

CAMPUS NEWS



Head of ANSTO, Dr David Cook, Manager of the Biomolecular Mass Spectrometry Facility, Dr Margaret Sheil, the Chancellor Dr RM Hope and Head of Biomedicine and Health Program ANSTO, Dr Richard Lambrecht

Major new research capability for the region



A warm welcome for the Biomolecular Mass Spectrometry Facility from Dr Margaret Sheil

A biomolecular mass spectrometry facility was officially opened by the Chancellor Dr RM Hope on 18 June.

This new state-of-the-art mass spectrometer is a shared facility between the Department of Chemistry at the University of Wollongong and the Biomedicine and Health Program at ANSTO. It provides a major new capability in the Illawarra region.

It is one of only a few such instruments in Australia and was the first to be installed in the Sydney/Illawarra region.

It incorporates a revolutionary new ionisation technique called electrospray.

This permits for the first time the accurate probing by mass spectrometry of structural changes to large chemicals and biological molecules such as proteins, nucleotides

Continued page two

Wollongong's lead role in national administrative computing initiative

The University of Wollongong has joined forces with 10 other Australian universities to develop new administrative computing systems.

Full story page three

Congratulations Clem Lloyd and Frank Hambly

Professor Clem Lloyd, foundation head of the Graduate School of Journalism, was admitted to the Order of Australia (AO, Officer in the General Division) in the Queen's Birthday Honours for services to journalism, education, politics and public policy.

AVCC Executive Director, Mr Frank Hambly, was also recognised for his services to tertiary education with admission to the Order of Australia (Member in the General Division - AM).

St George award winner

Karen Davies received the Academia award in the quarterly presentation of the St George Youth Endeavour Awards on 16 June.

Karen is undertaking the Masters in Public Health and Nutrition and achieved an outstanding academic record.

She will be a finalist in the grand award at the end of the year.

Nomination forms for the September awards will be sent to departments soon.

Academics can nominate excellent students for the Academia category and anyone can nominate a young person (16-25) living in the Illawarra and Southern Highlands for the Community Service, Secondary Achievement, Business or Performing Arts Awards.

Distinguished visitor

The Graduate School of Education's

next seminar on 13 July will be presented by Director of the Centre for Mathematics, Science and Technology Education at Murdoch University, Dr Renato Schebici.

Dr Schebici will present 'Probing Adult's Understanding of the Scientific and Mathematical Basis of Human Nutrition Using HyperCard based Stimuli'.

Dr Schebici has been researching in the area of children's perception of science and scientists and the implications for teacher preparation.

He is also working on use of information technology as a tool to investigate the learning processes.

The seminar will be held from 12.30-1.30pm in 22.107.

Broadband Switching and Services Symposium

The Department of Electrical and Computer Engineering is hosting the 1993 Australian Broadband Switching and Services Symposium from 12-14 July.

The symposium provides the opportunity for researchers in these fields to interact, promoting a wider mutual understanding.

The symposium will coincide with the third Australian Multi-Media Communications, Applications and Technology Workshop to be held on 14-15 July.

The workshop will enable researchers, users, manufacturers and others with interest in multi-media communications to meet and exchange information, discuss applications, and take

stock of the latest research and development in this fast growing field.

Because of common interest, there will be a joint session of the workshop and the symposium on 14 July.

Further information can be obtained from the Department of Electrical and Computer Engineering, tel.21 3065.

Wollongong at Beijing conference

Dr A B Sim of the Department of Management presented a paper on business strategy and control systems at the Pan-Pacific 10th Conference held in Beijing, China on 9-14 June.

The conference was hosted by the State Science and Technology Commission of China and the Ministry of Foreign Trade and Economic Co-operation of China and received wide media and TV coverage in China.

About 500 delegates from universities, and public and private sector organisations in the Pan-Pacific area, including the US, Canada, New Zealand and many Asian countries attended the conference.

At the conference, Dr Sim presented preliminary findings of a comparative study of the relationships between strategy and control systems and their impact on performance in three different national contexts, including Australia and two Asian countries.

