

CAMPUS NEWS

SBS agreement brings new era in postgraduate education



SBS presenter Andrea Stretton, Vice Chancellor Professor Ken McKinnon, SBS Managing Director Malcolm Long and Pro Vice-Chancellor Professor Lauchlan Chipman at the launch of the Consortium in the SBS studios



At the end of August SBS viewers throughout Australia will witness the beginning of a new chapter in Australian higher education.

They will see the first episodes in three postgraduate professional courses offered for credit by the University of Wollongong.

The fields represented are Health Management, Total Quality Management and Electronic Data Interchange.

They have been produced collaboratively in Wollongong using the combined expertise of SBS production and technical staff, and senior academics in the University of Wollongong's Faculties of Health and Behavioural Sciences, Engineering, Informatics, and Commerce.

An agreement signed by the Man-

aging Director of SBS, Malcolm Long, and the Vice-Chancellor, Professor Ken McKinnon, will make this new venture possible.

Its purpose is to facilitate the delivery of the most advanced education at the professional and graduate level throughout Australia.

At a launch on 9 July at SBS the Vice-Chancellor said: 'The people we plan to reach are those in whom this nation has already made a considerable educational investment.

'We are confident that, at the price of a relatively small additional investment, their knowledge and skills can be brought forward to what by world standards are the leading edges of modern industrial, commercial, and professional requirements.

'We will thus not only assist them

in advancing their professional careers, but at the same time enhance their capacity to contribute to Australia's economic revitalisation.

'The people we aim to reach are not only scattered throughout Australia but are in many cases highly mobile.

'It is impractical for them to make the time and place commitments of regular attendance at a single University campus for two or three evenings a week, over what may be as many as four to six years.

'They are people who have already proven they have both the personal motivation and the intellectual capacity for successful university study.

'By using the combined resources of SBS, the national telecommunications grid, and high quality printed

Continued page two

Telecom Education Fellowships

Telecom Australia-Research Laboratories are currently advertising a scholarship known as the Telecom Australia Education Fellowship.

These are aimed at undergraduate students in their penultimate year of study in areas of Engineering (Electrical & Computer), Mathematics and Computer Science.

Telecom Australia has sent the departments of Electrical Engineering, Computer Science and Mathematics relevant information and applications forms.

The University is working closely with Telecom to develop the Communication Centre and this appears to be a further opportunity to further our relationship.

Applications for the Fellowships close on 30 July.

Earthquakes in Japan

The recent Japanese earthquake highlighted the significance of a major theme of the Australasian Conference on the Mechanics of Structures and Materials.

The theme, the dynamic response of buildings, received a great deal of attention by speakers as a consequence of the Newcastle earthquake and the damage it caused.

The conference, the 13th of a series, is held every two years at different universities throughout Australia and New Zealand.

On this occasion the conference was organised by the Department of Civil and Mining Engineering, and was held from 5-7 July at the University.

More than 130 delegates attended, with representatives coming from various countries: Canada, USA, Ire-

land, UK, Japan, Korea, Malaysia, Singapore, Russia and Papua New Guinea.

Australian Press Council Award

The Australian Press Council is offering an award for the best researched paper of 10,000 words or more on a topic or topics clearly related to the objectives of the Press Council.

These, briefly, are to maintain the character of the Australian press in accordance with the highest journalistic standards, to keep under review developments likely to restrict the supply by and to the press and to make representation concerning freedom of the press to the appropriate bodies.

For details and entry forms contact the Executive Secretary of the council. Ph (02) 2611930

Union Art Award: entries wanted

The University of Wollongong Union is offering the Fourth Annual Acquisitive Art Award in three categories: Two Dimensional Art, Photography and Three Dimensional Art.

Entry forms from Jan Miller, Union Information Office. Closing date 4pm 23 August.

Modern history at Graham Park

A modern history study day for Years 11 and 12 is being held at the Graham Park Campus at Berry on Saturday July 31.

School-based presenters and University lecturers will be joined by a representative from the Navy who has had recent experience in Indo-

China to give fresh insights to the HSC History syllabus and sharpen up student's study skills.

