University of Wollongong

THE NEWS

OCTOBER 1997

For the campus and the community

Chancellor Mr Michael Codd

Graduation first role for new Chancellor

Michael Codd took up the role of Chancellor of the University of Wollongong on 1 October, just in time to officiate at the October graduation ceremonies.

Mr Codd worked for 30 years for the Australian Government serving in the roles of secretary to the Department of Industrial Relations, chairman off the Industries Assistance Commission and secretary to the Department of Community Services.

In 1986 he became secretary of the Department of the Prime Minister and Cabinet and secretary to Cabinet and held that post until he retired in 1992.

He is a director of several companies including Qantas, Telstra, MLC Limited, The Australian Nuclear Science and Technology Organisation (deputy chair) and the Menzies Foundation (deputy chair) and is senior adviser to the Asia-Australia Institute.

Since 1992 Mr Codd has provided consulting services to both public and private sector organisations and has conducted several advisory reviews for the Australian Government.

He is conducting an enquiry for the NSW Government as a commissioner under the Environment Protection Authority.

Mr Codd was appointed a Companion of the Order of Australia in 1991.

Breakthrough in cancer radiation treatment

RADIATION therapy has always proved one of the most effective weapons in the medical war against cancer, but difficulties in measuring and controlling dosage have so far lessened its range and effectiveness.

But now the University of Wollongong Radiation Physics group, in collaboration with Professor Barry Allen, Dr James Boehm and Nigel Freeman from St George Cancer Care Centre, and Associate Professor Peter Metcalfe, Martin Carolan and Martin Butson from the Illawarra Cancer Care Centre, have begun to move past these limitations with a technological breakthrough set to revolutionise the treatment of some forms of tumour - including breast cancer where precise dosage is vital to treatment.

The most important aspect of radiation therapy is the dosage control - an overdose will kill healthy cells while an underdose will have little effect.

In order to monitor this dosage, the laser beam must pass through a

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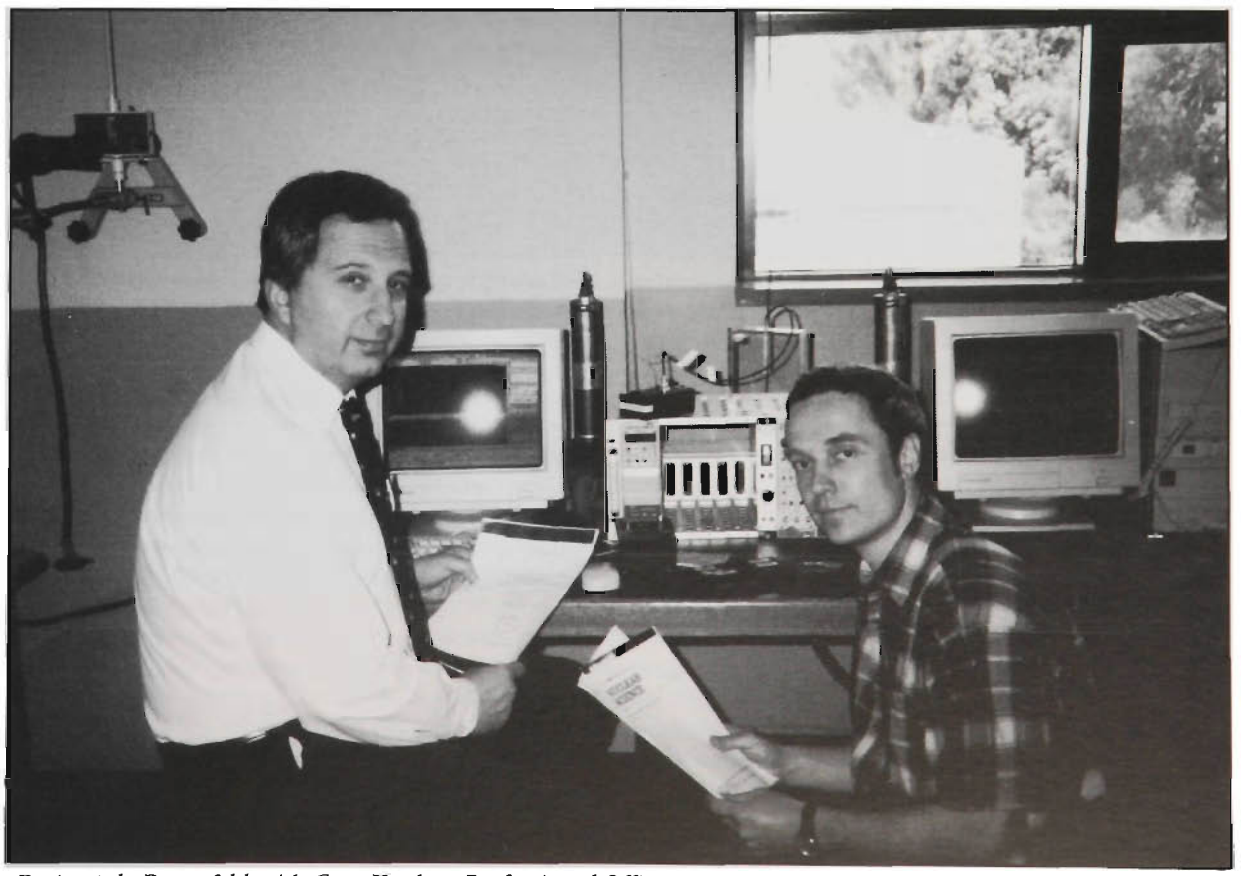

