Integral Energy funds Australia’s first Power Quality Centre

Local energy supplier, Integral Energy, has invested $400,000 in the establishment of the nation’s first Power Quality Centre, based at the University of Wollongong.

Integral Energy Chairman, Bill Hilzinger, said the ‘centre of excellence’ would provide solutions to future problems facing the energy industry throughout the world.

Mr Hilzinger announced the three-year sponsorship agreement at a special ceremony at the Power Quality Centre at Wollongong University on 4 July.

University Acting Vice-Chancellor, Professor Bill Lovegrove, and Mr Hilzinger, signed a formal agreement at the ceremony, which was attended by senior executives from Integral Energy and the University of Wollongong as well as academics and students.

Mr Hilzinger said the Power Quality Centre would focus on research and training, and the development of strategies to design ‘perfect electricity’ without distortion of voltage.

‘The centre will look at ways to improve the quality for the electricity that is delivered to homes and businesses,’ he said.

‘This research is required to keep pace with the growing use of more sophisticated electrical appliances, such as computers, in the home and in the workplace.

‘The centre will examine how the quality and consistency of supply can be improved so that the performance and productivity of customers’ sensitive electrical equipment can also be improved.’

The University of Wollongong is the only university in Australia where there is a substantial team of researchers working in the area of correcting power quality problems.

Mr Hilzinger said Integral Energy was committed to research and training activities that led to improved system reliability and better service for customers.

‘Interruptions to supply can be costly to customers and also affect the management of our electrical network,’ he said.

‘This research will address a common issue facing the electricity industry around the world and has the potential to deliver groundbreaking improvements to Integral Energy’s 680,000 household and business customers.’

Professor of Electrical Engineering at the University, Professor Chris Cook, said Integral Energy had shown foresight in recognising problems facing the power industry and understanding that continuing research needed to be carried out in an effort to provide engineering and mathematical solutions.

‘This is a major initiative by Integral Energy, which is going to benefit the entire industry,’ he said.

‘It will also keep academics involved in power engineering research, with a new course being established to ensure continuing education for the next generation of undergraduates.’

Six Wollongong University postgraduate students completing their Doctorate of Philosophy (PhD) in Power Engineering will primarily use the centre for their research.
New careers program to help Arts students

The University Careers Service, in association with the Faculty of Arts, will be implementing a 10-week program, Arts Paths, to assist Arts students get work.

The program will help students determine where they fit in the workplace, how they can get there, and how to thrive in a 21st century workplace where opportunities and pathways will be very different to that of today.

The Careers Service Co-ordinator, Mr Martin Smith, has designed the program in response to the needs of students in the non-vocational Arts degree who traditionally have felt at a loss when considering career directions.

'I initiated a similar program at my last institution. There was tremendous interest in the program, and student evaluations were very encouraging,' he said.

'Obviously this program will be more tailored to the needs of our students here, and will also have more focus on how students must prepare themselves for a labour market that is undergoing rapid change.

'Developing self-reliance and entrepreneurial skills will assume more importance for graduates in an environment where the notion of a career for life with one or two organisations is becoming increasingly rare.

'To quote some research recently conducted in the UK by the Association of Graduate Recruiters: There's no such thing as a career path, . . . it's crazy paving and you lay it yourself.'

Arts Paths will cover the following areas:
* self-evaluation and personal and work-related transferable skills;
* developing employment-related skills for the 21st century;
* the graduate labour market and specifically careers related to Arts majors;
* career pathways and choices;
* increasing employment potential;
* marketing on paper via letters and resumes, and in person via the telephone and interviews.

Contributions by people working in a variety of work settings will also form part of the program.

The program will culminate in Arts students identifying and obtaining work opportunities (with assistance where necessary from the Careers Service), whether they be voluntary placements or full-time or part-time paid employment.

Arts Paths will be held on Tuesdays from 12.30-1.30pm, from Tuesday 6 August until 22 October.

It is strongly recommended that students participate in all sessions so the value of the program can be fully appreciated.

There are limited vacancies for second and final year Arts students.

To participate, students must complete the Arts Paths registration form available through the Faculty Office, or your lecturer.

Registrations close on 26 July.

