:00pm - 4.00pm Lab times (MA79)
Content: Use of Mathcad or Derive for derivatives, symbol manipulation, graphics, matrix operations.

6.Creating a Web Site: Douglas Sil Kala
Monday 1st Feb to Friday 5th Feb
Start: 9.00am Monday 1st Feb, MA78
Time: 9.00am - 12.00pm MA78 Lab
Content:Communications to a Web site, creating Web pages, links and extra pages.

7.Minitab Statistics: Mr John Warnil
Monday 1st Feb to Friday 5th Feb
Start: 9.00am Monday 1st Feb, MA21
Time: 9.00am - 12.00pm MA21
Content: Use of minitab for general statistics, data diagrams, regression, hypothesis testing, Anova (if time).

These will be run in the week 1 Feb - 5 Feb 1999. We plan to offer (subject to sufficient interest)

Word for Windows. (Plus Windows 95)
Visual Basic 5
Excel 5 or 7: Statistics and charts
Database: Creation and Reports
Mathcad/Derive
Minitab Statistics
Delphi (if enough interest)
Power Point (if enough interest)

These are open to Unitech staff and their immediate families, high school teachers and administrators. A charge of K20 is made towards the cost of materials, tea and biscuits and certificates.

Morning: Excel 5 or 7, Website creation, Minitab and VB5.
Afternoon: Word 6 or 7, Database, Mathcard and power point.

Staff who wish to attend for either of these courses should register interest with Maria Sam on Extension 4801 (Phone 473 4801 / Fax 475 7458) email: msam@cms.unitech.ac.pg

PROFESSOR J.E. PHYTHIAN
Head of Department
Mathematics and Computer Science

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday:**UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF
Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

Sunday Morning
CLC CHURCH

Christmas Hello

***Send a Christmas Hello** to your friends or special message to your families and workmates this Christmas thru The Reporter.*

***Special Issue** with Christmas Greetings will be published on the final issue of The Reporter, Friday 5th December,1998. To include your message, enquire at Public Relations NOW. Deadline Friday 27th November,1998. Editor*

Merry X-Mass and a Happy New Year to all staff, students and the Unitech Community.

CLASSIFIEDS

NATIONAL MASTERS BASKETBALL TITLES NOVEMBER 27-28

The Masters Basketball Titles tournament kicks off on the 27th of November, 1998 and all teams participating must be regisiered by 20/11/98 and the fee is K150 per team.

Those staff members interested in playing basketball should now confirm their participation with Mr Witari Tauye, Coach on extension 4304 or Mrs Christabel Fainame on 4319 (Accounts Department).

The women's team is captained by Mrs Christabel Fainame and should put up a strong defence during the tournament with other centres.

The team has former PNG Rep, Mrs Freda Siaguru who represented the country during the 8th South Pacific Games in New Calendonia.

Come and cheer for our teams during the tournament. Watch out for more detail in next week's Reporter (27/11/98).

For more information, we can be contacted: Gewa Saking - 473 1713, Yapi Delabu - 472 2777/472 3985 or Martin Surab on 472 43111, Molly Geno 473 4237/4238, Elizah Kissing 472 4602, Ludwig Peka 473 1713.

Molly Geno
National Masters Basketball Organising Committee.

Arabasti's Basketball Fundraising Dance

Venue: Negiso Club 96
Date: Friday 20th November, 1998
Time: Starting at 6:00 pm till late
Gate Fee: K10.00 per head (both male and female)
Dressing:Formal

TRANSPORT WILL BE PROVIDED
PICK UP AT COFFEE SHOP, STARTING AT 6.30 PM

LOGO COMPETITION

Lae Tech and Unitech are conducting a Workshop next year. The mission statement is "To enhance the quality of village life in PNG."

A competition is being conducted to find a logo depicting this mission statement. Closing date 8/1/99.

Send your entries to Joe Fisher, Electrical Engineering Dept, Unitech, Lae or Tel 473 4729.

Position Vacant

The Secretariat of International Atomic Energy Agency (IAEA) has vacancies for;
Legal Officer and Safeguards Analyst till 22 January 1999.

Interested persons collect information sheets from the Public Relations Unit.

FOR SALE

Large Study Desk - K40.

Bicycle with Gears (Lady's or Gents) Unisex many extras K95

House Fencing, 150M Pig Wire and Star Pickets - K250

House Alarm, Logic Unit, Sensors, Siren - K350,

Car Alarm - K50.

