

CAMPUS NEWS

CSIRO Division Chief appointed Deputy Vice-Chancellor

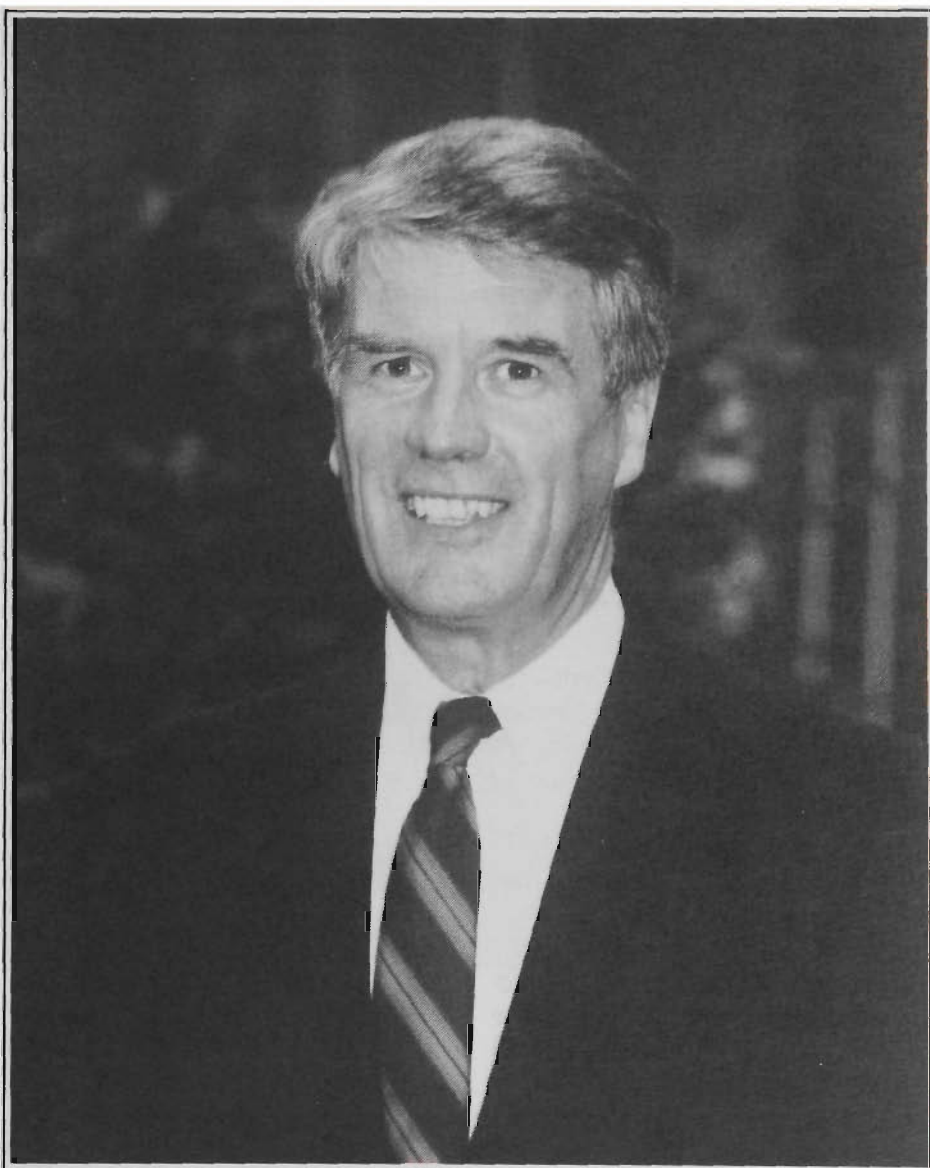
Chief of the CSIRO's Division of Manufacturing Technology, Dr Peter Robinson, has been appointed Deputy Vice-Chancellor to replace Professor Gerard Sutton who took up the position of Vice-Chancellor on 1 March.

Dr Robinson has also held positions as Director, Invetech Operations Pty Ltd, one of Australia's leading technology consulting companies; Group General Manager, Technical, with Metal Manufactures; Research Associate in Metallurgy, Massachusetts Institute of Technology, USA and Senior Research Officer, John Lysaght Ltd (Newcastle).

He has won many prestigious awards, including the Claude A Stewart Award from the Australian Institute of Metals for significant contributions to the Australian metals industry, the 'International Award' from the American Society of Diecasting Engineers and in 1994 he was made a member, Order of Australia for contributions to research and industry development.