More news from Berry

The University Foundation has awarded honorary membership to Greg Newton who has been conducting a free introductory course to the Apple McIntosh Computer at the University's Graham Park Campus.

The Executive Director of the foundation, Mr Peter Rose, made the presentation to Mr Newton during his computer class and paid credit to the contribution he had made to the University and to students studying at the Graham Park Campus.

Lovibond Prize

Entries are invited from young Australian scientists for the annual Syd Lovibond Prize which carries an award of \$1000.

Submissions should take the form of an essay of approximately 5000 words.

This should be a report of original research relevant to the treatment of drug or alcohol problems, a review of the literature of a specific topic in this area of research, or a critique of theory and/or methodology based on current research in the field.

The academic discipline of the entrant, and his or her essay, may be anthropology, medicine, physiology, psychology, sociology, or any related discipline.

The scientist must be under 30 at the time of submitting the entry. Deadline for entries for the prize is 1 November. Send entries to: Libby Barron, Syd Lovibond Prize, NDARC, PO Box 1, Kensington NSW 1033. Enquiries: (02) 398 9333

New era in postgraduate education

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materials, we are able to deliver to their homes or work places the resources they need to develop their knowledge and skills to meet the new demands an increasingly internationalised world economy is placing upon all of us.'

The three courses will be followed next year by additional University of Wollongong graduate courses probably in the areas of Telecommunica-

tions Engineering, Journalism, and Multicultural Studies.

They will be joined progressively by graduate courses from 16 other Australian universities.

A consortium is being formed and has been meeting in Wollongong for the last three months.

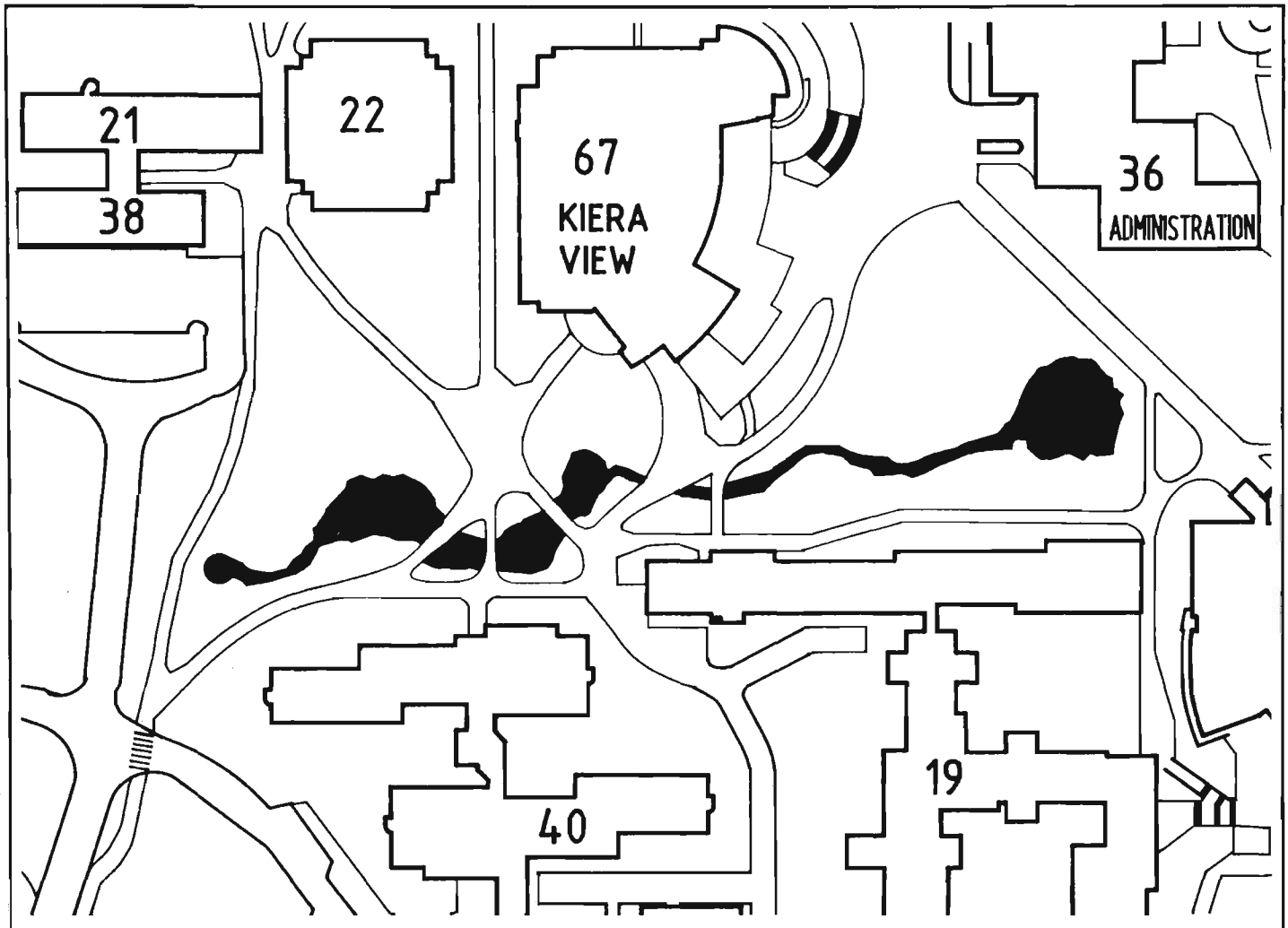
This consortium will bring together the expertise of these universities to deliver the best of Australian professional and graduate education on a national basis, through SBS.

