Vice-Chancellor to chair research reactor review

Science and Technology Minister Ross Free has released details of the inquiry into Australia's need for a new research reactor, which was announced in the August Science and Technology White Paper.

The inquiry, to be known as the Research Reactor Review, will begin in November 1992. It will report to the Government by the end of next year.

It will be chaired by the Vice-Chancellor Professor Ken McKinnon, who is a member of the Prime Minister's Science and Engineering Council.

The other members of the review are:

- Professor Ann Henderson-Sellers, Professor of Physical Geography in the School of Earth Sciences at Macquarie University. She is a member of the National Greenhouse Advisory Committee and chairs the Australian Academy of Science's National Committee on Atmospheric Science.
- Dr Tor Hundloe, an Industry Commission Commissioner since 1990 and formerly Director of the Institute of Applied Environmental Research at Griffith University.

The review will seek technical advice as required and will be supported by a secretariat headed by Mr Dennis Sligar, formerly NSW State Director of the Department of Industry, Technology and Commerce.

The review will report to both the Minister for Science and Technology and the Minister for Arts, Sport, the Environment and Territories on environmental matters.

International renowned pianist and composer Mr Roger Woodward was awarded an honorary Doctor of Creative Arts at the graduation ceremony on 9 October. The award was recognition for his outstanding creative contribution to the Arts in Australia and the active encouragement he has given to his fellow artists.

MORE GRADUATION STORIES, PHOTOS PAGES THREE AND FOUR
Thanks to all for your generosity in the fundraising for Sharon Lewis. Just over $3000 was raised through a 200 Club, a pie drive, selling chocolates, and a raffle.

The raffle prizes were kindly donated by campus people.

Sharon Lewis, Debtor’s Supervisor in the Finance Office died on the 24 August after a long illness. Sharon knew we had started raising money and was overwhelmed at the number of people who cared. The money will go to Sharon’s family for her daughter Rebecca.

The NSW Department of School Education is conducting a training course for secondary school careers advisers.

One day of the course has been set aside for a visit to a university. The University of Wollongong has been selected to host this visit on Tuesday 24 November.

The group is from the following schools: Auburn, Barham, Billabong, Blacktown Boys, Boorowa, Castle Hill, Cobar, Coonamble, Cowalie, Crookwell, Dunheved, Evans, Gundagai, Katoomba, Lithgow, Lurnea, Maitland, Mount View, Tumbarumba, Wade, Walcha Central and Walgett plus Port Macquarie Distance Ed Centre.

The aim of the day is to provide the participants with a broad range of information on the NSW and ACT universities.

International House will be the starting point with a presentation on accommodation, and staff from the University’s support services have been invited to talk about the services in universities in general.

These will include Aboriginal Support, Careers and Appointments Services, Assistance for Students with Disabilities, Counselling Services and Learning Assistance Units. Representatives from other universities will also be present.

Nominations are invited from qualified persons for election to the following positions on the University Council:

- the non-academic staff member;
- one of the two academic staff members.

Detailed notices setting out full details of persons eligible to vote and to be nominated have been forwarded to departments.

Further copies of the notices and nomination forms may be obtained from Olena Cullen in the Academic and Student Services office, ext. 4136.

Nominations for both positions must be received by a Deputy Returning Officer no later than 4.30 pm on Friday 6 November 1992.

Development leave is available to all members of the General Staff.

There are two categories or levels: senior staff (with salaries above the minimum rate for Senior Administrative Officer Grade 1) and other staff.

Similar policies and procedures apply in both cases.

Development leave provides an opportunity for an experienced staff member to revitalise his/her performance or gain new skills through a carefully planned and individually tailored programme of activities.

Development leave aims to:

i) Provide an opportunity for new experience or skills development not available in the workplace;

ii) Facilitate new work contributions by the staff member;

iii) Generate new ideas and approaches to a familiar set of responsibilities.

Development leave may be sought to:

i) attend conferences or short courses, seminars and workshops of demonstrated direct relevance to the work of the applicant and of demonstrably high quality;

ii) undertake a brief (not exceeding two weeks) series of visits to other institutions or employers to observe work practices and establish relevant senior contacts;

iii) Gain relevant additional work experience with another employer either on secondment or as part of an exchange.

For senior staff, normally no more than four weeks paid leave and an assistance grant of up to $3000 will be approved. Leave may be taken in Australia or overseas.

For other staff, normally no more than three weeks and an assistance grant of up to $1500 will be approved. A special case would need to be made for leave to be taken outside Australia. There is no provision for funding the costs of spouse or dependent expenses.

