



Newsletter of Water Quality Research Australia Limited

Issue 13 – 11 May 2009

Welcome to the thirteenth issue of Water Quality Research Australia News, the newsletter of Water Quality Research Australia Limited (WQRA Limited).

WQRA Limited is a not-for-profit scientific research institution, established to provide strategic knowledge for the Australian urban water industry. Incorporated in October 2007, its registered office is at Level 3, 250 Victoria Square, Adelaide.

Issues 1 – 12 of Water Quality Research Australia News can be downloaded from the website of WQRA Limited www.wqra.com.au

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Forthcoming Dates

Important Dates for your diaries in 2009:

28 May	Sydney	Lagoon Treatment Systems Workshop 10am – 3pm
28 May	Sydney	Education Committee meeting 10am – 1pm
28 May	Sydney	Board meeting 1.30 – 4.45pm
28 May	Sydney	Project Review Team meeting 5 – 6.30pm
29 May	Sydney	Members meeting incl Program Update 9.30am – 4pm
19 June	Teleconference	Board meeting 9 – 11am (ACST)
17 July	Teleconference	Board meeting 9 – 11am
27 August	venue tba	Board meeting 3 – 5pm
28 August	venue tba	Members meeting 10am – 4pm
24 September	Teleconference	Board meeting 9 – 11am
30 October	Teleconference	Board meeting 9 – 11am
26 November	venue tba	Board meeting 3 – 5pm
27 November	AGM	Board and Members 10am – 12pm

Programs Update

Wastewater Program

This month, the WQRA WW/RW Programs will be convening a workshop on 'Lagoon/Pond Treatment Systems' to explore research gaps and assess the need for WQRA to support further research on lagoon/pond treatment systems. Invitations have recently been disseminated, along with a pre workshop survey. We are looking for as many responses to the survey as possible, to gauge the priority issues of our members in this area. Even if you cannot attend the workshop on the 28th May, we request that you complete the survey and return to David Halliwell (david.halliwell@wqra.com.au). If you have not received the invitation/survey and are interested in attending and/or completing the

survey, please contact David. This workshop has deliberately been piggy-backed onto our quarterly members meeting to provide the opportunity for our members to attend. Guest speakers on the day will include an industry perspective presentation from Mr Paul Sherman (Power and Water, NT), as well as presentations from Prof Howard Fallowfield (Flinders University), Dr Helen Stratton (Griffith University) and Assoc. Prof Charles Lemckert. A summary of the survey results will also be presented at the workshop.

Other developments in the WW/RW Programs have included Board approval for 3 ARC projects for submission to ARC in the May 2009 funding round. If successful, these projects are likely to start in Jan 2010.

These projects include:

- Optimisation of nutrient removal, membrane fouling and excess sludge dewatering in hybrid coagulation/submerged membrane bioreactor (SMBR) treatment of wastewaters (Prof David Waite, UNSW)
- Investigation of endocrine disruption in Australian aquatic environments (Dr Fred Leusch, Griffith University)
- Enhancing the performance of reverse osmosis desalination membranes by understanding the mechanisms of degradation and wear (Prof Stephen Gray, Victoria University)

On the international front, there has been one project developed and submitted to the Water Research Foundation as a jointly funded project between WQRA and the Foundation. This project called, "Protocol for evaluating chemical pretreatment for high pressure membranes" will be led by Assoc. Prof Greg Leslie from UNSW. It is anticipated that a result on the success of this project will be known in the next 2-3 months. Similarly, Jodieann has presented at the Global Water Research Coalition (GWRC) meeting in the UK this month. Two WQRA led projects were presented, and if successful, will collaborate internationally to understand more about the global picture of EDC's. The status of these projects with the GWRC is pending. The project titles are:

- Survey of estrogenicity in environmental waters (Griffith University)
- Tools for analysing androgen, thyroid and glucocorticoid activity in environmental waters (Griffith University)

Drinking Water Program

Project Concepts

The 18 short-listed Drinking Water project concepts continue to be scoped into full project proposals. Since the last newsletter another project has been approved by the Board, with another 6 projects under review by the Project Review Team. This project is:

'Identification and Prevention of Chemical Contamination Causing Taint and Odour in Water from Coal Tar Enamel Lined Pipe' led by Professor Felicity Roddick at RMIT University.

The WQRA Board has also given support to two ARC LIEF proposals and one ARC Linkage proposal for the May '09 funding round. These projects are:

- *'Water, biota and air pollution – improving Australia's capacity for assessing and managing the risks to wildlife and humans'* led by Professor Beate Escher at EnTox, The University of Queensland (ARC LIEF)
- *'A facility for analysis of dissolved organic halogen compounds speciated into chlorinated, brominated and iodinated compounds'* led by Associate Professor Anna Heitz at Curtin University (ARC LIEF)
- *'Novel treatment methods for reduction of bromide and iodide in drinking water sources'* led by Associate Professor Anna Heitz at Curtin University (ARC Linkage)

Current Projects

There are seventeen projects underway or about to commence, this includes the two approved project concepts and 5 ARC/NHMRC projects that are awaiting ARC/NHMRC approval. A full report on progress of these projects will be given at the upcoming Members meeting in Sydney.

Please keep those CRCWQT final reports coming! Great progress is being made in finalising these valuable projects with another four now available and several others are imminent. Keep checking the WQRA website for new reports as they are finalised.

WQRA Education Program

Please circulate relevant information to colleagues and students.

Education Program Survey Form

The Education Program is currently undergoing a redevelopment phase.