This research, undertaken by Dr Sim, is part of the Department of Management's research program on management strategy and organisational change.

Major new research capability for region

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and the genetic material DNA by measuring changes in the mass (or weight) of the molecules.

This new instrument can do this much more rapidly (minutes compared with weeks sometimes) and with much greater accuracy (up to 500 times more precise) than older methods.

The instrument is already being used in a range of chemical and biomedical projects in the Department of Chemistry at the University of Wollongong, and will also be of major benefit to a number of projects involving the Department of Biological Sciences and the Biomedicine and Health Program at ANSTO.

Many projects focus on understanding the molecular basis of diseases, including senile nuclear cataract and heart disease and on the development of new drugs for treatment of diseases such as rheumatoid arthritis.

Other useful applications include analysing the polymers used in paint coatings and the analysis of chemical agents in diseased citrus plants.

In addition the instrument can look at very fragile

compounds such as many metal-containing compounds for the first time and will shortly be applied to the study of interactions of anti-cancer drugs with DNA.

The combination of this new mass spectrometer with the University's high field nuclear magnetic resonance and computer modelling facilities provide a world class unit for determining the structures of large biomolecules and for determining the way in which they behave in the body.

At the opening the Head of the Department of Chemistry, Professor Leon Kane-Maguire, thanked the agents in Australia, Fisons, for the 'generosity of spirit they displayed during the negotiations on the purchase price'.

He told the audience that it was through the outstanding efforts of Dr Margaret Sheil of the Chemistry Department that the University had been able to attract one of the largest grants it had ever received from the Australian Research Council.

The grant, with supplementation from the Vice-Chancellor, Pro Vice-Chancellor (Research) and the Dean of the Faculty of Science, enabled the purchase of this equipment valued at \$500,000.

Wollongong's lead role in national administrative computing initiative

The University of Wollongong has joined forces with 10 other Australian universities to develop new administrative computing systems.

Known as the UniOn Group – and in conjunction with the multi-national software supplier Oracle – the 11 universities are about to commence work on the project which will result in the development of a suite of integrated administrative applications in the areas of students, finance, human resources, physical resources, research and consultancy and management information.

Members of UniOn Group are: Charles Sturt, Deakin, Edith Cowan, Flinders, Griffith, Murdoch, New England, Northern Territory, QUT, Western Sydney and Wollongong.

Wollongong will play a major role in the management of the project with the election of Vice-Principal (Administration), Ken Baumber, as Chair of the UniOn Group and Greg Naimo, Director ITS, as head of the group's project management team.

The UniOn Group is one of two groups which have been set up in Australia. The second group dealt with a separate software supplier.

Based on a similar recent development in the UK, the project is designed to take advantage of the fact that all universities have essentially similar requirements from their administrative systems and working together can utilise the benefits of economies of scale and sharing of resources.



Ken Baumber

Essentially the project will consist of taking the UK version of the product and converting it to meet Australian requirements.

The project has attracted strong interest and support from DEET which has already contributed to the development of a set of standard Australian specifications.

The Minister for Employment, Education and Training, Kim Beazley announced last month that the Commonwealth Government would contribute almost \$5 million to the project, to be divided among the participating institutions.

Work has begun on the UniOn project, with expectations that contracts



Greg Naimo

will be signed by the end of July.

Universities should be able to begin to install the applications progressively from the beginning of 1995.

Mr Baumber said the big plus for Wollongong is that it provides the opportunity at just the right time to move from the current IBM system to the increasingly popular UNIX environment.

'It provides us with a great opportunity to develop open, fully integrated systems which take full advantage of the new interactive technologies at a cost that we can afford,' Mr Baumber said. 'To move that way on our own would simply not have been a practical proposition.'

Dr Jayasuriya continues as WHO adviser

Dr Rohan Jayasuriya's membership of the World Health Organisation's Expert Advisory Panel on Health Situations and Trend Assessment has been extended for a further three years.

