

# Curtin

UNIVERSITY OF TECHNOLOGY

THE NEWSLETTER OF THE OFFICE OF RESEARCH &amp; DEVELOPMENT

OCTOBER 2003

## OFFICE OF R&D NEWS

### DEST Reviews

During the past two months, the Office of R&D has coordinated Curtin's response to three important reviews being conducted by the Department of Education, Science and Training (DEST). The reviews are examining the relationships between universities and major publicly funded research agencies such as CSIRO, support for research infrastructure, and the effectiveness of the reforms arising from the 1999 *Knowledge and Innovation* white paper. Copies of all submissions will be posted on DEST's website in the near future.

### Australian Technology Network (ATN)

Curtin continues to work with its ATN partners to enhance our collective research and research training environment. During 2003, a benchmarking study into external clients' perspectives on the quality of our research services was conducted by the ATN and the study is likely to be

repeated in 2004. ATN research offices are being assisted in this process by Vicki Thomson, the new ATN Director, based at the University of South Australia.

### ORD Welcomes New Staff

The Office of R&D recently welcomed two new staff members. Meesha Watson joined the office as the new Data and IT Officer, replacing Matt Mulder. Meesha – who comes to Curtin from Murdoch's Division of R&D – has a degree in IT and extensive experience in the grants area.

Stuart Clarke joins the Office of R&D as Research Grants Officer. Stuart assists Carla Nosworthy with processing and managing research grant applications. Stuart comes to Curtin from Zentner Shipping where, as Office Manager, he was responsible for running daily operations and overseeing export documentation. Stuart brings excellent skills in administration and project management to Curtin.

## SIGNING ESTABLISHES NEW ENERGY RESEARCH ALLIANCE

L to R: Professor Colin MacLeod (UWA), Dr Barney Glover (Curtin) and Dr Bev Ronalds (CSIRO Petroleum) at the signing to establish the Energy Research Alliance



In September, Curtin's Office of R&D – together with UWA and CSIRO – signed an agreement to form the WA Energy Research Alliance (WA ERA).

The multi-disciplinary alliance will develop technology-based solutions for the global energy sector. Partners will share knowledge, skills and facilities in areas such as sub-surface technology, drilling and wells, energy facilities and energy science.

Based at the Australian Resources Research Centre at Technology Park, the alliance will work closely with

industry groups to generate solutions that will enhance outcomes and capabilities for the global oil and gas and petroleum industries. The alliance has been jointly funded by the three partner organisations

"The WA ERA will strengthen existing infrastructure and develop high-quality expertise that will enhance the reputation of WA as a major research and development centre in the creation of new energy technologies," said Dr Barney Glover, Acting DVC, R&D.

## FROM THE ACTING DVC

A recent report by the influential Technology and Industry Advisory Council (TIAC) – *Creating Western Australia's Knowledge Infrastructure: Towards Global Competitiveness and High Value Employment, June 2003* – has highlighted the need for 'full collaboration' as a key feature of applications for State funding of major research initiatives.

The report includes several recommendations that stress building capacity and linkages within the State to enhance our national and international competitiveness. There are clear messages for all WA universities and research institutions from the report about the importance of strengthening collaborations.

Several current collaborative initiatives, in which Curtin is participating, are worthy of comment. The recent signing of the Joint Venture Agreement to launch the WA Energy Research Alliance (WA ERA) between Curtin, UWA and CSIRO Petroleum signals the beginning

of a significant relationship among energy researchers in WA.

The WA ERA is well advanced in discussions with major companies in the oil and gas sector with a view to securing substantial research funding. The alliance links capability across the three partner institutions and will rival major international research centres when fully operational. With a focus on delivering high-quality large-scale research outcomes, the alliance will establish a seamless interface with industry and offer high-level project management. Although still early days for this venture, the signs are very positive that the WA ERA will bring significant benefits to industry and ensure growth and stability among the research providers.

A similar venture is underway in the geosciences, through the establishment of the Earth Sciences Consortium, which involves UWA, Curtin, CSIRO and the WA Museum. The consortium also includes prominent associate members including

the Geological Survey of WA, various CRCs and other research centres. These initiatives demonstrate the commitment of the universities to deliver against the challenge posed by the TIAC report.

The State Government – through the auspices of the Science Council – is currently in the second phase of the selection process for the WA Major Research Facility Program (WAMRF). The State will invest up to \$21 million over the next four to six years in the first round of this program, probably through a single major initiative. Curtin researchers are involved in eight WAMRF expressions of interest, which require 'full collaboration' with the relevant research providers in the State – including State Government agencies, CSIRO and the universities. This program, along with the discussions on the establishment of an Agriculture Institute in WA, demonstrates the commitment of the State Government to promoting full collaboration between research providers.



The recommendations of the TIAC report need to be taken very seriously and highlight the difficulties of competing at the national and international level without a high degree of collaboration. Curtin has a strong and well-documented commitment to building strength through partnerships and should be well-placed to participate in these major initiatives over the coming months.

**BARNEY GLOVER**  
ACTING DVC, R&D

## IN THE NEWS

- ▶ In September, *The West Australian* featured Associate Professor Tilak Chandratilleke's thermoelectric refrigeration system, developed in collaboration with Hydrocool Pty Ltd. The technology is an alternative to CFC-based refrigerators.
- ▶ *The West Australian* also covered the launch of the Kids' Science State program, which aims to expose more students to science and boost science teachers' professional development. The program is the result of recent research conducted by Professor Léonie Rennie – in collaboration with ECU researchers – that revealed that Australian teachers felt under-prepared to teach science.
- ▶ Professor Robert Amin was featured on *Stateline* on Friday, 28 August 2003. Professor Amin spoke about his latest research in LNG processing technologies and its benefits to the oil and gas industry.

