Tuesday 23 February 2010

7:30	**Registration Open** Venue: Bayside Foyer					
8:00	**Exhibition Open** Venue: Bayside Gallery and Foyer					
	CONFERENCE OPENING AND PLENARY SESSION 1 Venue: Bayside Auditorium A Chairs: Prof Calum Drummond, Prof Andrew Dzurak and Dr Cathy Foley					
8:30	**Welcome to Country** **Welcome: The Hon Jodi McKay, NSW Minister for Science and Medical Research** **Opening Address: Prof Mary O'Kane, Chief Scientist and Scientific Engineer of NSW**					
9:00	**David Awschalom -** University of California, Santa Barbara, USA *Manipulating single spins and coherence in semiconductors*					
9:45	**Michael Roukes -** Kavli Nanoscience Institute, Caltech, USA Presentation Title TBC					
10:30	**Morning Tea**					
11:00	**PARALLEL SYMPOSIA - SESSION 1**					
	SYMPOSIUM 1: Nanomaterials and the Environment (Bayside 105) Chair: **Dr Graeme Batley**	**SYMPOSIUM 2A: Excitons & Plasmons** (Bayside 103) Chair: TBC	**SYMPOSIUM 2B: Meso/Nano silica** (Bayside Auditorium) Chair: **Prof Chengzhong Yu**	**SYMPOSIUM 3: Nanobiotech** (Bayside 104) Chair: **Prof Frank Caruso**	**SYMPOSIUM 4: Nanoelectronics** (Bayside 102) Chair: **Prof Lloyd Hollenberg**	**SYMPOSIUM 7: Nanoindustry** (Bayside 106) Chair: **Prof Abid Khan**
11:00	*Invited Speaker* **Prof Mark Wiesner** Duke University, USA *Physical-chemical factors controlling nanoparticle exposure, transformation and reactivity*	*Invited Speaker* **Prof Michael Cortie** University of Technology Sydney *Beyond burgundy : Strategies to extend the colour gamut of plasmonic nanoparticles*	*Invited Speaker* **Prof Hua Gui Yang** East China University of Science and Technology, China *Anatase TiO2 with A Large Percentage of {001} Facets for Environment and Energy Applications*	*Invited Speaker* **Prof Keiichi Torimitsu** NTT Basic Research, Japan *Understanding the Structure and Functions of Receptor Protein*	*Invited Speaker* **Prof Hans Hilgenkamp** University of Twente, The Netherlands *Effects of interface conductance and magnetism between insulating, non-magnetic oxides*	*Invited Speaker* **Prof Ian Boyd** Melbourne Centre for Nanofabrication, VIC *Presentation title TBA*
11:30	**Dr Nicola Rogers** CSIRO Land & Water, NSW *Light-induced toxicity of nanoparticulate CeO2 to aquatic organisms*	**Dr Daniel Gomez** CSIRO Molecular & Health Technologies, VIC *Coherent Coupling of Excitons in Colloidal Quantum Dots and Surface Plasmons*	**Dr Jian Liu** ARC Centre of Excellence for Functional Nanomaterials, QLD *A Facile Vesicle Template Route to Mesoporous Silica Hollow Nanospheres with Tunable Size*	*Invited Speaker* **Prof Alan Rowan** University of Nijmegen, The Netherlands *Polyisocyanopeptide Nanoworms 'From solar cells to drug delivery'*	**Dr Simon Lam** CSIRO Materials Science and Engineering, NSW *Magnetisation measurement of ferritin nanoparticles using nanoSQUIDs*	**Mr Charles Mire** University of Wollongong, NSW *Printing Nanomaterials Using Non-Contact Printing*
11:45	**Prof David Waite** The University of New South Wales, NSW *Oxidative Contaminant Degradation by Nanoparticulate Zero Valent Iron in the Absence and Presence of Selected Redox Catalysts*	**Mr George Lee** Intelligent Polymer Research Institute, NSW *Photomorphic Silver Nanoparticles*	**Dr Dehong Chen** Melbourne University, VIC *Long chain alkyl amine templated synthesis of mesostructured titania-based oxide microspheres and their application*		**Dr Mikhail Kostylev** University of Western Australia, WA *Microwave collective dynamics of arrays of dipole coupled magnetic nanoelements*	**Mr Gerald Kreindl** EV Group, Austria *35 nm Half Pitch Step and Repeat Imprinting utilizing polymeric stamps from EUV-IL fabricated templates*