Tel: 475 7065, Kris

Going Finish Sale

9 white single-width full drop curtains.

3 white full-width, half drop curtains

4 floral full-width, full drop

Underwater case for SLR camera, compact tripod

2x CD-ROM and PC-Card for laptop computer

Various photo frames

Sterile medical kit (needles, swabs, etc.)

Various tools: hammers, screwdrivers, bolt-cutters etc.

Sale Saturday 21st November 1998 from 9am.

Contact 473 4414 (O/H) or 694 5652

Unitech laplaps with logo on sale at the Public Relations Unit. K10 tasol. Kam hariap while stock last

FUN WITH MATHEMATICS

Problem 22.
In a Mathematical contest , three problems, A, B,C were posed. Among the participants there were 25 students who solved at least one problem each. Of all the contestants who did not solve problem A, the number who solved problem B were twice the number who solved problem C. The number of students who solved only problem A was one more than the number of students who solved A and at least one other problem. Of all the students who solved just one problem, half did not solve problem A. How many students solved only problem B?

Answer: Only six students solved problem B. The solution is quite long and there is not enough space to write all down. Interested persons please see me for the solutions to problem 22. Only correct winner was Thorald Quicho BSCS1.

This is the end of the competition for this year. I would like to take this opportunity to thank the students and staff who have shown a keen interest in the fun with mathematics problems and have provided solutions to the problems.
Congratulations to the following prize winners.

Ngiya Alina FYE	K20.00
Lawrence Kumbin BEME 4	K05.00
Bata Micheal DIPC I	K05.00
Kenneth Naso BASC I	K05.00
Duruwa Peter BSCS II	K05.00
Thorald Quicho BSCS I	K10.00
Xin Luo BSCS III	K05.00
Masi Narewe BSCS I	K05.00
Sipa Benny BSCSI	K05.00
Ronney Nengabo BEMP II	K05.00

John Wamil, Dept. of Mathematics and Computer Science,
Email:jwamil@cms.unitech.ac.pg

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The Reporter
INCORPORATING CAMPUSES AT
TARAKA
BULOLO
BUMBU
ISSUE No:1315 ISSN:10119-5354 27th November, 1998 WEEKLY

Education minister promises support for International Sago Symposium

The Minister for Agriculture and Livestock, Hon Tukape Masani, has promised that his Department will provide necessary financial support for the international sago symposium to be held in Wewak.

"Having convinced the cabinet of the benefits of hosting the symposium which subsequently led to the National Executive Committee (NEC) approval for the proposal, I will discuss with the Secretary of DAL to source funds from some allocations and I hope to get back to you next week or so," the Minister announced.

The Minister made this statement last Friday while addressing the meeting of the coordinating committee of the symposium which was privileged to have the Vice Chancellor, Dr James Kaiulo, Pro Vice Chancellor (Administration) Wilson Tovirika, Head of Applied Sciences, Prof Khan, and Acting Head of Forestry, Mr John Mukiu in attendance at the Mining Engineering Conference Room.

The committee is made up of Dr Peter Sopade (Applied Sciences) - Chairman, Mr Ben Mindiria (DAL, HQ), Mr David Kamilon (East Sepik Provincial Government), Mr Sim Sar (NARI), Mr Jimmy Risimeri (NARI) and Mr Beka Siki (Morobe Provincial Government).

While welcoming the Minister, Vice Chancellor, Dr Kaiulo emphasised the need to pay proper attention to the staple foods of Papua New Guineans.

"Our people grew up with these foods and are, therefore, more comfortable cultivating, handling, processing, and utilisng them," Dr Kaiulo said.

"Unitech has the expertise to assist various government departments and the expertise within the country is usually cheaper and more relevant."

In Response, Mr Masani, said his support for the sago symposium was in line with promoting local foods and wishes to use his contact with Unitech to benefit numerous projects in his Department.

He is looking at the possibility of engaging UDC in certain projects within his Department and constituency.

The idea behind the symposium arose in 1996, when Mr Miri Setae, then DAL secretary and Dr Sopade attended the 6th International Sago Symposium in Penkanbaru, Indonesia.

Sago symposia have been held in Malaysia and Thailand, and with PNG holding 1,000,000 ha out of the global 2,250,000 ha of wild sago palm and being the center of diversity of sago palm, the Council of ISS unanimously recommended PNG to host the 7th symposium in Wewak.

