

Monday 5th July	
8.00-8.45	<i>REGISTRATION AND WELCOME TEA AND COFFEE</i>
8.45-10.30	<p>Plenary Session - Leighton Hall <i>Chair - David Garman, IWA</i></p>
8.50-9.00	Organising Committee Welcome – Rita Henderson, Chair of the YWPC 2010 Organising Committee
9.00-9.15	University Welcome – Fred Hilmer, Vice Chancellor, UNSW
9.15-9.35	Opening Address: National perspective on the challenges of water supply – Ken Matthews, CEO of the National Water Commission
9.35-9.50	IWA Address: Global Perspective on water challenges and the role of the YWP – Glen Daigger, New President Elect, IWA
9.50-10.30	Keynote Presentation: Sydney Water's response to climate change challenges and changing water markets – Kerry Schott, Managing Director, Sydney Water Corporation
10.30-11.00	<i>MORNING TEA</i>
11.00-12.40	<p>A: Special Session - Climate change adaptation, Leighton Hall <i>Chair - Richard Stuetz, UNSW; Co-chair – Ruyi Hu, United Utilities, UK</i></p>
11.00-11.20	Assessment of the challenges in adapting water resources and water infrastructure to climate change: a review – Short, M. <i>et al.</i> , UNSW, AUSTRALIA
11.20-11.40	Adaptation of large-scale water supply systems for climate change - Integration of Sydney's Desalination Plant – Port, C.L., Sydney Water Corporation, AUSTRALIA
11.40-12.00	Climate change impact modelling for water reuse systems – Blaikie, J. and Stanmore, J., NSW Public Works, AUSTRALIA
12.00-12.20	Validation of observed trend models between evaporation and temperature in Bangladesh using PRECIS projections – Rajib, M.A. and Rahman, M.M., Bangladesh University of Engineering and Technology, BANGLADESH
12.20-12.40	Algae: a solution to wastewater treatment, greenhouse gas emissions and biofuel production? – Aitken, D. and Antizar-Ladislao, B., University of Edinburgh, UK
12.40-1.40	<i>LUNCH</i>

Monday 5th July (cont)		
1.40-3.20	Stream 1: The Galleries	Stream 2: Lecture Theatre, G1
	B: Modelling for improved water management	C: Water treatment
	<i>Chair – Paul Freeman, Sydney Water</i>	<i>Chair – Michele Akeroyd, WQRA</i>
	<i>Co-chair – Denny Kollanur, Vienna University of Technology, Austria</i>	<i>Co-chair – Katerina Ruzicka, Vienna University of Technology, Austria</i>
1.40-2.00	Development of statistical linear regression model for metals from transportation landuses – Maniquiz, M., Kongju National University, KOREA	Bromate minimisation with cerium incorporated MCM-48 during ozonation of bromide-containing water – Zhang, T., Chinese Academy of Sciences, CHINA
2.00-2.20	Emissions of particulate matter from urban areas and their impact on the receiving water sediment – David, T. <i>et al.</i> , Helmholtz Centre for Environmental Research, GERMANY	How to measure specific deposit washout and backwash efficiency of granular filters – van Staden, S. and Haarhoff, J., University of Johannesburg, SOUTH AFRICA
2.20-2.40	An integrated management system for the Shoalhaven Reservoirs, Australia- the use of real time data acquisition and numerical modelling – Harris, J. <i>et al.</i> , Centre for Water Research, AUSTRALIA	Carbon isotopic analysis of potential carbon inputs during the water treatment process – Roe, J. <i>et al.</i> , University of Birmingham, UK
2.40-3.00	Multi-objective differential evolution (MDEA) for groundwater management – Adeyemo, J.A. and Otieno, F.A., Tshwane University of Technology, SOUTH AFRICA	Influence of carbon preloading and water matrix on adsorption of pharmaceuticals – de Ridder, D. <i>et al.</i> , Netherlands
3.20-3.20	A comparison of Adaptive Metropolis and Sequential Monte Carlo MCMC algorithms for use with conceptual rainfall runoff modelling – Jeremiah, E <i>et al.</i> , UNSW, AUSTRALIA	Adsorption of arsenic from groundwater by cupric oxide nanoparticles – Martinson, C.A. and Reddy, K.J., CH2M Hill, AUSTRALIA
3.20-3.40	AFTERNOON TEA	
3.40-4.40	D: Treatment and supply in challenging regions	E: Water quality and distribution
	<i>Chair – Felicity Roddick, RMIT</i>	<i>Chair – Colin Nicholson, Sydney Water</i>
	<i>Co-chair – Jorge Gonzalez Estrella, IPICYT, Mexico</i>	<i>Co-chair – Tao Zhang, Chinese Academy of Sciences</i>
3.40-4.00	Looking back at the Delmas 2007 diarrhoeal outbreak: A suggested multiple bacterial pathogen outbreak – Barnard, T.G., SOUTH AFRICA	Impacts of blending desalinated water into the drinking water distribution system on iron corrosion and colloidal iron release – Liu, H. <i>et al.</i> , University of Washington, US
4.00-4.20	Estimation of ground water storage potential in Kathmandu Valley aquifers using GIS technique – Pandey, V. <i>et al.</i> , University of Yamanashi, JAPAN	Study on applicability of a rapid method based on redox potential measurement in drinking water supply – Nagy, Z. <i>et al.</i> , Budapest Waterworks, HUNGARY
4.20-4.40	Microbiological performance of a 25 L enhanced water solar disinfection (SODIS) batch reactor exposed to solar conditions in South Africa – Ubomba-Jaswa, E., SOUTH AFRICA	Quick detection of tetravalent lead corrosion product in chlorinated drinking water by a simple iodometric method – Lin, Y-P. <i>et al.</i> , National University of Singapore, SINGAPORE

