

Campus news

Issue One 2001

University of Wollongong



Celebrating 50 years of Excellence in Education

Chancellor opens new-look Recreation and Aquatic Centre

The University's refurbished Recreation and Aquatic Centre was officially opened by the Chancellor of the University of Wollongong, Mr Michael Codd, AC, last month.

The official opening marks the completion of \$2.8 million worth of extensions to the centre, which includes new squash courts, a completely new open plan café area and total access to all Recreation and Sports Association facilities for those with disabilities.

The building area containing the gymnasium has actually been doubled in size to cater for increased demand, while the foyer and reception area has been extended to cater for the higher traffic expected through the centre. At the same time, the squash courts have been completely reconstructed, replacing those built about 12 years ago.

Mr Paul Manning, Executive Director of the Recreation and Sports Association, said the improvements to the Recreation and Aquatic Centre came as a result of increased demand for its facilities.



"In the past, demand of some of our facilities was outstripping supply. For example, there was a waiting list to get into the gym every afternoon," Mr Manning said.

"The refurbishment has created fantastic new sporting facilities as well as a lot more space for users of the centre," he said.

More building on pages 6 & 7

UOW Chancellor Mr Michael Codd (left), Recreation and Sports Association executive director Mr Paul Manning and Vice-Chancellor Professor Gerard Sutton (right).

Celebrating 50 years

As the nation celebrates the Centenary of Federation in 2001, Australia's University of the Year, the University of Wollongong, celebrates 50 years.

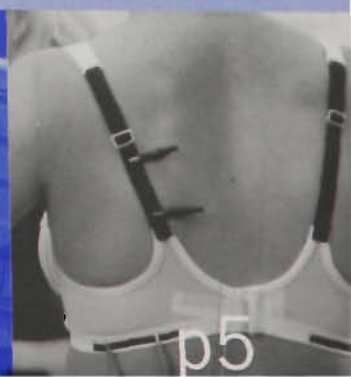
The University was established in 1951 thanks to the determination and support of the Illawarra community. This continued support over the past 50 years has helped UOW to become one of Australia's leading universities.

In return, the University makes a significant contribution to the local community. The 13,000 students from Australia and overseas eat, live, shop and enjoy themselves in Wollongong making the University a major employer and supporter of local business.

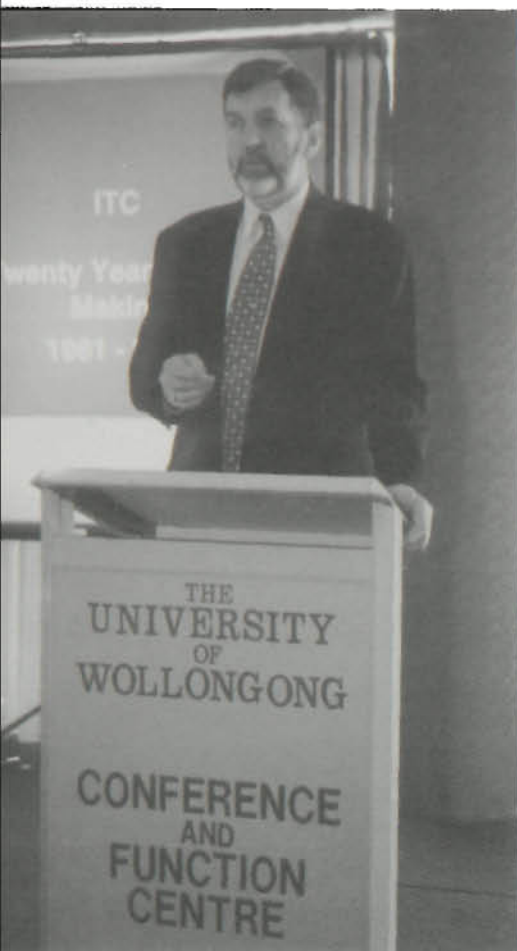
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ITC marks its 20th anniversary



ITC Managing Director, Mr James Langridge, addresses guests at the company's recent 20th anniversary celebration.

While the University of Wollongong is this year celebrating its 50th anniversary, the largest of the University's subsidiary companies, Illawarra Technology Corporation (ITC), is celebrating a milestone of its own – its 20th anniversary.

ITC was originally established in 1981 as "UniAdvice", a consulting division of The Friends of the University of Wollongong Ltd. The Illawarra Technology Centre Limited was established in 1984, as the foundation facility for new technologies and commercialisation of research within UOW.

In 1987 UniAdvice Ltd was established as a separate company and in 1990 Illawarra Technology Corporation Ltd was established as the umbrella company for UOW's commercial activities. This involved the consolidation of seven subsidiary companies and 14 profit centres.

ITC has today grown to comprise more than 220 full-time employees and has a projected 2001 turnover of \$32 million.

The company's operations involve running Wollongong University College, which expanded its activities into Sydney in 1997. Since 1993 ITC has operated UOW's only offshore campus in Dubai. In late 1999, ITC obtained a formal licence from the Federal Government of the United Arab Emirates to operate the campus in Dubai – the first and still only Western University to achieve such recognition. ITC had previously been operating in Dubai under a licence from the State Ministry of Education and holding a trading licence from the Dubai Municipality. Last year saw the relocation of the campus to a new, purpose-built facility in Jumeirah Beach, Dubai.

ITC also secured the first of a number of international consulting projects with AusAID, the Asian Development Bank and the World Bank in 1993 and has now won \$40m in contracts in nine countries through international competitive bidding.

ITC has recently established a new subsidiary company, ITC Europe Ltd, with a registered office in Rochester, England, to provide an entrance to the European Union marketplace.

ITC Managing Director, Mr James Langridge said ITC has established a reputation over the years for providing commercially viable and enterprising solutions to major complex problems.

"It has developed, on behalf of the University as its shareholder, an enviable reputation which has enabled it to win contracts across the world against major international competitors. It is now recognised as a professional services company of excellence in pursuing its aim of providing 'solutions for a better world', and secures 80 per cent of its sales revenue through export earnings," Mr Langridge said.

Planned growth should see the company achieve its target of \$38m per annum turnover in three years, and through a service contract with the University, should exceed a turnover of \$65m per annum, by 2003.