Members of staff applying for development leave must generally have been employed by the University for more than three years and must have occupied their current position for at least two years.

Normally no reapplication will be allowed within three years.

Further information in regard to this matter and a suggested application format may be obtained from the Personnel Officer (General Staff), Ann Kiceluk, ext. 4284. Applications close 30 November 1992.

The Australian Bureau of Statistics publication Social Indicators 1992 has been received in the Library.

This is the report that was mentioned in most news programs recently. Social Indicators provides a contemporary view of social conditions in Australia and monitors changes in social conditions over time and is the first cumulation of such statistics since 1984.

This publication is not available for loan but will be available for perusal at the Library Information Desk.

For further information please contact Lorraine Denny, Government Publications Officer, ext. 3544.
520 graduate at October ceremonies

The University held two graduation ceremonies on the 8 and 9 October for approximately 520 students from eight faculties who had satisfied requirements for their degrees.

RIGHT: Guest speaker for the ceremony on 8 October when students from the faculties of Education, Engineering, Health and Behavioural Sciences, Informatics and Science graduated was Telecom Director of Research, Mr Harry Wragge. He is pictured in the procession with the Vice-chancellor Professor Ken McKinnon.

BELOW: On the 9 October at the ceremonies for Arts, Commerce and Law the speaker was Mr Moosa Baqer, President and Chief Executive Officer of Best Enterprises (a computer-based solutions company) and former Director-General of Industry and Commerce in Oman. He is pictured with Ms Sue Walker and Mrs June Hope.
Roger Woodward’s ‘passionate commitment and unswerving dedication’

In the citation for Roger Woodward’s honorary doctorate, the Vice-Chancellor, Professor McKinnon said: ‘Roger Woodward’s formative education was completed at the NSW Conservatorium of Music where he studied piano with Winifred Pope.

‘His other mentors as a young man were the legendary Kenneth Long and Sir Eugene Goosens with whom he studied the layered and precise art of organ and church music.

‘After graduation from the Conservatorium and then the Sydney Teachers College, Roger Woodward spent a short time as a teacher in the New South Wales Department of Education. In 1964, he won the ABC Instrumental and Vocal Competition Commonwealth Finals and, by 1965, he was enrolled in postgraduate studies in the Warsaw Academy of Music.

‘In 1968, he won the 23rd International Chopin Festival in the composer’s native Poland. His relationship with the works of Chopin was to be a long and loving one. Twenty years later, he performed Chopin’s complete works from memory and his latest recording is devoted to Chopin.

‘Arthur Rubinstein has called Roger Woodward “one of the finest Chopin performers...of our time”. In 1976 he was appointed a Fellow of the Frederic Chopin Institute, Warsaw.

‘The two nodes in Roger Woodward’s remarkable history as performer and composer could be represented, on one side, by the European classical and romantic tradition and, on the other, by the “new world” of avant garde artists and composers. His devotion to the work of contemporary artists is evident in the list of world premiers he has given to the works of composers like John Cage, Richard Meale, Morton Feldman, Iannis Xenakis and our own Barry Cunyngham.

‘In the 1970s, he founded and directed the London Music Digest - the unique music festival series at the Round House, London.

‘The concerts from this celebrated series have been recorded and released internationally by the BBC, EMI and Decca. Woodward’s overall recording achievement is currently 30 discs, many of which have received awards.

‘In 1990, Roger Woodward founded and continues to be the inspiration of the Sydney International Festival of New Music.

‘This unique showcase for new Australian work is typical of Woodward’s commitment to heightening awareness of the quality of Australian composing and performance. As well as being an international figure, he is a genuine Australian patriot. No cultural cringe for him!

‘Roger Woodward’s career demonstrates the wonderful variety in the musical continuum and his great ability to appreciate it and to use so many of its forms.

‘He has performed in nine seasons of the London Proms and has been acclaimed for his interpretation of the full cycle of Beethoven’s thirty-two piano sonatas and five piano concertos.

‘He has also worked with Frank Zappa and has frequently collaborated with great jazz artists like Cecil Taylor.

‘Back in Sydney in 1988 he directed a specially collected 23 piece orchestra for the ballet “Kraanerg” composed by Iannis Xenakis and performed by Graeme Murphy and the Sydney Dance Company.

‘That orchestra has remained together under Roger’s artistic direction as the Alpha Centauri Ensemble which has received outstanding reviews internationally for its recordings and performances.

‘As a pianist, Roger Woodward has earned the accolades of the famous. Sir Yehudi Menuhin remarked that “magical sounds came from every part of the instrument”.

‘As a composer, he has received the honour of being commissioned to write a celebratory work for the Bicentennial of the French Revolution.