Tuesday 6th July		
8.00-8.50	<i>REGISTRATION AND WELCOME TEA AND COFFEE</i>	
8.50-10.30	<p>Stream 1: The Galleries</p> <p>F: Society and Sustainability</p> <p><i>Chair – Tom Mollenkopf, AWA</i> <i>Co-chair – Marla Maniquiz, Kongju National University, Korea</i></p>	<p>Stream 2: Lecture Theatre, G1</p> <p>G: Wastewater treatment initiatives</p> <p><i>Chair – Glen Daigger, CH2M Hill, IWA</i> <i>Co-chair – Adrien Moreau, Delft University of Technology, Netherlands</i></p>
8.50-9.10	<p>Security through diversity: Moving from rhetoric to practice – Werbelhoff, L. and Brown, R., Monash University, AUSTRALIA</p>	<p>Measurement of oxygen transfer to a subsurface horizontal flow constructed wetland - comparing different retention times – Tyroller, L., SPAIN</p>
9.10-9.30	<p>Cross sectional social survey on the sustainability practices of a Western Sydney suburb – Barnes, J. <i>et al.</i>, University of Western Sydney, AUSTRALIA</p>	<p>Formation of aerobic granular sludge in palm oil mill effluent (POME) – Abdullah, N.B., Universiti Teknologi Malaysia, MALAYSIA</p>
9.30-9.50	<p>The 'becoming' of a decentralized water system: a socio-technical perspective on its project risks – Moglia, M. <i>et al.</i>, CSIRO, AUSTRALIA</p>	<p>Impact of immobilised humic substances on the bio-transformation of reactive red 2 – Gonzalez-Estrella, J. and Cervantes, F.J., Institution Potosino de Investigacion Cientificay Tecnologica (IPICYT), MEXICO</p>
9.50-10.10	<p>Water in public and political debate in Sydney – Lawrence, E and Rolston, C., Sydney Water Corp, AUSTRALIA</p>	<p>Novel inverted phase fermentation for waste management – Hu, R., United Utilities, UK</p>
10.10-10.30	<p>Best practice performance monitoring for small scale wastewater systems – Toifl, M. <i>et al.</i>, CSIRO, AUSTRALIA</p>	<p>Sediment characteristics and phosphorus types in a FWS constructed wetland treating secondary piggery wastewater effluent – Lee, S. <i>et al.</i>, Kongju National University, REPUBLIC OF KOREA</p>
10.30-10.50	<i>MORNING TEA</i>	