Dr Anatoly Rozenfeld with Greg Kaplan, Professional Officer and PhD sstudent in the Radiation Physics group at the University of Wollongong

Visit by Consuls General

TWENTY-FIVE Consuls General inspected the University and its research facilities as part of a visit to the region to investigate potential trade and research opportunities. The visit by the senior representatives for trade and development was sponsored by State and Regional Development in conjunction with the Illawarra Regional Development Board. After lunching at the City Council Chambers, the consuls were greeted by the Vice Chancellor.

Library Link

WORK began on the Union Library Link project on Monday 1 September.

The University appointed AW Edwards, who have just completed work on the General Academic Building 3, to undertake the role of construction manager for the project.

Work should be complete by 27 March 1998.

UniCentre Awards

CONGRATULATIONS to the following winners of this year's Unicentre Annual Awards which were presented during the annual dinner.

Shoreline Pillay (UniCentre Staff Award), George Takas (Voluntary Service Award) and Damien Cavil (Volentary Service Award).

The UniCentre would like to thank all staff for their collective efforts during the previous year.

The News

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News Briefs

Super award

PhD CANDIDATE X.L. Wang, Associate Professor H.K. Liu and S.X. Dou of Centre for Superconducting and Electronic Materials received the workshop materials performance award from the Program Committee of the 1997 International Workshop on Superconductivity.

This award is in recognition of superior performance in the category of single crystals and strong pinning specimens for the unique spiral growth Bi-2212 single crystal.

Wang developed the flux technique to grow the 2212 single crystals which has demonstrated spiral growth patterns for the first time.

The spiral grown crystals show a strong improvement in flux pinning, which leads to a significant increase in critical current density.

The discovery will have important implications on high temperature superconductor (HTS) applications as the major barrier for HTS commercialisation has previously been the low current density.

Breakthrough in cancer radiation treatment

From page one

sensor which, unfortunately, disrupts the beam to some degree and makes exact measurements difficult.

The system developed by the Radiation Physics group uses a semiconductor sensor one micron thick, as opposed to the existing systems whose sensors can be measured in centimetres, so the disturbance to the beam's path is minimised.

Extensive research involving Illawarra and St George Cancer Care Centres has shown that this new system allows a much more precise delivery of the dose.

The first prototype is already in place at St George Hospital - ordered by US company VARIAN Oncology System Ltd, which will monitor its progress closely.

Three other Australian hospitals are preparing to obtain the equipment.

The concepts developed with semiconductor dosimetry opened a myriad of possibilities concerning the control of tumours and cancer treatment.

Further research into radiotherapy on a cellular level - microdosimetry - has led to the development of new approach to the modelling cancer cells with the silicon cells of similar size as a biological cell.

According to the Wollongong team, this kind of radiation dosimetry is unparalleled in the medical world.

Recent experimental testing on the new radiation oncology modalities in Detroit (fast neutron therapy) and Brookhaven National Laboratory, USA (boron neutron capture therapy) demonstrated great advantage of new instrumentation.

Children may be the next to benefit from these new advances.

The Brookhaven National Laboratory have commissioned the group to continue development of the technology for use in treatment of brain tumours in children.

Traditionally, radiotherapy has not been a treatment option, as delivery would kill the brain as well as the tumour.

Microbeam radiation uses an array of very narrow uniplanar 30 microns synchrotron radiation beams from the which deliver the required dosage to the tumour, but leaves the surrounding tissue healthy.

New semiconductor sensors developed in Radiation Physics group are uniquely fitted for dosimetry of such narrow radiation beams.

The group was invited to present two papers with these results in September at the World Congress on Medical Physics and Biomedical Engineering in France.

Farewell Chancellor Hope – the students' friend

ON Thursday 18 September, hundreds of people, members of the University community and the general public, joined the Vice Chancellor Gerard Sutton as he farewelled Dr Robert Marsden Hope – the first and only Chancellor of the University since its inception 22 years ago.

At 78, Dr Hope is going..."not because I want to but because it is time to go".

Chancellor from 1975; Dr Hope thanked the company for the opportunity to oversee a "small little-known University which grew into one of the best universities in the country".

Dr Hope brought to the University the wisdom, attention to detail and connections that were the result of an illustrious career as a Supreme Court Judge and Royal Commissioner – he led the 1983 inquiry into ASIO and the Coombe-Ivanov affair.

Despite his notable contributions to the University, he was quick to highlight the different strengths of the three Vice-Chancellors he appointed.

Michael Birt, who did very well at the difficult job of turning the original college into a University, Ken McKinnon, who had the "wonderful vision and drive" and who made the people at the University realise what could be achieved and lastly, "Gerard [who] is taking the University ahead, but also working on consolidation of what has been achieved, and that is very important".