The practicalities are also being explored of migrating many of the courses to pay-TV or some other narrowcast option.

One of the founding principles of the consortium is maximum cross-accreditation, and mutual recognition for credit purposes of our respective contributions.

The national headquarters of the consortium will be located in the new Communications Centre on the University of Wollongong campus.

Work commenced on Keira View ponds



Part of the landscaping and flood mitigation works associated with the new Keira View Building will be an additional ponding system.

The system will be located between the new building to the north and the Commerce Building and Building 19 to the south.

Manager, Buildings & Grounds, Kevin Turnbull, said excavation work began on 19 July.

'The ponding system will consist of

nine ponds of various sizes linked by a continuous running stream,' Mr Turnbull said.

'The water course will start northwest of the Commerce Building and will link the series of ponds finishing with the main pond between the Administration Building and the eastern end of Building 19.

'The edge of the stream will be of natural rock and overhung by turf.'

He said flat timber bridges will be

introduced where footpaths cross streams.

The deeper termination pond will have dressed stone steps formed on the north west side to provide approach and seating near the water and a formal foreground to the backdrop of the Keira View Building.

'This project is another stage of the beautification of the campus which is making us the envy of many,' Mr Turnbull said.

ITC signs landmark enterprise agreement

Earlier this month the Illawarra Technology Corporation signed a landmark enterprise agreement with two of Australia's biggest unions and its non-unionised workforce.

The agreement covers about 80 engineering, scientific, research, clerical, secretarial and management staff employed full time by ITC.

It was signed by the Automotive Metals and Engineering Union (AMEU), Federated Clerks Union (FCU) and ITC's management and supervisory staff works committee.

ITC Managing Director, Mr Jim Langridge, said the agreement was one of the most important developments in the corporation's 12-year history.

'I believe this is the first time in Australia that a university-based company has negotiated an enterprise agreement,' he said.

'ITC is very serious about being an internationally competitive enterprise. Our success in achieving this aim depends increasingly on communication and cooperation with our employees.'

'1993 - Big Brother is still watching you'

Professor of Computing Science, Professor Jennifer Seberry, is presenting the next of the Graduate Faculty's public seminar series on 4 August. at 6.30pm.

Entitled '1993 - Big Brother is Still Watching You', the seminar will be held in the University Union Function Centre at 6.30pm.

The aim of the series is to provide opportunities for people in Wollongong to hear, in lay terms, about the outstanding research being undertaken at the University.

Professor Seberry said many billions of dollars constituting about four times the world's money supply is transmitted through the international swift world wide banking money transfer network every day.