Tuesday 6 th July (cont)		
10.50-12.30	<p>H: Socio-economic and regulatory aspects</p> <p><i>Chair – Adam Lovell, WSAA</i> <i>Co-chair – Tobias Barnard, South Africa</i></p>	<p>I: Microbial considerations in wastewater treatment</p> <p><i>Chair – Michael Storey, Sydney Water</i> <i>Co-chair – Doug Aitken, University of Edinburgh, UK</i></p>
10.50-11.10	<p>Regulating Water Service Provision to the Urban Poor: Informal Service Providers versus Water Utilities – Karimi, S.I., Water Services Trust Fund, KENYA</p>	<p>Long-term, low-temperature anaerobic biotreatment of acidified wastewaters: Bioprocess performance, physiological characteristics and molecular characterisation – McKeown, R.M. <i>et al.</i>, IRELAND</p>
11.10-11.30	<p>Potential and limitations for the private sector involvement in sanitation in Ethiopia – Drewko, A. <i>et al.</i>, Hamburg University of Technology, GERMANY</p>	<p>The effect of colloidal and particulate organic compounds on denitrification and EPBR in a full-scale activated sludge system – Drewnowski, J. and Makinia, J., Gdansk University of Technology, POLAND</p>
11.30-11.50	<p>Willingness to pay for community wastewater service: Case studies of low-income settlements in Suburban Bangkok – Singhirunnusorn, W., UNITED STATES</p>	<p>Population of ammonia- and nitrite- oxidising bacteria compromises successful nitrification in a membrane-aerated biofilm reactor – Terada, A. <i>et al.</i>, Tokyo University of Agriculture and Technology, JAPAN</p>
11.50-12.10	<p>Optimization approach for the assessment and selection of sustainable wastewater treatment scenarios - Case study in small towns of Vietnam – Bao, P. N., JAPAN</p>	<p>Application of real-time PCR and FISH to determine the diversity and dominance of hydrogen-producing clostridium species in microbial consortia – Savichtcheva, O.S. <i>et al.</i>, University of Liege, BELGIUM</p>
12.10-12.30	<p>Application of the Australian Guidelines for Water Recycling: Two case studies – Williamson, S., CH2M Hill, AUSTRALIA</p>	<p>Visualisation of biofilm formation during decomposition process by Optical Coherence Tomography – Lokuhewage, A. <i>et al.</i>, Saitama University, JAPAN</p>
12.30-1.30	LUNCH	

Tuesday 6th July (cont)		
1.30-3.50	<p>Stream 1: The Galleries</p> <p>J: Source water quality</p> <p><i>Chair – Penny Knights, SCA</i> <i>Co-chair – Lina Tyroller, Spain</i></p>	Stream 2: Lecture Theatre, G1
1.30-1.50	Quantitative assessment of faecal pollution sources in alpine spring catchments as a basis for microbial hazard- and risk assessment – Kollanur, D., Vienna University of Technology, AUSTRIA	<p>K: Membrane treatment</p> <p><i>Chair – Greg Leslie, UNSW</i> <i>Co-chair – Norhayati Abdullah, Universiti Teknologi Malaysia, Malaysia</i></p> <p>Overview of MBR activated sludge filterability at European scale – Moreau, A. <i>et al.</i>, Delft University of Technology, NETHERLANDS</p>
1.50-2.10	Estimating the relative risk from sewage treatment plant effluent in the Sydney Catchment area – van den Akker, B. <i>et al.</i> , UNSW, AUSTRALIA	Monitoring nutrients load and ecological toxicity of the reverse osmosis concentrate at Bundamba Advance Water Treatment Plant – Vargas, C.A. and Buchanan, A., Veolia Water, AUSTRALIA
2.10-2.30	Water quality assessment and remedial strategy development of Carp Lake, Taiwan – Yen, C-H. and Chen, K-F., National Chi Nan University, CHINESE TAIWAN	Potential of UV/H ₂ O ₂ oxidation for enhancing the biodegradability of municipal reverse osmosis concentrates – Liu, K. <i>et al.</i> , RMIT, AUSTRALIA
2.30-2.50	AFTERNOON TEA	
2.50-3.10	Comparison of two constructed wetland soils for reducing nitrogen load from agricultural runoff – Yates, C., CANADA	Advanced characterisation of biopolymers and cleaning solutions in MBRs – Subhi, N. <i>et al.</i> , UNSW, AUSTRALIA
3.10-3.30	Validation and application of an on-line fluoroprobe for rapid detection of harmful cyanobacteria in source waters – Zamyadi, A., University of Montreal, CANADA	Exploration of concentration polarisation and fouling in forward osmosis using high resolution impedance spectroscopy technique – Lay, W.C.L. <i>et al.</i> , Nanyang Technological University, SINGAPORE
3.30-3.50	Microalgae toxicity related to nutrient supply? – Godrant, A. <i>et al.</i> , UNSW, AUSTRALIA	The hydrodynamic effect on biofouling in reverse osmosis membrane processes – Suwarno, S.R., Nanyang Technological University, SINGAPORE