Celebrating 50 years (continued)

UOW contributes \$375 million a year to the local economy.

The University is a partner in developing the region's commercial potential and its international reputation for new technologies attracts significant business investment to Wollongong.

Its outstanding research and development partnerships earned the University the 1999-2000 joint award of Australia's University of the Year. Research carried out by the University and its local and international partners is creating a better future for all. Many of these leading research projects are focused on areas which are high priority and have direct public benefit.

Every year 2,000 students from more than 70 countries choose to study at UOW in preference to other universities, in Australia and overseas. Thousands of students from Sydney and other parts of NSW also make this choice.

The University is especially proud to be the university of choice for the majority of Illawarra students who regard a degree from UOW as their passport to success.

UOW graduates gain essential computer, communication, analytical, interpersonal and management skills, regardless of the degree they study. They are prepared for change - the joint award of Australia's University of the Year for 2000-2001 was for 'Preparing Graduates for the e-World'. They enjoy the best employment opportunities and some of the highest starting salaries in Australia, proven by the University's 5-star rating for Graduate Outcomes in the 2001 Good Universities Guides.

UOW is proud of how it has grown, prospered and achieved over the past 50 years.

Vice-Chancellor identifies Uni's initiatives to boost regional development

University of Wollongong Vice-Chancellor Professor Gerard Sutton identified the University's initiatives to boost regional development when he addressed the Universities and Regional Development Forum at Parliament House in Canberra recently.

The focus of the forum's discussion was engagement between regional universities and their local regions to promote economic, social and cultural development in regional Australia. It was hosted by the Deputy Prime Minister and Minister for Transport and Regional Services, John Anderson and the Minister for Education, Training and Youth Affairs, Dr David Kemp.

An important new planning tool, the Atlas of Higher Education - A Community Perspective, and a new tertiary education Think Tank were just two of the outcomes of the forum.

The Think Tank will include representatives from government, regional universities, regional communities and the Regional Development Taskforce that is already established. It will meet once or twice a year to provide advice on issues important to regional development.

Professor Sutton addressed the forum on the contribution of higher education to regional economic development. He identified the strong relationships that UOW had forged with the local community as well as major national and international industry partners.

The University's long-standing partnerships with the information technology and telecommunications company Nortel and BHP have led to the creation of new industries and employment opportunities within the local region. Professor Sutton also identified the University's efforts to establish a film industry in the Illawarra, in partnership

with Wollongong City Council, the Department of Employment, Workplace Relations and Small Business and the NSW Department of State and Regional Development, to promote the Illawarra region as a viable and competitive film location.

"It is particularly pleasing that the government has recognised the potential universities can play in the future of regional development," Professor Sutton said.

"The University is now the second largest employer within the Illawarra region and contributes more than \$1 million each day to the regional economy," he said.



NSW Premier Bob Carr with UOW Vice-Chancellor, Professor Gerard Sutton, at the launch of Innovation Week and the opening of Duke Energy Observatory.

Premier launches Innovation Week and Observatory

NSW Premier Bob Carr launched Innovation Week in Wollongong and opened the Duke Energy Observatory at the University of Wollongong's Science Centre in Fairy Meadow on 7 May.

It is the only public Observatory that gives visitors a chance to use a research quality telescope.

The Observatory is being sponsored by Duke Energy, which follows sponsorship by Nortel for the Science Centre and sponsorship from BHP for the Planetarium.

The State Government has provided about \$2.6 million towards the construction of the Science Centre and by the end of last year the centre had recorded 60,000 visitors. It is expected that more than 1,000 school classes will visit the centre each year.

The Science Centre is a major innovation for Wollongong, providing science literacy for the people of southern NSW through the special combination of hands-on exhibits, science shows, a planetarium and now a public observatory. The combination of interactive exhibits, observatory and planetarium will provide the State's leading astronomical education resource.

The Observatory's rotating domed roof provided some major architectural challenges. The large aluminium dome will hold up to 30 people at a time. During the opening ceremony, the Premier paid special tribute to the University's special links with the community praising UOW for helping to bridge the gap between developing new ideas and turning them into new products.

Mr Carr said the University has become more prominent year after year . . . more prominent with every passing year in the life of the region.

University Library wins Australian Excellence in Business Award

In recognition of its world-class organisational performance, the University of Wollongong Library was recently awarded the prestigious Australian Business Excellence Award by the Australian Quality Council.

The UOW Library was selected from a group of highly competitive finalists including multi-national corporations and service organisations.

Over the past six years the Library has actively worked to improve resources and services for its staff and students, as well as improve internal management processes and staff satisfaction. This award brings national recognition to the University through the excellence of its Library, "the Vice-Chancellor Professor Gerard Sutton said.

The award, presented as part of the International Business Excellence Summit in Sydney, recognises the Library's key strengths:

- valuing commitment, initiative, and learning;
- acute awareness of a volatile scholarly information environment;
- excellent planning processes;
- confidence in the direction taken by leadership.

"Demand from students and staff for greater variety and improved quality of information services in an environment of constant change has put pressure on university libraries to become more productive and competitive," according to UOW Librarian, Felicity McGregor.

"The Australian Business Excellence Framework has helped us to plan for the future as well as effectively manage our day-to-day business. Thinking in business terms can help organisations like ours to demonstrate a return on investment, as well as improved satisfaction with service, for all our stakeholders," she said.

Last year, the UOW Library became the first library in Australia to achieve a prestigious international best practice standard for the management and development of people to achieve organisational goals.

The Library also played a significant role in the attainment of the University of the Year Award for 2000-2001 – "Preparing Graduates for the E-World" (Good Universities Guides' Joint Winner).

On top of this, University Librarian Felicity McGregor was recognised for her leadership by the Australian Library and Information Association's Manager of the Year Award for 2000.

Science Direct and UOW Library model a first

More of the world's most cited journals are now available on campus in electronic full text due to a world first agreement between the University of Wollongong Library and Elsevier ScienceDirect.

Sally Stone, Manager for Elsevier Science in Australia and New Zealand, visited the Library recently to officially launch the enhanced and enlarged ScienceDirect service.