12:00	**Ms Heather Pace** Colorado School of Mines, USA *Advanced Methods to Characterize Inorganic Nanomaterials for Environmental Toxicity Studies*	**Dr Kristy Vernon** CSIRO Materials Science and Engineering, VIC *Effective Background Permittivity of nanoparticles on Substrates*	**Mr Tae-Hyun Kim** Australian National University, ACT *The synthesis and properties of silica and hybrid metal-silica nanostructures*	**Prof Gordon Wallace** University Of Wollongong, NSW *Organic Nanobionics - A New Capability*	**Dr Karl-Heinz Muller** CSIRO Materials Science and Engineering, NSW *Electron transport in nanoparticle assemblies*	**Dr Takuya Tsuzuki** Deakin University, VIC *Current Trend in the Commercial Production Methods of Inorganic Nanoparticles*
12:15	**Dr Geert Cornelis** University of Adelaide, SA *Dissolution and Partitioning of Manufactured Nanoparticles in the Terrestrial Environment*	**Miss Julia Baldauf** University of Melbourne, VIC *Exciton-Plasmon coupling between a single CdSe/CdS-nanocrystal and a single Au-particle*	**Dr Jeremy Wu** Industrial Research Limited, New Zealand *Template-assisted Fabrication of Nanomaterials and Their Applications*	**Dr Marc In Het Panhuis** University of Wollongong, NSW *Conducting hydrogel bio-materials*	**Dr Timothy Duty** University of Queensland, QLD *Phase-flip transitions and amplification in a parametric oscillator based upon a SQUID-tunable microwave resonator*	**Mr Clive Davenport** CSIRO Future Manufacturing Flagship, VIC *Plastic Banknotes to Printed Solar Cells: Printing a Sustainable Future*
12:30	**Lunch**					

13:30	**PARALLEL SYMPOSIA - SESSION 2**					
	SYMPOSIUM 1: Metrology and Modelling. (Bayside 105) Chairs: **Dr Asa Jamting and Dr Maxine McCall**	**SYMPOSIUM 2A: Excitons & Plasmons** (Bayside 103) Chair: **TBC**	**SYMPOSIUM 2B: Meso Structures II** (Bayside Auditorium) Chair: **Prof Hua Gui Yang**	**SYMPOSIUM 3: Nanobiotech** (Bayside 104) Chair: **Prof Alan Rowan**	**SYMPOSIUM 4: Nanoelectronics** (Bayside 102) Chair: **Prof Andrew Dzurak**	**SYMPOSIUM 7: Nanoindustry** (Bayside 106) Chair: **Mr Clive Davenport**
13:30	*Invited Speaker* **Dr Michael Stintz** University of Technology Dresden, Germany *Nanoparticle Characterization Techniques – Selection, Interpretation and some Pitfalls*	*Invited Speaker* **Dr Marco Califano** University of Leeds, UK *Excitation and De-Excitation Processes in Semiconductor Nanocrystals: Theory vs Experiment*	*Invited Speaker* **Prof Chengzhong Yu** Fudan University, China *Designed Siliceous Nano-vehicles for Bio-applications*	*Invited Speaker* **Prof Horst Vogel** EPFL, Switzerland *Investigating cellular signalling at the nanometer and attoliter scale*	*Invited Speaker* **Prof Gerhard Klimeck** Purdue University, USA *Atomistic Electronic Structure and Transport Modeling of Realistically Extended Nanoelectronic Devices*	*Invited Speaker* **Dr Kees Eijkel** University of Twente, Enschede, The Netherlands *Building clusters from University research*