## UPCOMING EVENTS

ALCHEMIES: COMMUNITY EXCHANGES (7TH ANNUAL HUMANITIES GRADUATE RESEARCH CONFERENCE)

6-7 November 2003

For further information, call 4797 or email Marion.Pearson@curtin.edu.au

## GRADUATE STUDIES NEWS

- ▶ The Australian Postgraduate Awards/Curtin University Postgraduate Scholarships (APA/CUPS) round for 2004 is now open. The APA stipend is currently \$18,009 per annum and the CUPS stipend \$16,780 per annum. Students intending to apply for admission to a higher degree by research are encouraged to make enquiries with the Office of R&D's Scholarships Manager on ext 3119. Applications close on 31 October 2003. Forms and information are available from [www.scholarships.curtin.edu.au/](http://www.scholarships.curtin.edu.au/)
- ▶ Recent seminars offered by the Office of R&D include 'Grant Applications: Getting Started' and 'Supervising Postgraduate Students: Managing the Simultaneous Demands of Teaching, Supervision and Administration'. The final seminar, 'Research Involving Humans: What You Need to Know About Ethics', will be offered in November. For booking details and notes from previous sessions, visit [Isn.curtin.edu.au/seminars/series2.html](http://Isn.curtin.edu.au/seminars/series2.html)
- ▶ The Curtin University Postgraduate Student Association (CUPSA) held its Annual General Meeting in September with the following Executive Committee election results: Tim Simmons (President), Michael Parsons (Vice-President), Joside Pridmore (Secretary) and Scott Mullen (Treasurer). In addition, 12 Divisional and General members were elected to the Council. Congratulations to those elected. For further details about CUPSA, visit [www.cupsa.curtin.edu.au/](http://www.cupsa.curtin.edu.au/)
- ▶ Curtin's ATN-LEAP (Learning Employment Aptitudes Program) project module, 'Leadership and Communication', is now underway, in addition to a trial of the new 'Global Sustainability' module offered by RMIT. The final two modules, 'Project Management' and 'Research Commercialisation' will begin in early October. For more information on this project, visit [research.curtin.edu.au/graduate/atnleapinfo.html](http://research.curtin.edu.au/graduate/atnleapinfo.html)
- ▶ Curtin's National Drug Research Institute – one of Australia's leading drug and alcohol research centres – has been granted funds by the Commonwealth Department of Health and Ageing for two PhD scholarships. Both scholarships are for research into the prevention of drug and alcohol related harm, for a duration of three years. Applications must be received by 31 October 2003. For further information, contact Associate Professor Dennis Gray on ext 1624 or at [d.gray@curtin.edu.au](mailto:d.gray@curtin.edu.au)

## RESEARCH DEVELOPMENTS



L to R: Professor Gordon Parkinson, Dr Ian Gould and Professor Lesley Parker signing the Memorandum of Understanding

### Nanochemistry MoU Signed

In September, the Acting Vice-Chancellor, Professor Lesley Parker, signed a Memorandum of Understanding between Curtin, the AJ Parker Cooperative Research Centre for Hydrometallurgy and the Nanochemistry Research Institute (NRI). The MoU sets out the principles for the relationship between the groups and opens further doors for Curtin to develop its leading-edge capabilities in technology development through molecular analysis, modeling and characterisation. Dr Ian Gould, Chair of the Parker Centre, and Professor Gordon Parkinson, Director the NRI, also signed the MoU.

### Organic Geochemistry Centre Opens

The new Centre in Applied Organic Geochemistry (CAOG) will be launched at Curtin in October. CAOG is a collaboration between Curtin and UWA, with support from Woodside Energy Ltd and the Water Corporation of Western Australia. The centre will conduct organic geochemistry research primarily in petroleum exploration and water quality. Under the leadership of Professors Robert Kagi and Robert Alexander, both from Curtin, and Professor Bob Gilkes from UWA, the Centre will have a core staff of 12 experienced academics and up to 20 graduate students.

### Synchrotron Research Fellowships

Dr Nigel Kirby – from Curtin's Department of Applied Physics – has been awarded an Australian Synchrotron Research Program fellowship grant of around \$70,000 per year. The funding will support Dr Kirby's work in developing a better understanding of the construction of bio-minerals, such as bones and teeth, for use in developing synthetic materials for treating a range of health problems.

### Health Researcher Wins Top Award

Congratulations to Professor Colin Binns who received the 2003 Public Health Association (WA Branch) Award at the association's AGM on 8 September 2003. Professor Binns was recognised for his considerable contribution to public health in Western Australia.

### Braille Technology Gets Further Recognition

Andrew Pasquale – who received his BSc in Electrical Engineering from Curtin this year – has been included in the 2003 Engineers Australia Heroes honour roll. Pasquale was named for his development of a prototype portable scanner that converts Braille to English text. The scanner will assist teachers who can't read Braille but have blind students in their mainstream classes. Last year, Pasquale won the WA category of the 2002-2003 Siemens Prize for Innovation.

### New Research Professor of Accounting Appointed

Professor Greg Tower was recently appointed as the Research Chair in the School of Accounting in CBS. Professor Tower comes to Curtin from Murdoch University, where he was the Director of Research for the Murdoch Business School. His specific research interests include communication, accountability, governance, performance reporting and international accounting.



Professor Greg Tower