The Library had access to ScienceDirect during 2000 but was only able to provide access to around 110 subscribed titles. They now have increased full text access to selected collections of titles in the discipline areas of material science and engineering, earth and environmental science, mathematics and computer science, and commerce and social sciences.

"Elsevier Science worked with the Library to determine the best collections to suit the University's profile. The Library is the first to provide access to journal titles via the collections model and this model will now be extended throughout the world," Ms Stone said.

The University Librarian, Ms Felicity McGregor noted that ScienceDirect was a multidisciplinary database with a powerful search engine and a variety of useful features which makes searching, locating and linking useful resources much easier.

"It will be a significant asset to teaching and research in many faculties," Ms McGregor added.



UOW Librarian Felicity McGregor

BHP's \$2.5 million collaboration with University



BHP's Alan Thomas (centre) presents the formal agreement on future funding to Professor Rian Dippenaar with the Dean of Engineering, Professor Brendon Parker, watching on.

BHP's faith in the future of steel manufacturing has been highlighted with its announcement of \$2.5 million in funding for the University of Wollongong's BHP Institute of Steel Processing and Products over the next five years.

Chair of the Institute's Board and Vice President Hot Mills & Technology BHP Flat Products, Alan Thomas said: "The announcement ensures the Illawarra remains at the forefront of steel making technology research. This is a significant investment in the future of steel making excellence in the region, which ensures BHP can continue to offer its customers the best flat steel products available."

UOW currently collaborates with BHP on projects ranging from steel processing metallurgy and coatings technology to management of innovation and technological change. It is envisaged the core funding of \$500,000 per year will encourage even closer collaboration on educational programs and the sharing of specialised experimental equipment.

The Director of the Steel Institute, Professor Rian Dippenaar, said the announcement would have a major positive impact on the whole university, not just the Institute. He emphasised that collaboration with BHP affords university staff the opportunity to direct their research efforts to a better understanding of the fundamentals underpinning steel processing technology and steel products.

It provides them with an opportunity to take a more active role in the economy through application of their expertise while retaining their academic independence.

Environment the focus for two key groups

The state of the environment was the focus when the University of Wollongong played host to the inaugural Pacific Youth Caucus on the Environment and the 2001 Young Environment Envoys Program, during April 2001.

Representatives from throughout the South Pacific on the Pacific Youth Caucus were brought together to discuss environmental problems that confront this unique part of the world, such as Global Warming and the rising sea level, deforestation, coral bleaching and water contamination, and to draw attention to their problems.

Fourth Year UOW science student Andrew Stanton is sub-regional youth adviser for the Pacific to the United Nations Environment Program (UNEP), and was involved in organising the caucus.

Andrew said the event was very exciting as it was the first time the youth of the region have had an opportunity to meet and talk, at a truly regional level, about the environmental problems and opportunities they face.

"Pacific nations are generally very isolated from the rest of the world because they are small and separated by vast tracts of ocean. Out of sight can also mean out of mind. It is one of the reasons that they have not been well represented in the past at global forums," Andrew said.



Pacific Youth Caucus members Andrew Stanton (UOW), Megan Aliklik (Nauru) and Kilifi O'Brien (Tavatu)

"Because of their geographic isolation they have found it difficult to keep up to speed with the rest of the world in moving towards sustainable development."

Andrew hopes the caucus will help the region move towards more sustainable practices, and take a more coherent message to the international community.

"One thing we aimed to achieve during the caucus is to establish a region-wide youth environment network to allow us all to work together. It will help us to make more out of our individual efforts," he said.

"We hope that we will also be able to take up the slack and ensure that the young people of the Pacific nations are fully represented at the international level."

To this end, the conclusions and resolutions

reached during the caucus will be reported back to UNEP, the South Pacific Regional Environment Program (SPREP), and next year's Rio + 10 conference.

The University also held a forum for the envoys and Australian students involved in the 2001 Young Environment Envoys Program consisting of about 20 envoys representing the Asia Pacific Region on 'The role of young people in decision-making for ecologically sustainable development'. During their visit to Australia, the envoys also visited sites of environmental significance including Environment Australia, ANSTO, Sydney Airport, national parks and the Bicentennial Park at Homebush Bay, the Minnamurra Rainforest at Jamberoo and the Booderee National Park at Jervis Bay.



Pictured at the 2001 Young Environment Envoys Program at UOW are, from left, Andrew Stanton (UOW), Nadia Vaikai (Cook Islands), Limei Ying (Hong Kong) and Professor of Environmental Science John Morrison.

Applicants sought for Fulbright Awards

Applicants are being sought to enter this year's Fulbright Awards.

The Fulbright Commission is planning on issuing 20 Fulbright Awards to Americans to study and research in Australia in 2002 and a similar number for Australians to go to America.

For Australians - applications, in a number of award categories, open on 1 July 2001 and close 31 August 2001. All information and application forms are available on the Australian-American Fulbright Commission website at www.fulbright.com.au

Wollongong a major player in two new Co-operative Research Centres

The University of Wollongong is a major participant in two new Co-operative Research Centres (CRCs); Building the Internet of the Future and Improving Railway Efficiency.

The new industry-linked CRCs will receive more than \$33 million over the next seven years.

"For a university to be involved in one CRC would be regarded as a major achievement but the announcement of UOW's participation in two centres can only be described as an outstanding result," according to the Vice-Chancellor, Professor Gerard Sutton.

The two CRCs involving the University of Wollongong with other universities and industry bodies are:

- The CRC for Smart Internet Technology (total funding of \$22 million over seven years)
- The CRC for Railway Engineering and Technologies (total funding of \$11.2 million over seven years).

The Smart Internet Technology CRC will build the IT infrastructure required to improve the ease of use and the

management of an Internet that is rapidly increasing in complexity. The Internet of the future will meet the needs of people in all aspects of their daily lives. It will be useful, flexible, readily accessible and affordable.

The Railway Engineering and Technologies CRC will focus on improving railway efficiency through engineering and information technologies involving:

- "Smart train" intelligent systems
- innovative/automated track maintenance and upgrading technologies
- optimal traffic control and scheduling
- systems and standards for rail management
- new materials, systems and components for railways, and
- industry skills development

The formation of the nation's 19 new CRCs was announced after an extended and rigorous process of evaluation by the Minister for Industry, Science and Resources, Senator Nick Minchin.