Dr Robinson is a graduate of the University of Wales where he gained his PhD and was awarded a DSc for 'Contributions to Material Science'.

As well as having an academic and professional record of the highest standard, both nationally and internationally, Dr Robinson is well regarded for his capacity as a member of senior management teams, his leadership qualities and his interest in creating an environment in which individuals can achieve their intellectual potential.



Newly-appointed Deputy Vice-Chancellor, Dr Peter Robinson

Professor Sutton said the University is 'very pleased to have attracted a person of the calibre of Peter Robinson to the post of Deputy Vice-Chancellor.

'His academic standing and breadth

of management experience together with his personal style will ensure that this university will continue on its upward quality spiral.'

Dr Robinson will take up his position on 15 May.

Targeted links visits underway

The Department of Chemistry at Sophia University in Japan and the Intelligent Polymers Research Laboratory (IPRL) at this university are paired institutes.

These groups are international leaders in intelligent polymer research, and have received money under the Australian Government's Targeted Institutional Links (TIL) Program.

Researchers are collaborating on the development of intelligent membranes.

While funding was received last year and collaborative work is well under way, the personal linking side of the project has only just begun.

The first visitors from Professor Ogata's laboratory at Sophia University arrived in February.

An associate researcher, Mr Takashi Aoki, is here for only two weeks, while PhD student Mr Yukikazu Takeoka will be here for five weeks.

A post-doctoral Research Fellow in Professor Gordon Wallace's IPRL, Dr Chee Too, is managing the TIL

Intelligent polymers research with Japan

Program at this end.

'TIL gives us an opportunity to build closer bonds between the two labs,' he said.

'We have complementary interests, and a lot of technology transfer can occur during personal visits. Towards the end of the year, we're going to visit Japan in return.'

Both internationally recognised labs already have interests in similar areas.

'We learn from their expertise, and they learn from ours,' Mr Aoki said.

Mr Aoki is working on chiral separation using polymer membranes.

Synthesised chemicals tend to be racemic, that is they contain a mixture of 'left-handed' and 'right-handed' molecules.

The molecules are mirror images of each other, but only one type is usually biologically active. Does this matter?

'Yes. In some circumstances it can be very important,' Dr Too said.

'Thalidomide is an example. One form is a useful pharmaceutical. However the other form is responsible for the terrible birth defects associated with the drug.'

'Using only the active form helps to eliminate side effects as well as enabling lower doses to be used.'

The different forms of molecules are currently separated by chromatography which is slow and expensive.

Mr Aoki is developing a method to do this using conducting polymer membranes.

PhD student Yukikazu Takeoka is interested in looking at interactions between surfactants and hydrogels (hydrogels are polymers that hold a lot of water and are a speciality of the IPRL).

'We know little about interactions between polymers and surfactants, so at this stage I'm doing a basic investigation of the electrochemistry,' Mr Takeoka said.

Mr Takeoka is particularly interested in micelle behaviour.

Under some conditions, surfactants can be used to form micelles (small balls in a type of emulsion, a bit like oil drops in a salad dressing after a good shake, only micelles are hollow).

Applying a potential to electroactive micelles can cause them to break down. An obvious use for this is in drug encapsulation, perhaps with targeted delivery to specific organs.

'We are very excited about our TIL interactions,' Dr Too said.

'Both labs gain a lot, in exchanging information and ideas, but also in obtaining more funding for collaborative work.'

USA visitor for Earth Environments and Resources Group

Dr Uschi Graham of the Center for Applied Energy Research, University of Kentucky in Lexington (Kentucky) will visit the School of Geosciences this month.

Dr Graham graduated from Penn State University and has spent several years at Kentucky.

Her initial projects at Kentucky were related to oil shales, especially the eastern oil shales of the USA which contain reasonably abundant pyrite.

One of the investigations focused on the origin of iron pyrite.

More recently, she has worked on the use of retorted torbanite waste as an activated carbon.

Her present project at Kentucky has been the characterisation of high carbon fly ashes and their use.

While at Wollongong, Dr Graham will collaborate with Adrian Hutton, Bryan Chenhall and Aivars Depers on the metal speciation in particulate industrial fallout.

She will also present a seminar on the research activities.



To judge film festival award

Efi Hatzimanolis, a recently appointed lecturer in the Department of English, has been invited by the Board of the Sydney Film Festival to judge the 1995 EAC Award, sponsored by the Ethnic Affairs Commission, in the Australian Short Film Competition.



The Pro Vice-Chancellor, Professor Bill Lovegrove shutting down the Univac 2200. Watching on are Director, Information Technology Services, Mr Greg Naimo, and University Librarian, Mr John Shipp.