Further major funding for research

Professor John Norrish, Department of Mechanical Engineering, and Professor SX Dou, Institute for Superconductivity and Electronic Materials, have obtained grants under two major grant programs.

Professor Norrish has won an Australia-China Institutional Links Grant with his proposal 'Development of Intelligent Systems for On-line Control of Automated Welding and Improved Exploitation of Lower Cost Automation' in collaboration with the Harbin Research Institute of Welding, China.

Professor Dou gained a Targetted Institutional Links Grant worth $191,500 over three years in collaboration with Nankai University, the Zhuhai Centre of Harbin University, China, and Osaka National Research Institute in Japan.

Suicide intervention workshop

There will be a two-day suicide intervention workshop held on campus, on Friday 26 and Saturday 27 July.

The cost will be $35. The venue is 21.105, (Music room upstairs in building 21).

Enquiries: Roz Westbrook, ext. 3876.

Wollongong artists in London

A joint exhibition at Australia House in The Strand, London this month featured two artists from the Faculty of Creative Arts at this university.

The exhibition, called 'Sun Music-Music and Art from Australia' featured paintings by Paul Ryan, a former Bachelor of Creative Arts student now working successfully in London, and Associate Professor Andrew Schultz's composition 'Mephisto'. Dr Schultz is a member of staff the Faculty.
Two years ago, a clinical psychologist working in the Departments of Nursing and Psychology, Brin Grenyer, initiated a program with the National Drug and Alcohol Research Centre (NDARC) to help cannabis smokers to quit. This was believed to be the first program of its type in the world and the results have been well received at two conferences in the USA.

Early results reveal that the commonly held belief that cannabis is a 'soft' drug and easy to give up is incorrect and that smokers wishing to quit have not had the necessary programs and support.

They were often turned away when seeking help from drug and alcohol centres because cannabis was not seen as a serious problem.

Volunteers for the study were long-term smokers, with responsible jobs and in relationships.

They were keen to quit because of concerns about health, cost and not being 'in control' of their lives.

The volunteers were divided into two groups.

One group was given a brief session of how to quit and reading material, the other was given psychotherapy for one hour a week over 16 weeks.

The treatment phase is over and the volunteers will now be followed up over 12 months to determine the success of the two treatments.

Initially, it looks as if the success rate of the group that had only one session is minimal, only four out of 30 have quit.

Results from the other group look much more promising with 21 out of 31 quitting.

While the physiological effects of cannabis are still debated it would seem that cannabis has a psychological addiction that needs psychological treatment.

Brin Grenyer said: This means we need to allocate resources to cannabis treatment, especially as there is increasing evidence that cannabis can lead to other health problems.

The study has resulted in the production of a Guide to Quitting Cannabis by Brin Grenyer, Nadia Solowij and Richard Peters.

This guide is available from the Centre for Education and Information on Drugs and Alcohol (CEIDA) on (02) 8180488.

The University’s computer network has served us well, but its days are numbered.

It reached capacity some time ago and has limitations that restrict the University from adopting some of the emerging technologies.

It carries data only, for example, and has no ability to carry voice or video traffic or serve the growth of the World Wide Web, Library services and research requirements.

Information Technology Services, with Professor Gary Anido's Switched Networks Research Centre, has undertaken an extensive study in the last two years to determine a system that will take the University into the 21st century.

They have chosen networking equipment developed by a young, but extremely successful company, Xylan, who are also providers to the Pentagon, UCLA, six Japanese universities and Telecom research laboratories.

Xylan’s system is aimed at minimising disruption to users as it enables a progressive switchover to the new equipment, and the tailoring of solutions to meet an institutions specific needs.

It means a change to high bandwidth and switched networking technologies that support high-speed transmissions essential for new emerging technologies.

The University has chosen a new network technology called Asynchronous Transfer Mode (ATM) for the campus backbone network.

This allows us to use the network for the delivery of telephony and video services as well as computer data services.

ATM also offers the highest performance network technology available today. To provide a very reliable network, we will employ a decentralised scheme coupled with redundant links to provide a core network with no single point of failure.

The use of a common equipment chassis format allows us to easily restore services if a unit should fail.