A member of the advisory panel is appointed by the Director General to contribute technical information on development in his or her fields and to offer advice as appropriate to the WHO.

Dr Jayasuriya has been a member of this panel since 1988.

He has been selected as one of nine members of an Expert Committee for the purpose of reviewing and making

technical recommendations to WHO on 'Information Support for Public Health Action at District Level'.

This committee will meet in November in Geneva to make its recommendations.

Dr Jayasuriya has wide experience in the development of Health Information Systems in several countries.

Before joining Wollongong University he was the head of National Health Information Systems Unit in the Ministry of Health in Sri Lanka.

He has carried out consultancies for WHO in South East Asia and Western Pacific Regions of WHO.

A recent research report on 'Current Developments of Computerised Community Health Information Systems in NSW' by Dr Jayasuriya has been received well by the NSW Health Department.

Findings of his research have been incorporated in an important policy paper of the Department on 'Future Roles and Direction of Community Health in NSW' which is to be released soon.

Dr Jayasuriya's study will be available as a publication of the Community Health Association of NSW in the near future.

Australian Mathematical Society's Annual Conference

The Australian Mathematical Society's Annual Conference, to be held from 5-9 July in Wollongong for the first time, will cover a wide range of interests.

The main emphasis will be on pure mathematics, but there are to be talks on statistics, including one from Professor Peter Hall of the ANU, who is one of the most prolific scientific authors in the world.

There also will be talks on applied mathematics, including one from Wollongong's Professor Philip Broadbridge entitled 'Application of an integrable fourth order non-linear PDE to metal surfaces'.

Some talks, such as 'Straight complex foliations on tube manifolds', or 'On 2-arc transitive graphs admitting the simple group of Suzuki and Ree' (co-authored by Professor Cheryl Praeger, the President of the Society), convey something of the specialised

vocabulary used by mathematicians in their research.

Others, such as 'Can one hear the shape of a fractal drum?', by Professor Michel Lapidus of the University of California, and 'The vibrating football', by Professor Gordon James of the University of London, seem to be more closely related to everyday experience.

There is even a talk on the mathematics of the ringing of church bells

from a group in Sydney.

Some of the general interest talks will be on mathematics education and the talk 'Computers in mathematics', by Professor Robert Churchhouse of the University of Wales at Cardiff, is also in this category.

Professor Churchhouse will also give a public address (see last week's Campus News and the box below).

The conference will also feature a book and computer software display.

Mathematical Analysis Miniconference

Before the Annual Conference of the Australian Mathematical Society, there will be a Miniconference on Mathematical Analysis at the University of Wollongong from 1-3 July.

The miniconference will feature 24 invited lectures and contributed papers, and emphasise areas which are very strong within Australian mathematics.

One lecture by Professor Michel Lapidus, of the University of California, will

concern the vibration of fractal-shaped objects and the extent to which they are determined by their fundamental vibrations or 'harmonics' as they are called by mathematicians.

Fractals are almost a term of popular culture because of their intimate connection with chaos theory, the most recent area of mathematics to have caught the public imagination.

Another lecture will be given by the Dean of the Faculty of Informatics, Professor Sid Morris, concerning recent work on topological groups.

Topological groups are a fundamental concept in mathematics and have a very wide range of applications in the physical sciences, especially where questions of symmetry are important.

Other invited lectures will be given by Professor Norm Dancer (University of New England), Professor Michael Mislove (Tulane University) and Dr Vladimir Pestov (Victoria University of Wellington).

Remaining lectures and talks cover a wide range of ideas, some arising out of the work of David Hilbert, one of the most famous mathematicians of the 20th century, and Richard Feynman, the American physicist who had a major impact on the mathematical formulation of particle physics.

The miniconference is supported by the Analysis Research Group at the University of Wollongong and the Australian Mathematical Society.

PUBLIC LECTURE



by
ROBERT F. CHURCHHOUSE,
C.B.E.