In 22 years, the Chancellor has never failed to put his students first.

He has personally farewelled some 23, 000 graduands, making him, in the words of Vice-Principal James Langridge "a key figure in the largest longitudinal study of graduate employment".

Dr Hope saw his role as one of offering advice, warnings, generally monitoring the University's progress, attending functions and getting to know the students.

He maintained that "getting to know students is very important ... so that they feel they are not just a part of a sausage machine operation".

Professor Sutton said that Dr Hope had played a "crucial role as the perfect Chancellor; being a Chancellor and Chairman but not a CEO – the evil eye at board meetings yet offering sage and timely advice".

In an emotional farewell address, the Vice-Chancellor thanked Dr Hope for his guidance and commented that Dr Hope and his wife June would be looking at ways of continuing their association with the University.

In reply, Chancellor Hope assured everybody that he would "still be sneaking back to take a look".

Lifting University's profile in Vietnam, ASEAN

Former Vietnamese students who studied at the University from 1993-1996 with Mr Downer (back row) and left of him, Dr Cornelius, Professor Castle and Professor Tran Van Hoa

THE University's international profile received high prominence at an official function for former Vietnamese students studying in Australia.

The function, at the Vietnamese Government Reception Centre, was organised by the Australian Embassy and the International Education Foundation in Hanoi.

Present were the Minister for Foreign Affairs and Trade, Mr Alexander Downer; the Australian Ambassador to Vietnam, Ms Susan Boyd; former Vietnamese Ambassador to Australia, Mr Chau; and Chairman of the University Senate and the Economics Department, Associate Professor Rob Castle.

Associate Professor Tran Van Hoa (Economics Department) and Dr Barbara Cornelius (Accounting and Finance) were also present.

Professors Castle and Tran Van Hoa and Dr Cornelius were in Hanoi to provide foreign expertise for a short-term training course on 'Business Economics for Government Officials and Business Executives in Vietnam'.

The course was funded by the Australia-ASEAN Economic Cooperation Linkage Stream III Program (AusAID) with the collaboration of the International Consulting and Modelling and Forecasting (EMF) Program, Chulalongkorn University, Bangkok, Thailand.

The two other ASEAN participants were Thailand's Ministry of Finance and the ECOGRAPH Corporation of Bangkok.

Also represented at the course were the Australian Competition and Consumer Commission, and the University of Melbourne.

During the visit, the University staff established links with Vietnam's prestigious National Economics University and Foreign Trade University.

The terms of the agreement include the exchange of staff, students, research and library information.

Other valuable networks established by the University include those with Vietnam's economic policy think-tank – the Central Institute for Economic Management – the Ministry of Planning and Investment (the recipient of a US$1.5 billion grant from the World Bank and the Asian Development Bank to spend on education, HRD, agriculture and infrastructure reforms), the National Statistical office and the United Nation Drug Control Program of the UNDP.

Funded by the Pro-Vice Chancellor (Research), the Faculty of Commerce, the National Priority Funds of DEETYA, AusAid and the 1995-1997 ARC Collaborative Research project – 'Foreign Direct Investment in Vietnam' – the visiting University staff, led by Professor Tran Van Hoa were involved in other training and research programs.

About 30 Vietnamese students are studying at Wollongong.

Richard Tognetti returns to Wollongong

RAISED and educated partly in Wollongong, talented young Australian violinist Richard Tognetti went on to make his mark on the Australian music world.

On Saturday September 13 he brought the Australian Chamber Orchestra, of which he is artistic director, back to his home town and a receptive crowd of 450.

Presented by the Faculty of Creative Arts and Unicentre in association with Musica Viva Australia, the program marked the 200th anniversary of the birth of composer Schubert with a performance of one of his most popular early symphonies, Symphony No 5.

Other pieces performed included Mozart's hauntingly beautiful Clarinet Concerto in A major – used as the theme music for the hit movie 'Out of Africa'.

For this the orchestra was joined by Catherine McCorkill, one of Australia's finest clarinettists.

She played the somewhat unusual basset clarinet which has an extended lower range, as the concerto was written for this instrument.

The program also included works by Corelli and Rameau.

Founded in 1975, the ACO enjoys an international reputation for artistic excellence.

Composed of some of the finest young musicians in Australia, the orchestra has a core of 18 players, but on occasions (such as this) often expands for more comprehensive performances.

Mr Tognetti, son of University of Wollongong lecturer Keith Tognetti, plays first violin and conducts the orchestra.

He took up his position as the artistic director in 1989, opening an exciting new chapter in the orchestra's artistic history.

Under Mr Tognetti's direction, the ACO has performed with some of the world's leading soloists and conductors.

The orchestra also has the largest number of subscribers for any chamber orchestra in the world.

Engineering students outshine competition

WOLLONGONG University Civil and Environmental engineering students captured five of only six interview spots available for the 1998 OVE ARUP scholarships offer.

Beating a field of nearly 30 were Louise Unicomb,Ailan Tran, Lara Sossi, Carolyn Goonrey and Stuart Grey.