In 1974, the University installed a Univac 1106 mainframe computer for student, academic staff, and general departmental use.

A physically large machine, the Univac 1106 was capable of supporting about five background jobs, and up to 25 users concurrently.

As the University was about to enter the growth phase of the 1980s, it became obvious that a new machine would be needed to meet the ever-increasing demands.

The machine chosen to replace the 1106 was a Univac 1100/60, a large and powerful machine which, towards the end of its life, would support about 25 background jobs and up to 175 users concurrently.

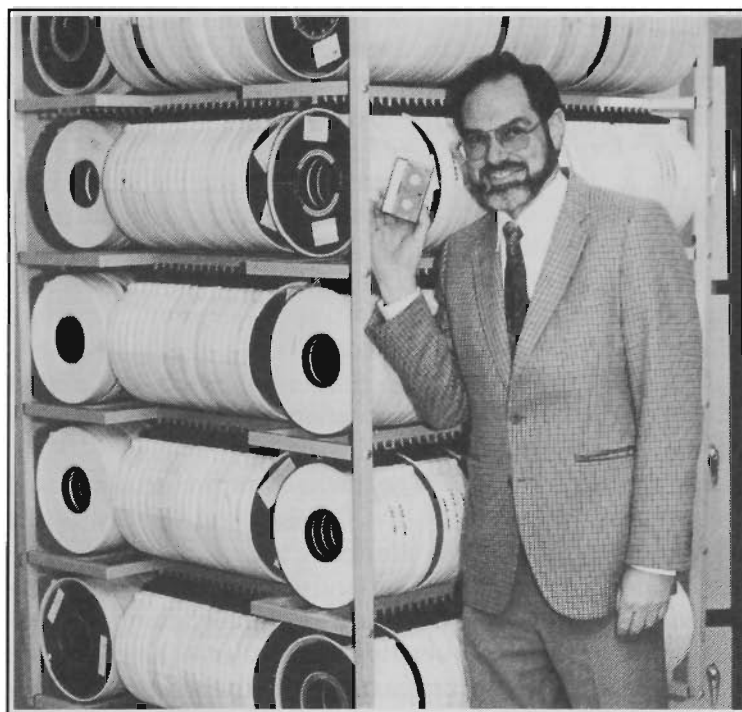
The 1100/60 was upgraded several times during its life, eventually becoming a Unisys 1100/72 (note the company name change from Univac to Unisys). This machine also supported a bureau service to clients outside the University.

In the mid-1980s, the University began to recognise the need to provide a diverse range of services which could not be sourced from a single computer, no matter how large.

From 1986, several new computers were installed, including a Sequent Unix machine to service student needs, and an IBM System 38 for Administration needs.

The 1100/72 was becoming obsolete, and a new, smaller computer

The last of the Univacs



This data quality back-up tape held by John Shipp has replaced the bulky reel-to-reel system.

was purchased to provide the Library PALS system and several Administration services.

This machine was the Unisys 2200/202, and was installed in 1988.