(University of Wales, Cardiff)

*'The Achilles heel of the ENIGMA
cipher machine
and some of its consequences'*

The Hope Theatre

University of Wollongong
Tuesday 6 July
7.30 pm

NO NEED TO BOOK

Original farmyard texture book donated



University Librarian, John Shipp and Pro Vice-Chancellor Lauchlan Chipman admired the texture book presented by Sgt Charles Pasefield

Sergeant Charles Pasefield from the NSW Police Service has had a long and varied connection with the University.

He completed a Diploma in Teaching in 1974 at the Institute of Education before the amalgamation with the University, then, after joining the Police Service, he served on the University's Police Consultative Committee.

Sgt Pasefield has taken considerable interest in the Professional Development Centre which has been established in association with the University at the Police Academy in Goulburn. (Campus News 16 June)

Sgt Pasefield has been appointed a Police Educator at this Academy and is moving to Goulburn, but in recognition of his association with the University, he has

presented the Library with the original manuscript of a book he compiled during his teaching days. This book was published as resource material for infants and primary children.

Called 'The Farmyard' it was written and assembled in association with Ronald Foster.

It provides the opportunity for children to explore the texture and feel of materials found in the farmyard.

Actual examples of these materials – fur, feathers and chicken wire – are used in the original manuscript.

Children have to collect these materials (or the next closest thing) for themselves and paste them in the appropriate places in their workbook. The manuscript will be displayed in the Curriculum Resources Centre.

Australia and Japan labour relations seminar

The University of Wollongong Labour History and Industrial Relations Research Program is hosting an international event that will feature eminent speakers from Australia and Japan.

They will attend a conference, the Development and Future of Labour Relations in Australia and Japan, at the university on 13-14 July.

The conference, to be held at the Novotel Northbeach Hotel, is being run in association with the Commonwealth Department of Industrial Relations.

On day one six papers will be presented on the evolution of employer-employee relations in Australia and Japan.

Three papers will concentrate on Australia and three on Japan covering the periods before World War I, between the wars, and after World War II to the present.

On the second day, speakers will concentrate on the legal framework for industrial relations, work and management practices, and the responses of trade unions in each country.

Speakers include: Mr Hajime Matsuzaki (University of NSW); Professor Takao Matsumura, Professor Ryuji Komatsu and Dr Damon Drummond (Keio University); Professor Kazuo Nimmura (Hosei University); Associate Professor Ray Markey, Dr Andrew Wells and Dr Andrew Frazer (University of Wollongong); Associate Professor Tom Sheridan (University of Adelaide); Mr Bryan Noakes (Executive Director, Australian Chamber of Commerce and Industry); and Mr Michael Easson (Secretary, Labour Council of NSW).

Conference registration is \$350. Enquiries: (042) 21 3369.

Help promote Open Day with rubber stamps

Planning and Marketing have four self-inking stamps with the slogan 'Don't Forget Open Day Last Sunday in August'.

If you would like to arrange to use the stamps for letterheads, envelopes, compliment slips etc., the stamps are available now.

Call Margaret Finch, ext. 3248.

Correction

Campus News apologises for some inaccurate reporting in the issue of the 16 June.

Associate Professor Rob Whelan has recently been appointed Professor of Biological Sciences not Head of Biological Sciences as was stated. He has held the position of Head of the Department since 1 January 1993 and will continue to hold this position as well as the Chair.

Aboriginal Education Centre international seminar

To mark the Year of Indigenous People, the Aboriginal Education Centre has organised an international seminar on 26-30 July on Early Childhood Education and Development

The seminar will bring together early childhood education and development specialists from several countries.

It is planned to document the current situation in these countries and social and cultural environments, both mainstream and indigenous.

The seminar will provide a forum for development of policy and practice options for early childhood education and development in a range of envi-

ronments. A framework for training early childhood care, education and development workers will be outlined so aboriginal people have more effective involvement in children's development

Topics to be covered include:

- Education of the spirit
- Indigenous education
- Mainstream education
- Desirable directions in philosophy and practices

The conference convener is Head, University of Wollongong Aboriginal Education Centre Margaret Valadian.

