

# CAMPUS NEWS

The University Singers, directed by David Vance, will present a program of *Music for Eastertide* in the Hope Theatre on Maundy Thursday, April 8 at 8pm.

The concert is shared with the Sutherland-based choir, *The Georgian Singers*, whose conductor is William Moxey. Mr Moxey is a member of the part-time music staff in the School of Creative Arts and a voice teacher at Wollongong University Conservatorium of Music.

The collaboration between the two choirs is fittingly marked in two works from the baroque era: the majestic eight-part setting of the *Crucifixus* by Antonio Lotti; and JS Bach's motet for two choirs, *Komm, Jesu, Komm*. Both will be conducted by William Moxey.

The concert features each choir in a wide range of passion music from Renaissance motets by Gabrieli and Sheppard, to music by Bruckner, Poulenc, and a recent score by the British composer, John Tavener.

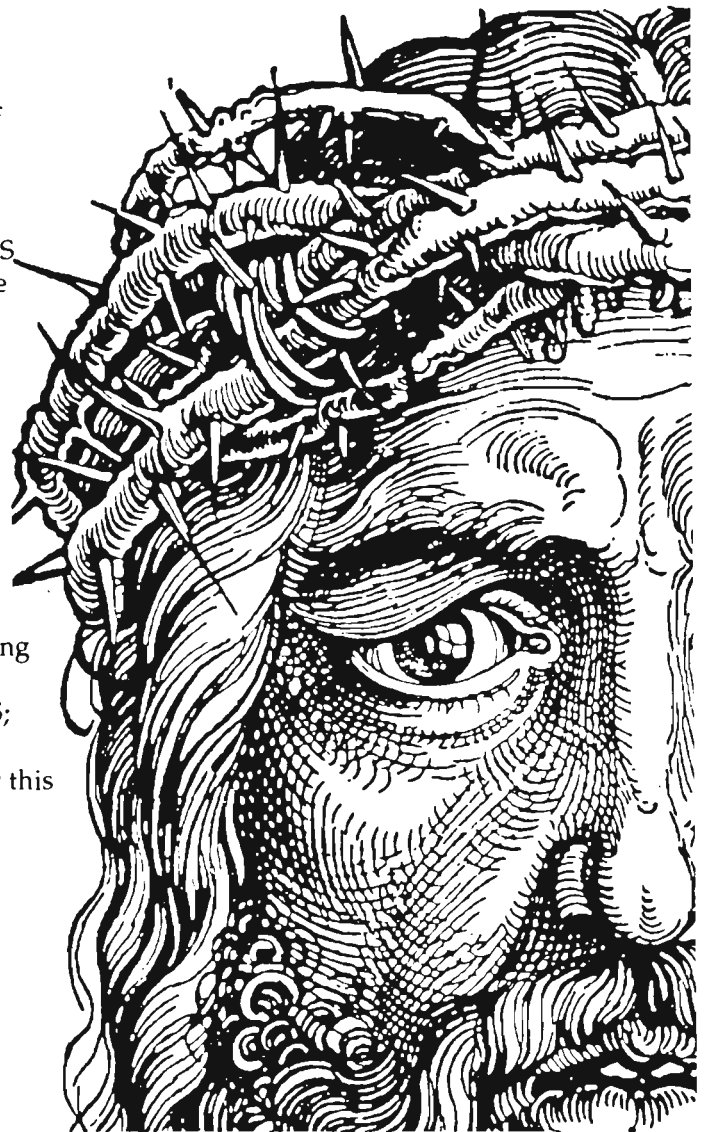
The moving Adagio by Samuel Barber appears in a choral version, by the composer using the text of the *Agnus Dei*.

The performance also includes the premiere of a Mass setting by Paul Stanhope. Paul, a tenor with the University Singers, is an MA Hons. student in Creative Arts, researching the music of Ross Edwards.

Tickets are available at the door from 7.15pm. Adult: \$15; Concession: \$10 Enquiries. 21.3591.

Apologies to those who receive their Campus News after this date.

## *music* FOR EASTERTIDE



The University Chaplain, Canon Raymond Heslehurst will be conducting the following services over Easter at St John's Keiraville:

Maundy Thursday 8pm  
Good Friday 9am. Meditation on the Cross

Easter Eve Saturday 10.30pm. Reflection and Celebration of the Resurrection/Holy Communion. (First time this service has been held in an Anglican church in the Illawarra.)

Campus News will not be published on 14 April owing to the Easter and Session break the week before. The next issue will be on 21 April.

## Italian scholarship

The locally-based Emilia Romagna Association is keen to locate students of Italian extraction to apply for their scholarship.

The scholarship offers return air tickets and passage to the Emilia Romagna region, free board and lodgings for one month with an Italian family of accredited repute and \$500 spending money.

The applicant must be aged between 18 and 25 years and have family lineage to a present or former resident of that particular region. The applicant should have been born in Australia.