MONDAY POSTER SESSION - Tyree Room, 4.45pm - 6.00pm

A: Climate change adaptation

1. Roadmap of strategies to improve the performance indicators of water supply networks in adaptation to climate change. Case study: Basque Region, Northern Spain – Jimenez Redal, R. and Almandoz, J., University Basque Country, SPAIN
2. Ivanhoe Road stormwater treatment device – Lam, A., GHD Ltd., NEW ZEALAND
3. An integrated basin-based wastewater management system: A future approach for water pollution control in Upper Citarum River Basin, Indonesia – Suhar, Y. and Matsushita, J., Shibaura Institute of Technology, JAPAN
4. Securing new and traditional water resources in Oman for the future – Almahroqi, S.S., Muscat, OMAN

B: Water treatment and supply

1. Effects of desalinated water and its blends with treated surface water on copper and lead release from distribution systems – Liu, H. *et al.*, University of Washington, USA
2. Characterisation of environmental colloids through drinking water treatment in relation to disinfection by-product formation – Roe, J. *et al.*, University of Birmingham, UK
3. Removal of dissolved manganese during water chlorination. Kinetic Study of the Effect of Bromide and Natural Organic Matter – Fouche, L. *et al.*, Curtin University, Perth, AUSTRALIA
4. A kinetic study of the chlorination of amino acids associated with the formation of chlorinous off-flavours – Dreissen, H. *et al.*, Curtin University, AUSTRALIA
5. Ultrasonic-assisted photocatalytic degradation of Alachlor under visible light by S-doped TiO₂ – Tipayarom, D. *et al.*, Chulalongkorn University, THAILAND

4.45-6.00

C: Wastewater treatment and recycling

1. Visualisation of biofilm formation during decomposition process by Optical Coherence Tomography – Lokuhewage, A. *et al.*, Saitama University, JAPAN
2. Biosorption of methylene blue dye on POME waste activated sludge – Kanadasan, G. and Vadivelu, V.M., Iniversity Sains Malaysia, MALAYSIA
3. Formation and removal of iodo-organic compounds during waste water treatment – Allard, S. *et al.*, Curtin University, AUSTRALIA
4. Malodorous gas treatment using a continuous adsorption / electrochemical regeneration process – Conti-Ramsden, M. *et al.*, University of Manchester, UK
5. Development of a LC-MS/MS method for the determination of benzotriazoles in highly treated wastewaters for indirect potable reuse in Australia – Loi, C. *et al.*, Curtin University, AUSTRALIA
6. Kinetics of the oxidation of chlorophenols in aqueous solution by potassium permanganate – Ghausul Hossain, S.M. and McLaughlan, R.G., UTS, AUSTRALIA
7. The distribution of inorganic nitrogen compounds around septic tank absorption trenches in the clay soils of semi-urban Melbourne – Goodman, N. *et al.*, CSIRO, AUSTRALIA
8. Acid sulphate soil groundwater remediation using waste concrete: A laboratory and pilot scale investigation – Regmi, G. *et al.*, University of Wollongong, AUSTRALIA
9. Improved biodegradability of DOC in secondary effluent after UV/H₂O₂ treatment – Puspita, P. *et al.*, RMIT, AUSTRALIA
10. Caustic soda cleaning of sewer pressure main – O’Gorman, J. *et al.*, Sydney Water Corporation, AUSTRALIA
11. The implications of reduced water usage on odour and corrosion in sewers and understanding sewer ventilation patterns to assist in alleviating negative impacts – Hamer, G. *et al.*, CH2M Hill, AUSTRALIA
12. The effect of chloramine speciation and contact time on N-nitrosamine formation and the N-nitrosamine formation potential of Beenyup secondary wastewater during chloramination – Hartley, J.J. *et al.*, Curtin University, Perth, AUSTRALIA

