

INTERACT 2006 PROVISIONAL PROGRAM
'Air, Water and Earth: Interact in Perth'

REGISTRATION DAY: SUNDAY 24 SEPTEMBER 2006

3.30pm	Registration desk opens
5.00pm	WELCOME AND OPENING CEREMONY
6.00pm	Welcome Reception in the Industry Exhibition

DAY ONE: MONDAY 25 SEPTEMBER 2006

8.00am	Registration	
8.45am	KEYNOTE ADDRESS 1	Science in Australia – Developing a Culture of Research and Innovation Dr Robin Batterham (Chief Technologist, Rio Tinto)
9.45am	PLENARY ADDRESS 1 Stokes Medallist (Electrochemistry) Electrochemical Power Sources: Key Agents for Energy Sustainability Dr David Rand (CSIRO Energy Technology, Clayton, VIC)	PLENARY ADDRESS 2 ICP-MS and Crime Scene Investigation - Just how far can we go? Professor John Watling (Centre for Forensic Science, The University of Western Australia)
10.30am	Morning Tea Break in the Industry Exhibition	

CONCURRENT SESSION ONE

Theme	Forensic Science	Smart New Analytical Techniques 1	Mining and Environment 1	Bioavailability of Metals 1	Energy and Electro-active Materials
11.00am	Towards Chemistry at the Crime Scene: Improvements to Separation and Detection of Illicit Substances Simon Lewis (Curtin University of Technology, WA)	Quantitative Analysis of Ochratoxin a in Wine and Beer Using Solid Phase Extraction and High Performance Liquid Chromatography-Fluorescence Detection Georgina Giannikopoulos (CSIRO – Food Science Australia, NSW)	Integrated Assessment of Water Discharges From Argyle Diamond Mine: Chemical and Ecotoxicological Aspects Rick Van Dam (Environmental Research Institute of the Supervising Scientist, NT)	Toxicity of Copper and Zinc to Wheat in 14 Australian Soils and Modelling Using Soil Physicochemical Properties Michael Warne (Centre for Environmental Contaminant, SA)	Electroactive Materials for Clean Energy Applications Guoxiu Wang (University of Wollongong, NSW)
11.20am	Terrorism Response – Issues Involved in the Development of a Chemical Weapons Analysis Capacity Within State Public Health and Forensic Laboratories Gary Golding (Queensland Health Scientific Services)	Application of Shipboard Determination of Aluminium in Seawater to Dust Deposition Studies in the Ross Sea, Antarctica Juliette Tria (ACROSS, CSIRO, ACE CRC, TAS)	Toxicity Assessment of Limed and Phosphorus Amended Mine Pit Lake Water Luke Neil (Curtin University of Technology, WA)	Internalisation of Copper by Three Marine Micoralgae of Differing Sensitivities Jacqueline Levy (University of Wollongong and CSIRO, NSW)	A Study on Manganese Dioxide Discharge Using Electrochemical Impedance Spectroscopy Jeremy Arnott (University of Newcastle, NSW)
11.40am	Analysis of Oxygenated Flammable Liquids in Fire Debris by Immersion SPME-/GC-MS David Tranthim-Fryer (Chemistry Centre, WA)	A New Organic Carbon Detector for HPLC Bradley Allpike (Curtin University of Technology, WA)	Approach to Deriving Water Quality Closure Criteria for Natural Waterbodies at the Ranger Uranium Mine Using Water Quality and Aquatic Biology Time Series Data David Jones (Environmental Research Institute of the Supervising Scientist, NT)	Heavy Metal Toxicity to Antarctic Macroalgae: Photosynthetic Decline Measured Using a Robotic Pam-Fluorometer Christopher Golding (Department of Environment and Heritage, NSW)	Electrochemistry of Ferrocene Derivatives: Its Applications Touma Issa (Murdoch University, WA)
12.00pm	Towards a Single HPLC Column for Explosives Analysis Peter Jackson (Dionex Pty Ltd, NSW)	Sample Automation – From Preparation to Analysis Tim Williams (Ai Scientific Pty Ltd, QLD)	Mine Lake Water Quality Assessment Using Bioassays and Chemical Analyses Yuri Tsvetnenko (Curtin University of Technology, WA)	Effects of Acclimation on Copper and Zinc Tolerance of Two Tropical Microalgae Hilary Johnson (University of Wollongong, NSW)	Fourier Transform AC Voltammetry for THR Characterization of Electromaterials Mark Imisides (Intelligent Polymer Research Institute, NSW)