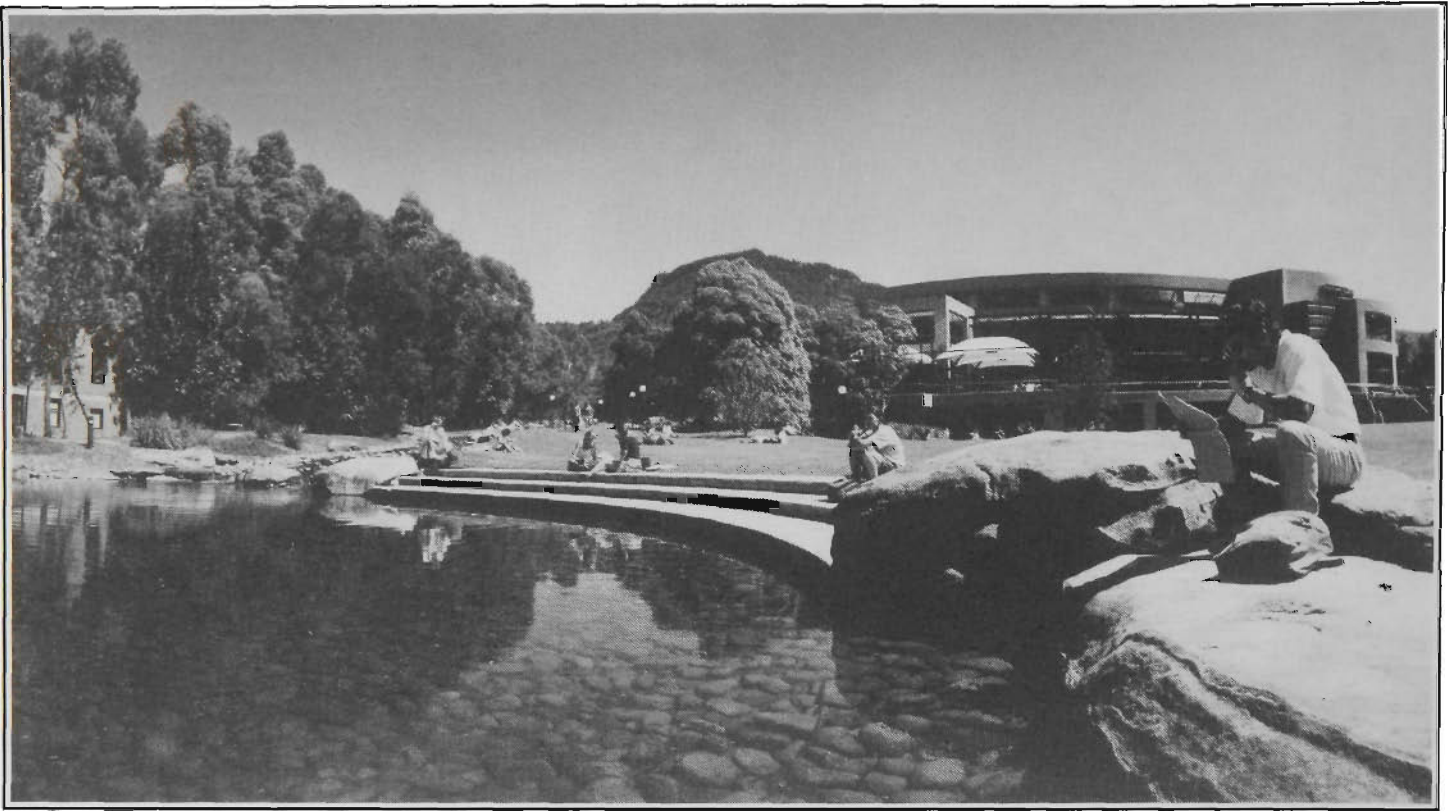
The first Unisys 2200 in Australia, the machine was to provide the Library PALS system until February 1995, when it was superseded by a Sun Unix computer.

On 2 March, Pro Vice-Chancellor, Professor Bill Lovegrove, turned the 2200 off for the last time, ending 21

years of Univac history within the University.

The Univac 1106 was donated to Macquarie University in 1980, and the Univac 1100/72 was dismantled by the Science Faculty workshop, and components have found their way into tools and equipment manufactured by the workshop staff.

The 2200 will also find its way to the Science Faculty workshop, and its components may still provide a service to the University for years to come.



Ponds win national landscape merit award

The ponds between buildings 67 and 19, which form an integral part of the University's stormwater system, were the subject of a national award made late last year to a local landscape architect firm.

The 1994 National Merit Award presented by the Australian Institute of Landscape Architects was awarded to brammer taylor landscape architects for the Keira View Ponds at the University of Wollongong.

The category in which the ponds won the award was Infrastructure and Building Settings—a landscaped design associated with engineering infrastructure and/or building settings. There is a growing recognition of landscape as being an inherent positive quality in projects.

There were three levels of awards; the best project in each category receives a Project Award while entries considered to be meritorious will receive merit awards.

Cited as "This simple yet charming softer approach to the method of solving an engineering problem and the transformation of a constraint to a positive element has an unselfconsciously natural resolve".

The ponds won the merit award over a variety of entries in Australia and overseas.

The theme of the project was based on the location and quality of the Wollongong area.

The landscape feature was to reflect the escarpment behind the University, in particular Mt Keira, located immediately to the west of the Uni-

versity campus and forming a prominent viewpoint from the University—hence the name, Keira View Ponds.

The ponds link the upper and lower sections of the campus. Elements of the escarpment were brought into the ponds, such as rocks and rounded river pebbles, reflecting the processes of weathering and deposition.

The ponds were completed in February 1994 following a fast track design implementation. They were constructed by the staff of the University Landscape Department with an invaluable contribution made by Jim Van Breda.

There were 17 entries in the category, from formal embassy landscapes to informal nature reserves, indicating the landscape architect's strong support and often major or leading role in team projects.

The project award went to Coronella Creek in Nunawading, Victoria and the merit awards went to the Keira View Ponds at the University of Wollongong and the Hotel Conrad Jupiter's Casino.