The applicant must be an enrolled full-time student studying at this campus in any discipline.

This is an opportunity for the student to learn about the region and culture of antecedents of the Emilia Romagna region.

For further details contact Pietro Tedeschi, 10 Robin Place, Balgownie, phone (042) 83 5746.

## Busy Berry Campus

The Graham Park campus at Berry is being used as a weather station for the local area.

Weather details are phoned into the three local radio stations at 7am and are often broadcast with an accompanying message such as 'It's a fine day for study at the Graham Park Campus'.

The University of Central Queensland will also be using the Graham Park Campus as an examination centre for their external studies students in the Shoalhaven area.

## Deep throat ?

The Royal Blind society wants volunteer narrators to record computer text books and user manuals on to cassette tapes for blind people.

The Society needs people from around the country with computer experience and who can describe charts and diagrams.

If you can help please call Mr Jim Bates at the Royal Blind Society on 02 334 3333 or 008 424 359.

## Japanese study

The Japan Airlines Scholarship Program aims to give two Australian university undergraduate students an opportunity to see Japan and understand the culture and people.

To be selected, applicants must submit an essay on 'Environment and Development in East Asia and Oceania'.

## Musicology major approved for Music teaching

The Musicology major in the Bachelor of Arts degree, as specified in the University's Undergraduate Calendar, has been recognised by the Department of School Education as meeting their requirements for appointment as a teacher of Music (Secondary).

The Department would also require some evidence of expertise on an instrument.

They have not specified what expertise, or level, exactly, but it is assumed that most people in the Musicology degree would have some Board or College results that are adequate. For primary teaching, the musicology subjects give one of the three teaching areas required in an undergraduate degree.

Students would also have to include two other teaching areas, for example, English, Social Science or Maths.

Entry to the Graduate Diploma in Education generally is competitive. Students must have completed a Bachelor degree and first preference is given to students who meet the Department of School Education requirements.

The University then looks at academic record, and ranks on this. Demand has outstripped places for the last three years, by about 4:1. The music method will only run if there are a minimum of five students.

Job prospects at the moment are good, although the market does depend on vacancies occurring, as Music departments in schools are usually very small.

The planned development of performing arts high schools will also increase opportunities for employment.

The JAL scholarships are open to students who have never been to Japan; are undergraduates enrolled in years two, three or four of a degree course; study in any faculty; are Australian residents; are 20-28 years of age; and are in excellent health.

Successful applicants will leave on Japan Airlines' flights to arrive in Japan on July 14, 1993 and return home on August 28, 1993.

They will attend Summer Session of Asian Studies at Sophia University, Ichigaya Campus, for five weeks consisting of 27 morning sessions of 80 minutes for six days per week with afternoons devoted to field trips.

Accommodation is provided at a JAL dormitory in Tokyo.

Scholarships provide for: air travel, travel documents, insurance, tuition, accommodation, transportation in Japan, per diem and textbooks

For any further information and conditions, contact the

Office of Development & Community Affairs, ext. 3455.

## All sorts read *Campus News*

From time to time we get requests from people from sometimes unexpected quarters wanting to receive *Campus News*.

The latest was the parent of a first year student whose daughter had brought home a copy.

If you would like to be on the mailing list contact Planning and Marketing (042) 21 3110.

Three thousand copies of *Campus News* are printed and distributed to staff, students, Friends of the Univer-

sity, local, metropolitan and national media, community organisations, Illawarra schools, international education organisations and individuals with links to the University.

## Tit Bits

If you hear any newsy items about the University that you think others would enjoy - human interest, pats on the back, unusual achievements, colourful happenings, amusing incidences, sayings of the week, wildlife on campus, please tell Gillian Curtis 213926 or E-Mail

## KCM Scholarships

The Key Centre for Mines has recently awarded two competitive Scholarships in Mining Engineering.

The successful candidates are Nihad Ridha who will be working on *Coal Mine Outbursts* under the joint supervision of Associate Professor Aziz from the Department of Civil and Mining Engineering and Dr Hutton from the Department of Geology, and Ashoka Herath who will be working on *Strata Control* under the supervision of Dr B Indraratna from the Department of Civil and Mining Engineering.

## Name tags for staff

Staff at the University who have contact with the public will soon be wearing name tags as part of the University's desire to provide a friendly, personalised service to students, the community and the rest of the campus.



# ITC News

The Illawarra Technology Corporation Limited

April 1993

## HOWARD WORNER SYMPOSIUM

Professor Howard Worner, Director of the Microwave Applications Research Centre, will be 80 years of age on 2 August this year. To honour this occasion, and to honour a most esteemed colleague, the University and ITC are collaborating to organise a one day Symposium on Saturday 31 July, to be held in the Hope Theatre.