'The banking and communications industries are the biggest commercial users of Cryptography in the world,' she said.

'We all use magnetic strip cards to do our banking and Eftpos transactions.

'However there are other cards, such as Smart Cards, or memory cards, which contain electronic chips which have far greater potential for storing information and facilitating modern life style.

'Recent developments in global services for mobile communications are using Smart Cards to enable telephone users to use the mobile telephone anywhere in the world and be connected as though a local user and be billed for these facilities to their home telephone account.'

She said the telephone system can also find the holder of this Smart Card to connect calls anywhere in the world.

'In the past we have seen that many mobile telephone conversations have been recorded and replayed by television or radio stations to the embarrassment of the persons who have made these telephone calls,' she said.

'With the use of Smart Cards it will no longer be possible for a member of the public to intercept mobile telephone conversations because these will all be encrypted.

'This poses problems for defence

Professor
Jennifer
Seberry



departments and police departments of individual countries.

'Some of the issues that become involved when we have protection of information are issues such as national defence, the prevention of crime, privacy issues, scientific issues, moral and ethical issues.

'There have been new developments in the United States, Europe and Australia to ensure that the government, the defence departments and the police departments can decrypt any message sent in the banking network, the telephone network or indeed in any commercial situation.'

The University of Wollongong Computer Security Program is working to understand and build cryptographic algorithms and cryptographic protocols which may be of use to secure information, confidentiality and privacy of persons and private companies.

Before coming to the University, Professor Seberry was Professor of Computer Science at University College, Australian Defence Force Academy where she set up a Cryptography and Computer Security Group which was the nucleus for the

Centre for Computer Security Research incorporating the Centre for Communications Security Research.

Professor Seberry is a Fellow of the Australian Computer Society, a Fellow of the Institute of Mathematics and Its Applications and a Fellow of the Institute for Combinatorics and Its Applications.

She is a member and elected director of the International Association for Cryptologic Research, a member of the Association for Computing Machinery and a member of the Institute for Electrical and Electronic Engineers.

Especially interested in Authentication and Computer Security, Professor Seberry and her colleagues have recently received considerable media attention for the Australian Telecommunications and Electronics Research Board financed research into 'anti-hacking systems'.

Professor Seberry is widely published and has consulted for Telecom, the Commonwealth Bank, State Bank of NSW, to name a few.

To assist with catering arrangements, contact Jacqueline King, phone 214323 to let her know if you will be attending this seminar.



Dr Wee King Soh (third from left) with visiting scientists and postgraduate students

A group of scientists and academics from Singapore visited the University in June.

They were Drs Lam Khin Yong and Yeo Khoon Seng from the National University of Singapore (NUS), Peh Kiam Choon (Singapore Navy) and Png (Eric) Eng Kwee (Singapore Defence Science Organisation).

The visitors are members of a consortium at the Department of Mechanical and Production Engineering which is funded by the Singapore Defence Science Organisation to research into underwater explosion and shock damage on ship structure.

The aim of their visit to Wollongong is to obtain detail information on the research of underwater explosion carried out by Dr Wee King Soh from the Department of Mechanical Engineering.

On the visitors' requests, Dr Soh organised a series of seminars and discussion sessions for their five-day tour.

The topics of discussion cover the experimental technique used in Wollongong, the interpretation of image data, computational technique and underwater explosion bubble dynamics.

One day was spent in the Material Research Lab (DSTO, Victoria) on mine warfare, ship vulnerability,

It's all about underwater explosions

shock loading of materials and shock standards for war ships.

There is sufficient academic interest between the two groups (at Wollongong and at NUS) to collaborate for research into underwater explosion.

Dr Soh is invited to visit NUS this September and will take this occasion to complete the discussion on

the guidelines for the research collaboration.

The research into underwater explosion at Wollongong is in collaboration with Professor John Blake (University of Birmingham, UK), Dr Dave Ritzel (the Canadian Defence Establishment) and Drs Don Richardson and John Best (Material Research Lab, DSTO).