Lara and Ailan were offered jobs with the company, which is a national engineering firm, as has Caroline Raleigh who accepted a position as a structural engineer.

Our most successful student, however, was Louise Unicomb, who won first the state scholarship, and then went on to be awarded the national scholarship for two years' tuition in the United Kingdom.

Wollongong's reign did not end there.

Natalie Rosenbaum was awarded the Mechanical Engineering state scholarship. Although she completed unsuccessfully for the national title, she was offered and has accepted a position with the company.

Lara recently won the University of Wollongong award for her entry in the Industrial Training Excellence Awards.

The Australian Institute of Steel Construction National Scholarship, open to all Australian universities, has also been taken out by a Wollongong student.

Anthony Diedricks, studying a BE/BCom, won the $10,000 award for his undergraduate thesis and will now travel to the USA, UK as well as throughout Australia to visit research institutions and industry bodies.

Graham Fairbank, a 1996 BE Materials graduate, will also be leaving shortly for overseas study having won a prestigious Packer Cambridge Scholarship to study for a PhD at the University of Cambridge. (See below)

Engineering scholar wins prestigious Cambridge PhD scholarship

A 1996 first class Honours Bachelor of Engineering Graduate in Materials Engineering, Mr Graham Fairbank, has won a prestigious Packer Cambridge Scholarship to study for a PhD degree at the University of Cambridge.

The Packer Scholarships were established in 1986 through a donation to the Australian Committee of the Cambridge Commonwealth Trust by Mr Kerry Packer.

These merit-based PhD Cambridge scholarships are available to outstanding graduates of Australian universities.

The Packer scholarships have been biased towards technology and also towards the major universities.

Mr Fairbank's award is the first to a graduate of the University of Wollongong.

Mr Fairbank completed the BE in Materials Engineering as a BHP Research Scholar and since graduation has been working with BHP Research at Port Kembla.

His appetite for research was whetted by a final year undergraduate research project on the metallurgy of welding of high strength structural steels under the supervision of Professor Druce Dunne and also by projects conducted at BHP Research during his summer vacations.

Professor Dunne has spent 18 months as a Visiting Scholar at the Department of Materials Science and Metallurgy at the University of Cambridge and is a Life Fellow of Clare Hall, Cambridge.

The Department at Cambridge is a world leader in materials research and Mr Fairbank has been offered the opportunity to work under the supervision of Professor Colin Humphreys, the Goldsmiths Professor of Metallurgy, in the field of high temperature superalloys, which are essential materials for turbine components in aircraft jet engines.

The department is located in the centre of Cambridge adjacent to the old Cavendish Laboratory where Rutherford split the atom, Cockcroft and Walton developed one of the first particle accelerators and Crick and Watson solved the riddle of the DNA molecule.

Mr Fairbank has been accepted into Darwin College, a relatively young postgraduate college, and he will undoubtedly find Cambridge to be a stimulating and rewarding environment in which to further his career aspirations in materials science and engineering.

Conservation – have we been wasting our time?

AS ecological concern grows, the field of Environmental Management assumes more and more responsibility for our very survival.

But, as Professor Hugh Possingham proposed in the September 25 *Alan Sefton Memorial Lecture,* our efforts may so far have been misguided.

In our haste to implement conservation practices we have fallen behind in our theory, and such unqualified decisions have achieved little or no good

The address,'New Theory in Ecology: Is it of any use in Nature Conservation?', examined new developments in ecology, with an emphasis on mathematical modelling and the analysis of biological population distributions.

Using these examples he showed how new policy directions based on determining priorities for conservation can be developed.

Professor Possingham suggests that a series of regional biodiversity management plans would make much more effective use of the limited resources for biodiversity conservation than has occurred in the past.

These plans will be developed, with large community input, over the next two to three years and will set the agenda for much of the future federal government support for biodiversity activities.

The Allan Sefton Memorial Lecture is held annually in recognition of Mr Allan Sefton's contributions to the conservation of the Illawarra environment.

The Allan Sefton Memorial Prize, which goes to the top graduation student in the Bachelor of Environmental Science, was presented to Peter Robbins, while Ainsley Noakes received the Howard Worner prize for the top second year student.

Sir Richard Kerby Lecture

20 October 6:30 PM Hope Theatre

IAIN Ross, Vice-President, Industrial Relations Commission, who recently gave the Minority Decision in the Living Wage Case, has agreed to be the 1997 Sir Richard Kirby Lecturer.

The Kirby Lecture has had quite an array of significant speakers over the years.

The aim has always been to have people 'of the moment', so that, for example, Keith Hancock gave his lecture around the time of the Hancock Report (Committee of Inquiry into Australian Industrial Relations Law and Systems) and John Hewson shortly after fightback.

As usual, Sir Richard Kirby (President of the Industrial Relations Commission in 1960-1970), Vice Chancellor and other local dignitaries and academics will be in attendance. Free public lecture, no need to book.