Principal speakers will be Emeritus Professor Sir Rupert Myers KBE, President of the Australian Academy of Technological Sciences and Engineering, and Emeritus Professor David Craig AO FRS, President of the Australian Academy of Science. Professor Keith Brimacombe OCFRSC, from the University of British Columbia will represent many of Howard's overseas friends and colleagues.

Among the other distinguished speakers will be Professor Hugh Bradlow, from the University of Wollongong and NorTel Technology Centre who will examine

"Travelling the World from Your Desktop: How Computers and Communications are Shrinking the Globe". The collective subjects of the nine speakers range far and wide, and reflect the breadth of Howard's interests.

The Managing Director of ITC, Mr Jim Langridge, will chair one of the sessions, as will the Vice-Chancellor, the Deputy Vice-Chancellor and Howard's brother, Professor Hill Worner from the Australian Defence Force Academy in Canberra.

The Celebration Dinner, to be held that evening, will be presided over by the Chancellor, and addressed by Mr John Innes FTS, Group Executive of CRA.

Attendance at the Symposium and the Dinner is open to all who wish to acknowledge Howard's significant contributions in many fields of endeavour.

*Further information:*  
Jackie Zelinsky (042) 268884

### CHANGE TO BOARD OF DIRECTORS

At the February 1993 Board Meeting, the Chairman accepted with regret the resignation of Director Mr Grahame Parker, who departed for Melbourne recently to take up the position of Group General Manager, International Division, BHP Steel. Mr Parker was formerly Group General Manager of the Slab and Plate Products Division, BHP Steel, in Port Kembla. The Board noted its appreciation of Mr Parker's valuable contribution to the management of ITC during his three years as a Director.

### MANAGER, INTERNATIONAL APPOINTED

Bill McGaw, formerly Senior Lecturer in the Department of English within the University of Wollongong, took up duty on 1 February 1993 as Manager, International. In addition to overall responsibility for the Wollongong English Language Centre and the Foundation Studies Program, he has specific responsibility for the establishment of The Institute for Australian Studies in Dubai.

## WELCOME TO CRC FOR MATERIALS WELDING AND JOINING

The CRC for Materials Welding and Joining, funded by the Commonwealth Government under the Cooperative Research Centres Program, has located its administrative base at the Illawarra Technology Centre.

The CRC is a joint venture between the Australian Nuclear Science and Technology Organisation (ANSTO), Commonwealth Scientific and Industrial Research Organisation (CSIRO), the Broken Hill Proprietary Company Limited, the Welding Technology Institute of Australia and the Universities of Wollongong and Adelaide. The Centre's objectives include the establishment of cooperative research and development programs in a number of key areas of importance to Australian industry, training researchers, technical personnel and policy makers in advanced materials welding and joining technologies, technology transfer and commercialisation.

A Board of Directors consisting of independent Chairman, Dr Don Williams, representatives of all participating members and the Executive Director, Dr Norman Eaton, will oversee the activities of the Centre. Dr Eaton has wide-ranging

executive and research experience in the area of materials joining and welding, is a prominent member of international industry associations, and has recently taken up his position after senior appointments in the United Kingdom and Canada. Dr Eaton is currently establishing the operational networks and linkages required to assure the success of the Centre. Program Managers have been appointed in key

research and development areas, and several projects are under way or in the process of evaluation.

The ITC has been retained to provide financial services to the CRC and the Corporation's Peter Beniuk has been appointed Company Secretary.

*Further information:* Dr Norman Eaton (042) 268885



• Dr Norman Eaton, Executive Director of the CRC for Materials Welding and Joining, is welcomed to the ITC by Mr Jim Langridge, Managing Director, and Mr Peter Beniuk, Company Secretary

## SCHOLARSHIP FOR TREVOR LEWIS

Trevor Lewis has left Biological and Chemical Analytical Services (BACAS) to take up an APRA scholarship to complete his PhD in Chemistry at the University of Wollongong. His project will be carried out in conjunction with Pasminco, and aims to reduce energy costs and improve quality in the zinc recovery process.

Laboratory management of BACAS will be taken over by Catherine Lancaster, who will also become the designated NATA signatory. Sales will be handled by Tony Sunderland, while Trevor will remain as a technical consultant.

The management and staff of ITC congratulate Trevor on securing this scholarship, and wish him every success in the future.

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## ITC TRAINING & EDUCATION LAUNCHES CONFERENCE PACKAGES

The Training and Education Division has developed a successful conference organiser's package which facilitates the organisation and presentation of conferences and seminars.

Working in close consultation with Tourism Wollongong, Helen Robinson offers a full range of services, including pre-conference publicity and publications management, budget development and control, and special assistance for VIP guests. This is all supported by a database which can be networked across the University campus

*Further information:*

Helen Robinson (042) 268884

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## WORK BASED PROFESSIONAL LEVEL TRAINING

Many companies and industry groups approach ITC enquiring about the provision of University-accredited training, and ITC Training and Education Division has set up the Centre for Continuing Education and Training to respond to these needs. The Centre provides postgraduate level modularised training for senior industry professionals, and current clients include the Water Board, CityRail, the NSW Premier's Department, and the NSW Police Service.