Centre for Staff Development Seminar

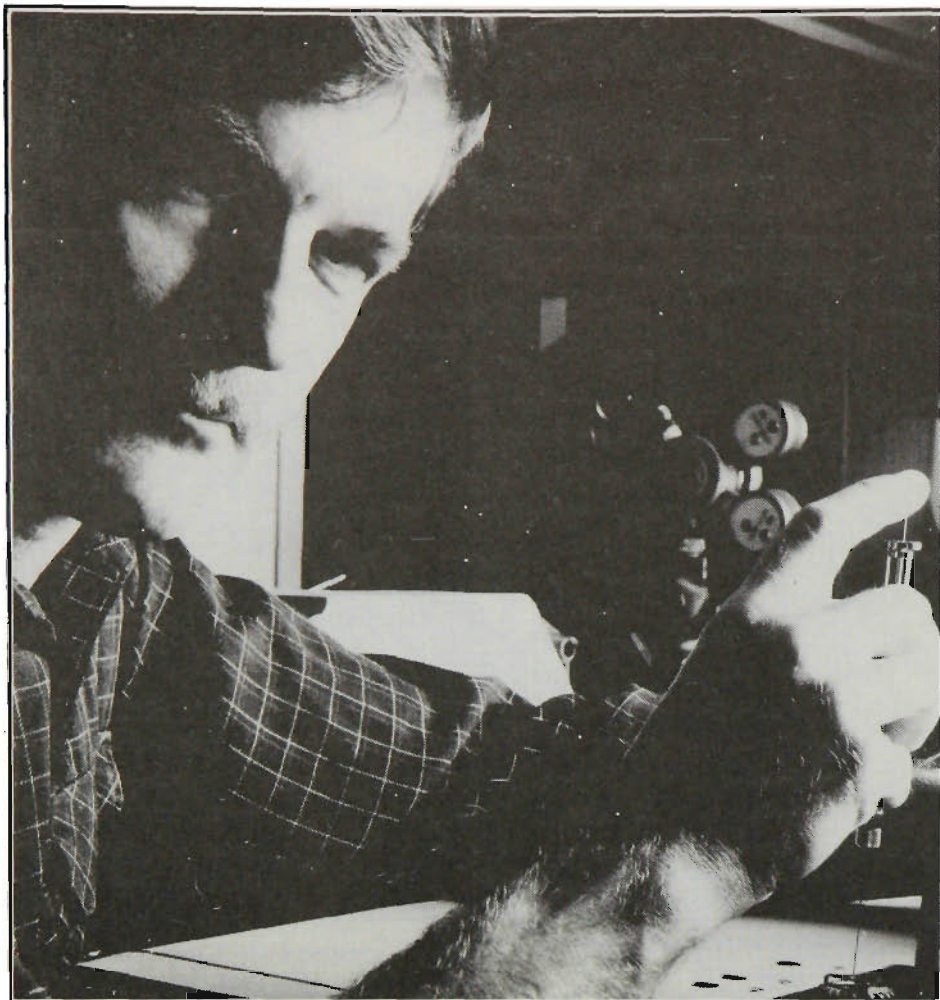
COURSE ADVERTISING AND PROMOTION

9 August 11am-2pm (light lunch provided)

This seminar is designed to assist Faculties and Departments to promote their courses in the way they wish, and to make the most of their advertising budget. Topics will include: Targeting your Audience, Advertising in the Print Media, Market Research, Preparing Copy and Using University Resources.

Presenters: Austin Knight Advertising Agency
Staff of Planning and Marketing

To register: please fill in an application form available from the Centre for Staff Development, ext. 3618, or from the CSD file server.



Oils ain't oils

Most people know that too much saturated fat is not good but less know that polyunsaturated fats are essential and important components of your diet.

Kerry Withers, pictured above injecting a sample into a gas chromatograph to determine its fatty acid composition, has just submitted his Ph.D. thesis which has examined the potential beneficial role of polyunsaturated fats in alleviating the worst effects of protein-energy malnutrition in rats.

Malnutrition in humans is a major global concern these days and for theoretical reasons Mr Withers and his supervisor, Associate Professor Tony Hulbert, hypothesised that a diet deficient in energy and protein but containing polyunsaturated fats would result in less harm than a deficient diet in which the fats were saturated.