‘Awarded an OBE in 1980, Roger Woodward was this year admitted as a Companion of the Order of Australia. The University is very proud today to make its own special award and to welcome him into its community.

‘He has given us the pleasure of hearing him play in Wollongong on a number of occasions and recently in our new Hope Theatre. He has also taken a keen interest in our School of Creative Arts.

‘We honour Roger Woodward as a person who has scaled the heights of excellence and stands now as an example for others to emulate.

‘He has done this with passionate commitment and unswerving dedication. Impresarios occasionally accuse him of temperament, but none of apathy or lack of zest for life.

‘Amidst his hectic schedule, he finds time each year to tour dozens of Australian country towns giving concerts and gratis workshops and masterclasses.

‘A complex and talented man who has been called a genius, Woodward has retained the enthusiasm to teach and the desire to learn. These qualities are cherished and applauded in this, as in any, university.’
Law review sets a benchmark

Were they professional artists masquerading as law students, or law students who moonlight as entertainers?

Whichever they were, the group of performers on stage for the Law Faculty Review in September gave a slick, fast-moving and very entertaining performance far beyond what you would expect from an inaugural student review.

Producer Rob Stefanic, Alternate Producer Danielle Sandon and Director Shalom Andrews with some enthusiastic support from students from the School of Creative Arts put together 'Sex, Lies and Magistrates' which ran over two nights and attracted 75 per cent capacity audiences in the Hope Theatre.

Topical skits and song and dance routines flowed for two hours.

The ICAC, MBF, unemployment, Greiner, Keating and Laura Harris of Sultana Bran fame were among the list of issues and individuals parodied, slandered and put to music.

Bravo! Make it an annual event!

DEPARTMENT OF CHEMISTRY
BERT HALPERN LECTURE 1992

DR GRAEME PEARMAN, BSc(Hons), PhD, FAA
Division of Atmospheric Research CSIRO

"The Changing Chemical Composition of the Global Atmosphere and the Greenhouse Effect"

Thursday, 29 October at 5.30pm, Function Centre Room 40-3 Union Building

The Bert Halpem Lecture has been established as a public lecture to be presented annually at the University of Wollongong by a distinguished visiting scientist on a subject in chemistry or biochemistry.

It honours the memory of Bert Halpem, the Professor of Chemistry at the University of Wollongong from 1970-1980. Professor Halpem's pioneering studies in amino acid, peptide and protein chemistry impacted across the fields of medicine, biochemistry, chemistry and geochemistry.

Dr Graeme Pearman has been Assistant Chief of the CSIRO Division of Atmospheric Research since 1989. He is a leading world authority on the Greenhouse Effect, with major contributions both to the measurement of atmospheric constituents and to the development of a comprehensive model which is now widely employed to predict future carbon dioxide levels in the atmosphere.

He was also a pioneer in the application of global atmospheric transport models to establish the role of tropical deforestation in the carbon cycle.

Dr Pearman has also played a leading national and international role in raising public and government awareness of the Greenhouse Effect, which was recognised in 1989 by a United Nations Environmental Program Global 500 Award.

In his lecture, Dr Pearman will present the scientific evidence of the changing composition of the atmosphere, together with consideration of the basis for predicting future changes in global climate.

The lecture will demonstrate the interdisciplinary and international nature of research concerning climate change. These factors, together with the significance of the science to current policy positions, creates some difficulties for scientists working in the field.
Wollongong provides course for CityRail Engineering staff

As infrastructure grows older, and all organisations look at what is affecting their bottom line, maintenance management takes on a new importance for industry in Australia.

A new training program - Maintenance Engineering and Management - was launched in Sydney in September by CityRail.

The program has been developed within the Faculty of Engineering by the Department of Mechanical Engineering.

Its subjects have been specifically tailored by the department to meet the needs of CityRail from the University’s innovative new Postgraduate Diploma of Engineering (Maintenance Management) program.

University staff will deliver the course on site in Sydney over two years.

CityRail staff will improve their control over equipment and its performance through developing better maintenance strategies.

The program teaches methods of analysis of maintenance requirements and the efficient organisation of resources directed towards business requirements.

Most industry maintenance training is on the job.

By putting maintenance management into an educational context CityRail staff will learn of maintenance strategies used in other industries and be able to structure their knowledge into a scientific framework to improve their response to current and future technological demands.

This is a joint project between CityRail and the University of Wollongong and managed by the University’s commercial arm, The Illawarra Technology Corporation (ITC).

It is a first for the transport industry in NSW.