Ms Valadian has a long interest in aboriginal education and in particular the educational development of young children and youth.

The seminar is supported by ATSIC and The Van Leer Foundation.

The cost is \$475 which includes all meals except breakfast. Inquiries: (042) 21 3776. Fax: (042) 21 4244.

Forum on maintenance engineering

The Illawarra chapter of the Maintenance Engineering Society of Australia (MESA) held a forum to discuss maintenance issues last month.

Almost 100 people attended the forum at the University of Wollongong.

The participants came from a wide range of organisations from within the Illawarra and included some of the key maintenance managers from these companies.

The key speaker was Peter Robinson, the national chairman for the society.

Inquiries: Richard Dwight (Interim Chairman Illawarra Chapter), phone (042) 21 3183. Fax 21 3101.

Staff news

Information on the Administration File Server for the assistance of academic staff has been reorganised.

Data is now available under Public Information (access through Chooser, Administration, Public Information).

Under Public Information, select Staff Matters, Academic Staff then one of: Conditions Documents, Policies-Procedures-Information or Pro Formae-Forms

Staff who do not have the necessary access may have information forwarded, on request, by e-mail or as hard copy.

Contact extensions 3117, 3202 or 3934.

SCHOOL OF CREATIVE ARTS INTER-VIDEO

(VIDEO PERFORMANCE)

A Production for the DCA Degree by MIN-HO YOU

Inter-Video is an experimental genre dealing with the relationship of video art and performance art. It aims to show how far we can create inter-action between the performance and the audience through the video medium. Sharing the traditional power of control, the performer aims to work out unexpected and spontaneous relationship with the audience. The actor in the performance is Barbara Biciste

(Text collaboration - Peter Dallow)

Dates: 14 July 8pm 15 July 8pm

Venue: The Performance Space,
University of Wollongong

Admission: Free

This Project is sponsored by SAMSUNG Australia
Assistance from Educational Media Unit University of Wollongong

Council News

The University Council met on 18 June, 1993. The major items for discussion and resolution were:

- Council congratulated Mr Paul Jeans who had been appointed to membership of Council by the NSW Minister for Education. Mr Jeans is the General Manager of the Port Kembla Steelworks and replaces his predecessor at the Steelworks, Mr Graham Parker, on Council. Council also congratulated Mr Christopher Downy, one of the parliamentary members, on his appointment as the NSW Minister for Sport, Recreation and Racing.

- Council expressed its appreciation and gratitude for the outstanding contribution of Associate Professor John Steinke over almost 30 years of service. John Steinke retires this month as Dean of the Faculty of Commerce.

- On the recommendation of the Academic Senate, Council approved the addition of both Pro Vice-Chancellors to the recently revised membership of Senate and its Standing Committee. It also allowed for one member to represent the Learning Development Centre, the Aboriginal Education Centre and the Centre for Staff Development on Senate.

- Council received the Report of the Review of the Centre for Multicultural Studies and noted the action taken by the Academic Senate to implement the recommendations.

- The joint degree in BMATH, BCOMSC in the Faculty of Informatics was approved.

- Council received the printed version of the University's 1992 Annual Reports and the Annual Reports from the Union, the Recreation and Sports Association and the University Union. Council congratulated the associated bodies on their operation.

- On the recommendation of the Union Board of Management, Council approved the award of an Honorary Life Membership of the Union to Mr Noel Diffey.

- A Constitution for the Hall of Residence, International House, was approved.

- Council noted the resignations of the Pro Vice-Chancellor (Academic), Professor Chipman and the Dean of the Faculty of Education, Professor Linke.

- The procedures for the appointment of Deans were amended, specifically to allow for external advertisement of positions as a first step in the process.

Opportunities for business skills training for students

The University is one of the participants this year in the Young Achievement Australia (YAA) Business Skills Program.

Final year students across all disciplines were invited to take part in the first of the programs for university students.