Smart bra goes commercial



The smart bra is coming to a shop near you, after major UK company, Marks and Spencer, signed a deal to develop a commercial prototype.

The development of a commercial item will build on research undertaken by Kelly-Ann Bowles, a PhD student in Biomechanical Sciences, Associate Professor Julie Steele, and the Intelligent Polymer Research Institute (IPRI).

Professor Gordon Wallace, Director of IPRI, said the deal was a good one because not only would it allow the bra technology to reach the shop, but it would also provide the University research team with other opportunities for commercial development.

Marks and Spencer hope to have a commercial prototype smart bra developed within two years.

Pictured are Associate Professor Julie Steele (left), Professor Gordon Wallace and Kelly-Ann Bowles with Ian Scott, Head of Technology and Procurement – Lingerie, for Marks and Spencer (second left).

Forum focus on good fats

The University of Wollongong's Smart Foods Centre recently hosted a gathering of nutritional scientists, food manufacturers, nutrition educators and policy makers from across Australia to discuss new research and possible new foods featuring 'good' fats.

The workshop, sponsored jointly by Meadow Lea Foods, Clover Corporation, Unilever Australia and Roche Vitamins, was the first meeting of the Omega Discussion Group, formed recently by Professor Peter Howe of the Smart Foods Centre and Professor Andy Sinclair of RMIT University, Melbourne.

The Omega Discussion Group wants to address the health implications of fats in the diet, especially two classes of polyunsaturated fats known as omega-3 and omega-6, and also monounsaturated fats, known as omega 9.

"Until now, we've concentrated on cutting fat intake to reduce the risk of heart disease," Professor Howe said.

"But people have unfortunately cut down on good fats more than bad. The latest research shows many benefits to health from unsaturated fats, especially the marine omega-3s in fish and fish oil.

"We need to promote different food sources of omega 3s and increase consumption of these valuable fats," he said.

The workshop looked at benefits of omega fats, including their role in infant health and how they may counteract diseases of an ageing population, such as heart disease and arthritis. Australia still has no official recommendations on how much of the different omega fats are needed, although there is a rapidly growing public awareness of their importance in health.

The forum also discussed sources of the marine omega-3 and how they can be incorporated into a wider range of food products.

"The broad range of expertise in the Omega Discussion Group should help us capitalise more effectively on the beneficial aspects of dietary fat," Professor Howe said.

"It's encouraging to see food manufacturers prepared to work together to make this happen," he said.

Professor Peter Howe, of UOW's Smart Foods Centre (left) with Professor Andy Sinclair of RMIT University, Melbourne.



Major building phase under way on campus

A number of new building projects are well under way, or have been recently completed, on the main campus of the University of Wollongong.

These projects include the new Unibar, the replacement of Building 30, upgraded facilities for the University Recreation and Aquatic Centre (URAC) and a total major refurbishment of Building 18. These projects are depicted below.

Other projects of note have included extensive alterations to, and refurbishment of, a specialist laboratory and ancillary facilities for the Departments of Biological Sciences and Biomedical Science (Building 5), completed at the end of last year; and the construction of major stormwater mitigation works, completed early this year.



One of the main social meeting places on campus – the Unibar – has been completely rebuilt. The bigger and better version opened just recently.



Inside a new chemistry laboratory in Building 18. The Chemistry building has been completely refitted inside and offers the very latest in workspaces for the Chemistry department.



Building 30 is a project that will provide first-rate facilities for three separate units. Stage one will house administration, staff areas and teaching facilities for Wollongong University College and is scheduled for completion in July, while stage two, to be completed in November, will provide accommodation for the Aboriginal Education Centre, further teaching facilities for Wollongong University College, and a new entrance and reception area for the Graduate School of Business and Professional Development.



The new front entrance of the massively upgraded Sport and Recreation Association (URAC) facilities provides access to a much larger gym, new squash courts, improved changing facilities and food outlet. The new facilities opened in April.



Floodgates fight acid sulfate soil

Adjustable weirs and floodgates are being enlisted in the battle against acid sulfate soil in the Berry area thanks to \$171,805 from the Federal Government's Natural Heritage Trust.

Researchers from UOW are preparing to install self-tilting weirs in drains on Berry dairy farms with documented acid soil problems.

The project is expected to result in a 30 per cent reduction in new acid, which will ensure a better growing environment for fish and oysters downstream and significantly benefit the local fishing and oyster industries.

Coastal areas like Berry are particularly prone to acid sulphate soils because iron sulfide layers were formed under swampy marine conditions.

Project coordinator Professor Buddhima Indraratna said pyrite layers were being exposed to oxygen during drought periods, especially near banks. This produces corrosive acid constituents that destroy concrete infrastructure, kill vegetation and pose a danger to stock and marine life.

A floodgate being tested in a local farm drain is showing encouraging results, recording an increase in pH levels in the soil and drain water to almost seven, compared with nearby highly acidic drains that have pH levels as low as three. The floodgate was modified so tidal water could flush the drain water and neutralise acid when the build-up became significant.

Masters student William Glamore has been monitoring the test weir, testing for acidity and salinity once a month and maintaining the dataloggers attached to the floodgate. Research scientist Dr Anand Tularam analyses the data, using sophisticated computer models.

Professor Indraratna said the fisheries industry would benefit from reducing acid sulfate soils because of the threat acid water posed to marine life.

"The aluminium in acid water affects the gills of fish," he said.

"Red spots are a symptom of low pH attack and

produce allergy-like symptoms. Some reports indicate that up to 50 per cent of crayfish may be killed during high acid leaching periods and up to 80 per cent of an oyster crop can be lost suddenly when acid infiltrates their ponds or habitats," he said.

Professor Indraratna said reducing the acid level in farm drains at the Berry property meant better quality water would enter nearby Broughton Creek which flows to coastal waters.

"This means the fish breeding habitats within the flood migration will have a chance to improve over time," he added.

High level Asian interest in new Australian investment guide

Current economic apathy in the Australian market is a passing 'glitch', according to the authors of Allen&Unwin's latest contribution to Australian business publishing.