12.20pm	Lunch Break and Poster Displays				
1.30pm	KEYNOTE ADDRESS 2		Biomonitoring of Trace Metals in Estuarine and Marine Environments Professor Phil Rainbow (Keeper of Zoology, Natural History Museum, UK)		
2.30pm	KEYNOTE ADDRESS 3 Analytical Approaches to Investigations of Metal Biotransformations Professor Kevin Francesoni (Analytical Chemistry, Institute of Chemistry, Karl-Franzens University Graz, Austria)		PLENARY ADDRESS 3 2005 Analytical Division Medal Instinct, Intension and Insomnia in the Development of Several High Performance BioAnalytical Methods Professor Milton Hearn (ARC Special Research Centre for Green Chemistry, Monash University, VIC)		
3.15pm	Afternoon Tea Break in the Industry Exhibition				
CONCURRENT SESSION TWO					
Theme	Soils and the Environment	Smart New Analytical Techniques 2	Mining and Environment 2	Ecotox Modelling	Electrochemistry of Minerals of Metals
3:40pm	Isotopic Dilution and HPLC-ICP-to Determine Cobalt Exchangeability in Soils Jason Kirby (CSIRO Land and Water, SA)	Utilising NIRS and DNA Technologies to Manage Rangeland Sustainability Peter McCafferty (Chemistry Centre, WA)	Using Ecotoxicology to Assess the Effectiveness of Pond and Process Water Treatment at Ranger Uranium Mine Melanie Houston (Environmental Research Institute of the Supervising Scientist, NT)	Measuring Relationships Between Contamination and Benthic Community Structure: Assessment of Approaches Anthony Roach (Department of Environment and Conservation, NSW)	The Frequency Changes Observed with the EQCM Resulting from the Adsorption of a Flotation Collector on Silver Ron Woods (Monash University, Vic)
4.00pm	The Biogeochemical Cycling of Sulfur, Carbon and Nitrogen Across the Permian-Triassic (P-TR) Schuchert Dal Section (Eastern Greenland) Stephen Fenton (Curtin University of Technology, WA)	pH Mediated Electrospray Ionisation Mass Spectrometry Christopher McRae (Macquarie University, NSW)	Uranium Toxicity to the Tropical Duckweed Lemna Aequinoctialis and the Gastropod Amerianna Cumingi Alicia Hogan (Environmental Research Institute of the Supervising Scientist, NT)	A Multivariate Functional Model Able to Simultaneously Predict the Toxicity of Chemicals to Multiple Species. I The Statistical Model Richard Morton (CSIRO, Maths and Info Sciences, ACT)	Electrochemical Aspects of Sphalerite Mineral Surfaces in Copper Sulphate, Xanthate, and Dithiophosphate solutions Studied by Voltammetry Anjana Narasimhan (The University of Newcastle, NSW)
4.20pm	The Effect of Soil Matrix on the Extraction of Glyphosate Tatjana Nedelkoska (Chemist Organic Chemistry Laboratory, NSW)	Investigation on Mixed Acid Digestion With High Content of Hydrochloric Acid for Environmental Samples Analysed by Dynamic Reaction Cell Inductively Coupled Plasma Mass Spectrometry (DRC-ICP-MS) Jin Yang (Department of Environment and Conservation, NSW)	From Biological Effects Data to Site-Specific Water Quality Objectives; Applying National Water Quality Guidelines to Manage Minewater Discharge Michelle Iles (Office of the Supervising Scientist, NT)	A Multivariate Functional Model Able to Simultaneously Predict the Toxicity of Chemicals to Multiple Species. II Toxicology and Applications Michael Warne (Centre for Environmental Contaminant, SA)	Electrodeposition of Metals From Ionic Liquids William Price (ARC Centre of Excellence for Electromaterials Science, NSW)
4.40pm	Use of Species Sensitivity Distributions to Derive Protective Concentrations for Soils Diane Heemsbergen (Centre for Environmental Contaminant, SA)	Optimisation of GCXGC TOF-Analysis With Automated Sample Preparation for Plant Metabolomics Robert Trengove (Murdoch University, WA)	Tracing Sediment Deposition on a Tropical Floodplain Using Mine-Derived Particulate Metal Signatures Simon Apte (CSIRO Land and Water, NSW)	Imprecise Estimates of Species Sensitivity at Species Can Produce More Accurate Species Sensitivity Distributions (SSDs): Rapid Toxicity Testing Ben J Kefford (Biotechnology and Environmental Biology, RMIT University, VIC)	Copper Electrowinning From Cyanide Solutions at Low PH Xianwen Dai (CSIRO, WA)
5.00pm	Close of Sessions				
5.05pm	Official Opening of the Industry Exhibition				