The six man coordinating committee has met on several occasions to examine various issues towards hosting a successful and well attended symposium.

With no funds committed to the symposium yet, members have travelled to Port Moresby and Wewak using personal funds or joining their visits to other sponsored official trips.

Eventually, a proposal on the symposium was submitted, considered and subsequently approved by the cabinet some weeks ago.

The Secretary of DAL, Mr Utula Samana, and his predecessors, Mr Ted Sitapai and Dr John Kola, greatly assisted in this regard.

"We have worked so hard and waited this long for the proposal to be approved," Dr Sopade said.

"I must confess that all the members of the committee were



Staff dependents undergo drilling excercise as security guards as part of the Security Services public relations campaign. *See story on Page 2*

so delighted that hose outside Lae wasted no time in booking their flights to attend this meeting."

He has e-mailed the International Sago Network - Tsukuba Sago Fund in Japan on the latest developments and we might be looking a hosting out local and international sago colleagues in Wewak in the year 2000.

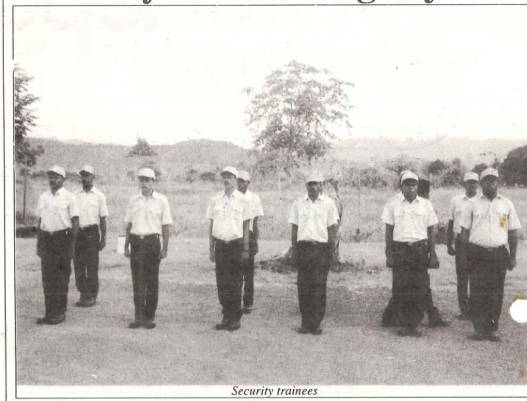
ISS will have to confirm this but members of the committee felt that this would be about right if we were aiming, which we are, at having a good attendance from sago researchers and workers in and outside PNG.

Once funds are committed and a trust account open, the coordinating committee will have completed the first phase of its assignment and it will expand and metamorphosed into an organising committee with its sub committee.

"We will also be looking for members from the University (Applied Sciences, Agriculture, Forestry, ATCDI), DAL, NARI, Morobe and East Sepik Provincial Governments, and possibly other provincial governments of sago areas of PNG, private sector (mining companies with concern on sago), and ISN (Germany, UK, Japan, Indonesia, and Malaysia).

"There will be a editorial, fund raising, hospitality, and transport committees, and a trip along the Sepik River in the Melanesian Explorer will permanently register the vast areas of some unexploited PNG sago palms in minds of participants."

Security PR stunt targets youth



Security trainees

Unitech campus security service, has embarked on a public relations campaign by engaging 12 unemployed staff dependents to provide security service over the Christmas and New Year break.

The 12 youth are currently undergoing a one week training stint which is expected to be completed today.

Unitech Security Services Director, Mr Eka Pisae, said that the engagement of the youths was part of a directive from the Council through the FNGP committee to try to curb the increasing crime related problems on campus.

"It is also an attempt to give those unemployed youth something to do and be proud, also we are trying to help them by giving them basic training, so that they may be employed by other security firms," Mr Pisae said.

"Previously, during the Christmas and New Year period, we had been engaging outsiders to beef up our security service during these period, however, we are changing our strategy by engaging the staff dependents to look after the University's property and community.

"They would be employed for two months and their performance would determine the success of this campaign."

Mr Pisae said that during the two month period, if any member of the 12 youth show outstanding performance and dedication to his work, he may be empl full time by the security service, however, this would depend on availability of positions.

The 12 youth would also be engaged during the University's orientation week and graduation.

The Reporter is produced weekly by the **PUBLIC RELATIONS UNIT.**
Deadline 4pm on Tuesday weekly.
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Secretary: ANGELA BOROMANA 473 4291
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Mission Statement

The mission of the Papua New Guinea University of Technology is to produce graduates and research of high standard in the development, critical evaluation and application of science and technology for Papua New Guinea and the Pacific

Local leader impressed with services and training at TFTC

Morobe Provincial Chairman for Agriculture and Forestry, Corney Iguan was very impressed with the training facilities and services offered by the Timber and Forestry Training College.

After a guided tour around the college and its various sections with Principal Frank Corin, Mr Iguan who was representing the Morobe Governor, Luther Wenge, said that he did not believe that there were such services and training facilities that were, in the college were offered in Papua New Guinea.

He said that he thought such things as the manufacturing of huge saw blades were done overseas , not in the College.