Other entries in this highly competitive category included the Garden Deck at the Hotel Nikko, the Australian Embassies in Tokyo and Beijing, and Twin Waters Resort, Noosa.

Workshop announcement

The First Asia Pacific Symposium on Biosensors will be held at the University of Wollongong from 4-6 December.

The aim of the workshop is to bring together researchers and industrialists to exchange ideas on the development of Biosensors, one of the most intense activities in scientific research.

All attendees, including oral presenters, are encouraged to participate in the evening poster sessions.

For more information contact Professor Gordon Wallace at the Intelligent Polymer Research Laboratory, Chemistry Department, University of Wollongong, phone (042) 213 127 or fax (042) 213 114.

Honours for Statistics

The University of Wollongong's Department of Applied Statistics had six honours students in 1994 and has five this year.

Equivalent departments in all of the Sydney Metropolitan universities have each had at most one honours Statistics student in each of the last two years.

One of these Wollongong students, Anthony Carolan, a final year honours student, has been awarded a scholarship by the Statistical Society of Australia.

Anthony, a former Edmund Rice College student, has an enviable undergraduate record of high distinctions 'blemished' by only one distinction.

He won an Australian Bureau of Statistics' cadetship for his undergraduate achievements and only a few of these are given each year.

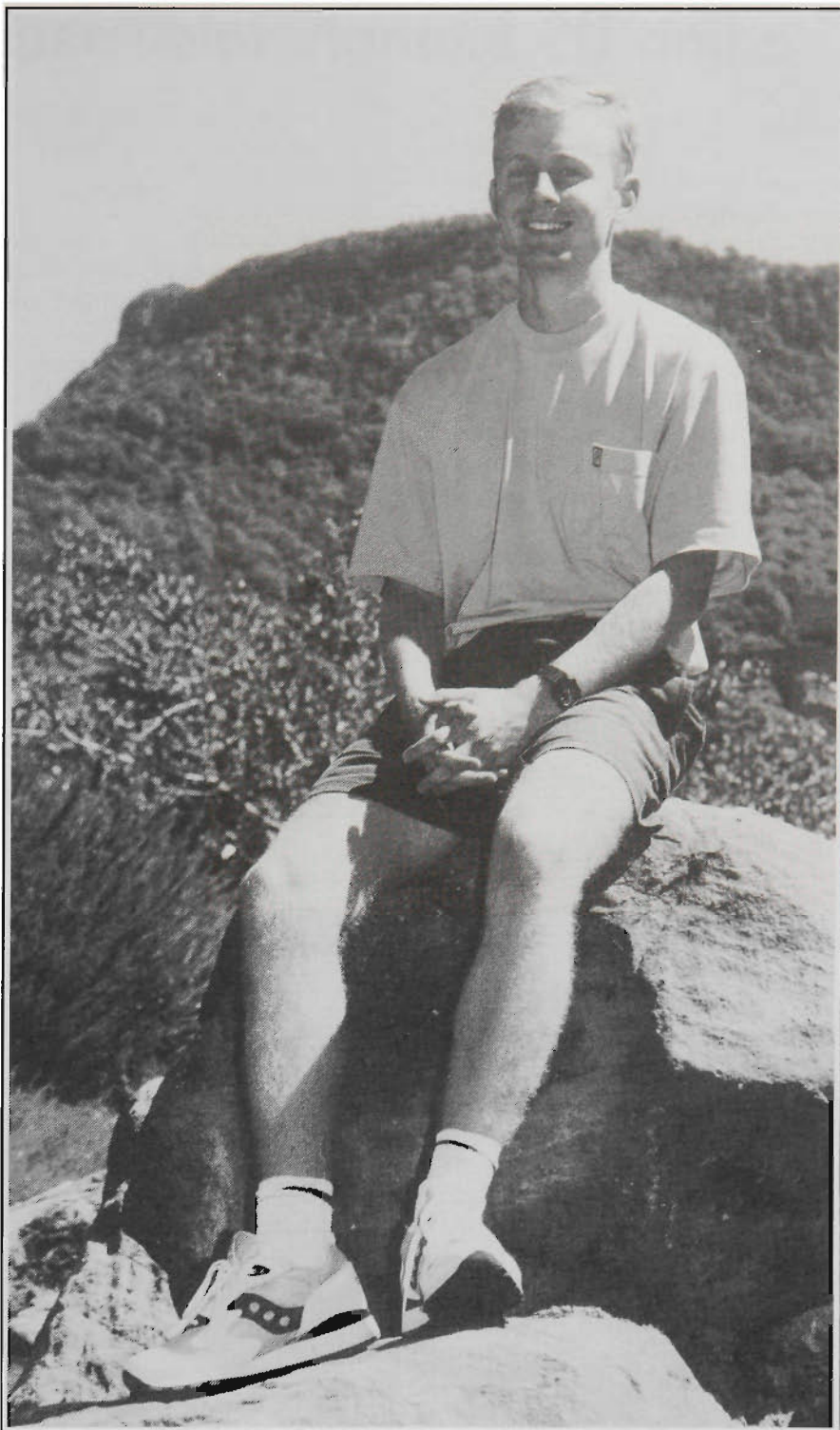
Anthony was the only one awarded in the Mathematics/Statistics area for 1995.