This was a business skills program, the tertiary level program of the YAA venture programs which have been conducted in schools for the last 16 years.

This program teaches the student to run their own small business.

Twenty-two final year students formed the University of Wollongong group which gave itself the business name of Absolute.

Absolute is sponsored by Natural Gas (AGL) but has an advisory team from other businesses.

The advisory team covers finance, marketing, personnel, manufacturing and company secretary.

Representing these areas advising the Absolute business are:

- Paul Howlett, Chief Executive Officer - Kolback Group of Companies, ex General Manager, Resource Division, ITC.

- David Jones, Project Manager-Associated Products-Slab & Plate Products Division, BHP Steel.



The Absolute company with their advisers.

- Nigel Price, Managing Director, Southern Star Duplitek.

- Susan Smith, Director of Finance, University of Wollongong.

- Margaret Williams, ITC.

Careers and Appointments Officer, Patricia Webster, is the co-ordinating adviser of the program.

Ms Webster sees the business skills program as an important career development process for final year students.

Absolute is developing a product which is a packaged body kit suitable for taking to the gym or similar activity.

It will contain towel, comb, shampoo and body gel in a clear plastic draw-string bag. The kit will sell for \$9.95.

Business Skills YAA will be looking for sponsors for 1994. It is hoped to have two groups in progress next year.

Interest in the YAA Business Skills and inquiries about this year's product can be made through the Careers and Appointments Service, ext. 3324/5.

Three attend Paris virology conference

Three members from the Biological Macromolecules research program in the Department of Biological Sciences attended the Fourth International Cytomegalovirus Conference, held at the Pasteur Institute in Paris in April.

Cytomegalovirus (abbreviated as CMV) is an important human pathogen, which infects up to 80 per cent of the population.

In healthy people the infection is cleared by the defence system, but the virus may remain in the body in a dormant state.

Impairment of the defence system by conditions such as AIDS, cancer or the use of immunosuppressive drugs for organ transplantation, usually results in reactivation of the virus infection, which may cause severe disease or even death.

A Senior Research Officer in the department, Salwa Woodroffe, delivered an oral paper in addition to her poster presentation on the effect of human CMV infection on the function of endothelial cells, which line the blood vessels of the body.

Ms Woodroffe has demonstrated that CMV is able to multiply within endothelial cells and alter the levels of cytokines produced by these cells.

Cytokines are proteins which co-ordinate our immune response

Thérèse Savage-Marengo, a Research Associate and PhD student, and Glenda Sullivan-Tailyour, an Honorary Research Fellow, presented posters on the interaction of human CMV with white blood cells and lung cells respectively.

A study of CMV infection of white blood cells is crucial to the search for the site(s) and mechanism of CMV replication and dormancy in the body.

Ms Savage-Marengo showed that although CMV binds readily to monocytes in the blood, only low amounts of virus actually enter these cells.

Since monocytes play a central role in the immune response to foreign invaders, efficient binding of the virus to these cells could account for the ability of CMV to suppress the normal defence mechanisms and allow secondary infections to take hold.



University Centre News

- The University Centre in Clarence St, Sydney has an IBM-compatible PC and a Macintosh computer for student use.

The PC has Microsoft Word for Windows, Excel for Windows and Wordperfect for Windows.

The Macintosh has Microsoft Word, Excel and PowerPoint. Both computers have Telnet software which allows access to your university 'home' computer.

Bookings are essential, for more information and bookings telephone (02) 370 6632.

- The Education and Health display at The University Centre features a display from the University of New England called 'Images of Nursing'.

The subject is an unexpected combination of art and nursing that expresses the views of health and illness that cannot be gained from biologically based studies.

LONG GALLERY

Enquiries 21 3996. Building 25.
Opening hours Mon-Fri 9am-4pm.
Sun 1.30-4pm. Visit the Gallery
Shop.

Until 20 June: 'Them and Us'. **Environmental exhibition**, 'Aquarelle' watercolours by Jelle van den Berg and visual poetry exhibition.