He said that he would brief the Governor, Mr Wenge, on his visit to the college, and he would also make it a point to brief the provincial cabinet about the college.

He also made a commitment that he would invite the Morobe Provincial Government Cabinet members to pay a visit to the college at a later date.

TFTC, he said, was training a lot of grassroots Papua New Guineans, and especially Morobeans who were benefitting more from the training and services offered by the college.

College Principal, Frank Corin, during discussions told the Provincial member that the college's invitation to the Governor, and him as his representative, was an attempt to increase better dialogue and establish a link between the college and Provincial and National leaders.

He said that through a better link with the leaders, the college would be able to show what it can offer as part of its services and training to people of their electorate and Papua New Guinea.

Mr Corin told Mr Iguan that the TFTC was the only college of its type in the South Pacific that was offering a wide range of courses on timber related fields.

He said although, their were similar colleges in Australia and New Zealand, none of them were covering a wide range of field as the college was doing.

He said that the college has been receiving students from other neighbouring Pacific countries and has also conducted courses in other parts of the Pacific.

During Mr Iguan's visit to the college, he also had the opportunity of launching two new flag poles made out of timber.

During the launching of the poles, Principal, Mr Corin said that the two 10 meter flag poles were special as they were specially laminated then shaped to give them a professional look.

The flag poles were made of a timber spices called white planchonella - a relatively soft low density species that has no special commercial use.

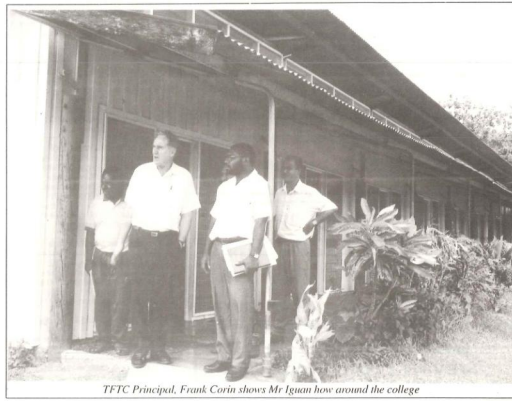
"The poles were dried and pressure treated and then laminated with three pieces of 150 x 50 glued together with water proof glue," Corin said.

"The square blocks were than tapered and rounded by hand using craftsman techniques to obtain a very nice looking pole.

"The college is able to manufacture these flag poles if orders were placed at the college."

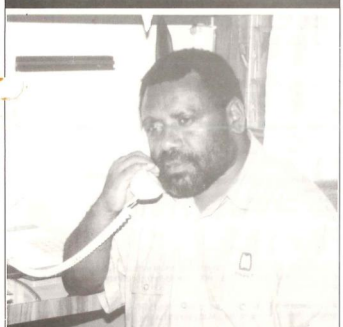
Meanwhile, the college would see the completion of a new sports stand to be completed this year.

The sports stand construction is an initiative of the college staff and workers to have something which they can sit down in and enjoy watching sports being played at the college.



TFTC Principal, Frank Corin shows Mr Iguan how around the college

UNITECH CORPORATE SHIRTS



Management Accountant Francis Gumembi with the new look shirt at work. Departments contact us at the Public Relations Unit for orders.

INFORTAINMENT BOARD

Garden Refuse (Pipia) Dumping

All Campus residents are reminded again to dump garden refuse on designated areas only, and no where else. Please read the signs. Do not dump house hold garbage and rubbish on garden refuse pipia collection area.
Tenants are also requested to inform their gardeners.

Planting of food gardens, shrubs/plants along storm water drains, security access roads.

Planting of food gardens, shrubs and plants along and on storm water drains or road reserves are discouraged. Buildings and Grounds will not be responsible for damage or removal of gardens, shrubs and plants in the course of maintaining drains and roads.

Wilson Tovirika
Pro -VC (Administration)

Staff Amenities Centre

Staff Amenities Centre will close as from December 4th, 1998. We wish all our club members a Merry Christmas and a Happy New Year.

See you next year.

SAC Management

Wheelbarrow Push - Steven Fugre Appeal

On Saturday 28th November, a group of children from the Madang Compound (settlement), mostly boys will be carrying out a wheelbarrow push around the campus between 9.00 am and 12.00 noon.

The main reason for the wheelbarrow push is to raise funds towards the second tumour operation expenses for Steven which he will be undergoing on 02/12/98.