The project was launched by CityRail Group General Manager, Mr Rob Schwarzer, and Dean of Engineering, Professor Tibor G. Rozgonyi, at the Petersham Training Centre on September 22.

The Department of Mechanical Engineering was represented at the opening ceremony by Head, Dr John Montagner, Associate Professor Kiet Tieu and lecturers Dr Devi Saini and Richard Dwight, all of whom were instrumental in establishing the program and will be delivering the lectures.

After the opening ceremony the first lectures began immediately.

The ITC, who will manage the program, was represented by its Chairman, Mr George Maltby.

EEO News

privacy, it has been the government’s policy that this EEO group membership data should not be stored in personnel information systems and linked to other personnel data.

However, the development of sophisticated computerised systems with extensive security features has made it possible for this policy to be revised.

Therefore in order to improve the monitoring of EEO, data on ethnicity and disability will now be collected by means of a survey, stored on an ongoing basis and cross tabulated with other personnel information.

This survey is voluntary but I would urge you to provide the information requested as this data will be invaluable in assisting the University in evaluating our EEO program.

Access to the data will be strictly limited to senior personnel in the EEO Unit. Any reports generated with this data will be in summary form only.

I will be happy to answer any queries on this project. Please do not hesitate to contact me on 3917 or Faye Franklin on 3030.

Peg MacLeod,
Equal Employment Opportunity Unit.

Leading econometrician visiting

Pro Vice-Chancellor of the University of Delhi and an internationally known Econometrician, Professor A.L. Nagar, is visiting in the Department of Economics for six weeks.

He is a Fellow of the Econometric Society, past President of the Indian Econometric Society, Managing Editor of the Journal of Quantitative Economics and the recipient of the 1991 Nehru Award for distinguished services to the cause of higher education in India.

He has been Director of the Delhi School of Economics, Professor of Econometrics, and Visiting Professor at several leading American and Canadian Universities.

In 1974 he came to Australia as a Visiting Professor to the ANU.

On this visit he is delivering several special lectures in the Department of Economics, in addition to speaking at seminars here and at other Australian universities.

The University’s new postal address is: University of Wollongong, Northfields Ave, Wollongong NSW 2522
Science building 'best in the cosmos'?

The Chancellor Dr RM Hope discussed the new building with Dean of the Faculty of Health and Behavioural Sciences, Professor Christine Ewan, and Dean of the Faculty of Science, Professor Murray Wilson.

On the 8 October the Chancellor Dr RM Hope officially opened the University's new science building.

Completed earlier this year after 19 months of construction, the building cost $8,251,000 which was made up from a $7,501,000 grant from the Commonwealth Government and $750,000 from University funds.

There was considerable input in the construction of the building from Illawarra firms.

The builder was MC Harold and Associates (Kiama), the architects were Graham, Bell and Bowman (Wollongong) and the engineers included Forbes Rigby and Steensen Varming, also from Wollongong.

The building has 3000 sq metres of useable floor area and now houses most of the offices and laboratories of the Department of Geology, the teaching laboratories of the Departments of Chemistry and Physics, the Faculty of Science offices and the Anatomy laboratories used by the Faculty of Health and Behavioural Sciences.

Extensive input from users in the planning process has resulted in a very practical, efficient and attractive building which provides facilities for students and staff that are up with the best in the country - or as Professor Leon Kane-Maguire said at the opening 'the best in the cosmos'.

Medical research scholarship for Harry Rothenfluh

Harry Rothenfluh in the Department of Biology has received a Government Employees Medical Research Fund Scholarship which contributes to his Doctor of Philosophy.

Associate Professor Ted Steele is his supervisor.

Mr Rothenfluh's work was selected for oral presentation at the Eighth International Congress of Immunology in Budapest, Hungary (August 1992) following a peer review of submitted abstracts.

The paper was received well, and as a result he was invited to visit the Basel Institute of Immunology, Switzerland, by Dr Marie Kosco, an expert on germinal centre interactions, where his work was discussed in more detail with researchers working there.

The research presented by Mr Rothenfluh and other speakers at the congress has added to our knowledge about somatic hypermutation of antibody variable genes, although this process is still far from fully understood.

Antibodies are essential in the combat of diseases. In order to fine-tune the antibody response, some of the higher organisms, including humans, have developed a mechanism that introduces many mutations into the variable genes of antibodies.

These mutations result in slightly different antibody molecules, some of which will be more effective against a particular disease, thus increasing the individuals' chances of survival.

Somatic hypermutation occurs in germinal centres, which form in lymph nodes and in the spleen during immune responses.

Mr Rothenfluh, Ted Steele and collaborator Dr Gerry Both (CSIRO) have also been involved in the Fourth and Fifth Frank and Bobbie Fenner Conferences in Medical Research.