DAY TWO: TUESDAY 26 SEPTEMBER 2006

8.15am	Registration				
8.45am	KEYNOTE ADDRESS 4	Influence of Offshore Oil and Gas Platforms on the Environment Dr Jerry Neff (Principal, Neff & Associates LLC, USA)			
9.45am	PLENARY ADDRESS 4 Chemistry on Aerosol Particles Professor Peter Brimblecombe (Atmospheric Chemistry, School of Environmental Sciences, University of East Anglia, UK)		PLENARY ADDRESS 5 2006 Environmental Division Medal Speaker to be advised		
10.30am	Morning Tea Break in the Industry Exhibition				
CONCURRENT SESSION THREE					
Theme	Oil and Gas and the Environment	Urban Air Quality	Rural and Urban Water Issues 1	Innovations in Separation Science	Modern Electrochemical Techniques 1
11.00am	Forensic Fingerprinting of Woolamai Oil spill Ivo Tence (La Trobe University Research and Development Park, VIC)	Perth Airshed Modelling: Developments and Preliminary Results Sam Saunders (The University of Western Australia)	Legacy PAH Contamination From Road Tar in Older Pavement Layers in Christchurch and Auckland, New Zealand – Implications for Stormwater Management Michael Ahrens (CSIRO Land and Water, NIWA)	Profiling and Quantifying Quercetin Glucosides in Onion Varieties Using Capillary Electrophoresis and High Performance Liquid Chromatography Craig Trener (Department of Primary Industries, VIC)	Detection of Different Phases and Control of Localized Nanorod Formation and Crystal Formation in CUTCNO System Using the SECM Method Alan Bond (Monash University, VIC)
11.20am	GCxGC-MS Characterisation of Stabilising Components in Crude Oil Emulsions Robert Trengove (Murdoch University, WA)	Measurements and Preliminary Modelling of Pollutant Dispersion in the Perth CBD Rory Donnelly (Murdoch University, WA)	Pesticide and Heavy Metals Monitoring in Goulburn Murray Water Irrigation Supply Channels, Victoria, Australia Gavin Rose and Golam Kibria (Department of Primary Industries, VIC)	Fast and Ultra Fast LC with a Highly Optimized HPLC System Peter Jackson (Dionex Pty Ltd, NSW)	A Raman Spectroelectrochemical Investigation of the Modification of Chemically Deposited Copper Sulfide Thin Films Carolyn Munce (Griffith University, QLD)
11.40am	PFW Discharge at Sea: Measuring the Impacts on Fish Health Monique Gagnon (Curtin University of Technology, WA)	Contribution to Urban Air Pollution From Biogenic Emissions Resulting From Leaf Mulching Nichola Porter (RMIT University, VIC)	The Effects of Pulse-Exposure of Pesticides on Native Fish Larvae From the Goulburn-Murray Region, Victoria, Australia Dayanthi Nugegoda and Golam Kibria (RMIT University, VIC)	Application of Diffusive Gradients in Thin Films for Determining Inorganic Arsenic Concentrations in Natural Waters Jarad Panther (University of Canterbury, NZ)	Development of an Atomic Force Microscope for High Speed, in Situ Electrochemical Imaging Alex Harris (Monash University, VIC)
12.00pm	Current Approaches to Assessing Effects of Produced Water Discharges to the Ocean Jerry Neff (Neff and Associates LLC, USA)	Mitigation Strategies for the Control of Exhaust Emissions From Diesel Engines Anne Tibbett (CSIRO Energy Technology, NSW)	An Integrated Assessment of the Effects of Laundry Detergent on Aquatic Macro-Invertebrates in rural South African River Andrew Gordon (Institute for Water Research, South Africa)	Selenium Speciation of Bio-Fortified Wheat Products Using ID-HPLC-ICP and LC-Tandem Mass Spectrometry Jason Kirby (CSIRO Land and Water, SA)	Surface Studies of Gold Leached in Ammoniacal Copper(II) Thiosulfate Solutions Kym Watling (Griffith University, QLD)
12.20pm	Lunch Break and Poster Displays				
1.30pm	KEYNOTE ADDRESS 5	Traceability for Chemical Measurements: What This Is, Why It Is Important, and Why You Should Care Dr Willie E May (Director, Chemical Science and Technology Laboratory, National Institute of Standards and Technology, USA)			

