

CWMR ENEWS

October 2008



SA Water Centre for
Water Management
and Reuse



Research news

Both CWMR and the Civil Engineering Group at UniSA had ARC grant successes in the rounds announced this month. It is first worth noting that between civil engineering and CWMR we had staff involved in two Discovery and three Linkage (project) applications. From the five applications, we were rewarded with three grant successes, which is an outstanding result.

CWMR's Deputy Director, **A/Prof Linda Zou**, had spectacular success by winning both her Discovery and her Linkage applications. This is Linda's 2nd Linkage success since joining CWMR, and her 7th overall. CWMR is now working on two Discovery and two Linkage grants.

A/Prof Linda Zou and **Prof Simon Beecham** have received project funding of \$22,000 for *treating concentrated membrane filtration waste by mediated electrochemical oxidation processes*, from the Australia-Korea Foundation, through the Department of Foreign Affairs and Trade. The funding will be used to establish research collaboration with Prof Il-Shik Moon at Suncheon National University, Korea in innovative water and wastewater treatment technologies and membrane processes.

SARDI is providing a \$3000 stipend to support Magda Kluka who is investigating nutrient leaching in the root zone of drip irrigated vineyards for her M. Env Mgt & Sustainability research project. This project continues the collaboration between **Adjunct Senior Research Fellow Tapas Biswas** (SARDI) and **A/Prof Ian Clark**.

Miss Ah Rim Lee has submitted her PhD thesis, *Methodologies to restore pre-urbanized low flow regime of urbanized catchments using Water sensitive Urban Designs measures*. Her supervisors during her candidature were **Dr Guna Hewa** and **David Pezzaniti**.

Visitors to the Centre

Dr Nini Thein, Vice-President for Development and Resources, Asian Inst of Technology, Thailand visited the civil engineering group on 16 Oct. Dr. Thein who is a hydroinformatics expert will commence a collaborative research project with **Prof Simon Beecham** and Prof Cedo Maksimovic of Imperial College London.

Conferences, seminars, workshops

David Pezzaniti and **Prof Simon Beecham** have recently completed a series of workshops on Water Sensitive Urban Design. David conducted workshops on permeable paving design in Hobart, Melbourne and Perth, where he launched the PERMPAVE program. The program, funded by the

Concrete Masonry Association of Australia, is a tool that enables users to produce a permeable paving design for water quality improvement, water harvesting for reuse and flood attenuation.

Prof Simon Beecham conducted seven workshops for Planning SA as part of the Institutionalising WSUD in the Adelaide Metropolitan Area project. Separate workshops were held for planners, developers, local government officers and consultant engineers.

Dr Ali Hassanli presented a seminar titled, 'Irrigation Water Management and the Sustainable Use of Effluent' at SA Water for their Sustainability Focus Group meeting. In this presentation Ali discussed the ecological sustainability and sustainable use of effluent for irrigation. He also presented the results of a number of research projects and also outlined a number of research priorities for sustainable use of water and wastewater.

David Pezzaniti, Dr Ali Hassanli and Mr Ben Williams (CRC IF Honours student) attended the CRC for Irrigation Futures Annual Research Forum in Canberra 2008 from 9-11th September. On the first day of the forum postgraduate students and honours students undertaking research in connection with the CRC IF presented their work. Subsequent days were allocated to paper presentations, panel discussions, workshops and field trips. David Pezzaniti and Tapas Biswas presented their work on Smart Metering and solute management at a special forum attended by staff from the National Water Commission and the Department of the Environment, Water, Heritage and the Arts. The event was very useful as it also enabled connections to be established with interstate CRC IF researchers in relation to the work being carried out by NBE Honours students working on salinity build-up management caused by effluent irrigation in the Virginia horticulture region.

Adjunct Professor Dennis Mulcahy recently attended the 11th International River Symposium in Brisbane. Dr Kylie Catterall of Gold Coast Water, a former CRC for Water Quality and Treatment candidate, received the Annual Young Water Scientist award at the conference.

Adjunct Professor Dennis Mulcahy and Dr John Van Leeuwen attended the Water Quality Research Australia (WQRA) Drinking Water Program Workshop on Thursday October 2nd and the Water Quality Monitoring Database Workshop on Friday October 3rd.

Prof Simon Beecham and his co-authors presented three papers on Water Sensitive Urban Design at the 12th International Conference on Urban Drainage in Edinburgh in September.

Awards

On Friday 31 October, UniSA celebrated good teaching across the divisions by honouring the recipients of teaching awards at a lunch held at the Playford Sebel Hotel. The School of Natural and Built Environments was very well represented by six award recipients. One of these was CWMR's **A/Prof Ian Clark** who received an Australian Learning and Teaching Council *Citation for Outstanding Contributions to Student Learning*. The Australian Learning and Teaching Council promotes excellence in higher education by recognising, rewarding and supporting teachers and professional staff through a suite of award, fellowship and grant schemes.

Publications

Journal:

- Ackland, L., Zou, L. and D. Freestone (2008) "Biodiesel breathes easier" Australian Science Vol 29, No 8, September pp34-36.
- Hassanli, A. M., Ebrahimizadeh, M. A. and Beecham, S. (2008), The Effects of Irrigation Methods with Effluent and Irrigation Scheduling on Water Use Efficiency and Corn Yields in an Arid Region, *Agric. Water Manage.*, Elsevier, DOI:10.1016/j.agwat.2008.07.004, (<http://www.sciencedirect.com/science/article/B6T3X-4T5S4FX-1/2/d0851d2b4fd3daea78c46a20058edaab>)

Conference:

- Sanciolò, P., Zou, L., Leslie, G. and Stevens, D. (2008) "Integrated membrane system treatment for fit-for purpose water reuse in irrigation". 15th AOGC Conference, 8-12 September, Adelaide.
- Chung, D., Pillai, K. Zou, L. and Moon, I. (2008) "Application of Ce(IV)/Ce(III) based mediated electrochemical oxidation process for organic pesticide destruction.", 15th AOGC Conference, 8-12 September, Adelaide
- Shackel, B., Beecham, S., Pezzaniti, D. and Myers, B. (2008), Design of Permeable Pavements for Australian Conditions, 23rd ARRB Conference, Adelaide, Australia
- Dunphy, A. and Beecham, S. (2008), Use of Concrete Additives to Improve the Quality of Storm Water Runoff from a Car Park, 11th International Conference on Urban Drainage, IAHR/IWA, Edinburgh, Scotland
- Dunphy, A. and Beecham, S. (2008), Protecting Groundwater Quality Using Porous Pipe and Engineered Soil Systems, 11th International Conference on Urban Drainage, IAHR/IWA, Edinburgh, Scotland
- Singh, G., Chanan, A., Ghetti, I. and Beecham, S. (2008), Connells Point Stormwater Improvement Project, 11th International Conference on Urban Drainage, IAHR/IWA, Edinburgh, Scotland