TUESDAY POSTER SESSION, Tyree Room, 4.00pm-5.00pm

D: Source water quality and catchment management

1. A network of knowledge on applying flood vulnerability index methodology in order to test the degree of flood vulnerability on various spatial scales – Balica, S. and Wright, N.G., UNESCO-IHWE, NETHERLANDS
2. Single step 11 gene m-PCR in detecting diarrhoeagenic E. coli in clinical and environmental water sources – Omar, K.B. and Barnard, T.G., University of Johannesburg, SOUTH AFRICA
3. Isolation of Enterococcus host strains for bacteriophage detection and enumeration – Purnell, S.E. *et al.*, University of Brighton, UK
4. Recent advances and applications of the WaterCAST catchment modelling framework – Stewart, J. and Weber, T., BMT WBM Pty Ltd., AUSTRALIA
5. Temporal pollutant trends and hazard ranking in the desalination effluence area of Penghu, Taiwan – Lin, Y.C. *et al.*, Cheng-King University, CHINESE TAIWAN
6. Toxicity of Tasmanian river water samples to human T47D cell line – Makepeace, J. *et al.*, Flinders University, AUSTRALIA
7. An integrated management system for the Shoalhaven Reservoirs, Australia- the use of real time data acquisition and numerical modelling – Harris, J. *et al.*, Centre for Water Research, AUSTRALIA

E: Society, economics, sustainability and implementation

1. Planning and management of the urban draining in the City of Belam, Para, Brazil: Financial self-sustainment through the collection of one taxes – Lisboa, E.G., BRAZIL
2. Water supply development in the Sultanate of Oman – Alsaadi, K.S., Public Authority of Electricity and Water, OMAN
3. Feeding the world: The importance of green water in water resources management – Vanham, D., University of Innsbruck, AUSTRIA
4. Water poverty mapping as a tool to assist water management – van der Vyver, C., North-west University, SOUTH AFRICA
5. Best practise performance monitoring for small scale wastewater systems – Toifl, M. *et al.*, CSIRO, AUSTRALIA

F: Membrane treatment

1. Titanium dioxides coated PVDF membrane using low temperature synthesis method – Ng, M. *et al.*, UNSW, AUSTRALIA
2. Prediction of reverse osmosis fouling using crossflow sampler modified fouling index ultrafiltration (CFS-MFI-UF) – Sim, L.N. *et al.*, UNSW, AUSTRALIA
3. Image analysis of the bio-cakes of cells-proteins mixtures deposited on membrane surface – Kim, J.Y. and Chang, I.S., Hoseo University, REPUBLIC OF KOREA
4. Mapping reverse osmosis membrane performance using fluorescence spectroscopy – Singh, S. *et al.*, UNSW, AUSTRALIA
5. Impact of Cyanobacteria on membrane fouling in the treatment of secondary treated effluent – Goh, Y.T. *et al.*, RMIT, AUSTRALIA
6. Long-term performance of a full-scale microfiltration plant in secondary effluent reuse – Sakata, C. *et al.*, University of Wollongong, AUSTRALIA
7. Removal of perfluorochemicals and salts in wastewater using reverse osmosis for water reuse in irrigation – Lin, Y.L. and Reinhard, M., CHINESE TAIWAN
8. Multi-cycle tests for evaluating membrane fouling propensity in ultrafiltration of a secondary effluent – Nguyen, S.T. *et al.*, RMIT, AUSTRALIA
9. An experimental study of the effects of fluctuating pressure on reverse osmosis membrane performance – Ibbotson, B.A., AUSTRALIA