2.30pm	PLENARY ADDRESS 6 Breyer Medallist (Electrochemistry) Voltammetry at Heterogeneous Surfaces. New Electrodes for Old: From Carbon Nanotubes to Edge Plane Pyrolytic Graphite Professor Richard Compton (Theoretical and Physical Chemistry, Oxford University, UK)		PLENARY ADDRESS 7 The Atmosphere, the Environment and Society Dr Ian Galbally (CSIRO Marine and Atmospheric Research, VIC)		
3.15pm	Afternoon Tea Break in the Industry Exhibition				
CONCURRENT SESSION FOUR					
Theme	Issues in Groundwater Quality	WORKSHOP	Bioavailability of Metals 2	Metrology and Managing Scientific Data 1	Modern Electrochemical Techniques 2
3.40pm	Arsenic Removal From Contaminated Ground Water Reza Alizadehfard (Moltoni Infra Tech Pty Ltd, WA)	National Low Level Nutrient Collaborative Trials Dan Wruck (Queensland Health Scientific Services)	Selenium Biotransformation in Rats and Humans: Investigations of Urinary Metabolites by HPLC/MASS Spectrometry Kevin Francesconi (Karl-Franzens University Graz, Austria)	Managing Environmental Risks Through the Application of ISO 14001 Environmental Management System Standards Steffi Schwarz (SAI Global, WA)	Fourier Transformed Large Amplitude Alternating Current Voltammetry Jie Zhang (Monash University, VIC)
4.00pm	Biological Characterization of Treated Wastewater for Environmental Impact Assessment of Managed Aquifer Recharge Jill Woodworth (Geotechnical Services, WA)		Effect of Biosolids and Metals on Plant Endpoints in South East Asia Diane Heemsbergen (Centre for Environmental Contaminant, SA)	How to Estimate Measurement Uncertainty and Chew Gum at the Same Time? Greg O'Donnell (WorkCover, NSW)	Electrolyte Penetration Into Manganese Dioxide Particles During Discharge Using Electrochemical Impedance Spectroscopy Jeremy Arnott (University of Newcastle, NSW)
4.20pm	Metals in Groundwater: Are They a Problem for Stygofauna? Grant Hose (UTS, NSW)		Arsenic Concentrations in Yabbies (<i>Cherax Destructor</i>) Exposed to Elevated Levels as a Results of Mining Activity in and Around Ballarat, Victoria Gemma Williams (Deakin University, VIC)	Fitness for Purpose of Chemical Measurements – Inferences Drawn From Proficiency Testing Paul Armishaw (National Measurement Institute, NSW)	Non Cyanide Electroless Plating of Gold Matthew Jeffrey (Gold Program, CSIRO Minerals, WA)
4.40pm	The Determination and Hydrogeological Transport of Atrazine and Related Herbicides to Groundwater Systems in Western Australia Peter Taylor (Chemistry Centre, WA)		Can We Use Fish as Sentinels of Contamination in Western Australia? Thomas Rose (Department of Environment, WA)	Estimating Measurement Uncertainty in Fifteen Minutes Graham Roberts (National Association of Testing Authorities, VIC)	Electroless Solution Deposition of Ag Thin Films Fionnuala Buckley, (Griffith University QLD)
5.00pm	Close of Sessions				
5.00pm	Happy Hour and Poster Displays				