As the work of the Centre complements that being done by The Australian Training School of Advanced Manufacturing (ATSAM) at the shopfloor to supervisor level, ITC is now a one-stop training provider enabling access to accreditation at all levels of tertiary education.

*Further information:*

Jackie Zelinsky (042) 268884

## PRACTICAL INDUSTRIAL QUALITY SYSTEMS

### COURSES ON OFFER

The Centre for Advanced Manufacturing and Industrial Automation (ITC-CAMIA) is offering a range of one-day courses in 1993 in Quality, Maintenance, Management and Operations.

One of the most popular has been the Practical Industrial Quality Systems (PIQS) series, usually taken as four one-day courses over a period of 8 weeks. This series provides an introduction to the general problem-solving techniques which are at the heart of all quality improvement programs. Based on the "KAIZEN" principle of continuous improvement which permeates all TQC/TQM programs, and on visibility of the improvement process, the series concentrates in particular on the graphical techniques and management

tools available. Comprehensive course notes are issued, and these combine with the workshop materials to form a 2-volume PIQS Quality file for future reference.

Although the four PIQS courses together form a continuous series, each module may also be taken individually without undue loss of continuity. These courses commence on 28 April 1993 (PIQS-I). Other one day courses are also operating between March and July.

*Further information and bookings:*

(042) 213354 or (042) 268909

Fax (042) 268815

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## WATERFRONT REFORM

The Centre for Transport Policy Analysis (CTPA) has been requested by a major trans-Pacific ship operator to examine the actual impacts of waterfront reform, particularly in relation to productivity on the waterfront, and whether cost savings are reflected in shipping costs.

While the Australian waterfront has been in the process of reform for a number of years, confusion now surrounds the actual extent of benefits which have resulted. Although recognising that there is some way to go, it is claimed by some that the reform process is a success. On the other hand, considerable criticism is being levelled at stevedoring operators and shipping companies for failing to pass on the perceived benefits.

*Further information:*

Dr Ross Robinson (042) 213683

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## FOUNDATION STUDIES PROGRAM

Forty nine students from twelve countries, including Tonga, Lesotho, Palau and The Philippines, commenced the Program this session. Student numbers are increasing, especially from Malaysia, Singapore Hong Kong and Taiwan, and 60 students are expected to commence in the Spring session. Two AIDAB sponsored students completed a session last year, with 5 students being enrolled for the Autumn session

One hundred and fifty six students who have completed the Program are now studying at the University of Wollongong, and the first of these will complete their studies and qualify for degrees during 1993.

Course development is ongoing to ensure that the Program fulfils the needs of the students and the requirements of the University. Courses currently on offer are Arts, Commerce, Science and Engineering, and Mathematics and Computing Science.

*Further information:*

Kareena Rixon (042) 268803

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## CALL FOR EXPRESSIONS OF INTEREST

Expressions of interest are being sought from organisations suitably placed to develop and commercialise existing intellectual property in cataract research.

Cataracts are the major cause of blindness in the world. In India alone, four million people are blinded by cataracts each year. The Australian Cataract Research Foundation (ACRF), headed by Professor Roger Truscott, has been actively involved in research designed to work out the mechanism of cataract formation. The long term objective of the Foundation's work is to inhibit the development of cataracts by using drugs rather than surgery. The ACRF is considered one of the top cataract research groups in the world.

The Consulting and Intellectual Property Unit (CIPU) is seeking expressions of interest from companies interested in evaluating the work completed to date, and prepared to collaborate in the move towards commercialisation of cataract treatment and prevention utilising chemical, as opposed to surgical, solutions.

*Further information:*

Peter McNamara (042) 268939

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## OFF-SHORE TRAINING IN OMAN

In February, ITC undertook its first off-shore training in the Sultanate of Oman. Bob Williams, from the Department of Management within the University of Wollongong, designed and delivered a five-day training course, *Finance for Non-Financiers*, to a group of managers at the Central Bank of Oman. This was a most successful venture, and Professor Michael Hough will visit Oman in April to deliver a Management training program to the same group.

*Further information:*

Jackie Zelinsky (042) 268884



## CONSULTANT DATABASE

ITC is seeking to increase its participation in international aid-funded projects. In order to expand its database of consultants, ITC advertised recently seeking expressions of interest from persons with appropriate experience and skills, preferably with developing country experience, in the areas of: Human Resource Development; Women in Development; Education Management and Planning, Teacher Training, Curriculum Development; Transport - Ports and Shipping; Environmental Management and Pollution Control; Economic Evaluation of Agricultural Technology and Policy; and Health Services Development and Population Planning.