Vice-Chancellor, Professsor Gerard Sutton with Dr John McQuilton, Professor Jim Hagan and Helen Carter

'Dispossessed, Diggers and Democrats' CD-ROM launched

AN INTERACTIVE CD-ROM, 'Dispossessed, Diggers and Democrats: Australia 1788-1880s', an introduction to 19th century Australian history, was launched by Vice-Chancellor Professor Gerard Sutton on Thursday 14 August.

The CD is designed for first year university or upper secondary school students with little, or no, knowledge of Australian history.

It was developed by Dr John McQuilton, Professor Jim Hagan and experienced educational software developer Helen Carter in conjunction with technical support from the Interactive Multimedia Production (IMP) team at the Centre for Educational Development and Interactive Resources (CEDIR).

The program can be used alone or incorporated into a broader teaching program.

Features include timelines, mapping exercises, quizzes, school room exercises from the last century and a simulation game where you play the part of a selector.

The program also introduces students to historical methodology by making use of documentary sources.

Each subject is accompanied by a question and answer format to test comprehension and encourage interpretation.

The documents can be accessed either through the Library option of the program or through the document booklet which is available as a separate item.

'Dispossessed, Diggers and Democrats' is heavily illustrated with paintings and drawings from the period.

It uses a user-friendly format and has been trialled successfully with students of all ages over the last two years.

Even students with little experience with computers find the program easy to use.

Professor Sutton said that history taught in his day was mainly English history, with the Australian history component being presented through British eyes.

He said he has followed the path of this project from its beginnings back in the early 1990s, being instrumental in sourcing the funding for its development.

He also thanked Allen & Unwin, the publishers, for their support and foresight in marketing the product.

Mr Geoff Hamer, who since his retirement from the University has been the project manager for external projects being developed by CEDIR, regaled the guests with tales of the early days of the program.

Dr McQuilton amused the group with anecdotes on how he became involved, giving special thanks to Ms Carter and her team for producing such a professional, educationally sound product.

Ms Carter thanked the team at IMP, past and present, for their input and hard work during the project, with special mention to Karen Taylor (programmer) and Dr McQuilton for his patience and willingness to try new approaches with the technology available.

Associate Professor Sandra Wills said she had an indirect link with the project, albeit from a distance and long before her commencement at Wollongong, by being coding screeds of data on the First Fleet database, back in the 1980s.

Dispossessed, Diggers and Democrats: Australia 1788-1880s is published by Allen & Unwin. Details can be found on the web at:

http://www.allen-unwin.com.au/PUBLISH/SOFTWARE.HTM

The cost of the program is $89.95 for the CD-ROM only or $110 for the CD-ROM plus the companion booklet. It is suitable for Macintosh or PC. Multiple user licence prices are available upon request by emailing Allen & Unwin on: academic@allen-unwin.com.au

Wollongong and Cambridge research team meet in Darwin

AS PART of a collaborative research program into the efficiency of energy conversion in animals, two researchers from Biological Sciences at the University of Wollongong, Associate Professor Tony Hulbert and Dr Paul Else met Dr Martin Brand from the University of Cambridge (England) at "Crocodylus Park" in Darwin recently.

This team first began their research when Dr Brand from Cambridge's Biochemistry Department spent a sabbatical at Wollongong in 1990 and they showed reptiles were considerably more efficient in their cellular energy conversion than mammals.

Since 1990 Dr Brand has visited the University of Wollongong four times. Later work showed large mammals like horses, cows etc., are more efficient than small mammals like rats and mice.

These findings suggested that the most efficient energy conversion mechanisms might be found in large reptiles like crocodiles.

Last year, they contacted Charlie Manolis, chief scientist at "Crocodylus Park", a crocodile research and education centre in Darwin.