The recent launch of 'Investing in Australia – A Cultural and Practical Guide' attracted considerable international interest with Consuls-General from China, Thailand and Indonesia attending the launch at Parliament House Macquarie Street Sydney.

One of the book's authors, Sydney Business School Director, Professor John Glynn, said the concise guide provided the latest facts about the Australian business scene including the role of government, relevant laws, marketing and simply what has to be considered when

setting up business in this country.

Co-author and Asian business consultant Rob Goodfellow noted the attendance of both the Indonesian Consul General in Sydney, Bapak Gunawan and Mr Firdauzi, the Head of the Economic Section of the Indonesian Consulate General.

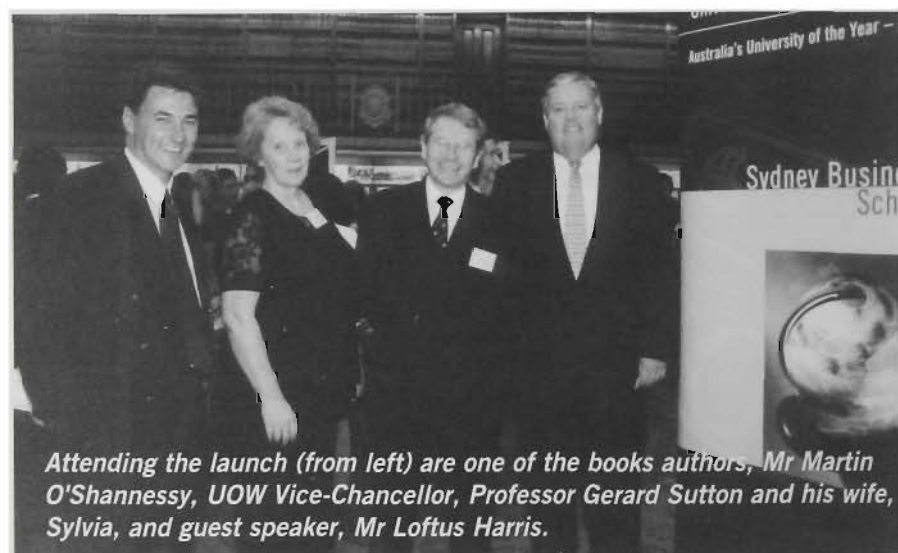
The Director General of NSW State and Regional Development, Mr Loftus Harris, officially launched the book.

Mr Goodfellow said that with the competitiveness of the Australian dollar, exports to Asia have just reached \$13 billion a year.

"In addition, the Australian Bureau of Statistics has shown very strong growth in the in-bound tourism sector as international visitors discover Australia is the best value holiday on earth. All this has contributed to strong sales of the book particularly through WS Smith Airport book stores," Mr Goodfellow said.

Co-author Martin O'Shannessy said the attendance of the three Consuls-General and relevant economic advisers at the launch indicated the interest and optimism held in Asia for the Australian economy.

The book launch was sponsored by The Sydney Business School and hosted by the Member for Wollongong, Mr Colin Markham.



Attending the launch (from left) are one of the books authors, Mr Martin O'Shannessy, UOW Vice-Chancellor, Professor Gerard Sutton and his wife, Sylvia, and guest speaker, Mr Loftus Harris.

CD-Rom targets writing skills

An innovative CD-ROM that will assist university students to improve their academic writing skills has been launched at the University of Wollongong (UOW).

With the assistance of the Centre for Educational Development and Interactive Resources (CEDIR), the interactive teaching and learning tool was developed by staff of the Modern Languages Program in the Faculty of Arts.

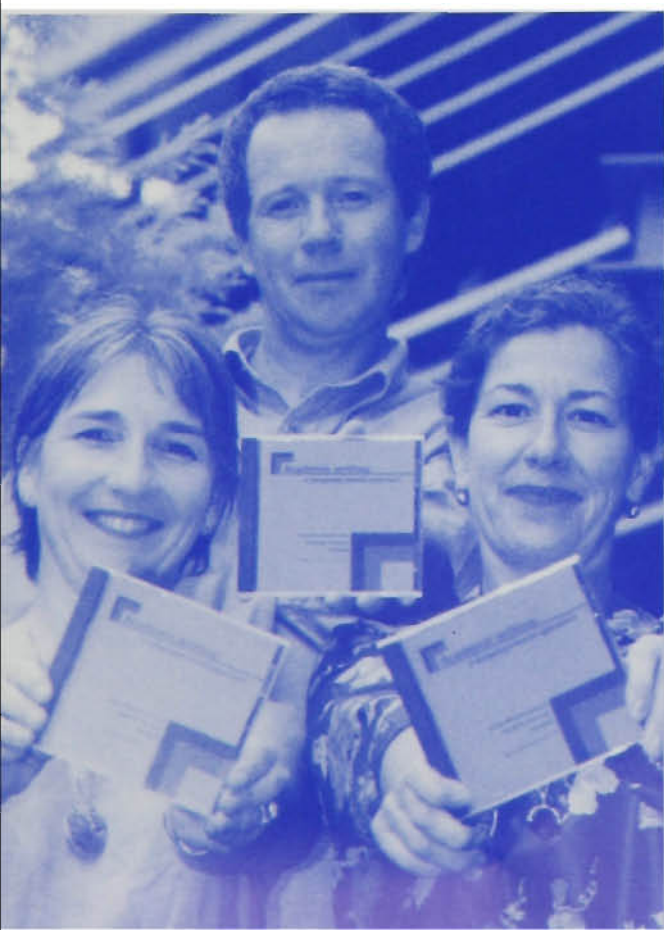
The CD will be extremely useful for international and Australian students commencing University studies at either undergraduate or postgraduate level.

The CD introduces students to the types of writing expected in a university environment and presents model examples. These models are de-constructed and their language features highlighted. Students then can practise these features in a range of writing tasks either independently or within a classroom setting.

Elizabeth Thomson who co-developed the project with Robyn Woodward-Kron said: "It is a unique language-based approach because it presents real examples of successful academic writing and annotates them using dynamic computer effects."

Published by Gonichi Language Services, the CD-ROM will be available as a teaching and research resource at all UOW campuses and also available commercially. It was recently reviewed by Margaret Allan, Senior Lecturer in Language Education at James Cook University, in Australian Language Matters as "a rare combination of sound language theory, intelligent instructional design and elegant navigational devices".