Further information: Ann Webb (042) 268800

## NOKIA RESEARCH PROGRAM

The Centre for Information Technology Research (CITR) will carry out a \$1.7 million R&D program for Nokia Telecommunications Pty Ltd over the next three years. The program will develop tools to incorporate the effects of multipath propagation into network planning systems for cellular and microcellular communication systems.

Further information:

Dr Ian Reinecke (042) 272644

## ITC DEVELOPS POTENTIAL FOR PYROMETALLURGY RESEARCH

ITC is now in an excellent position to undertake research projects in the field of pyrometallurgy. A major outcome of the EnvIRONment project has been the construction of a 75 kg DC electric arc furnace, and associated materials preparation and offgas management systems. Following the commercialisation of the EnvIRONment process, this furnace will be used for a wide range of smelting and refining research.

To enhance the existing metallurgical staff at Coniston, ITC, in conjunction with the Department of Materials Engineering of the University of Wollongong, is preparing to jointly appoint a Senior Lecturer in Extractive Metallurgy. This will ensure that ITC and the University of Wollongong will remain at the forefront of research into pyrometallurgy, and be well placed to provide a comprehensive research and experimental service to clients from the minerals industry.

Further information:

Paul Blackwell (042) 268821

## PORT DEVELOPMENT POLICY

Dr Ross Robinson, Director of the Centre for Transport Policy Analysis (CTPA) was recently invited to participate as a guest lecturer in the Department of Defence Maritime Studies Program.

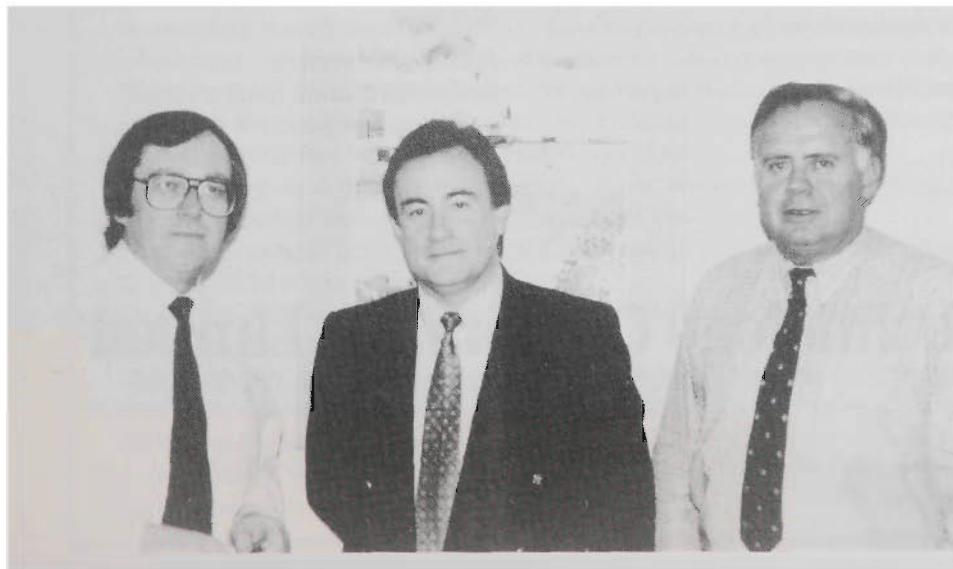
Lectures were presented to senior Naval and government personnel, and shipping personnel from the private sector, on developments in liner shipping and issues relating to port development policy. Topics discussed included the globalisation of liner shipping and the development and growth of hub and feeder operations, and the likely impacts this would have on Australian ports. Dr Robinson also stressed that ports must

cease being isolated and discrete entities, but must become part of an integrated intermodal transport chain. The efficiency of port operations and better productivity are critical, but, even more importantly, ports must begin to operate as part of an efficient logistics system which focusses on the efficient handling of cargo from origin to final destination.

Further information:

Dr Ross Robinson (042) 213683

• **Pictured below Dr Ross Robinson, Mr Mike Perri, Director of Marine Industries in DITAC and Commodore Sam Bateman, Director of the Maritime Studies Program Royal Australian Navy discussing the Centre's maritime program**



## BEYOND THE JAVA SEA

Dr. Adrian Vickers, from the Department of History and Politics at the University of Wollongong, has been working closely with the Consulting and Intellectual Property Unit (CIPU) on a major project for the Australian Museum entitled 'Beyond the Java Sea'. Dr. Vickers, who specialises in Indonesian studies, curated the exhibition which includes historical artefacts from many of the islands of Indonesia.

Mr. Jim Langridge, Managing Director, and Mr. Peter McNamara, Manager of CIPU, represented ITC at the opening ceremony of the exhibition at the Australian Museum on Thursday 4 March 1993, which was officially opened by the Governor-General.

The significance of this exhibition goes far beyond the magnificent display of Indonesian artefacts. Dr. Vickers' highly acclaimed involvement in the exhibition has linked the University of Wollongong and the ITC to the development of closer cultural links between Australia and Indonesia.