Mr Withers, who previously had done an M.Sc. (Hons) researching thyroid function in small marsupials, decided to examine this hypothesis in rats for his Ph.D. research.

He found that rats on the diet containing polyunsaturates grew more and were able to use their scarce dietary protein more efficiently than those rats whose dietary fats were saturated.

During malnutrition a substantial amount of water is retained in tissue spaces outside of cells (which is why malnourished children appear to have swollen bellies).

Mr Withers found that this was reduced in his rats that were malnourished when their dietary fats were polyunsaturated.

There are important potential implications of his research on rats for humans in treating malnutrition and thus in the nature of the food aid we should provide to other parts of the world.

SALE OF EQUIPMENT TENDER 93/07

The University has a quantity of computer equipment for sale by Tender.

Equipment includes Apple Mac Plus computers, Abulatt & Sperry PCs and acoustic hoods.

Contact Melisa Stocks on phone 21 3219 for full tender details.

Dr Harland's controversial new book released

English Department lecturer Dr Richard Harland has just had published a controversial book on structuralism and poststructuralism.

Beyond Superstructuralism: The Syntagmatic Side of Language was published by Routledge in the UK and Australia, on 8 July.

It will be published in the US by Routledge in October. The Australian paperback will sell for \$27.95.

Beyond Superstructuralism follows Dr Harland's previous theoretical book, *Superstructuralism*, which sought to unfold the basic principles of structuralism and post-structuralism, especially as regards their understanding of language.

The book has since sold more than 10,000 copies in the UK and US, receiving favourable reviews from many quarters.

Superstructuralism represents a rejection – or at least, an outflanking – of structuralism and post-structuralism. Dr Harland argues that structuralism and poststructuralism are limited in their understanding of language, and proposes instead the radical alternative of a syntagmatic theory.

As defined in linguistics, the syntagmatic dimension is the horizontal dimension of words side by side in a sentence.

According to Dr Harland, the nature of meaning is transformed and changed in kind when words combine together syntagmatically.

Such an approach goes against not only the focus upon single words in structuralism and poststructuralism, but also against the focus upon propositions and contexts of use in Anglo-American philosophies of language.

The key theoretical ideas of *Superstructuralism* are developed in various directions in later sections of the book.

Dr Harland has been lecturing in the English Department at Wollongong for seven years.

He teaches fantasy, contemporary writing, and American literature. He has been working on *Superstructuralism* for five years, although some of the ideas in the book go back more than 20 years.

Exciting new degree in Telecommunications Engineering

The Department of Electrical and Computer Engineering is offering a new degree course in Telecommunications Engineering in 1994.

The Bachelor of Engineering (Telecommunications Engineering) will supplement the Bachelor of Engineering courses (in Computer Engineering and Electrical Engineering) which the Department has been running for more than a decade.

The new course will share much in common with the existing courses, but will further provide students with a solid foundation in the fundamentals of telecommunications.

The course covers the traditional areas of signal transmission, antenna design, and analog and digital communications, as well as new and emerging areas of importance such as network engineering, computer communications, and multimedia communications.

Two well-equipped telecommunications laboratories have recently been established in the Department to enable students to explore, at first hand, these exciting topics.

Further details of the Bachelor of Engineering (Telecommunications Engineering) can be obtained from Professor Gary Anido in the Department of Electrical and Computer Engineering.

According to Professor Anido, telecommunications is a technology as important as computing to many industries.

'Every company engaged in finance, manufacturing, transport, and

engineering has the need to exchange information as quickly and efficiently as possible,' Professor Anido said.

'Many industries are global in their scope, requiring next to instant access to data from around the world.

To cater to such requirements, a great many companies have established extensive telecommunications networks and infrastructures which represent both a large corporate asset, and a source of jobs for professionals with telecommunications skills.

'The University of Wollongong has developed an enviable reputation in Telecommunications over the past several years.'

He said the Department of Electri-

cal and Computer Engineering has an Advanced Telecommunications Research Program which focuses on high-speed, intelligent networks and multimedia technologies (including speech and image coding).