GENERAL

3-4 July: **Annual gathering of all Muslim students** will be held at the new Mosque near the University at 9 Foleys Rd, Gwynneville

5-16 July: **Interactive multimedia intensive workshop** presented by the Interactive Multimedia Group and Education Policy Program, Faculty of Education. Cost \$2500. Registration and information from Margaret Cameron. Fax (042) 21 3892. Phone (042) 21 3971.

6 July: 7.30pm **Public lecture** by Professor Robert Churchhouse, The Achilles heel of the Enigma Cypher Machine and some of its consequences. Venue: Hope Theatre. No bookings necessary. Professor Churchhouse is from the University of Cardiff. This lecture is in conjunction with the Annual Conference of the Australian Mathematics Society, being held at the University.

26 July: **Biological Sciences-sponsored evening seminar**. The Beckman Seminar on gene therapy given by Dr Wayne Gerlach (R.W Johnson Pharmaceutical Research Inst., Sydney) 'Genethrapy for virus diseases'. 8pm Bld 35 R105

26-30 July: The Aboriginal Education Centre is marking the International Year of Indigenous People with a **seminar on Early Childhood Education and Development**. Phone (042) 21 3776.

7 August: **Wollongong Sym-**

What's On

phony Orchestra 'Nights at the Opera' Tickets: Illawarra Performing Arts Centre.

9 August: **Biological Sciences-sponsored evening seminar**. The Progen Seminar on experimental leukemia given by Dr Geoff Symonds (R.W Johnson Pharmaceutical Research Inst., Sydney) 'Bone Marrow repopulation to study oncogene-induced leukaemia'. 8pm Bld 35 R105

29 August: **University Open Day**. Everything is open and everyone is welcome

10 September: **Postgraduate Research Student Open Day**. Union Function Centre

28-30 September: **1993 ANZAAS Congress**. Curtin University, Perth.

Illawarra Committee for Overseas Students events for this year are: 31 July and 7 August, Snowy Mountains; 18 September, Blue Mountains; 26 and 27 September, Canberra; 16 October, Sydney Aquarium and harbour cruise; 4 December, Australia's Wonderland. Tickets and details are available from ICOS office, 3rd Floor, Union Retail Centre on Tuesday, Wednesday and Friday from 9.30am to 2pm or phone 21 3158.

10 October: **Annual University Service** at 7pm at St John's Anglican Church, Eastern St, Gwynneville

9-10 November: **International Conference on Islamic Banking**, organised by the University's International Business Research Group and sponsored by Al Baraka Investment And Development Co., Jeddah, Saudi Arabia. Venue: The University Centre, Sydney. Enquiries: Dr Nelson Perera, phone 2134028

Considering further study or just somerecreational reading? Visit the **University Graduates bookshop and gallery book sale** at Campus East, Fairy Meadow. The stock of used books covers: Science & Engineering, Social Sciences, Arts & Music, Education, Fiction & Non-Fiction, Young Readers' Stories & Classics. Open every fourth Saturday and Sunday of the month from 1-5pm, the bookshop is located at Cowper Street, Fairy Meadow (opposite the Science Centre). Your donations of any material are invited. These may be left any weekend afternoon at the Science Centre (Please mark 'Booksale'), or The Library or Students Enquiry Desk during the week.

Animal Experimentation Ethics Committee meeting dates, with agenda deadlines in brackets, are: 9 August (30 July); 22 November (12 November).

Human Experimentation Ethics Committee meeting dates with agenda deadlines in brackets are: 13 July (29 June); 24 August (10 August); 5 October (21 September); 16 November (2 November); 21 December (7 December).

Undergraduate Studies Committee meeting dates, with agenda deadlines in brackets, are: on the following dates: 14 September (31 August); 9 November (26 October). Submission to Trevor James, ext. 4457, by 5pm of deadline date.

Stop Press

Campus News is published weekly on Wednesdays. Send material, preferably by Microsoft Mail or on disk, to Gillian Curtis (042) 21 3110 by noon on Monday of the week before that of publication