At the Fourth Fenner Conference in November last year they presented papers on the history of research into the generation of antibody diversity, and on the latest research into Somatic Hypermutation carried out in Wollongong.

More recently, at the Fifth Fenner Conference in September this year, Mr Steele presented a paper discussing the possible evolutionary implications of somatic hypermutation.
Funds shortage erodes research base

The research base of Australia's universities is under genuine threat because of the existing shortage of funds for research infrastructure, the Australian Vice-Chancellors' Committee (AVCC) has warned.

In its submission to the National Board of Employment, Education and Training (NBEET) Review of Higher Education Infrastructure Funding, the AVCC says many independent reports have highlighted a shortfall in research infrastructure funding in the last five years.

The AVCC says it has consistently made representations to the Government for action to improve research infrastructure funding.

In the submission, the AVCC highlights the views of the Government's own White Paper on Science and Technology, Development Australian Ideas - a Blueprint for the 1990s.

The White Paper has as one of its major policy themes the need to ensure that the research base in the universities is of leading international standards.

The AVCC believes the provision of adequate research infrastructure is one of the most difficult problems facing the university system.

Universities, in aggregate, are the major contributors to Australia's research effort.

'The demonstrable deficiency in research infrastructure is occurring in the context of a restructured and rapidly growing higher education system which has triggered a range of pressures on the existing resources available to that sector,' the submission says.

'The growth in the number of Commonwealth targeted research granting schemes (around 40), which provide funding for research projects, mostly without a component for infrastructure, has also strained the ability of universities to provide a more general infrastructure support for their research and research-training effort.'

The submission, in response to the phase one of the NBEET review, strongly argues for the continuation of funding provided through the Australian Research Council (ARC) Research Infrastructure Program.

It says that the cessation of the program, due in 1995, will only exacerbate the existing infrastructure problems and will have very serious consequences for Australia's research effort.

The AVCC warns that if the infrastructure funding program is not continued there will be an immediate loss of jobs in the university sector, loss of skills to the Australian community, loss of earlier investment and increased unemployment in the professional, scientific and technological area.

It would also mean the loss of a very significant creative and imaginative potential which had been fundamental to the success of Australian science.

New Research Centres 'face of universities'

'The post 1987 Dawkins selectivity and concentration policies have worked - at least in terms of stimulating response from the university sector. Since that time there has been a very significant growth in research centres throughout the Australian academic system. Now, behind the centres formally established by government - the 26 Special Research Centres, 31 Key Centres for Teaching and Research, and the 34 Cooperative Research Centres - there is a fabric of more than 800 other centres, the majority of which are mainly funded externally.'

These conclusions were contained in a report released by the Centre for Research Policy at the University of Wollongong.

The centre, a Special Research Centre of the Australian Research Council, surveyed 610 of almost 900 research centres they were able to identify through 32 Australian universities.

The report, entitled Concentration and Collaboration: Research Centres in the Australian University System offers a new comprehensive base-line survey of the development of concentration in Australia's academic research.

Previously very little data was available. Indeed many universities were found to be in the process of reviewing their own centre's programs as the areas of concentration had grown rapidly and often with little regulation or, in some cases, without any central record.

The report demonstrates that the new, or 'Dawkins', universities have been quite successful in establishing research concentrations.

They are often comparable to the pre- and post-war universities in terms of their numbers and proportions relative to the national system.

There are also significant differences between centres at the three university types.

Centres within the new universities tend for example to be more applied, more driven by contract research and more orientated towards the applied sciences, engineering and information science and technologies.

Many universities were engaged in reviewing their centres' programs. The report is therefore timely in its contribution to current strategic planning at both institutional and national levels.

The report provides comprehensive data on Australian university centres according to centre size, area of research, disciplinary focus, funding source and type, relationship to university structure and date of establishment.

For further information contact Dr Tim Turpin or Mr Antony Marsh, tel. (042) 21 3256.

Report calls for major effort on research and technology

The identification and development of technical project leaders and applied researchers from Australia's educational institutions to lead Australia's research and technology development into the next century is one of the main recommendations of a business report released recently.

Promoting Partnerships, a report by the Business/Higher Education Round Table, representing Australia's major companies and universities, also recommends the establishment of a skills directory of research and technology resources in Australian educational facilities to be distributed through industry.

President of the Business/Higher Education Round Table, Mr Eric Mayer, said: 'Australian education and industry are at an economic crossroad in their relationship which could have a profound effect on Australia's future development and standard of living.