DAY THREE: WEDNESDAY 27 SEPTEMBER 2006

8.150am	Registration				
8.45am	KEYNOTE ADDRESS 6		A Systems Approach to Characterising and Predicting Thyroid Toxicity Using an Amphibian Model Dr Joe Tietge (Chief of Toxic Effects, Characterisation Research Branch, Environmental Protection Agency, USA)		
9.45am	PLENARY ADDRESS 8 Faster, Smaller, Smarter: New Developments in Ion Chromatography Professor Paul Haddad (Australian Centre for Research on Separation Science, University of Tasmania)		PLENARY ADDRESS 9 Effects of Air Pollutants on Human Health and the Environment Associate Professor Frank Murray (School of Environmental Sciences, Murdoch University, WA)		
10.30am	Morning Tea Break in the Industry Exhibition				
CONCURRENT SESSION FIVE					
Theme	Endocrine Disrupting Chemicals 1	Innovations in the Characterisation of Atmospheres	Bioavailability of Metals 3	Metrology and Managing Scientific Data 2	Smart New Electrochemical Sensors 1
11.00am	Estrogenic Activity of Treated Municipal Effluent From Twelve Sewage Treatment Plants in Victoria, Australia Graeme Allison (Department of Primary Industries, VIC)	SPME-GC/Investigations of Volatile Organic Compounds Emitted From Australian Plants Ian Jamie (Macquarie University, NSW)	Assessment of the Natural Levels and Enhancement of Metals in Estuarine Sediments of Central Queensland Vicky Vicente-Beckett (Central Queensland University)	Science and Public Engagement – Incorporating Social, Economic and Environmental Issues for Better Outcomes Peter McCafferty and Sunil Govinnage (Chemistry Centre, WA)	Construction of a Polypyrrole-Based Tyrosinase Biosensor for Potentiometric Detection of Phenols Samuel Adeloju (Monash University, VIC)
11.20am	Assessing Exposure to Endocrine Disruptors and Their Effects in Mosquitofish Within Sydney Creeks Near Sewage Discharge Sites Heather Brown (University of Technology Sydney, NSW)	Monitoring of Low Level VOC and Carbonyl Compounds in Ambient Air at Wagerup/Yarloop Patrick Coffey (Alcoa, WA)	Development of Robust Guidelines and Assessment Procedures for Metal Contaminated Sediments David Strom (CSIRO Land and Water, NSW)	The Preparation and Characterisation of Analytical Reference Materials Gregory Tarrant (National Measurement Institute, NSW)	Materials Science and Electrochemical Sensors – An Exciting and Powerful Combination Roland De Marco (Curtin University of Technology, WA)
11.40am	Distribution of Frogs in Race Bays Within an Irrigated Agriculture Area: Preliminary Results Ross Hyne (Department of Environment and Conservation, NSW)	Studies of Atmospheric Organic Compounds Using Proton Transfer Reaction Mass Spectrometry Ian Galbally (CSIRO Marine and Atmospheric Research, VIC)	Determining the Contribution of Dissolved and Particulate metal Exposure Pathways to the Toxicity in Marine Sediments Tina Micevska (CSIRO Land and Water, NSW)	Protecting Intellectual Property – What Scientists Need to Know Kelvin Lord (Lord and Company, WA)	An Electrochemical Immunosensor with a Self-Assembled Monolayer and Protein A as a Backbone Structure Danny Wong (Macquarie University, NSW)
12.00pm	Interactive Effects of PAHs and TBT in Promotion of Imposex in <i>Nucella Lapillus</i> Scott Wilson (Australian Catholic University, NSW)	Experience with a Man-portable GC-MS for the identification and Measurement of Volatile Organic Compounds in Air Steve Wilkinson (Chemistry Centre, WA)	Whole-Sediment Toxicity Tests with the Benthic Marine Alga <i>Entomoneis CF Punctulata</i> – Relevance and Application Merrin Ada (CSIRO Land and Water, NSW)		Fabrication of a Nitrate Reductase Biosensor for the Detection of Nitrate in Environmental Materials Manzar Sohail (Monash University, VIC)
12.20pm	Lunch Break				
1.30pm	KEYNOTE ADDRESS 7		Express Test Methods for Field Water Analysis Professor Yuri Zolotov (Head of Analytical Chemistry, Lomonosov Moscow University, Russia)		
2.15pm	PLENARY ADDRESS 10 The National Low Level Nutrient Collaborative Trials an Educational Proficiency Testing Program Dan Wruck (Queensland Health Scientific Services)		PLENARY ADDRESS 11 Past and Future Radiative Forcing by Long-Lived Greenhouse Gases Colin Allison (CSIRO Marine and Atmospheric Research, VIC)		
3.00pm	Afternoon Tea Break in the Industry Exhibition				