He spent one month with the Bureau in Canberra in January and will join them full-time at the end of this year.

President of the NSW Branch, Dr Ann Eyland, addressed the Annual General Meeting of the Illawarra Statistical Group on 15 March and it was here that she announced that Anthony and Patrick Kelly from Newcastle, won the scholarships.

Dr Eyland praised the Illawarra Statistical Group as one of the few genuinely functioning groups of the society.

Dr Ken Russell of the Department of Applied Statistics has been president of the group for the last three years and its continued success is largely because of his enthusiasm and organisation.



Anthony Carolan, a final year honours Statistics student, who has been awarded a scholarship by the Statistical Society of Australia.

The University of Wollongong was one of the NSW venues for a student strike and protest meeting on 23 March to reject the introduction of fees for postgraduate courses and any increase in undergraduate fees.

Around 500 students travelled to Wollongong from several universities in NSW.

Local students took the crowd to nearly 2000 at times during the protest.

The group assembled in the amphitheatre west of the Administration Building.

Following several speakers, the Vice-Chancellor, Professor Gerard Sutton, received a petition to hand on to the Minister, Simon Crean.

Students make their point

The event was well organised by President of Wollongong's Students Representative Association, Jo Kowalczyk, and her team.

Despite some heated exchanges at times, the protest went without any major problems.

However, the graffiti painted on the new wall in Northfields Ave was unnecessary vandalism that did not contribute to the students' cause and was uncharacteristic of Wollongong students.

Professor Sutton said he felt that the students had made their point very effectively.

Leading US Biomaterials scientist to visit IPRL

Leading US Biomaterials scientist, Professor S.W.Kim, from the University of Utah, will visit the Intelligent Polymer Research Laboratory (IPRL) from 12-14 April as part of an ongoing international collaborative program.

This program involves the development of intelligent polymer materials for biomedical applications.

During his visit Professor Kim will deliver the opening address of the launch of the Intelligent Biopolymer Research Unit (IBRU).

The formation of this research unit signifies an important breakthrough in collaborative research activities in the Illawarra region.

The unit involves staff from the In-

telligent Polymer Research Laboratory and the Illawarra Area Health Service.

Combining expertise in Intelligent Polymer research and Medical Science, the team is poised to make a significant impact in biomaterials research.

Professor Kim has made significant contributions to two important areas of research:

- Blood-compatible polymers: These are essential components of implantable materials such as with artificial organs and prosthetic devices (eg hip replacement). They are also an essential component of open-heart surgery.

- Polymeric drug delivery systems:

Marked advances in the pharmaceutical industry have resulted in a range of new drugs. There is also a need for continued development of more efficient drug delivery systems such as materials that release drugs in response to certain stimuli. Professor Kim is a pioneer in this area of research.

During his visit Professor Kim will also address the Research Institute for Molecular Recognition Science at the University of Wollongong to describe his group's most recent advances in this important area of research.

For further details contact Professor Gordon Wallace, phone (042) 213 127 or fax (042) 213 114.

It is widely thought that ultra violet (UV) light may be involved in the formation of cataract, the major cause of blindness worldwide.

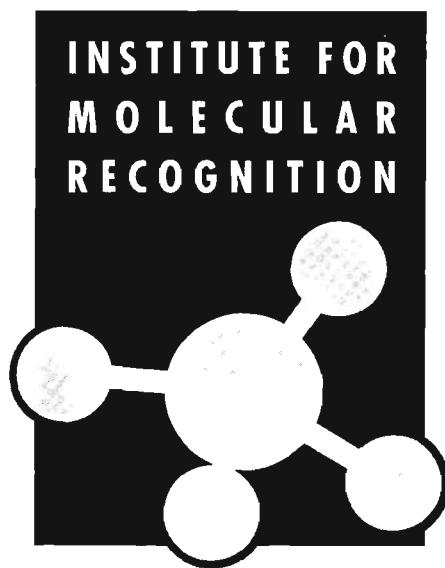
In India, for example, there are four million newly blind from cataract each year.