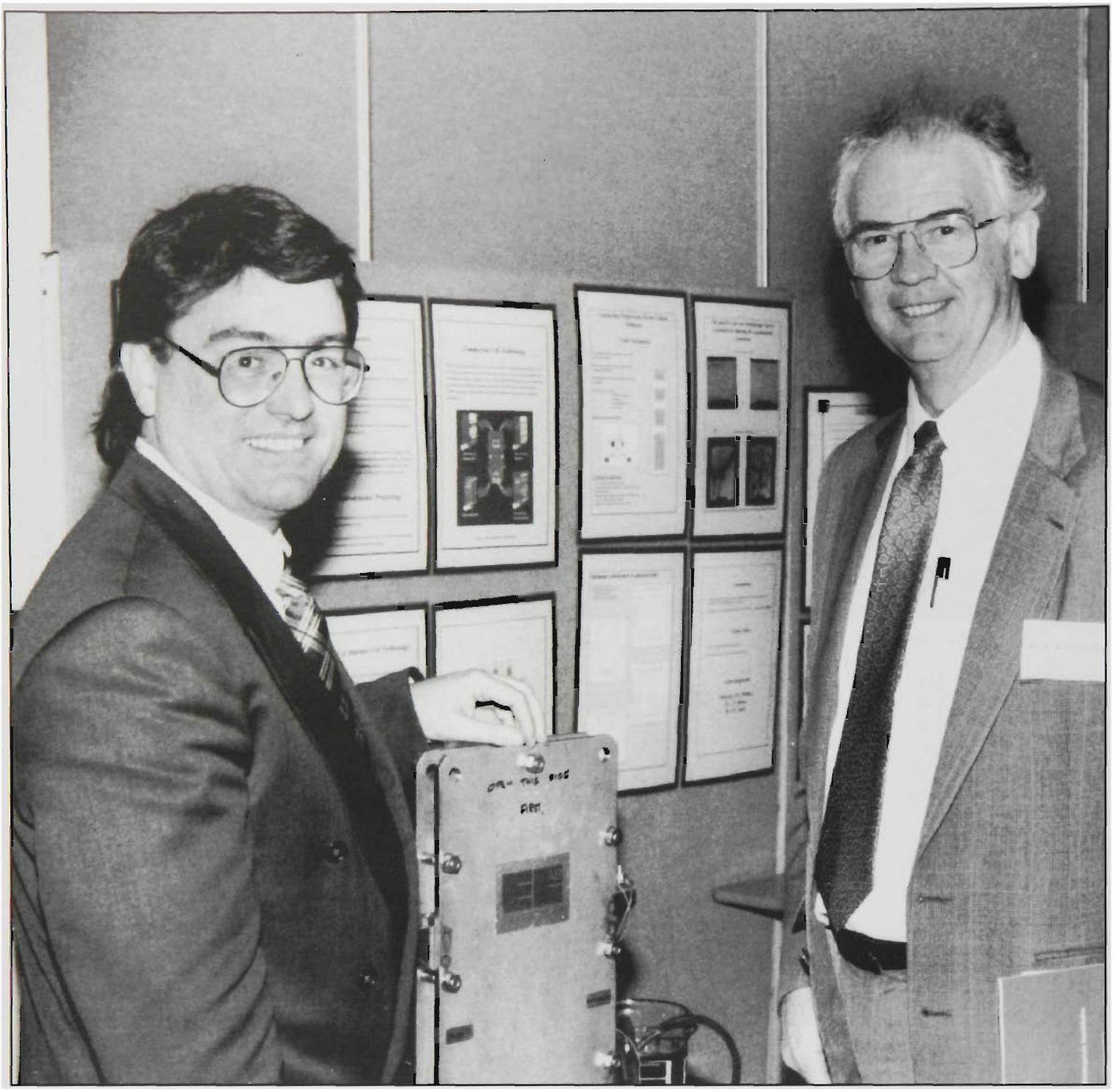
In August, Associate Professor Hulbert and Dr Else transported their scientific equipment to Darwin and set up a lab in a demountable at the park.

Dr Brand travelled from Cambridge and, with the assistance of Mr Manolis, gained access to tissues from some crocodiles during a culling of crocodiles at the park.

As well, tissues were available from some large crocodiles (up to 3 meters long and 95kg in weight) recently caught in Darwin Harbour.

Measurements were made in Darwin and some tissues were brought back to Wollongong on dry ice for further analysis.

The results from this work may have implications both for understanding the processes involved in animal production and possibly also for human conditions such as obesity.



Professor Gordon Wallace and Professor Bob Watts

Electronic tongues, noses and muscles

GLOBAL interest in polymer processing attracted a diverse audience to the September launch of the Intelligent Polymer Research Institute (IPRI) which showcased the latest developments of the Wollongong group.

Professor Bob Watts, the new chief scientist at BHP, officiated at the launch as scientific and interested commercial groups came from Japan, Korea, Italy, the United Kingdom, New Zealand and the USA to view new sensing and actuating technologies.

Many of the international guests at the launch have been involved in collaborative research with the new institute, the extensive research network has enabled rapid progress to be made in the polymer processing field.

Electronic tongues, noses and muscles represented some of the more exciting sensing and actuating research developments.

Speaking of the 'nose', Professor Wallace said: 'Vapours are sampled by the device and an electronic pattern is used to gain information on the chemical composition of the sample that has been sniffed. The device has obvious applications in the food industries for quality control but also in areas of security and defence.'

Other technologies on show included the new intelligent polymer processing and coating methods such as those used in corrosion, protection and electrochromics and device fabrication techniques using Atomic Force Microscopy.

The importance of device fabrication in this area was recently acknowledged by Senator Amanda Vanstone when she announced an Australian Research Council special initiatives grant.

The grant will enable the new institute to host an international workshop on Microsensing in Wollongong in February 1998.

The IPRI plans to use the advances in polymer processing and device fabrication to ultimately realise intelligent materials, structures and devices in the near future.

Information systems paper wins top award

TWO academics from the Department of Business Systems have topped the best paper awards at the Eighth Australian Conference on Information Systems (ACIS) for their article based on the University of Wollongong's web technologies.

Associate Professor Celia Romm and Associate lecturer Ms Jeanne Wong, who is also studying for her PhD, shared the award with three other academics-submitted papers at the conference.

The conference is generally regarded as the major event for information systems educators.

Professor Romm said their paper, entitled The Dynamics of Establishing Organisational Web Sites: Some Puzzling Findings, was determined the best in the category of 'electronic commerce'.

In an abstract to their paper, Professor Romm and Ms Wong point out that it is virtually impossible to use existing models to describe or explain the process of establishing organisational web sites.