CONCURRENT SESSION SIX					
Theme	Endocrine Disrupting Chemicals 2	Bioavailability of Metals 4	Drinking Water Chemistry 1	Metrology and Managing Scientific Data 3	Smart New Electrochemical Sensors 2
3.30pm	<p>International Collaboration in the Development of Endocrine Disrupter Screening Test Guidelines for fish and Amphibians</p> <p>Joseph Tietge (National Health and Environmental Effects Research Laboratory, USA)</p>	<p>Ecotoxicology in the Freezer: The Sensitivity of Antarctic Marine Biota to Metals</p> <p>Catherine King (Impact of Human Activities in Antarctica, TAS)</p>	<p>Studies of Chloramine Stability with pH Variation in Potable Waters Using a Microstill Conductance Module</p> <p>David Davey (University of South Australia, SA)</p>	<p>Issues Concerning the Reliability Log P and Log K_{oc} Values of Synthetic Pyrethroids</p> <p>Amanda Hasthorpe (The University of Queensland)</p>	<p>Simultaneous Determination of Trace Amounts of Vanadium and Molybdenum in Water and Foodstuff Samples Using Adsorptive Cathodic Stripping Voltammetry</p> <p>Shokooh Khaloo (Isfahan University of Technology, Iran)</p>
3.50pm	<p>Occurrence of Antifouling Biocides in Perth Waters: TBT is Not The End of the Issue</p> <p>Tarren Reitsema (Department of Water, WA)</p>	<p>Sensitivity of Antarctic and Temperate Spirorbids to Metal Contaminants</p> <p>Nicole Hill (University of NSW)</p>	<p>Sorption Preconcentration for Trace Components Determination in Water</p> <p>Yury Zolotov (Lomonosov Moscow University, Russia)</p>	<p>The National Low Level Nutrient Collaborative Trials an Educational Proficiency Testing Program</p> <p>Dan Wruck (Queensland Health Scientific Services)</p>	<p>Comparison on In-Situ Bismuth - and Mercury-Filmed Electrodes for the Detection of Lead in Calcium Supplement Tablets by Square-Wave Anodic Stripping Voltammetry</p> <p>Vicky Vincente-Beckett (Central Queensland University)</p>
4.10pm	DIVISIONAL AGM's AND WORKSHOPS				
4.10pm	<p>Formation of a National Management Division within RACI</p> <p>Stewart Jones (Royal Australian Chemical Institute, WA)</p>	ASE AGM	<p>CASANZ Particle WORKSHOP plus</p> <p>CASANZ AGM</p> <p>Peter Brimblecombe (University of East Anglia, UK)</p>	<p>Metrology WORKSHOP</p> <p>Certified Reference Materials – When, Why and How to Use Them in Analytical Chemistry</p> <p>Laurence Beasley (National Measurement Institute, NSW)</p>	
4.30pm	RACI AGM's				
5.30pm	Close of Sessions				
7:00pm	Conference Dinner				