So to show their LOVE for their brother, friend and playmate, the kids have taken it upon themselves to help raise some funds towards the costs.

So if you have any copper coins lying around idle, dump it in the wheelbarrow where it will become helpful.

Thanking you all in advance very much.

Kimson Ambale
Father/Organiser

Thank You

On behalf of the Unitech Catholic Womens Club (UCWC) members I would like to thank the following people for making our fund raising dinner dance a great success:

1.All those who supported us by buying tickets and being at the dinner dance on Saturday 14/11/98. Your support is greatly appreciated;

2.Certain individuals who contributed generously but did not attend the dinner dance. Thank you most kindly;

3.All our friends who helped us to sell tickets.

4.Lawrence Mwayubu and the dancers - boys and girls who entertained the crowd. Your time and effort was worth it. Thank you;

5.Those who provided security that evening;

6.Our children and husbands who have supported us all along.

God bless and wishing you all A MERRY CHRISTMAS.

Magdalene Panau
President - UCWC

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
N-HOUSE COMPUTER TRAINING COURSE
FEBRUARY 1999

The Department of Mathematics and Computer Science will offer seven training courses, for high school staff, teachers and administrators; running from Monday 1st February to 5th February 1999. All lab work in Maths & Computer Science Labs. Lectures in Rose Kokedo Lecture Theatre. A charge of K20 per course is made towards costs for tea, biscuits and issue of certificates.

1.Word for Windows: Afternoon Course: Mr Roy Lewis/Alan
Monday 1st Feb to Friday 5th Feb
Start: 1:00pm - Monday 1st Feb, RKLT
Time: 1:00pm - 4:00pm daily
1:00pm - 2:00pm Lectures (Rose Kekedo)
2:00pm - 4:00pm MA78
Prerequisite: Prior use of PC Computers with Windows
Maximum Participants: 30

2.Visual Basic 5 (Windows)Programing: Dr Chris Wilkins
Monday 1st Feb to Friday 5th Feb
Start:9.00am - Monuay 1st Feb, RKLT
Time:9:00am-12:00 noon daily.
9:00am-10:00am Lectures (Rose Kekedo)
10:00am-12:00pm MA79
Content:Concepts of Visual Basic. Programing in Visual Basic 5.
Prerequisite: Working knowledge of Windows environment.
Maximum Participants: 15

3.Using Excel 5 for Statistics: Prof. PhythianDr. Alan Oxley
Monday 1st Feb to Friday 5th Dec
Start:8.00am - Monday 1st Feb, MA22
Time:10:00am -11:00am Lectures (Rose Kekedo)
8:00am-10:00am MA78 Lab & MA22
Content: Creating a table, use of absolute cells, sum and function wizard, statistical functions incorporating charts. Inserting tables into a word document. Spinner. Scroll bars, Macros.
Prerequisite:Working Knowledge of Windows environment.

4.Creating Database and Reports: Dr. Alvin Bampton
Monday 1st Feb to Friday 5th Feb
Start:1.00pm Monday 1st Feb, MA22
Time: 1.00pm - 3.00pm - Lab Sessions
3.00pm - 4.00pm - Lectures (Rose Kekedo)
Content: Use of Foxpro to create a data base, queries of the database and reports based on these queries.
Prerequisite: Idea of Tables and a database.

5.Mathcad/Derive: Dr Alan Oxley
Tuesday 2nd Feb to Friday 5th Feb
Start: 1.00pm Tuesday 2nd Feb, MA79
Time: 1:00pm - 4.00pm Lab times (MA79)
Content: Use of Mathcad or Derive for derivatives, symbol manipulation, graphics, matrix operations.

6.Creating a Web Site: Douglas Sil Kala
Monday 1st Feb to Friday 5th Feb
Start: 9.00am Monday 1st Feb, MA78
Time: 9.00am - 12.00pm MA78 Lab
Content:Communications to a Web site, creating Web pages, links and extra pages.

7.Minitab Statistics: Mr John Wamil
Monday 1st Feb to Friday 5th Feb
Start: 9.00am Monday 1st Feb, MA21
Time: 9.00am - 12.00pm MA21
Content: Use of minitab for general statistics, data diagrams, regression, hypothesis testing, Anova (if time).