14:00	**Dr Victoria Coleman** National Measurement Institute, NSW *Characterization of engineered metal oxide nanoparticles in sunscreen: measurement challenges*	**Ms Dana Morgan** University of Melbourne, VIC *Designing porous nanostructures for solar cell applications*	**Dr Matthew Hill** CSIRO Materials Science and Engineering, VIC *Development of metal organic frameworks with exceptional gas storage capacity*	**Dr Ozana Onaca** University of Basel, Switzerland *Membrane proteins as gates to reactions inside nanocontainers*	**Mr Jarryd Pla** University of New South Wales, NSW *Single-shot readout of an electron spin in silicon*	**Dr Russell Lyons** CSIRO, QLD *Molecular approaches to manipulating properties of resilin-inspired proteins and biomaterials*
14:15	**Mr Andre Nogowski** TU Dresden, Institute Of Process Engineering And Environmental Technology, Germany *Methods to characterize concentrated suspensions of fumed silica*	**Mr Hong Qiao** University of New South Wales, NSW *Optical Properties of II-VI Colloidal Quantum Dot Doped Porous Silicon Microcavities*	**Dr Dario Buso** CSIRO Materials Science and Engineering *Towards colloidal ultraporous frameworks using SiO2 nanoparticles as nucleating agents*	**Miss Rona Chandrawati** University of Melbourne, VIC *Capsosome: Cargo-loaded Liposomes within Polymer Carrier Capsule*	**Mr Kok Wai Chan** Centre for Quantum Computer Technology, University of New South Wales, NSW *Tunnelling Spectroscopy of Individual Implanted Phosphorus Donors in Silicon*	**Dr Paolo Falcaro** CSIRO Materials Science and Engineering, VIC *X-rays and sol-gel: a strategy to tune nanomaterials properties*
14:30	*Invited Speaker* **Dr Dave Winkler** CSIRO Molecular & Health Technologies, VIC *Towards modelling nanoparticle toxicity*	**Mr DongHan Seo** University of Sydney, NSW *Ion-assisted self-organization of size-selected Si quantum dots on SiC : Fabrication approach for all-Si 3rd generation photovoltaics*	**Dr Yao-Da Dong** Monash Institute Of Pharmaceutical Sciences, VIC *Surface and interfacial properties of nanostructured liquid crystalline systems*	**Dr Angus Johnston** University of Melbourne, VIC *Targeted Delivery of Encapsulated Therapeutics using Bioinspired Capsules*	**Mr Kuan Yen Tan** Center for Quantum Computer Technology (CQCT) *Probe and control of the reservoir density of states in single-electron devices*	**Dr Erol Harvey** Minifab, VIC *Frogs and Princesses : Working in the no-man's land between Universities and Industry*
14:45		**Mr Daniel Tune** Flinders University, SA *Single Walled Carbon Nanotube Array as Working Electrode for Dye Solar Cells*	**Dr Avi Shalav** Department of Electronic Materials Engineering, ACT *Hierarchal silica nanowire growth via single step annealing*	**Dr Aimin Yu** Murdoch University, WA *Novel Mesoporous Silica based Biolabels for Amplified Fluorescent Immunoassays*	**Dr Giuseppo Carlo Tettamanzi** Kavli Institute For Nanoscience- Delft University Of Technology, The Netherlands *A Novel Kondo effect in single atom transistors*	**Dr Chris Carter** Davies Collison Cave, NSW *Effective patent protection for nanotechnology – including a case study from the University of Queensland*
15:00	**Afternoon Tea**					

15:30	**PARALLEL SYMPOSIUM - SESSION 3**					
	SYMPOSIUM 1: Societal Impact and Governance of Nanotechnologies (Bayside 105) Chair: **Prof Susan Dodds**	**SYMPOSIUM 2A: Nanomaterials I** (Bayside 103) Chair: **Prof Paul Mulvaney**	**SYMPOSIUM 2B: CNTs etc** (Bayside Auditorium) Chair: **Prof Michael Cortie**	**SYMPOSIUM 3: Nanobiotech** (Bayside 104) Chair: **Prof Gordon Wallace**	**SYMPOSIUM 4: Nanoelectronics** (Bayside 102) Chair: **Prof David Jamieson**	**SYMPOSIUM 7: Nanoindustry** (Bayside 106) Chair: **Mr John Miles**