'The report, aimed at providing a focus for discussion and interaction between business and education in Australia, has identified a number of issues which require urgent and practical action to break down barriers between education and business.

'Australia has a massive investment in education and it is vital to tap its commercial potential in the development of internationally competitive manufacturing and technology industries.'

The report also recommends:

• increased interaction between university staff and industry personnel by encouraging cross-participation of staff on advisory boards and boards of directors;
• the establishment of a special fund to test the commercial potential of new ideas;
• joint industry and university appointments;
• increased business participation in course advisory bodies;
• co-operation between intellectual property guardians of universities and industry to reach common ground on intellectual property priorities and management;
• joint business/higher education research programs to be developed as models for Australia.

The Vice-Chancellor, Professor Ken McKinnon, is a member of the Business/Higher Education Round Table.
**Fellows’ first gathering**

The University has admitted 22 members of the community as Fellows of the University in recognition of their contribution to the University and to the wider community.

The Friends of the University has initiated an annual Fellows dinner to bring together the recipients of this award for a social occasion and as an opportunity to discuss their ongoing involvement with the University.

The inaugural dinner was held on 7 October.

Eleven Fellows and their wives attended together with representatives from the University’s executive.

They are pictured here gathering to walk over to the Union where the dinner was held.

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**The Senate**

At its meeting on 23 September, the following were some of the matters considered by the Academic Senate:

- Review of the Department of Biology: the recommendations of the report were endorsed;
- Review of the Department of Sociology: the Head of the Department provided a report on the action taken in response to the review undertaken in November 1990;
- Changes to show cause policies to tighten procedures were noted;
- A change in the conditions for the availability of examiners during examinations;
- Noting of the urgent action taken by Standing Committee on admission policies:
  - retention of the bonus entry scheme for Illawarra students, the bonus in future being five TER points;
  - retention of the top 10 per cent entry scheme, subject to entry not being permitted if the score is more than seven TER points below the course cut-off;
  - amendment of the deferment policy to permit deferment for up to three years.

Senate also recommended to Council on:

- the establishment of a Department of Applied Statistics;
- the establishment of a Centre for Learning Development Advisory Committee;
- a number of amendments to Course Rules.

Further details of these items are available from Trevor Cuthbertson, ext. 3928.

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**EQUIPMENT FOR SALE**

Tender No.92/14

**Learning Development Centre - Library**

10 off Abulatt XT Computers (8088) 640K, Dual 1.44MB Floppy Disk Drives with Monochrome Monitors.
3 off President XT Computers (8088) 640K Dual 1.44MB Floppy Disk with Monochrome Monitor.
1 off Commodore Colt XT (8088) 640K, single 720K Disk, 20MB Hard Disk with Monochrome Monitor.
1 off Commodore XT PC 10III, 20MB Hard Disk, 360K Floppy 720K Disk, 640K RAM with Monochrome Monitor.

**Printers**

1 off Siemens PT 90 Inkjet Printer with Centronics Interface plus IBM Emulation.
1 off Parallel Printer C,ITOH/C310 Dot Matrix
1 off Citizen Printer MSP - 50 Deluxe
1 off C,ITOH Model 8510 Printer
1 off Apple Imagewriter Model A9M03039

**Miscellaneous Equipment**

1 off PCV2 Viewerboard Model 2 including MAC SE Interface
1 off PA System ATC 9203, Lapel Wireless Microphone (M300)

This equipment will be available for inspection in the Library Room G26 (Audio-Visual Room) on Thursday afternoon 1.00pm - 4.00pm and Friday morning 9.00am - 12.30pm 22 and 23 October 1992.

Tenders for the above equipment close on Thursday 29 October 1992.

For further information of these tenders and others please contact Ross Meaker, Office Services, Phone 21-3913.
Three tertiary teaching courses

The Faculty of Education offers staff of the University of Wollongong three award courses with immediate applicability to tertiary teaching.

These courses may be attractive to members of staff who wish to refine or expand their teaching repertoires or who wish to acquire post-graduate qualifications in education.

Enrolments are open for 1993 and interested staff are invited to contact Dr Max Gillett, ext. 4277 or E-mail, for further details.

Closing date is 30 October
The courses are:

1. Introduction to Tertiary Teaching: a one-session, eight credit point subject conducted in conjunction with the Centre for Staff Development which deals with lecturing, small group teaching, student assessment and subject design.
2. Graduate Certificate in Adult Education and Training: a course comprising three eight-credit point subjects - Introduction to Tertiary Teaching and two additional subjects chosen from the Graduate Diploma schedule outlined below.
3. Graduate Diploma in Adult Education and Training: a course of six eight-credit point subjects as follow:

   - EDGA801: Curriculum and Instructional Design, Autumn 1993
   - EDGA802: Psychology of Adult Learning, Autumn 1993
   - EDGA803: Assessment and Evaluation, Spring 1993
   - EDGA804: Instructional Strategies and Communication, Spring 1993
   - EDGA805: Management & Organisational Context, Autumn 1994
   - EDGA806: Practicum, Autumn/Spring

(* EDGA807 Introduction to Tertiary Teaching may be substituted.)