Further information:

Peter McNamara (042) 268939

## STRATEGIC PLANNING OF PORTS

The Centre for Transport Policy Analysis (CTPA) continues to be involved in the strategic planning of ports. Dr Robinson, CTPA's Director, stated that NSW regional ports, such as Port Kembla and Newcastle, which are located in the shadow of capital city ports, continue to be plagued by leakage of cargo to the major capital city ports such as Sydney and Brisbane. CTPA has recently completed major strategic development studies for both these ports, and implementation of the strategies is proceeding.

Further information:

Dr Ross Robinson (042) 213683

## ENVIRONMENTAL PROJECT

ITC has been working closely with the Technological Change and Environmental Strategies (TCES) group at the University of Wollongong to undertake a project for the Environmental Protection Authority (EPA).

A comprehensive survey conducted by the TCES group provided an indication of the concerns of the wider community in the Illawarra in relation to such issues as air pollution, land degradation, waste management and hazardous substances. The results were presented at the Illawarra Regional Environment Community Consultation Forum by Professor Jim Falk, Head of the TCES group, together with Kevin Parker and Greg Hampton. The Forum brought together a diverse group of community representatives from the Illawarra and Shoalhaven regions.

Further information:

Peter McNamara (042) 268939

## ITC OFFERS SUBSIDISED CONSULTANCY FOR AMT

The Advanced Manufacturing Technology Investment Evaluation Guidelines program is sponsored by the Department of Industry, Technology and Commerce. The aim of the Department is to encourage greater use of AMTs by small to medium sized Australian manufacturing companies. The program teaches the company the methods to use in evaluating the technical, operational and financial feasibility of project proposals. It also provides training in planning the implementation activities and reviewing the effectiveness of the project. ITC is one of only three accredited groups delivering this package in NSW.

The changing face of Australian and overseas markets means that a company's success and competitiveness is increasingly dependent on its manufacturing capabilities. To remain competitive, companies must invest in the appropriate level of Advanced Manufacturing Technology (AMT) but the apparent cost and perceived long payback periods often discourage companies from investing in the latest technology.

Adoption of new technology is not in itself a guaranteed solution to business problems, however, as the effective implementation of new technology requires changes in the culture of the whole company. A system of implementation that ensures that the technology is used effectively is also required.

A subsidy of up to 70% is available to companies participating in the pilot program, which is due to start soon.

Further information:  
Paul Blackwell (042) 26 8821

## EXPERT OPINIONS

Accidents that occur in the workplace or in public areas are often the cause of litigation action by individuals, and the Consulting and Intellectual Property Unit (CIPU) regularly provides expert advice relating to these kinds of cases. A number of local legal firms use the services of the CIPU to access the advice of consultants from the University of Wollongong. Many of the cases involve plaintiffs who have slipped and fallen in the course of their work, or in public places. Expert opinion is provided on a variety of

## EVALUATING THE ENVIRONMENT PROCESS

A major Australian engineering company has commenced a feasibility study into the ENVIRONMENT process, ITC's innovative waste processing technology. The process has been developed by ITC with R&D funding provided by the NSW Water Board and Pacific Power. In this process, sewage sludge, iron making dusts and other industrial sludges are

blended and pelletised before being fed into a DC electric arc furnace where they are smelted to produce foundry grade iron. In full operation, this process could recover up to 30,000 tonnes of iron per year in the Sydney region alone.

In March this year, formal agreements were executed by ITC, the NSW Water Board and Pacific

Power to grant to ITC an exclusive world wide licence to commercialise the technology. The evaluations and investigations currently being undertaken by this Australian company provide the initial phase of a major thrust by ITC to commercialise the process.

Further information:  
Paul Blackwell (042) 268821

matters associated with the causes of such accidents, including the "slipperiness" of surfaces and the relative contributions of the plaintiffs and defendants. Enquiries regarding expert advice for safety in the workplace or safety in public areas should be referred to the CIPU.

Further information:  
Peter McNamara (042) 268939

## MACHINE VISION SYSTEMS: LOOKING TO THE FUTURE.

Manufacturers often do not obtain the full benefits that automation can provide. Automation coupled with machine vision is highly suitable for such applications as stock control, automatic testing, flaw detection, machine control, identification and various other inspection processes. This technology ties in well with the current moves towards TQC and other quality improvement systems assisting Australian industry to gain a competitive edge.

ITC has developed a variety of unique systems utilising machine vision technology in industries as diverse as food production, pharmaceuticals, electronic components, catering and materials handling. ITC now has the expertise and equipment to conduct feasibility studies in-house, allowing companies to test the applicability of vision systems to their needs, without investing in technology which may not be appropriate. ITC uses practical manufacturing experience and project management skills, combined with research and innovation expertise, to

find the most appropriate solutions for their clients. Feasibility studies conducted by ITC are normally eligible for the 150% R&D Tax Incentive Scheme, or other forms of government assistance.