In the USA more than one million cataract operations are performed annually. This is a huge burden on the health system.

At the Australian Cataract Research Foundation, which is part of the Institute for Molecular Recognition, there is an active research group led by Associate Professor Roger Truscott investigating the reasons for cataract formation in the lens.

Researchers in this program – which receives major industry and ARC support (\$1 million over three years) – are hoping to elucidate the molecular basis for age-related cataract (which is by far the most common form) and ultimately to develop a drug that will inhibit the development of cataract.

Research into cataract



Most people do not realise that the human eye is not completely defenceless when it comes to UV light. In fact our lenses actively synthe-

size UV filter chemicals which protect the lens and retina from UV photodamage.

Recently this research group isolated and identified a major new UV filter compound in human lenses.

It is the second most abundant UV filter substance in the lens. Like the chemical in highest concentration, it filters out light in the 300-400nm region.

In one of those strange coincidences in science, soon after the Wollongong group worked out and published the structure of the new UV filter, a group in Japan also discovered the same novel compound.

At present the Wollongong group is trying to discover how the new UV filter chemical is made by the lens and what its role may be in protecting the lens from photodamage.

Key Centre for Mines courses

The Key Centre for Mines is holding the following courses during 1995:

1-5 May: Mine Water - Origin Prediction and Control
6-7 June: Tailings - and other industrial by-products;
Disposal-Rehabilitation-Construction
19-22 June: Principles of Geostatistics

23 June: Applications of Geostatistics Seminar
5-7 July: Modelling and Planning of Resources on Computers
7-11 August: Biohydrometallurgy
11-15 September: Strata Control - From Principles to Practice
29-30 November: Behaviour of Soft Jointed Rocks

Taiwan Art exchange a continuing success

After a successful beginning of art exchanges with Taiwan, the second stage of the Art Exchange Project, set up in 1991 by Associate Dean of the Faculty of Creative Arts, Associate Professor Peter Shepherd, is under way.

The first part of the project was the partnership with the Taipei Fine Arts Museum and the showing of the first Australian exhibition in Taiwan, "Identities: Art from Australia" from December 1993 to March 1994.

At that time the University took a group of the Australian artists, represented in the exhibition, to conferences in the museum and to meet the artistic communities of Taiwan.

The second exhibition 'Art Taiwan' was opened by the Australian Minister for the Arts and Communications, The Hon Michael Lee, at the Museum of Contemporary Art (MCA), Sydney on Wednesday 15 March.

It will be on show there for the next three months.

This, the first major art exhibition to come from Taiwan, is a large survey show of contemporary art.

It matches in scale and its lively investigation of current art concerns, the Australian exhibition which showed in Taiwan.

This second stage of the project has been a collaboration of the Taipei Fine Arts Museum, The MCA and the University of Wollongong.

As part of the project, the Acting Director of the Taipei Fine Arts Museum, Madam Tsai, and the Chief Curator, Madam Yang Wen-I, and nine artists and five journalists from Taiwan, visited Sydney for the opening events and conferences.

As part of this visit they came to Wollongong for two days where they took part in a seminar, visited the Wollongong City Gallery and the Buddhist temple, and spent time at the studios of artists Liz Jeneid, Guy Warren, Bert Flugelman, Ian Gentle and George Gittoes.

Associate Professor Shepherd said they were extremely impressed by what they saw of the University.



Chief curator, Ms Yang Wen-I, exhibition artist Cheng Tsai-Tung and Associate Professor Peter Shepherd



Wollongong graduate and Taiwanese exhibition artist, Dr Joan Brassil, enjoys lunch with Taiwanese artists Wu Mali and Margaret Shui-Tan

'They also thought we lived in one of the most beautiful places in the world,' Professor Shepherd said.

'Several of the artists have identified very closely with the area, saying they felt they had found a spiritual home here.

'They are determined to return.

'The visit has again helped to highlight Wollongong as a place with

strong connections for the artistic and academic world of Taiwan.'

The exhibition, Art Taiwan, is already attracting large crowds in Sydney.

After its showing at the MCA it travels to the Gold Coast City Art Gallery in June, then to the Canberra School of Art Gallery and then comes to Wollongong City Gallery in December and January.

Union Activities

All members of the Union, students and staff are invited to attend.

3-7 April: Heritage Week.