4.00-5.00

Wednesday 7th July	
8.00-8.30	<i>REGISTRATION AND WELCOME TEA AND COFFEE</i>
	<p>Professional Development Day, The Galleries, 8.30am-5pm Organised by the: IWAA-AWA National Committee <i>Chair – Erin Cini, Element Solutions</i></p>
8.30-8.35	Introduction
8.35-10.00	<p>Australian Project Showcases <i>Chair – Jaques Ostrowski, Sydney Water</i></p> <ul style="list-style-type: none"> • Sydney Desalination Project – Catherine Port, Sydney Water Corporation • Groundwater Replenishment in Western Australia – Palenque Blair, Water Corporation • Murray-Darling Basin Planning and Improvement – Racheline Jackson, Murray-Darling Basin Authority • Provision of Water and Sanitation Services to Remote Indigenous Communities – Nicole Teo, SKM • FutureFlow Irrigation Modernisation Project – Peter Walsh, Comdain • South East Queensland Water Grid – Yunal Kumar, Veolia Water
10.30-11.00	<i>MORNING TEA</i>
11.00-11.40	<p>Careers Panel <i>Chair – Erin Cini, Element Solutions</i> Panel members:</p> <ul style="list-style-type: none"> • Colin Nicholson - General Manager Operations, Sydney Water Corporation • Richard Stuetz - Professor, Co-Director of the UNSW Water Research Centre, School of Civil and Environmental and Chemical Engineering, UNSW • David Middleton - Regional Water Business Group Manager, CH2M Hill • Peter Moore - Chief Operating Officer, Water Corporation • Therese Flapper – Principal and Director, iConneXX • Melita Grant - NSW Office of Water, Department of Environment, Climate Change and Water (DECCW)
11.40-12.20	<p>Soap Box Presentations <i>Chair: Samantha Philips, NSW Department of Environment, Climate Change and Water</i></p> <ul style="list-style-type: none"> • Mapping reverse osmosis membrane performance using fluorescence spectroscopy – Singh, S. <i>et al.</i>, UNSW, AUSTRALIA • Toxicity of Tasmanian river water samples to Human T47D cell line – Makepeace, J. <i>et al.</i>, Flinders University, AUSTRALIA • Titanium dioxides coated PVDF membrane using low temperature synthesis method – Ng, M. <i>et al.</i>, UNSW, AUSTRALIA • Formation and removal of iodo-organic compounds during waste water treatment – Allard, S. <i>et al.</i>, Curtin University, AUSTRALIA
12.20-1.30	<i>LUNCH</i>
1.30-2.30	<p>Future Water Leaders World Café, Facilitated by: Now For Future</p>
3.00-3.30	<i>AFTERNOON TEA</i>
3.30-4.30	<p>Future Water Leaders World Café, Facilitated by: Now For Future</p>
4.30-5.00	Conference Closing Ceremony

SOCIAL ACTIVITIES

Welcome Reception

Sponsored by ACCARNSI

Location: Tyree Room, John Niland Scientia Building

Time: 6-8pm, Monday 5th July

Drinks and light canapés provided.

NSW YWP and YWPC 2010 Networking Night

Organised by the NSW YWP Committee

Sponsored by H2O Talent and supported by the NSW YWP Branch.

Location: Cruise Bar, Circular Quay West (opposite the Opera House)

Time: 7pm onwards, Tuesday 6th July

Drinks and light canapés provided at the start of the evening.

YWPC 2010 Conference Dinner

Location: Coogee Bay Hotel

Time: 7pm till late, Wednesday 7th July

A coach service will take delegates from UNSW to the venue.

Drinks and dinner canapés provided.