Vice- Chancellor’s Award for Outstanding Service by General Staff

Nominations are invited for the 1993 Vice- Chancellor’s Award for Outstanding Service.

Up to six awards, valued at $1000 each, are available to General Staff. The rewards are designed to encourage and reward outstanding or exceptional work performance.

The recipients will have the option of receiving the reward in the form of an amount of money, $1000 (tax free), or attendance at courses or conferences of their own choice, to the value of $1000.

Consideration may also be given to use the award to pay for the provision of equipment, eg: a personal computer for either work or home use.

All recipients will also receive an inscribed certificate, to be awarded on University Day next year.

Awards will only be issued for nominations which demonstrate exceptional and outstanding achievements.

Any or all awards need not be given in any one year.

A nomination may be made by any three people.

Only one of the nominators may be from the nominees own Department/Branch/School/Division/Centre. No more than one nominator may be an external client (with a demonstrated affiliation with the University).

Self-nominations will not be accepted.

All members of the staff covered by the General Staff Salaries and Conditions Awards will be eligible. Individual and groups are eligible to receive the award.

The amount of the reward will be divided between the members of the group. As a guideline, nominated units would not normally exceed six members.

The award will be for a single outstanding success in the workplace. It will not reward satisfactory or good performance only.

The nomination will meet one or more of the following criteria:

- An outstanding and exceptional achievement or success, with a demonstrated value,
- Outstanding service to clients of the Branch/Department/University, with a definable benefit to the clients,
- An outstanding or novel initiative which has been implemented, and has a demonstrated value,
- Changes or improvements to work practices of a definable benefit to the Branch/Department/University

For information on the decision making process and procedural matters please refer to the information brochure available from the Personnel Services Branch or Faculty Officers.

Alternatively, contact Ann Kiceluk, Personnel Officer, (General Staff), ext. 4284.

Nominations must be forwarded to the Head or Unit Manager by 30 November who must submit the nomination by 11 December. Late nominations will not be accepted.

No Parking

Police have advised that as from Monday 28 September the Eastern side of Robson Rd from Northfields Ave, North to Dallas St will be signposted as a NO PARKING area.

This is to provide a safe pedestrian walk-way in this area.

The western side of this roadway will continue to be available for parking and it is hoped that any inconvenience can be minimised.

Mechanical golf device a winner

David Casburn and Jeffrey Myers, both second year Mechanical Engineering students, recently finished third in the Warman Design and Build Competition National Finals.

The finals were held at the Sydney Boulevard Hotel on 10-11 September, with competitors coming from as far afield as New Zealand.

Competitors were required to design and build a mechanical device that would convey a golf ball from the starting line, along a horizontal track and down a vertical tube.

Aiming to foster creativity in second year Engineering students from across the nation, the competition is held annually and participation is a part requirement of MECH213 Mechanical Engineering Design 1.
New award for Dr Elias Siores

Dr Elias Siores from the Department of Mechanical Engineering, joint winner of the Ramsey-Moon award (Campus News 12 August) has been recognised again with an award from the Australian Institute for Non-Destructive Testing.

He won the first prize for the best Australian paper to be presented at the 13th World Conference on Non-Destructive Testing. The prize is a cheque for $1500.

The conference takes place every four years and this time it is in Sao Paulo, Brazil, 18-23 October 1992.

His paper is titled Real-Time Expert Systems and Neural Networks for Ultrasonic Non-Destructive Evaluation.

The paper will also be published in the Journal of Measurement Control and Testing.

Dr Siores was also chosen by the institute to represent Australian interests regarding non-destructive testing and evaluation at the pre-conference meeting of the International Council.

Non-destructive testing forms an integral part of the activities undertaken by the newly established Cooperative Research Centre in Materials Welding and Joining in which Dr Siores is one of the leading researchers.

Alterations to Administration car park

Some minor alterations will soon be made to the carpark east of the Administration Building. The alterations are required:

- to provide a turnaround at the southern end to eliminate the dangerous practice of drivers having to reverse the length of the carpark when there are no vacant spaces,
- to relocate the University Vehicle Only area from the northern end to the southern end of the carpark. This is to avoid conflict with users of the hockey field who often park in the northern area during evenings, and weekend pool hire vehicles on returning. This new area will also be secured in some way.