Leading-edge research work is being undertaken for many telecommunications companies such as Ericsson, AWA and Telecom Australia.

Several commercial organisations have also established telecommunications R&D centres, such as the NorTel Technology Centre, at the University to take advantage of its rich telecommunications environment, he said.

Three attend Istanbul business and economics conference

Three members of the Faculty of Commerce attended the international conference on Business and Economic Development in Middle Eastern and Mediterranean Countries in Istanbul from 5 - 7 July.

The conference was attended by 53 academics from various parts of the world.

Associate Professor Mokhtar Metwally (Department of Economics) played the role of the academic co-ordinator of the conference.

He also chaired two sessions and presented a paper on *Effect of decline in oil prices on the import-income relationship of members of the Gulf Co-operation Council*.

Dr Nelson Perera (Department of Economics) delivered a paper on *The demand for money in the Members of the Gulf Co-operation Council*.

Ms Barbara Cornelius (Department of Accountancy) presented a paper on *The agency role of covenants in venture capital investment agreements*.

Out of the 33 papers accepted for presentation to the conference, only 10 were selected for publication in the conference proceedings.

The papers by Associate Professor Metwally and Dr Perera were selected.

The World Health Organisation has chosen 'Time To Act' as the theme for World AIDS Day 1993 on 1 December.

It is a rallying call for urgent action against HIV and AIDS, not only on World AIDS Day itself, but on every day of the year.

'This theme is inspired by the marvellous work of dedicated people already working to slow the spread of HIV and to care for those with AIDS,' Director of the Global Programme on AIDS, Dr Michael H. Merson, said.

'But the world must do more.

'Although we know how to care for

EEO News

people with AIDS even with limited resources, this care is often lacking. If we want to alter the course of this dreadful pandemic, the time to act is now.'

An estimated 13 million men, women and children have already been infected with HIV.

Every day, an estimated 5000 people are newly infected. Without urgent action, the total may raise to 40 million by the end of the century.

World AIDS Day is the culmination

of months of activity around a given theme.

In 1991, it was Sharing the Challenge; in 1992, A Community Commitment.

With Time To Act, WHO seeks to add a sense of urgency to both these ideas.

Every community and every individual should realise that it is time to take up the challenge of HIV and AIDS.

For information on the University's AIDS Policy and AIDS Education call the EEO Unit on 3917 or 3030.

Dr Peg MacLeod
Equal Opportunity Co-Ordinator

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.

Until 20 August: **Indigenous Peoples Week Art Exhibition** by Trish Woods, Jeffery Timbery, Kevin Butler, Robert Storm and Coomaditchie Artists Co-op. Bistro Lounge, Union Building 2- 4pm Monday -Friday

7 August: **Wollongong Symphony 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 leukemia'. 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**

What's On

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 some recreational reading? Visit the

Campus Alumni 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: 31 August (17 August); 9 November (26 October). Submission to Trevor James, ext. 4457, by 5pm of deadline date.

IACT is now a department

The Information and Communication Technology Department is the newest department within the Faculty of Informatics at the University of Wollongong.

As a unique department within an Australian university, the IACT Department sees its location in the faculty as an innovative opportunity for teaching and research.

The Department is pioneering a new multidisciplinary approach to the study of Information Technology.

The combination of a complementary technological and social science expertise in the Department will provide graduates with an education that is unequalled in Australia.

Research is viewed as an integral part of the Department's teaching.

In an area of rapid development and change the Department recognises its research enriches its teaching.

It is committed to advancing the field of knowledge in information and communication technology.

Campus News is published weekly on Wednesdays. Send material, preferably by Microsoft Mail or on disk, to Gillian Curtis (042) 21 31 10 by noon on Monday of the week before that of publication

Stop Press

A demonstration of Computer Assisted Learning material developed for

Chemistry, Computer Science Education, Electrical Engineering French, History, Japanese Mathematics, Physics

will run from 9.30-4.00
Friday 30 July
in the ITC Conference
Rooms 1, 2 and 3

For further information contact
Beth Cavallari on 21 3834