15:30	*Invited Speaker* **Prof Linda Nielson** University of Copenhagen, Denmark *Nanotechnology and regulation – Challenges, dilemmas and the EU approach*	**Mr Mark Bissett** Flinders University, SA *Photocurrent Response from Vertically Aligned Single-walled Carbon Nanotube Arrays*	**Dr Jeon-Kook Lee** Korea Insititute of Science and Technology, Republic of Korea *Electrical Conductivity Improvement of Transparent Conductive Carbon Nanotube Films*	**Dr Kumar Penmetcha** AIST, JAPAN *A BioDVD platform for monitoring various biomolecular interactions and its application in molecular diagnosis*	*Invited Speaker* **Prof Paul Meredith** University of Queensland, QLD *New Materials for Next Generation Organic Solar Cells*	*Invited Speaker* **Dr Jan Herrmann** National Measurement Institute, NSW *Traceable Nanoscale Length Metrology at NMI: Scanning Probe Microscopy*
15:45		**PRESENTER TBC**	**Dr Pascal Boulanger** CEA Saclay, France *Nanomembranes made of Aligned Carbon Nanotubes carpets by aerosol assisted CCVD : growth, impregnation, functionalisation and*	**Dr Yen Nee Tan** Institute of Material Research and Engineering, Singapore *A Gold-Nanoparticles-Based Biosensing Assay for Protein-DNA Interactions*		
16:00	**A/Prof Simon Brown** University of Canterbury, New Zealand *Governance of Nanotechnologies: Avoiding the New Deficit Model*	**Prof Marek Osinski** University of New Mexico, USA *Synthesis and Characterization of Lanthanide Halide Scintillating Nanocrystals for Gamma Radiation Detection*	**Dr Canh-Dung Tran** CSIRO Materials Science and Engineering, VIC *Spinning CNT based Composite Yarns using a dry spinning process*	**Mr Bastian Rapp** Karlsruhe Insitut Of Technology KIT / Forschungszentrum Karlsruhe, Germany *An indirect diffusion free mircofluidic flow injection analysis (FIA) system as fluidic platform for biosensor sensor systems as demonstrated with an 8-fold surface acoustic wave (SAW) biosensor*	**Dr Yuri Pashkin** Nano Electronics Research Laboratories NEC Corporation, Ibaraki, Japan *Conventional single-electron transistor as a detector of its nanomechanical motion*	**Mr Malcolm Lawn** National Measurement Institute, NSW *A Metrological Intercomparison of Atomic Force Microscopes*
16:15		**Dr Joel van Embden** Swinburne University Of Technology, VIC *Band-edge and Higher-order Electronic Transitions in Wurtzite CdSe/CdS Heterostructure Nanocrystals*	**Mr Ludovic Dumee** CSIRO Materials Science and Engineering, VIC *Thermal properties of carbon nanotube macro structures*	**Dr Bernhard Wolfrum** Forschungszentrum Jülich, Germany *Chip-based nanogap sensors for localized electrochemical detection of neurotransmitters in real-time*	**Mr Nadim Darwish** University of New South Wales, NSW *Probing the Electrochemical Double Layer Using Norbornylogous Bridges with Ferrocene and Anthraquinone Head*	**Dr Patrick Trimby** Australian Key Centre For Microscopy And Microanalysis, NSW *Assessing the accuracy, precision and long-term stability of length measurements using electron microscopy*