DAY FOUR: THURSDAY 28 SEPTEMBER 2006	
8.30am	Registration
9.00am	<p>PLENARY ADDRESS 12</p> <p>Acid Sulfate Soils: Paralysis of Analysis – Are There Parallels in the Mining Industry?</p> <p>Dr Pamela Jones (formerly Acting Director, Mining Evaluation for Northern Territory Government, NT)</p>
9.45am	<p>PLENARY ADDRESS 13</p> <p>Online Separation Based on Hydrophobic Membranes in the Flow Injection Determination of Arsenic and Mercury</p> <p>Dr Spas Kolev (Senior Lecturer, Analytical and Environmental Chemistry, School of Chemistry, University of Melbourne, VIC)</p>
	<p>PLENARY ADDRESS 14</p> <p>Discrete Physico-Chemical Processes that Characterise Pollution From Mining</p> <p>Dr Barry Noller (Principal Research Fellow, National Research Centre for Environmental Toxicology, QLD)</p>
10.30am	Morning Tea Break in the Industry Exhibition

CONCURRENT SESSION SEVEN					
Theme	Endocrine Disrupting Chemicals 3	Acidity and Salinity Issues	Innovative Analytical Techniques	Bioavailability of Metals 5	
11.00am	Occurrence of Antibiotics in South-East Queensland Waterways: Implications for Wastewater Treatment and Recycling Andrew Watkinson (The University of Queensland)	Salinity Engineering and Acid Groundwater Discharge Shawan Dogramaci (Department of Environment, WA)	Removal of Interferences in Arsenic Measurement with LC-ICP Mass Spectrometry David Davey and K Akter (University of South Australia, SA)	Biological Indicators of Heavy Metal Stress in the Grey Mangrove, Avicennia Marina Geoff MacFarlane (The University of Newcastle, NSW)	
11.20am	Endocrine Disrupting Chemicals: Environmental Fate and Exposure in Australian Riverine Environment Anu Kumar (CSIRO Land and Water, SA)	An Emerging Pattern of Acidic Base-Flow Conditions in Waterways of the Inland Avon Basin Brad Degens (Department of Water, WA)	Simultaneous Determination of Isoflavones and Lignans in Aqueous Environmental Samples by LC-ESI-MS William Price (University of Wollongong, NSW)	Alumina Refining and Marine Hydrotalcite Deposits: An Assessment of Stability and Bioavailability of Occluded Metals Niels Munksgaard (Charles Darwin University, NT)	
11.40am	CYP1A Activity in Fish Populations Inhabiting a Remediated Site Christopher Rawson (University of Technology, Sydney, NSW)	Natural Saline System Western Australia: Ecological Values and Threats Jacob John (Curtin University of Technology, WA)	Luminescent Gold Complexes and Studies of Their Cellular Distribution by Fluorescence Microscopy Murray Baker (The University of WA)	Bioavailability of Trace Metals in the Diet – The Effect of Metal Binding in the Prey Philip Rainbow (Natural History Museum, UK)	
12.00pm	Toxicity and Bioavailability Atrazines and Molinate to Freshwater Fish (Melonotenia Fluviatilis) under Laboratory and Simulated Field Conditions Yin Latt Phyu (University of Technology, Sydney, NSW)	The Chemical Profile of Inland Saline Water and its Effect on the Aquaculture Potential of Selected Marine Species Ravi Fotedar (Muresk Institute, WA) and Don Sarathchandra (SGS Environmental Services, WA)	Rapid Determination of Granisetron in Human Plasma by Liquid Chromatography Coupled to Tandem Mass Spectrometry and its Application to Bioequivalence Study Yaju Pan, Yunyun Jiang, Xiaowei Fan and Guorong Fan (Second Military Medical University, PR China)	Cadmium Assimilation and Subsequent Efflux in the Signal Crayfish Pacifastacus Leniusculus Marilyn Bennet-Chambers (Curtin University of Technology, WA)	
12.20pm	Lunch Break				
1.30pm	KEYNOTE ADDRESS 8		Challenges for Tomorrow's Scientists - Solutions through Interaction, Innovation and Communication Robyn Williams AM (ABC Australia)		
2.30pm	PLENARY ADDRESS 15 Flow Injection Analysis and the Aquatic Biogeochemistry of Phosphorus Associate Professor Ian McKelvie (Waters Studies Centre, School of Chemistry, Monash University, VIC)		PLENARY ADDRESS 16 2006 Analytical Division Medal Speaker to be advised		
3.15pm	Afternoon Tea Break and close of Industry Exhibition				
CONCURRENT SESSION EIGHT					
Theme	Advances in Analytical Chemistry	WORKSHOP	Analytical Techniques	Rural and Urban Water Issues 2	Drinking Water Chemistry 2
3.40pm	Determination of Psilocin and Psilocybin by Flow Injection analysis and HPLC with Chemiluminescence Detection Simon Lewis (Curtin University of Technology, WA)	Aquatic Ecotoxicology of Metals from Mining Philip Rainbow (Natural History Museum, UK)	Application of Isotope Dilution High Resolution Mass Spectrometry to the Analysis of Brominated Flame Retardants in Environmental Samples Gavin Stevenson (National Measurement Institute, NSW)	Caridina Nilotica (Decapoda: Atyidae): An Indigenous Freshwater Shrimp for Use in Toxicity Testing in South Africa Nikite Muller (Rhodes University, South Africa)	IC and IC/MS Determination of Haloacetic Acids and Bromate in Drinking Water Peter Jackson (Dionex Pty Ltd, NSW)