Pictured at the launch of the CD-ROM are (from left) Elizabeth Thomson, James Meek from CEDIR and Robyn Woodward-Kron.



Honours for chemist and IT specialist

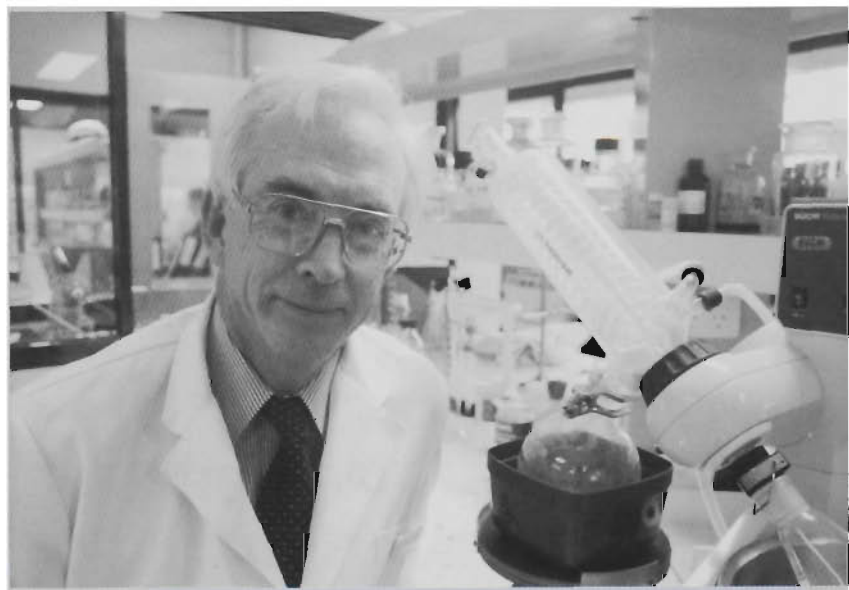
National honour for pioneering professor

University of Wollongong Professor John Bremner has won a national award for his outstanding contributions to medicinal chemistry research in Australia.

Professor Bremner, Director of the University's Institute for Biomolecular Science, has made significant contributions to organic chemistry in the fields of heterocyclic chemistry, natural products, and medicinal chemistry. He was the co-discoverer of the first alkaloids from the large plant family, *Proteaceae*, and he has made skillful use of alkaloids as starting materials in synthesis. He has pioneered an innovative approach to medicinal chemistry teaching in Australia. He was also instrumental, with co-workers in Wollongong, in identifying a structurally different antibacterial lead compound from a novel marine source.

Professor Bremner, who has been on staff since 1991, said the award was also a tribute to the excellent staff, students and facilities at the University's Institute for Biomolecular Science and its Chemistry Department.

Professor Bremner will receive the award and present the Adrien Albert lecture at the World Chemistry Congress in Brisbane in July.



Professor John Bremner has won a national award for his medicinal chemistry research

Hong Kong award honour

Meanwhile, Professor Ah Chung Tsoi, UOW's Pro Vice-Chancellor (Information Technology) has been named a winner of the 2001 Hong Kong Polytechnic University Outstanding Alumni Award.

The award, which pays tribute to distinguished graduates of the Polytechnic University and its forerunners, Hong Kong Technical College was presented to Professor Tsoi for his "illustrious achievements in his career



and continuous contribution to the community and support of the university".

Professor Tsoi is one of only seven Polytechnic University alumni to win the award this year. It is only given once every two years. This is the third time that such an award has been given.

The award was presented at a dinner at the Regent Hotel, Hong Kong, in early April.

Doctor of Science awards for academics

Associate Professor Rod Nillsen of the University's School of Mathematics and Applied Statistics has been awarded the degree of Doctor of Science by the University of Tasmania.

The degree was awarded on the basis of published work published, which has been acknowledged by scholars in this field as being a distinguished contribution to scientific knowledge.

The citation for the degree says "Over recent years Dr Nillsen has been working on characterising the functions, whose Fourier Transforms have a prescribed behaviour near the origin on the real line".

The Fourier Transforms is a mathematical concept named after the French mathematician Joseph Fourier (1768-1830). It is widely used in engineering and physics in the processing of electrical and radio signals.

A copy of Dr Nillsen's thesis, which develops a new connection between the Fourier Transform and differential calculus, is available for borrowing in the University library.

Meanwhile, the Director of the Intelligent Polymer Research Institute, Professor Gordon Wallace, has also been honoured with a Doctorate of Science by Deakin University.

Academic's lifetime work with children's learning capabilities recognised

A University of Wollongong academic is the first non-American to be awarded the 2001 Outstanding Educator in the English Language Arts by the US-based National Council of Teachers of English (NCTE).

The NCTE is the biggest professional organisation for English teachers, kindergarten to university level, in the USA.

The award for Associate Professor Brian Cambourne, from UOW's Faculty of Education, recognises distinguished educators who have made outstanding contributions to the field of language arts in elementary education.

Those receiving the award must demonstrate they have had a dramatic impact on classroom practice, made ongoing contributions to the field of language arts, obtained national and/or international influence and contributed a body of work that is compatible with NCTE's mission.

Professor Cambourne has published extensively about how children learnt and particularly how they learnt to control oral and written language.

A former teacher, Professor Cambourne once studied children as they began to learn to speak. He experimented with new teaching methods more aligned with "natural learning – learning that occurs outside the classroom".

He has been working with Wollongong teachers for the past 20 years who have picked up on his theories and put them into practice in their classrooms.

The award will be presented at the 2001 NCTE Annual Convention in Baltimore, Maryland in November this year.

101 years of service to education

The Faculty of Education has acknowledged the contributions of four staff retiring after a combined total of 101 years of service to the University.

Pat Farrar, the children's literature specialist within the faculty, joined the then Teachers College in 1961. Pat was for many years involved in organising the prac teaching trips to Fiji, which many UOW students participated in. Pat also made an invaluable contribution to language education and ensuring the staff were proficient in this field.