6 April: Market Day with bush band.

27 April: Band Competition Heat 1, Uni Tavern.

1-5 May: International Week.

11 May: Band Competition Heat 2, Uni Tavern.

25 May: Band Competition Heat 3, Uni Tavern.

27 July: Band Competition Final.

7 August: Union Art Award.

4-8 September: Union Week.

8 September: Union Dinner.

What's On

General

The Campus Alumni Bookshop will open on the second and fourth week-ends of each month. Come and browse through a wide selection of preloved textbooks and fiction. Campus East, Cowper Street, Fairy Meadow (opposite Science Centre). All proceeds directed towards Campus projects. Donations of material are invited. Enquiries to Alumni Office, phone 213 249 or 291 951 (anytime).

Suzanne Uniacke's Harvard honour

Senior Lecturer in Philosophy, Suzanne Uniacke, has been awarded a Fellowship in Ethics at Harvard University.

The period of this internationally advertised Fellowship is September '95 to June '96, during which time Dr Uniacke will participate in the Harvard Program in Ethics and the Professions and conduct research on central issues in moral theory that have important bearing on problems of practical ethics.

The Harvard program encourages teaching and research about ethical issues in the professions and public life more generally.

Its resident Fellowships support outstanding teachers and scholars who wish to develop their ability to address questions of moral choice in such areas as business, government, law, medicine, public policy, and social science.

Fellows participate in the weekly seminar of the program, which discusses problems of teaching and research in ethics.

They enjoy access to a wide range of activities in all of the professional schools at Harvard, as well as the Faculty of Arts and Sciences.

A significant part of their time is devoted to conducting their own research in ethics.

Dr Uniacke has strong research and teaching expertise in theoretical and applied ethics and philosophy of law.

Her book, *Permissible Killing: The Self-Defence Justification of Homicide* (Cambridge University Press, 1994) examines the moral and legal principles of self-defence.

In 1994 she was commissioned to write the entry on the Doctrine of Double Effect (which is concerned with the application of moral theory to practical cases) for the forthcoming Routledge *Encyclopedia of Philosophy*.

She has published articles in the area of criminal justice ethics, and on issues such as euthanasia and in-vitro fertilisation.

In May, Dr Uniacke will present a paper on 'Necessity and Criminality' at the annual conference of the Society of Applied Philosophy, United Kingdom.

With several of her departmental colleagues, Dr Uniacke plays an important role in teaching the range of ethics subjects offered by the Department of Philosophy at Wollongong.

The Department has a distinctive research profile in moral, legal and political philosophy, and particular teaching strengths in theoretical and applied ethics.

Long Gallery

Exhibition program for 1995:

Until 28 April: Postgraduate Show – Marilyn Walters, Binghui Huangfu, Enis Tan, Ron Stewart – Prints.

4 May-28 May: Print Show - 5 School Exchange Portfolio. University of Wollongong; University of Florida, Gainesville; West Virginia University; Indiana University; Purdue School of the Museum of Fine Arts, Boston. Cambodian Textiles from the collection of Neil Manton. Monoprints: Jane Hall.

1-25 June: Mumblings – Patricia Prociv, Fiona Davies, Davida Wiley. Country Blues – watercolours Jelle van den Berg; Landscape Aspects – Vivien Haley block and mono prints on fabric.

29 June-30 July: NAIDOC Exhibition – Works by Aboriginal artists.

3-27 August: Artist Made Furniture.

1-24 September: Postgraduate Works – Eileen Dillon Smith, Marcie McConville, Enis Tan, Taskin Gencag, Hue Lin Zhu, Alan Spackman.

2 October-5 November: Archaeologies: Structures of Time – Diana Wood Conroy and Sharon Marcus. Reciphering – Katharine Nix. Pathways – Paper works by Ian Arcus.

13 November-10 December: BCA Graduating Exhibition.

Stop Press

Staff and students should be aware that parking permits are being stolen from cars and resold. Please check your permit is still in place when you return to your car and report any irregularity to Security immediately. Do not leave valuables in your car, or if you must, be sure they are covered up or locked in the boot.

Campus News is published weekly on Wednesdays. Send material, preferably by Microsoft Mail or on disk, to E-Mail account 'Campus News' by noon on Monday of the week before that of publication.

For any other enquiries contact the Editor, Gillian Curtis (042) 21 3926. Campus News has a circulation of 3000. It is distributed on campus to staff and students. 1000 are mailed to the community and overseas including schools in Illawarra, southern Sydney and Canberra; local, Sydney and Canberra media; Friends of the University; business representatives; MPs and numerous individual requests.