Recently, a survey was forwarded to 298 members who receive the WQRA newsletter. Unfortunately, only 16 responses have been received to date. The survey was particularly important to gain feedback as to how the Education Program could best serve our Members. I will be forwarding the survey once again in June. Should you wish to be placed on the distribution list, please contact me on Carolyn.bellamy@wqra.com.au It would be greatly appreciated if you could take 5 minutes to read through the questions and respond – your thoughts and suggestions are valued ☺

Internship

Carlota Rodriguez – 0449 674 192 rodriguezcarlota@hotmail.com.

Preferred area / interest in water research: **Desalination, RO, water recycling**

Carlota is looking for an internship for four months from mid November onwards, preferably in Melbourne.

Carlota is currently undertaking a Chemical Engineering Masters on Sustainable Energy at RMIT University. She has previously worked in the company C.P-S. Europa S.L. in Madrid for two years. This company is involved in the treatment and sanitisation of water in swimming pools, using Oxygenation and Ionisation with copper processes, by means of electronic equipment. She was responsible for controlling the quality of the water as well as supervising the ion levels in the pools.

During her final year at University she worked for 6 months as a trainee at the multinational group Hutchinson in the research department.

Should you be interested in taking a student for internship, please contact Carlota direct.

PhD poetry

Jasper Pengelly, who recently submitted his PhD thesis “*Molecular Characterisation of Membrane Transporters associated with Saxitoxin Biosynthesis in Cyanobacteria*”, is also something of a poet. Here are a couple of the limericks he has penned and used to introduce chapters in his thesis.

*The bacteria known as blue green,
in the water look almost serene.
Best watch what you drink,
from lakes, dams and sinks,
for their toxins can never be seen.*

*There once was a young cyanobacteria,
full of poisonous paraphernalia.
In the summer he grew,
multiplied his crew,
causing panic in all of Australia*

Maude Barlow in Australia

Maude Barlow, Senior Advisor on water to the UN, has been in Australia recently visiting a number of states. She also gave the keynote address at the Australian Water Summit in Brisbane. If you are interested in reading her speech, it can be accessed from the following web address:

<http://blogs.abc.net.au/sa/files/KEYNOTE-AWS2009.pdf>

RABQSA Auditor Certification Scheme for Drinking Water Quality Risk Management plans – BRISBANE, 3rd August 2009

Due to popular demand, the next exam supporting the competency unit for management systems for drinking water quality will be held in Brisbane on 3 August 2009. This is the first time the exam is being run outside Victoria, to cater for the increasing interest in the scheme and drinking water risk management and new legislation in Queensland. If you are interested in becoming a certified drinking water quality auditor, or just testing your knowledge of drinking water quality risk management in Australia, please book now. Details and enrolment forms can be found at:

www.shortcourses.rmit.edu.au/keysearch.php?show_public_course=1&select_course_type_code=S001003

Certification under this scheme is mandatory for auditors seeking approval to conduct a regulatory audit in Victoria, in accordance with the *Safe Drinking Water Act 2003*. The use and audit of drinking water quality risk management plans will also be mandated by legislation in NSW and Queensland.

Further information is available in the May 2009 issue of "Water". Alternatively, please contact RABQSA International direct, on (02) 4728 4600, or via email to: info@rabqsa.com or Brian Labza at brian.labza@dhs.vic.gov.au.

Membrane Society of Australasia (MSA) launched

The official launch of the Membrane Society of Australasia (or MSA) was held in Melbourne on the 5th May 2009. Guest speakers at the event included Mr Bruce Biltoft and Dr Andrew Groth from Siemens Water Technologies (the official launch sponsors), and Professor Tony Fane, who has also accepted the role as patron of the MSA. WQRA is in the process of becoming a corporate member of the society, with membrane technologies ranking as WQRA's highest priority issue in the wastewater and recycled water research programs. The society is ably led by Associate Professor Mikel Duke from Victoria University and new members are welcome. For more information you can visit the society's website at: <http://www.membrane-australasia.org/>

Australian membrane research is up there with the leading groups in the world. Similarly, our uptake of membrane technologies is increasing at a dramatic rate, and there is perhaps no better example than their use in the water industry. Despite Australia being involved in membrane research since the 1950's, it has never had its own professional society until now.

New publications

CRC for Water Quality and Treatment *Research Report 49: Small water system reliability in remote Indigenous communities in the Kimberley* can now be obtained from the CRC website. This report has also been printed: please contact angela.gackle@wqra.com.au if you would like a copy.

The final report for WRF(AwwaRF)/CRC project 2.0.2.1.1.1 "Pathogen Modelling in Watersheds" by Christobel Ferguson et al. has been completed and will be available to WRF members via the WRF website. Non members can contact Christobel at cferguson@ecowise.com.au

Two more that are approaching completion are
Research Report 67: A practical guide to reservoir management, and
Research Report 78: Risk assessment for drinking water sources

Health Stream

A recent issue of the American Water Works Association publication *Streamlines* addresses concerns in the US about the influenza pandemic, and has a link to an article in *Health Stream* 40 on avian influenza which also gives general information about 'flu viruses and water supplies.

To read more: <http://www.awwa.org/publications/StreamlinesArticle.cfm?itemnumber=47970>

Contributing to WQRA News

This issue of Water Quality Research Australia News is sent to all nominated people associated with the members of WQRA Limited. If you would like to be added to the mailing list or submit a newsworthy item for the next newsletter, send an email to Angela.Gackle@wqra.com.au

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