Gary Wilsmore joined in 1963. Gary was in physical and health education and organised thousands of the practical activities undertaken by P.E. students, such as skiing, canoeing, and climbing.

Dr Michael Wilson joined the Faculty of Education in 1987 as coordinator of the Graduate Diploma in Education, and was involved in curriculum development. Michael was responsible for initiating the faculty's "bread and butter" course, the

Diploma of Education for 80 Canadian students who every year return to top teaching jobs in Canada.

Dr Max Gillett came from the University's Centre for Staff Development, joining the faculty in 1992. Max was the faculty's expert in adult education and training.

In their combined 101 years, these four committed staff helped produce thousands of teachers. And through major changes in infrastructure and organisation they continued to make significant contributions to the field of teacher training.



Pictured left to right are Dr Michael Wilson, Dr Max Gillett, Pat Farrar and Gary Wilsmore.

New principal predicts bright future for Wollongong Conservatorium of Music



New Principal of the Wollongong Conservatorium of Music, Mr Graham Drayton.

Senior appointments

University of Wollongong Professor Sharon Bell will become the new Dean of the Faculty of Arts from the start of second semester (16 July). Professor Bell, currently the Dean of Creative Arts, will take over from Professor Anne Pauwels who has taken up a position at the University of Western Australia.

Professor Bell has been at the University for seven years, before which she was the head of studies at the Australian Film, Television and Radio School. She is well known in the Illawarra for her role in Film Illawarra, an organisation that promotes film production in the region.

Meanwhile, it has been announced that Professor Joan Cooper will be the new Dean of Informatics.

Professor John Evans, currently Head of the Department of Finance and Banking at the Curtin University of Technology, has accepted the position of Dean of Studies at the University of Wollongong's Dubai Campus, United Arab Emirates. He will take up duty in Dubai in early July.

Other recent appointments have included Professor Rob Castle, Pro Vice-Chancellor (Academic), Professor John Patterson, Pro Vice-Chancellor (Operations), Professor Ah Chung Tsoi, Pro Vice-Chancellor (Information Technology) and Professor Joan Cooper, from the School of Information Technology and computing science as the new Dean of Informatics.

In a bold move the Wollongong Conservatorium of Music has recruited the former State Manager of the Performing Arts Unit in the New South Wales Department of Education and Training as its new Principal.

Mr Graham Drayton and his staff of top arts educators had a leading role in the organisation of performers for the Sydney Olympic and Paralympic Games.

Following his appointment, Mr Drayton said it was now time for him to refocus his attention on some local and ongoing arts education projects and music in the Illawarra and South Coast areas.

"I know that the Government is strongly committed to strengthening regional conservatoriums and music centres and they appreciate the enormous potential that Wollongong Conservatorium offers. It already has some great staff and students engaged in a range of programs and the potential to cater for many more," Mr Drayton said.

"This should be a people's Conservatorium for all residents of the South Coast. It already receives great support from the Wollongong City Council, BHP and IMB. We need to make it as accessible as possible to all who wish to enjoy its wonderful locations and programs."

With almost 40 years of experience in New South Wales education, the new principal is well placed to forge stronger links with schools and the University.

"In recent years I have worked with hundreds of talented teachers and students from the Illawarra and the South Coast. I am really excited about the prospects for the future," Mr Drayton said.

Dr Brian Gillett, Chairman of the Board of the Conservatorium said that the Board was keen to see the Conservatorium develop to a size and standard appropriate to a city the size of Wollongong.

"The Conservatorium should be a focal point in the cultural life of the community. Graham Drayton is a highly acclaimed and respected educational leader who has the capacity to guide the Conservatorium through its next phase of development," Dr Gillett said.

Leading UK scientist presents seminar at UOW

A scientist from Oxford University, who is a world leader in the study of chaperone proteins, was guest speaker at a seminar at the University of Wollongong recently.

Chaperone proteins exist in all living organisms and have potential involvement in diseases such as Alzheimer's, Parkinson's and Creutzfeldt-Jacob (or mad cow) disease.

The seminar was presented by Professor Chris Dobson, a Fellow of the Royal Society, who has been headhunted by rival Cambridge University, where he will take up a Chair in Chemistry in September this year.

Professor Dobson's visit further strengthens the close ties between members of the Oxford research team and researchers at UOW. Associate Professor John Carver, of UOW's Department of Chemistry has taken sabbatical leave in Professor Dobson's laboratory and the Dean of Science and chemist, Professor Margaret Sheil is a frequent visitor to the laboratory of Professor Dobson's associate, Professor Carol Robinson.

The University of Wollongong recently announced that Dr Andrew Aquilina, a PhD graduate of the Department of Chemistry, has been awarded a prestigious Howard Florey Fellowship to enable him to spend two years researching the role of chaperone proteins in



Icelandic heart/stress expert pays special visit

One of the world's leading experts into lipids (fats), cardiac function and stress on the heart, Professor Sigmundur Gudbjarnarson, of the Science Institute, University of Iceland, was special guest of UOW's Department of Biological Sciences recently.

The former Rector (Vice-Chancellor) of the University of Iceland paid special tribute to UOW as one of the world's leading universities into lipid research.

The Department of Biological Sciences and Metabolic Research Centre hosted a seminar in March by Professor Gudbjarnarson entitled, Polyunsaturated fatty acids influence stress tolerance in heart muscle and gastric mucosa. Professor Gudbjarnarson's studies have included hearts of different animals, from whales to mice and the relationship between the function of these hearts and polyunsaturated fatty acids such as omega-3 fats (also present in fish oil).

He also participated in a later discussion on the Iceland Genome Database. Iceland has one of the most complete records of family history of any country on the planet and thus represents a valuable resource into researching the genetic basis of many human diseases.

The Icelandic Professor of Biochemistry has been one of the critics of how this issue has been handled in his home country.

After undertaking his PhD in Munich, Professor Gudbjarnarson undertook studies in experimental cardiology in the US during the 1960s before setting up the Chemistry and Biochemistry Department at the University of Iceland in the 1970s.

Postscript: Professor Gudbjarnarson said the University of Iceland ran its own lottery and used the proceeds to fund building developments on its campus while the 7,000-strong student body was completely responsible for running its own accommodation needs. Money from the university's cinema provided the travel grants for staff.