4:00pm	<p>Microanalysis of Pearl and Shell of the Akoya Pearl Oyster Rob Russell (ANSTO, NSW)</p>	<p>WORKSHOP continues</p> <p>Aquatic Ecotoxicology of Metals from Mining Philip Rainbow (Natural History Museum, UK)</p>	<p>LC/Determination of Antibiotic Residues in Water-Accounting for Matrix Effects by Standard Addition John Murby (National Measurement Institute, NSW)</p>	<p>Efficiency of Constructed Wetlands in Treating High Strength Winery Wastewater Anu Kumar (CSIRO Land and Water, SA)</p>	<p>Degradation of Oestrogenic and Carcinogenic Compounds in Water Using Advanced Oxidation Technologies Heather Coleman (University of NSW)</p>
4.20pm	<p>Environmental "Green" Impacts on Toxicity of Lead-Free Soldering Used Globally Within the Electronic Industry Wuyuan Song (GuangDong Entry-Exit Inspection and Quarantine Bureau, PR China)</p>		<p>In-Line Microwave-Assisted Flow Through Extraction for Fractionation of Cadmium and Copper in Sediment Yanlin Zhang (Monash University, VIC)</p>	<p>Copper Concentrations in Australian Vineyard Soils Adam Wightwick (Department of Primary Industries, VIC)</p>	<p>Determination of Bromophenols in Water at Nanogram per Litre Concentrations Using Purge-and Trap After in Situ Acetylation Justin Blythe (Curtin University of Technology, WA)</p>
4.40pm	<p>A Robust Laser Spark Optical Emission Spectrometer for the Analysis of ppm Levels of Base Metals in the Field Jorg Metz (XRFS Scientific Limited, VIC)</p>		<p>The Oxidation of Aqueous Sulphur Dioxide by Transition Metal Ions Mike Reda (Independent Technical Consultant, Canada)</p>	<p>The Combined Toxicity of Ammonia and Low Salinity in a Sewage Effluent to Marine Biota Monique Binet (CSIRO Land and Water, NSW)</p>	<p>Characterisation of Molecular Weight Fractions of Natural Organic Matter in Source Waters and Their Behaviour in Water Treatment Processes Cynthia Joll (Curtin University of Technology, WA)</p>
5.00pm	Close of Conference				
5.00pm	Happy Hour				