ITC is also able to provide training in the application of vision systems and will work with the client to ensure that the company develops the expertise in-house to use and maintain the technology. Enquiries from manufacturers and equipment suppliers are welcome.

Further information:  
Paul Blackwell (042) 268821

## EXECUTIVE DEVELOPMENT PROGRAM

Following the presentation of a number of programs conducted in 1992 on behalf of the Kelang Port Authority and the Malaysian Ministry of Transport, the Centre for Transport Policy Analysis (CTPA) has been requested to again present training programs on the development of intermodal transport operation in Malaysia. The program will be conducted in Kuala Lumpur in October 1993, and topics to be discussed include the changes in global liner shipping, and the trends toward an integrated intermodal transport network; the economics and savings of logistics smoothing, and the legal implications of a single operator having responsibility for the entire transport operation.

Further information:  
Dr Sophia Everett (042) 213768



## The Illawarra Technology Corporation Limited

The Research & Development Company of the University of Wollongong A.C.N. 002 882 064

Northfields Avenue Wollongong NSW; Locked Bag 8812, South Coast Mail Centre NSW 2521  
Telephone: (042) 268999, Facsimile (042) 268807

Editor, ITC News: Ann Webb (042) 268800

# Development of a telecommunications network management training program

The Centre for Information Technology Research has completed an innovative distance-learning training course in network management for the Societe Internationale de Telecommunications Aeronautiques (SITA), which will deliver the program internationally.

The training program is generally aimed at senior telecommunications personnel, with responsibility for network management and client and supplier interfaces.

Initially, the program will be aimed at SITA's personnel and that of its membership and associates.

In the second quarter of 1993, the training program will be distributed to an initial 100 senior SITA personnel. The eventual audience in SITA will be 300 to 400.

In July 1991, SITA in conjunction with CITR, received funding of \$725,000 from the NSW Education Training Foundation (ETF) to develop a training program for telecommunications network management and operation for the international telecommunications industry.

The program was dependent upon a close working relationship between SITA in France and CITR in Wollongong.

CITR's project co-ordination was conducted by Ms Shirley Agostinho and Ms Sally Brownlow, who liaised with SITA's sizeable training and development centre in Sophia Antipoles France.

Communication between CITR and SITA was made possible through the use of SITA's electronic mail and document interchange service, SITATEX.

The overall objective of the project was to design and deliver a program of courses for the training of senior technical staff in the Australasia and South Pacific region on the management of the SITA international network (the largest special purpose telecommunications network in the world) and for network management in general, utilising network and distance learning techniques as much as possible.

This objective was achieved as the entire training program has been developed to be distance-learning based, using the delivery mediums of computer based training, (CBT), and paper-based workbooks.

Due to the method of course delivery, it is possible to provide the program throughout the world.

Initially, both SITA and CITR will offer the developed training program more widely within the Asian Pacific region, although SITA's global reach provides an ideal opportunity for wide dispersal of the product.

The topics covered include present technology applicable to the telecommunications industry, together with a review of existing and proposed products; network architectures and data processing aspects of telecommunications (including the main operating systems and protocols); and specific

network management issues (fault, ordering, capacity and contingency planning).

The total time to complete the training program is a very intensive 115 hours.

The CBT course will be distributed across the SITA network by making use of an automatic file-server based in the SITA training centre in Nice.

Users can send a request to the file server and be automatically sent the files for the appropriate CBT course.

## Friends News

The Board is seeking nominations for two members who can represent the community on the incoming Board to be elected at the Annual General Meeting on Friday 14 May, 1993.

Nomination forms are available from Antoinette Matarranz in the Friends Office.

The Association is also seeking new members from the community to become more involved in University activities.

The Friends offer the opportunity to participate in a wide variety of activities, and if you are well informed about our University you can help us to promote the City of Wollongong as a University City.

If you would like to attend the University Day Ceremonies and join us at the Friends Dinner on Monday 10 March phone (042) 213169.

If you would like to know more about the Friends and the satisfactions it offers talk to me. - John Bell

## Misrepresentation detected

Procedures implemented at the University of Wollongong and the diligence of University officers have led to the apprehension of two international students who made false representation to the University to avoid the payment of international fees.

In accordance with regulations and following the appropriate hearings, one student has been expelled and the other denied enrollment.

Both students falsified permanent residential status so they would only have to pay the same fees as an Australian student (around \$1500) rather than the international fees of between \$10,000 and \$14,000.

By enrolling as a permanent resident, these students were denying an Australian student the opportunity to study at the University.

Also, such actions constitute a prima facie case of criminal fraud and legal action could be taken against them.

These are the first incidences of this nature that have occurred at the University of Wollongong.

University officers believe that the procedures that are in place will make it very difficult for similar misrepresentations to happen in future.

As well there seems to be a high level of intolerance of this sort of action in the community which leads to individuals alerting the Administration to possible abuses.