Professor Sigmundur Gudbjarnarson (centre) is pictured with two of the key organisers of his visit, Associate Professor Tony Hulbert, Biological Sciences, (left) and Associate Professor Peter McLennan, from Biomedical Sciences. Professor Hulbert is hoping to visit the University of Iceland next year.

Reforestation efforts by visiting students

Fifteen students in the visiting Colgate University Study Group at the University of Wollongong participated in a reforestation project at the Comerang Island Nature Reserve, near Jervis Bay, last session.

The students, accompanied by Professor Ellen Kraly from Colgate and Professor Rob Whelan, of Biological Sciences at UOW, planted about 75 trees of three different species in the reserve under the direction of Pat Hall from the NSW National Parks and Wildlife Service.

The theme of the study group for the last session was environmental policies and programs in Australia, with the United States students doing courses in Geosciences, environmental studies, Australian history and Aboriginal studies.

The tree-planting project was suggested by the students as a way to "give back" something environmentally positive to Australia, a "thank you" for the opportunity to experience the environmental and cultural heritage of Australia.

The students also observed the effects of tsunami on the Southern coastline and aided in data collection projects.

disease with Professor Robinson at Cambridge University.

Dr Aquilina will then be returning to UOW's newly-formed Institute for Biomolecular Science to share his knowledge with Wollongong's "chaperone team", led by Professor Carver.

Dr Aquilina follows two other Chemistry graduates, Paula Iannitti and Mark Tito, who have just completed periods working with Professor Robinson. While at Oxford, Dr Tito was awarded the Royal Institution Prize for the UK's Science Graduate of the Year.



Participating student Liz Reed and Resident Director, Professor Ellen Kraly planting trees at the Comerang Nature Reserve, near Jervis Bay.



Recent Booker Prize winner and Canada's best-known poet and novelist, Margaret Atwood pictured during her address.

Alternative approach to teacher preparation successfully trialled

The University of Wollongong has successfully trialled an alternative approach to teacher education, which it believes gives students a better understanding of the professional work of teachers.

Using working teachers as mentors, education students are being taught using a problem-based method that is new to teacher training. About 70 pre-service teachers are now enrolled in this program.

According to Associate Professor Nita Temmerman, Dean of the Faculty of Education, the program (now in its third year), is designed to graduate beginning teachers with a more comprehensive understanding of how the profession works.

"It aims to do this through a problem-based

learning approach and close collaboration with teachers in the field."

The innovative program, which was developed jointly by Associate Professor Brian Cambourne and Dr Brian Ferry, has involved shifting the mode of program delivery from the current campus-based lecture/tutorial mode to a problem-based learning mode which occurs within a school site. They discovered that two recurrent themes emerged from studies that sought to follow-up graduates of teacher education courses.

First, many students reported that they leave university with feelings of being under-prepared for life in classrooms and confused by what confronts them when they arrive at schools.

Second, schools which employ the graduates reported that a majority of them were unaware of how school and classroom cultures operated.

"They are unable to see the relationships between what they have studied at university and how it can be translated into classroom practice that produces effective student learning," Professor Temmerman said.

Kirby Scholarship to aid Aboriginal health projects

Two students, Nadine Torney and Alana Moffett, have each received \$1,500 to work on community-related projects as part of the Bachelor of Health Science in Indigenous Health Studies.

Nadine's project involves Koori youth education retention through Wollongong Youth Centre, while Alana's project with the National Heart Foundation involves Koori tobacco cessation.

The Kirby scholarship will be established on a continuing basis to foster community-based projects and partnerships and to provide students with valuable practical experience.

Sir Richard Kirby, now aged 96, is also recognised by a series of public lectures, which began in 1979. The Kirby lectures, held by the University's Department of Economics, have attracted speakers including Bob Hawke, Simon Crean, Bill Kelty, John Hewson, Jennie George and Jeff Shaw.

Sir Richard was awarded an Honorary Doctor of

Letters from the University of Wollongong in 1984. He has considerable experience in the field of industrial relations and was Chief Judge with the Commonwealth Court of Conciliation and Arbitration from 1956 to 1973, and later President.

Pictured are (left to right) Samia Goudie, Course Coordinator of Indigenous Health Studies; Deanne Condon-Paoloni, Faculty Executive Officer; Professor John Patterson, Pro Vice-Chancellor (Operations); Nadine Torney; Alana Moffett; Associate Professor Sue Kirby; and Indigenous Health Studies lecturer, Ms Marian Martin.



Booker prize-winning author presents Nortel Network address

Recent Booker Prize winner and Canada's best-known poet and novelist, Margaret Atwood, visited Wollongong to deliver the second annual Nortel Networks Canadian Studies Address on behalf of the University of Wollongong's Centre for Canadian-Australian Studies.

Ms Atwood read from and discussed her Booker prize-winning novel, *The Blind Assassin*.

She was introduced by the organiser of the event, Centre Director Associate Professor Gerry Turcotte, and by the Canadian Consul-General, Mr John Mundy.

Globally acclaimed, Ms Atwood's work has been published in more than 35 countries and translated into 20 languages. Some of her other best-known works include *Alias Grace*, *The Edible Woman* and *The Handmaid's Tale*, which was made into a motion picture.

Ms Atwood is the recipient of a multitude of literacy awards in Canada and internationally.

Professor Turcotte said it was a major coup for the centre to have attracted such a literary identity.

UOW teacher training course attracts state's best students

The University of Wollongong's teacher training courses are the best in the State, maintaining the highest Universities Admissions Index (UAI) in NSW for the past two years.

Faculty of Education Dean Associate Professor Nita Temmerman said all the pre-service programs within the faculty, namely primary education, physical and health education and early childhood education, were very much in demand by students.

Professor Temmerman said one of the main reasons for the demand was the high practical component of the courses, which offered earlier and more frequent in-school training than many other institutions.

"This faculty offers one of the best practical experiences, with students able to go out and work at schools alongside practising teachers within the first three weeks of their course," she said.

Professor Temmerman said that demand for the course had resulted in the UAI for courses, which in turn meant the University was gaining high-achieving students. This was recognised by the Department of Education and Training, and other organisations, she said, with the University's teaching graduates highly sought after.