Using data collected from the University of Wollongong over a four-year period and comparing it to a theoretical model devised elsewhere, the researchers demonstrated that there was a need for a more generic model that would explain the diffusion process of web technologies in diverse organisational and cultural contexts. The major source of data for the study was interviews with 20 members of the university.

'Influenza Virus – Under the Microscope and Under Attack'

THE Bert Halpern Lecture, organised by the Department of Chemistry, will be held on Thursday, October 23, 1997.

The speaker will be Dr Peter Colman, Director of the Biomolecular Research Institute, Melbourne.

Influenza viruses reinfect man because they are continuously changing. Using X-rays, pictures of the virus at very high magnification (100 million times) can be obtained.

They reveal that even on influenza viruses, some things don't change.

The Bert Halpern Lecture 1997

Department of Chemistry, University of Wollongong
Thursday 23 October, 1997
Function Room 4, UniCentre, University of Wollongong.
Refreshments – 5.30pm. Lecture – 6pm.

The discovery of constant features on the virus has allowed the design of new drugs which promise to be effective in treating infection by all strains of influenza.

The Bert Halpern Lecture was established in 1988 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 Halpern, the Professor of Chemistry at the University of Wollongong from 1970 to 1980.

Professor Halpern's pioneering studies in amino acid, peptide and protein chemistry affected medicine, biochemistry, chemistry and geochemistry.

Among his notable achievements was the development of novel techniques for the diagnosis and study of metabolic disorders and genetic defects. Everyone is very welcome to attend the lecture

Cross Connections – Crossing the boundaries

TWELVE months ago Anne Marie Dodd was a local artist frustrated at the lack of community interest and access to her art form.

While every artist struggles at times to find an audience, Anne Marie faced the added challenge of being a religious artist in an increaslingly secular and disinterested community.

Her dream was to organise a group showing of local artists with a strong Christian spiritual theme.

The a dream came to fruition on Thursday 4 September as Cross Connections officially opened.

After approaching several other artists in the area, Anne Marie found herself overwhelmed by the interest it aroused from other artists feeling the same limitations.

It was then decided that while an art gallery or church hall may be an appropriate venue for the showing, these would automatically limit the audience and defeat the purpose of the exhibition.

The group then approached the University and were given the McKinnon Building entry foyer for a venue.

Curator Deirdre Armstrong said: "This location will give us a much greater viewing audience, purely because of its location and general busy nature."

Cross Connections included works in paint, print and sculpture.

Those attending were so impressed that plans are already underway for next year's event, with some expansion to involve other areas of the arts such as music, writing and theatre.

Playwright Wendy Richardson relaxes with Dierdre Armstrong and Ann Marie Dodd after opening the art exhibition Cross Connections

Sydney to the 'Gong bike ride

AS part of its community service involvement the University has entered a team in the Sydney to 'Gong to raise funds for Multiple Sclerosis.

Members of the academic and general staff will be taking part and will demonstrate their superior fitness, enthusiasm and striving for excellence which is part of the University culture.

Contact the Vice-Principal (Research) Bill Lovegrove on email by 10 October to take part.

Women in Science Public Lecture Series

21 October: 7:30pm McKinnon Building – 67.1067

Next in the series of Women in Science public lectures is 'Gravitational Lensing – Using Distortions to Map the Universe', delivered by Dr Rachel Webster, School of Physics, University of Melbourne.

WHAT'S ON

University Events

10 October: Official opening of Building 3 by the Chancellor Mr Michael Codd.

18 October: Engineering Alumni Dinner Dance. Join us for an evening of fine food and great entertainment. Guest speaker will be Tim Bowden, media personality and respected raconteur. Music provided by Fresh. 6.30pm, Novatel Northbeach.

20 October: The 19th Sir Richard Kirby Lecture. Presented by Mr Iain Ross, Vice President, Industrial Relations Commission who recently gave the Minority Decision in the Living Wage Case. Located in Building 20.3.

2 November: Sydney to the 'Gong bike ride. Join the University team to raise funds for Multiple Sclerosis. Contact Bill Lovegrove on email by 10 October to take part.

Long Gallery

A project run by the Faculty of Creative Arts. Works by visiting artists, students and staff. Many pieces for sale Bld 25 Admission free. Opening hours: 9am-4pm Mon-Fri and Sunday 1.30pm-4pm. Enquiries 213996.

13 October-9 November: SARAJEVO. Works exhibited by Liz Ashburn, Diana Wood Conroy, Vivienne Dadour, Dennis Del Favero, George Gittoes, Ian Howard, Enid Ratnam Keese, Elwyn Lynn and Peter Pinson. To be opened Wednesday 15 October at 6.30pm by Professor Liz Ashburn, College of Fine Arts.

Hope Theatre

Western end of the Campus enter second gate Northfields Ave.
The following concerts are in association with Music Viva, Faculty of Creative Arts and the UniCentre.