## Terry Pratchett is coming

Don't miss this opportunity to speak with one of Britain's most successful humourists, Terry Pratchett.

He will be at the University of Wollongong on Thursday April 22 from 12.30-1.30 pm, in Pentagon 3.

Pratchett's work is funny, earthy, cynical and joyously optimistic all at the same time.

Pratchett is a publishing phenomenon. He has produced 21 titles in the last 10 years and sold six million books world-wide.

He is the only author to have led both the adults' and the children's UK bestseller lists at the same time, sometimes with the same books.

## HOPE THEATRE

Bookings phone 21 4214  
Western Entrance, Northfields Avenue.

**Timetable:** 17-29 May, The Chapel Perilous, John Senczuk. 30 May: Illawarra Choral Society Performance, 5-9pm. 5-7 June: Regional Poets Co-op Conference, 9am-10.30pm, Ron Pretty.

## LONG GALLERY

An exhibition of photo art by Michael Thompson, Peter Jones and Peter Kemp is being held in the Long Gallery. Hours: Mon-Fri 9am-5pm. Sunday: 1.30-4pm. Enquiries: 21 3996

## GENERAL

The Department of Biological Sciences is holding a series of seminars titled 'The Cell and Molecular Evening Seminar Series'. The next seminar is on 10 May. The Calbiochem Seminar on Cell Signalling will be given by Dr Michael Crouch, from the John Curtin School of Medical research, ACT. The seminar is titled 'How G Proteins tell cells where to go'. The seminar will be held in Building 35, Room 105 from 8pm with

## What's On

drinks to follow. Enquiries: Julie-Ann Green, ext. 3427.

**Illawarra Committee for Overseas Students** events for this year are: 12 April, Gledswood Homestead (Adults \$10, Children \$3); 8 May, Canberra (Adults \$12, Children \$10); 9 May, Blue Mountains; 31 July and 7 August, Snowy Mountains; 18 September, Blue Mountains; 26 and 27 September, Canberra; 16 October, Sydney Aquarium and harbour cruise; 4 December, Australia's Wonderland. Tickets and details are available from ICOS office, 3rd Floor, Union Retail Centre on Tuesday, Wednesday and Friday from 9.30am to 2pm or phone 21 3158.

Considering further study or just some recreational reading? Visit the **University Graduates bookshop and gallery book sale** at Campus East, Fairy Meadow. The stock of used books covers: Science & Engineering, Social Sciences, Arts & Music, Education, Fiction & Non-Fiction, Young Readers' Stories & Classics. Open every fourth Saturday

and Sunday from 1-5pm, the bookshop is located at Cowper Street, Fairy Meadow (opposite the Science Centre). Your donations of any material are invited. These may be left any weekend afternoon at the Science Centre (Please mark "Booksale"), or The Library or Students Enquiry Desk during the week.

**Animal Experimentation Ethics Committee** meeting dates, with agenda deadlines in brackets, are: 24 May (14 May); 9 August (30 July); 22 November (12 November).

**Human Experimentation Ethics Committee** meeting dates with agenda deadlines in brackets are: 27 April (13 April); 25 May (11 May); 13 July (29 June); 24 August (10 August); 5 October (21 September); 16 November (2 November); 21 December (7 December).

Submission of papers for the **Undergraduate Studies Committee** must be given to Trevor James by 5pm, on the following dates:

13 April,  
11 May,  
29 June,  
1 September and  
26 October.

## Statistical consulting service

The arrangements for the operation of the Statistical Consulting Service in 1993 have been finalised.

The Statistical Consulting Service in the Department of Applied Statistics provides advice on statistical design, analysis and modelling to academic staff and postgraduate research students.

The role of the Service is to improve the quality of the statistical component of research within the University.

The Service can best help if consulted at the beginning of any research, so that questions such as research design and methods of data collection can be discussed.

Because the staff involved in providing consulting services have normal teaching, research and administrative commitments there is a limit to the amount of consulting that can be done at any one time.

Potential clients are thus encouraged to contact the Service in plenty of time so that the consulting can be properly scheduled. The service is not a free service, but in many cases where there is no external funding the cost is subsidised by the Graduate Faculty.

It is advisable to contact the Service at the beginning of a project to determine what costs might need to be allowed for and what additional training the researcher might need.

The Service, in conjunction with the Learning Development Centre, is planning a series of training courses in Statistics and Statistical Computing and is interested in hearing from anyone who might want to attend such courses.

This will enable an assessment of the likely demand and determine the content of the courses.

Attendance at these courses will be charged for. The Service has detailed guidelines for academic staff and postgraduate students who wish to make use of its services.

For further information contact Kerrie Gamble in the Department of Applied Statistics, ext. 4308.

## Stop Press

### Please donate tinned food

Anglican Home Mission  
'Can The Recession'  
food appeal

Three locations on campus  
where you can donate food:  
Library, Administration  
Foyer and Union Market.

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