These will be run in the week 1 Feb - 5 Feb 1999. We plan to offer (subject to sufficient interest)

Word for Windows. (Plus Windows 95)
Visual Basic 5
Excel 5 or 7: Statistics and charts
Database: Creation and Reports
Mathcad/Derive
Minitab Statistics
Delphi (if enough interest)
Power Point (if enough interest)

These are open to Unitech staff and their immediate families, high school teachers and administrators. A charge of K20 is made towards the cost of materials, tea and biscuits and certificates.

Morning: Excel 5 or 7, Website creation, Minitab and VB5.
Afternoon: Word 6 or 7, Database, Mathcard and power point.

Staff who wish to attend for either of these courses should register interest with Maria Sam on Extension 4801 (Phone 473 4801 / Fax 475 7458) email: msam@cms.unitech.ac.pg

PROFESSOR J.E. PHYTHIAN
Head of Department
Mathematics and Computer Science

LOTU TAIM

CHURCH GROUP MEETINGS ON CAMPUS

CHRISTIAN CENTRE

EVENING SCHEDULES:

Monday:**UNITED CHURCH**
Tuesday: **ANGLICAN**
Wednesday: **LUTHERAN**
Thursday: **AOG**
Friday: **CATHOLIC**

WEEK-ENDS

Saturday
AM -SDA
PM-TSCF
Sunday **Morning**
8:00 UNITED CHURCH
9:30 CATHOLIC

DUNCANSON HALL

inday Morning
.00 **CLC CHURCH**

Christmas Hello

Send a Christmas Hello *to your friends or special message to your families and workmates this Christmas thru The Reporter.*

Special Issue *with Christmas Greetings will be published on the final issue of The Reporter, Friday 5th December, 1998. To include your message, enquire at Public Relations NOW. Deadline Friday 27th November, 1998.*
Editor

CLASSIFIEDS

FOR SALE

FOR YOUR LOVED ONE

Colourful Highlands bilums on sale at Printery.

Please contact Jim on Phone 4275.

For Sale

HOME TV/STEREO CABINET. STACKS YOUR TV/ VCR, STEREO AND CDS CASSETTES IN ONE SPOT. GOING FOR K300 ONO CALL IN CORNEY LAHIES EXT 4298

Going Finish Sale

SUBARU STATION WAGON, 4WD, P/ STEERING, RADIO/ CASSETTE, AIR CONDITION, REGO TILL NOV '99

K3000 ONO
1 CHILDRENS BIKE - K30
TEL: 473 4671 (B/H) or 475 7334 (A/H)

Unitech Laplaps, Towels, Collar T'shirts with logo on sale at the Public Relations Unit.

Kam hariap while stock last.

All enquires on price list, contact Angela on 4291

Thank You Message

From Mr Bagai Sagaum & Family, Applied Sciences would like to say thank you for the great help during the untimely death of my dear son Yambingtung Bagai M23 on 14th August, 1998.

Brother Geyamsa Pally & Family, Eddy Kore, T.J Luni and Family, all the Area 5 Papa's and Mamas, all Applied Sciences staff, Mary Maima, Area 5 and all young boys and girls of Unitech, all Unitech staff on and out of campus, Unitech staff and the University for providing transport, Unitech Chaplain - Paster Taye, my wantoks of Begesin and Madang Community, Friends and inlaws from Kainantu and Kaiapit.

We have faced too may death problems in the campus but our University Community always stand by to take away the heavy loads from our shoulders. I am personally heart-broken and it is impossible for me to explain it. The Love, Peace and Joy was already there. Our God Bless You All.

STAFF CHANGES

This is the information summary of staff changes in respect of Appointments, Departures and interdepartmental transfers for the week ending 9/11/98 - 20/11/98.

NAME	DEPARTMENT	POSITION
Departures		
Dr M Majewski	Mathematics	Assoc. Professor
Abeyakoon L Dr	Medical Centre	Medical Officer
Ms Hania Bella	Electrical Eng.	Secretary

LOGO COMPETITION

Lae Tech and Unitech are conducting a Workshop next year. The mission statement is "To enhance the quality of village life in PNG."

A competition is being conducted to find a logo depicting this mission statement. Closing date 8/1/99.

Send your entries to Joe Fisher, Electrical Engineering Dept, Unitech, Lae or Tel 473 4729.

FINAL ISSUE OF THE REPORTER

The final issue of The Reporter for 1998 will be published next week on Friday, 4th December, 1998.

Staff wishing to advertise or publicise their events are advised to plan ahead and contact us for any assistance.

Corney Lahies
Editor

Air Mail

STAMP



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