24 October: Guitar Trek, Music for a Guitar Family. Admission Adult $20 Conc $12 Family Ticket $50 (2 adults 2 children) Bookings (02) 4221 4214

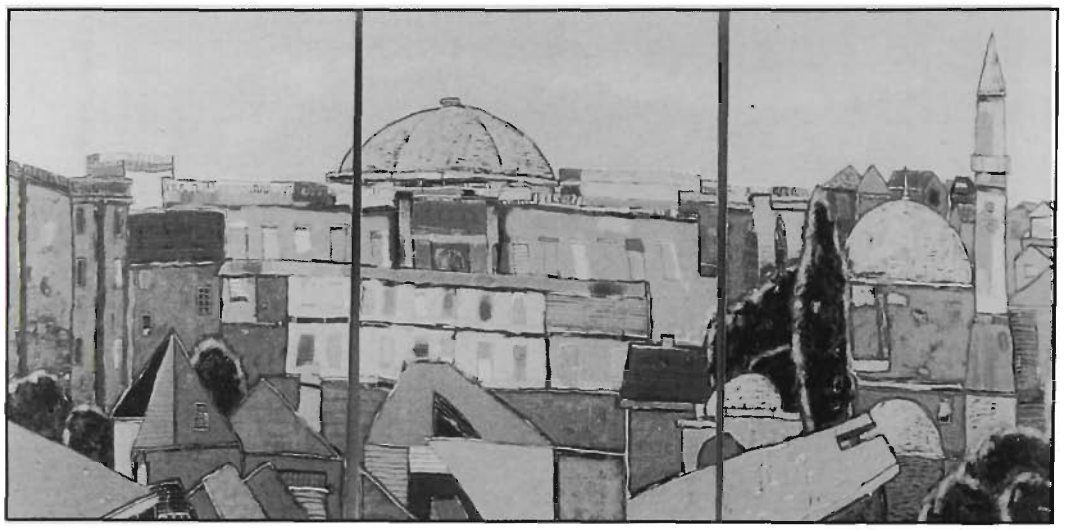
Art of Lunch Program

Free lunchtime concerts organised by the Faculty of Creative Arts.

16 October: Clem Gorman, lecturer in Creative Writing, will present 'Writers in the '90s - challenges both artistic and cultural; with reference to his recent work.

23 October: Student composers workshop and Music Performance students. Recent pieces by Faculty of Creative Arts composition students. Also included on this program are recital preparation performances by music performance students.

30 October: Music Performance students. Recital preparation performances by Faculty of Creative Arts music performance students.



Peter Pinson: Sarajevo Library before the Bombardment. Long Gallery 13 October - 9 November

UniCentre

15 October: Mabels (band), 12.30-1.30pm Duckpond lawn, free.

22 October: Jeff Lang (soloist), 12.30-1.30pm McKinnon lawn, Free

23 October: Market Day, all day, Duckpond lawn.

29 October: Infidels (band), 12.30-1.30pm Duckpond lawn, Free.

30 October: Ska Rude Boys band, 8pm Uni Bar, Free.

Theatre South

Begun in 1980 through the support of the University which continues to provide audiences, artists and administrative input. All productions at Bridge St Coniston unless otherwise stated. Reservations (02) 4229 6144.

16 October-1 November: Alma & Ivy, Molly & Merle. Four funny, touching women created by Wollongong's own Wendy Richardson..

4-13 December: Old Flame. Mayhem and farce in a small town as the Olympic flame passes through. Illawarra Performing Arts Centre.

Wollongong Performing Arts Centre

22-25 October: The University Singers present Acis & Galetea. Handel's Opera of revenge.

Seminars, discussions, lectures

21 October: Next in the series of Women in Science public lectures is 'Gravitational Lensing - Using Distortions to Map the Universe', delivered by Dr Rachel Webster. School of Physics, University of Melbourne. 7.30pm McKinnon Building - 67.1067

23 October: The Bert Halpin Lecture, organised by the Cepartment of Chemistry, will be presented by Dr Peter Colman, from the Biomolecular Research Insititue, Melbourne. He will be speaking on 'Influenza VIrus - Under the Microscope and under Attack'. Function Room 4, UniCentre, 5.30pm for 6pm.

20-22 January: Faculty of Science - Siemens Science School: Designed for students entering Year 10 in 1998. It is a chance for students to enjoy some of the wonders of science and technology and discover their uses in the modern world. The school includes laboratory sessions and excursions to BHP and the Science Centre. Application forms are available from most schools and local Rotary Clubs. Closing date 8 September 1997. Contact: Faculty of Science Office, Tel: 02 4221 3530.

Conferences

9-12 December: TASA '97. The Australian Sociological Association Annual Conference hosted by the Sociology Program. Contact Trish Vezgoff, Tel: 02 4221 4055, Fax: 02 4221 4301

Community Bush Regeneration Program

12 October: (boat ramp) Gooseberry Island

18 October: Bulli Pass

19 October: Ken Ausburn Track

All sessions begin at 9.30am. More clean up sessions included - contact NSW National Park & Wildlife service, Tel: 02 4229 5214

University Social Club

Become a member and enjoy a variety of social events. A chance to meet people across the campus. Contact: Helen Hasan, Tel: 3757 or email.