The use of a common chassis format also allows for the upgrade of performance as required and will support a diversity of services within both the backbone and building networks, simply by changing modules within the chassis.

The existing network routers in each building will remain for the present. This will allow us to perform the upgrade in simple stages with minimal loss of service and retain the network stability we have.

Our intention is to replace these routers when a standard for distributed routing such as Multi Protocol Over ATM (MPOA) becomes available.

This will give us a true routing upgrade that is scalable.

It will mean faster performance for systems such as Netscape, increased information access allowing, for example, potential electronic transmission of administrative forms, administrative information systems and potentially desktop video conferencing, and will keep options open to adopt new technologies infrastructure in the foreseeable future.

The upgrade will start in August. By the end of October all buildings that are suitable for the upgrade will be completed.

The cost of this project has been partially funded through funds received from the Federal Government quality review process.

Upon delivery of the technology, Xylan will provide technical staff of the University with a series of training courses, ranging from introductory network through advanced Xylan specific courses.
30 July: Organisation meeting of Women's Research Network in the Union Function Centre - Rooms 1 and 2. Associate Professor Kate Blackmore will speak to the group on her role as the Nursing Department's Research Facilitator and Peggy MacLeod will provide an overview of the obstacles, needs and solutions generated at the May workshop.

31 August: Annual Union Dinner. Special guest: Dr Karl Kruszelnicki

Meeting dates for the Human Research Ethics Committee and the Animal Ethics Committee for this year are: Human Research Ethics Committee: 20 August, 22 October, 19 November, 17 December. Animal Ethics Committee: 21 August, 20 November. Agenda items are due two weeks before meetings. Enquiries Karen McRae, Office of Research, by email or on ext. 4457 on Tuesday, Wednesday or Thursday.

The Campus Alumni Bookshop is open on the second and fourth weekends of each month (Saturday and Sunday 1-5pm). Come and browse through a wide selection of preloved textbooks and fiction. Location: Campus East, Cowper Street, Fairy Meadow (opposite Science Centre). All proceeds directed towards Campus projects. Donations of material are invited. Enquiries to Alumni Office, phone 213 249 or 291 951.

Cell and Molecular Seminar Series: Held on Wednesdays in the Department of Biological Sciences (Building 35), University of Wollongong, Dates: 31 July, 21 August, 18 September, 23 October, 30 October. Enquiries: Associate Professor Ted Steele, Associate Professor Ross Lilley, Associate Professor Mark Baker, Dr Mark Walker, Ms Wendy Russell, Dr Ren Zhang or Dr Mark Wilson, phone (042) 213 013, fax: (042) 214 135.

Creative Arts

Creative Arts productions '96
Each year students and staff in the Faculty of Creative Arts produce a diverse range of performances. They are presented in numerous venues across the campus depending on the nature of the performance.

Following is the provisional timetable for this year. Watch Campus News for confirmation and more details.

Graduation Production – 11-14 September, Hope Theatre and 18-21 September, Newtown HSPA, director Janys Hayes, producer Jeff Kevin and assistant producer Jacqui Clarke.

Classic Production (Shakespeare, Marlowe, Jonson etc) – 23-26 October, directed by John Senczuk and Jeff Kevin, Performance Space, Black Box Production.

Australian One-Act Plays or excerpts – 4-8 November, Kate Newey, Sharon Bell, Peter Shepherd possibly to direct. Performance Space.

Art of Lunch
Every Thursday during session, from 12:35-1:25pm.

Jerry Ellis from BHP to be distinguished speaker

The 1996 Kirby Lecture will be held on Monday 16 September from 6.45pm in the Hope Theatre.

Following the awarding of prizes, Deputy Chairman, and Chairman Designate, BHP, Mr Jerry Ellis, will present the 18th Kirby Lecture, on topic of globalisation.

Enquiries: Di Kelly, phone 213 612, or Rob Castle, phone 213 666.

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

For any other enquiries contact the Editor, Gillian Curtis (042) 21 3926.

Campus News has a circulation of 3500. It is distributed on campus to staff and students. 1000 are mailed to the community and overseas including schools in Illawarra, southern Sydney and Canberra; local, Sydney and Canberra media; Friends of the University; business representatives; MPs and numerous individual requests.