These changes will result in a net loss of only one space. Four spaces will be lost as a result of the turnaround area, however, two spaces will be regained when two senior officers with reserved spaces will soon be relocated to another building and one other space will be retrieved by using the existing vacant space in front of the pathway leading east.

COLLOQUIUM

Chris Illert ‘Computer Graphics of Seashells’

When: Thursday Lunchtime (12.30-1.30pm) October 22
Where: Lecture Theatre G19 - Building 35
Sponsored by the Department of Mathematics.

For anyone interested in computer graphics; the mathematics of shape and bioforms; ancient, contemporary and futuristic sea shell shape; beauty for its own sake.

Chris Illert is an original and controversial thinker and an excellent computer graphics artist. He produced the definitive model for sea shell mathematics. He has recently extended this model to demonstrate that it has ramifications in all sorts of other areas including cosmology.

He has many publications including papers in the prestigious IL NUOVO CIMENTO and has collaborate with IBM’s famous Cliff Pickard to produce graphics for a variety of journals including Scientific American.
**LONG GALLERY**

**Enquiries 213996 Building 25**

**Opening hours Mon-Fri 9am-4pm. Sun 1.30-4pm. Visit the Gallery Shop**

Oct 22-Nov 15: **Tori de Mestre and Jill Chisholm** MCA Cand. Opening Thursday 22nd October at 7pm. SCARP LAUNCH - North Wing, SCA. HONOURS EXHIBITION, ITC.

Nov 19-Dec 13: **Graduating exhibition**. Opening Friday 20 November at 7pm by Professor Barry Conyngham.

**GENERAL**

A four-week course on **Somapractic Therapy** is being held over four Wednesdays in the Sports Lounge of the Recreation Centre. Somapractic is a gentle movement therapy based on the principles developed by Moshe Feldenkrais. Further information is available from Nicole Barlow, tel. (042) 281266 or ext. 3361.

AIESEC, a commerce-based student group which aims to promote student understanding and development outside their normal University courses, is organising a **student finance seminar** for Thursday 22 October 12.30-1.30pm in Kemira Room 3. Speakers from DEET, the CES and the Australian Taxation Office will talk about Austudy/Abstudy (and the current changes to both), looking for part-time work and the taxation departments views on student finances. They will also be available to answer questions from students. Hand-outs and brochures will also be available. This seminar is aimed at students who wish to know more about how they can plan their finances while attending University. For more information tel. 214032.

**Stop Press**

**Who will be King and Queen of the mountain?**

Join the Summit Run to the top of Mt Keira 28 October starting at 12.30pm, from the western entrance, Northfields Avenue.

All welcome

The **Annual International Development Program National Conference on International Education** is being held 27-29 October at the National Convention Centre, Canberra. The theme of the conference, **International Education in the 1990s: Lifting the Barriers**, is designed to address the necessity of developing strategies and taking action to lift the barriers to international education in Australia, effecting beneficial change and growth. For further information please contact Aurelia Balpe, International Development Program, Conference Secretariat, tel. (062) 85 8227.

The next meeting of the **Women's Issues Group** will be held at 7.30pm on Tuesday 27 October in Room 40.1 of the new Function Centre, Union Building, Northfields Avenue (University of Wollongong). Sociology lecturer, Ellie Vasta will speak on Ital-Australian Immigrant Women: Racism and Resistance and Elizabeth Bradlow will talk on parenting. All are welcome. The cost is: Members $2.50; Non-members: $3.50

Mavis Hayes from the Illawarra Area Health Service will be holding an **Education Seminar on Pelvic Floor Muscle Exercises** on 29 October at 12.30pm in the Sports Lounge of the Recreation Centre.

Elizabeth Riddell (poet and journalist; winner of the 1992 Book of the Year, and Kenneth Slessor prize for poetry) will be the guest speaker at the **Annual Dinner of the Australian Federation of University Women** on Wednesday 4 November in the Norfolk Room, Northbeach Parkroyal Hotel, at 7pm. Tickets are $35 (including buffet meal, pre-dinner drinks and table wine), and are available from Jocelyn Booth, 10 Dallas St, Keiraville, tel. 29 3284.

The **Women's Issues Group's third Annual Dinner** will be held for members and friends on Friday, 27 November in the Union Function Room at 7pm for 7.30 pm. Speaker Tenzin Norbu will talk on Life in Bhutan. The evening costs $20 for a smorgasbord, wine and orange juice. Enquiries to Moira, tel. 84 3741.