

## SYMPOSIUM PROGRAM

Thursday 21- Friday 22, February 2008

<b>Registration– Foyer, Ian Wark Laboratories, CSIRO Clayton</b>	
<b>Thursday 21 February</b>	
<b>8:30</b>	<b>Registration &amp; Coffee</b>
<b>8:45</b>	<b>Professor Maria Forsyth: Welcome</b>
<b>8:55</b>	<b>House Keeping, OHSE (CSIRO)</b>
<b>9:05</b>	<b>Professor Gordon Wallace: Introductory Remarks</b>
<b>Morning Session 1</b>	
<b>Chair: Prof. Maria Forsyth (Monash University)</b>	
<b>9:20</b>	<b>Dr. John Wright (Energy Transformed Flagship CSIRO)</b> Grand Research Challenges on the Road to a Sustainable Energy Future
<b>9:50</b>	<b>Prof. Peter Bauerle (Institute of Organic Chemistry II and Advanced Materials, Ulm University, Germany)</b> Novel thiophene-based structures for solar energy conversion
<b>10:20</b>	<b>Morning tea &amp; Poster Session</b>
<b>Morning Session 2</b>	
<b>Chair: Dr. Jenny Pringle ( Monash University)</b>	
<b>10:50</b>	<b>Prof. Frank Walsh (Electrochemical Engineering Laboratory, Energy Technology Research Group, School of Engineering UK)</b> PEM Fuel Cells, Biofuel Cells and Redox Flow Batteries: Progress and Challenges
<b>11:20</b>	<b>Dr. Bjorn Winther-Jensen (Monash University, Melbourne, Australia)</b> Pt-free air electrode for batteries and fuel cells
<b>11:40</b>	<b>Dr Gerry Swieger (Molecular &amp; Health Technologies, CSIRO)</b> Time-Dependent (“Mechanical”) Electrocatalysis
<b>12:00</b>	<b>Prof. Leone Spiccia (Monash University, Melbourne, Australia)</b> Bioinspired Water Oxidation Catalysis
<b>12:20</b>	<b>Prof. Graeme Clark (Bionic Ear Institute &amp; St Vincents Hospital , Melbourne, Australia)</b> Cochlear Implants of the Future
<b>12:50</b>	<b>Lunch and Poster Session</b>

<b>Afternoon Session 1</b>	
<b>Chair: David Officer (University of Wollongong)</b>	
<b>13:50</b>	<b>Prof. Dennis E. Tallman (Department of Coatings and Polymeric Materials North Dakota State University Fargo, USA)</b> Probing Electron Transfer at Complex Interfaces by Scanning Electrochemical Microscopy
<b>14:20</b>	<b>Dr. Katya Izgorodina ( Monash University, Melbourne, Australia)</b> Ab-initio approaches to understand electromaterials
<b>14:40</b>	<b>Dr. Attila Mozer (Wollongong University, NSW, Australia)</b> Transient optical and electrical probes: Functional studies of porphyrin-based dye sensitised solar cells
<b>15:00</b>	<b>Prof. Geoff Spinks (Wollongong University, NSW, Australia)</b> Incongruous actuation in conducting polymers and polyelectrolyte gels
<b>15:20</b>	<b>Afternoon tea &amp; Poster sessions</b>
<b>Afternoon Session 2</b>	
<b>Chair: Prof. Doug MacFarlane ( Monash University)</b>	
<b>15:50</b>	<b>Prof. Steve Greenbaum (City University of New York &amp; Hunter College, USA)</b> Solid State NMR Studies of Battery and Fuel Cell Materials
<b>16:20</b>	<b>Prof. Hua Liu (Wollongong University, NSW, Australia)</b> Polypyrrole used in Lithium Rechargeable Batteries
<b>16:40</b>	<b>Dr. Anvar Zakhidov (The University Of Texas At Dallas)</b> Novel Architectures of Solar Cells with Carbon Nanotubes and Quantum Dots
<b>17:10</b>	<b>Prof. Jung-Ki Park (Department of Chemical &amp; Biomolecular Engineering, Advanced Institute of Science and Technology Korea)</b> Interfacial Characteristics of Polymer Electrolyte Fuel Cells
<b>17:30</b>	<b>Day closing</b>
<b>18:30</b>	<b>Dinner (Monash University Club)</b>
<b>Friday 22/02/08</b>	
<b>Morning Session 1</b>	
<b>Chair: Dr. Mark Bown ( CSIRO)</b>	
<b>9:00</b>	<b>Prof Hong Li (Nanoscale Physics and Devices Laboratory Institute of Physics, Chinese Academy of Sciences)</b> Nanostructured materials for energy storage and conversion devices
<b>9:30</b>	<b>Prof. Andrew Holmes (Bio21 Institute, Melbourne University)</b> The Victorian Photovoltaics Research Initiative"
<b>10:00</b>	<b>Dr. Anthony Burke ( Monash University, Australia)</b> Novel organic dyes for use in DSSC's

<b>10:20</b>	<b>Morning tea and Poster Session</b>
<b>Morning Session 2</b>	
<b>Chair: Dr. Simon Moulton ( University of Wollongong)</b>	
<b>10:50</b>	<b>Dr. Phil Aitchison (CAP- XX Pty Ltd, Australia)</b> Double layer capacitor technology
<b>11:10</b>	<b>Dr. Pawel Wagner (Wollongong University, NSW, Australia)</b> Improving light harvesting across the visible spectrum
<b>11:30</b>	<b>Dr. Patrick Howlett ( Monash University, Melbourne, Australia)</b> Surface characterisation of reactive metal surfaces
<b>11:50</b>	<b>Dr. Jose Razal (Wollongong University, NSW, Australia)</b> Carbon Nanotube Bio-Fibres
<b>12:10</b>	<b>Prof. Ray Baughman (NanoTech Institute University of Texas at Dallas, USA)</b> Diverse carbon nanotube artificial muscles Meet an exciting new family member
<b>12:40</b>	<b>Lunch and Posters</b>
<b>Afternoon Session</b>	
<b>Chair: Dr. Anita Hill (CSIRO) &amp; Dr. Steve Pas ( Monash University)</b>	
<b>13:40</b>	<b>Prof. Ric Kaner (Department of Chemistry and California NanoSystems Institute, University of California, Los Angeles , USA)</b> Enhanced Thermoelectric Properties on Nano-Bulk Silicon
<b>14:10</b>	<b>Dr. Dan Li (Wollongong University, NSW, Australia)</b> Producing Aqueous Graphene Dispersions from Graphite
<b>14:30</b>	<b>Dr. Simon Moulton (Wollongong University, NSW, Australia)</b> Powering Bionic Devices
<b>14:50</b>	<b>Prof. David Officer (Wollongong University, NSW, Australia)</b> Towards Artificial Photosynthesis: A New Paradigm for Light Harvesting
<b>15:10</b>	<b>Dr. Siegmur Roth (Synthetic Nanostructures Group, Max Planck Institute for Solid State Research, Germany)</b> Nanotube-Based Transparent Conducting Films
<b>15:40</b>	<b>Closing</b>