16:30	**Ms Georgia Miller** Friends of the Earth Australia, TAS *Nanotechnology and governance: The need to address broader social dimensions*	**Dr Qijin Cheng** CSIRO Materials Science and Engineering, NSW *Silicon quantum dots embedded in an amorphous silicon carbon matrix prepard by high-density inductively coupled plasmas*	**Dr Duangkamon Baowan** Mahidol University, Thailand *Encapsulation of TiO2 nanoparticles into carbon nanotubes*	**Dr Vinay Gupta** India *Fe - implanted ZnO Thin film for Mediator-less Third generation Biosensor*	**Dr Jonathan Bould** Academy of Sciences of The Czech Republic, Czech Republic *Self-assembled Thin Layer Inorganic and Inorganometallic Compounds on Metal Surfaces*	**Dr Howard Morris** Safe Work Australia, ACT *Development of International Health, Safety and Environment Standards for Nanotechnologies*
16:45	**Dr Craig Cormick** Department Of Innovation, Industry, Science And Research, ACT *What do you think the public think about nanotechnology?*	**Ms Jinfeng Wang** Deakin University *Fabrication of Highly Loaded Zinc Oxide/Silica Core Shell Nanospheres and Their Photodegradation Properties*	**Dr Cara Doherty** CSIRO Materials Science and Engineering, VIC *Meso/Macroporous Monolithic LiFePO4/Carbon Composite Cathode Materials for Lithium Ion Batteries*	**Prof John W White** Australian National University, ACT *Nanostructure of the 'Protein-nanoparticle Corona' an Indicator of Toxicity?*	**Prof Michael James** Australian Nuclear Science And Technology Organisation, NSW *Water, Water Everywhere, Nor Any Drop to Drink – Nanoscale Consensation of Water on Hydrophilic Self-Assembled Monolayers*	**Dr Gerry Triani** ANSTO, NSW *Atomic layer deposition and characterisation of Al2O3 and hybrid Al2O3 thin-films*
17:00	**Oral Sessions Conclude**					
17:00	**Poster Session I (& Happy Hour)** - Proudly sponsored by <insert logoMCN and ANFF> Venue: Bayside Terrace					
18:00	**Nanotechnology Forum: What are the big issues about small technologies?** Proudly sponsored by <insert Department of Innovation, Industry, Science and Research logo> Venue: Bayside Auditorium A					

Wednesday 24 February 2010

8:00	**Registration Open**					
8:00	**Exhibition Open**					
	PLENARY SESSION 2 Venue: Bayside Auditorium A Chairs: Prof Calum Drummond, Prof Andrew Dzurak and Dr Cathy Foley					
8:50	Introduction					
9:00	**Prof Mark Wiesner -** Duke University, Center For The Environmental Implications Of NanoTechnology, USA *Nanotechnology, Environment and Risk Assessment*					
9:45	**Keiichi Torimitsu -** NTT Basic Research Laboratories, Japan, *Development of Biomimetic Device Based on Receptor Protein Functions*					
10:30	**Morning Tea & ICONN 2010 Group Photo**					
11:00	**PARALLEL SYMPOSIA - SESSION 4**					
	SYMPOSIUM 1: Potential Health Impacts of Nanomaterials (Bayside 105) Chair: **A/Prof Paul Wright**	**SYMPOSIUM 2A: Single NCs and QDs** (Bayside 103) Chair: **Dr Johan Hofkens**	**SYMPOSIUM 2B: CNTs II** (Bayside Auditorium) Chair: **Prof Plinio Innocenzi**	**SYMPOSIUM 3: Nanobiotech** (Bayside 104) Chair: **Dr Ben Boyd**	**SYMPOSIUM 4: Nanoelectronics** (Bayside 102) Chair: **Dr Frank Klose**	**SYMPOSIUM 7: Nanoindustry** (Bayside 106) Chair: **Dr Erol Harvey**
11:00	*Invited Speaker* **Prof Brian Gulson** Macquarie University, NSW *Dermal absorption of ZnO particles from sunscreens applied to humans at the beach*	*Invited Speaker* **Prof Brahim Lounis** University of Bordeaux, France *Optical detection and spectroscopy of individual absorbing nano-objects*	*Invited Speaker* **Dr Mietek Jaroniec** Kent State University, USA *Development of Microprosity in Templated Mesoporous Carbons for Advanced Applications*	*Invited Speaker* **Dr Katsuhiko Ariga** National Institute for Materials Science, Japan *Hierarchic Supramolecular Structures for Drug Release and Sensing*	Invited Speaker **Dr Stuart Parkin** IBM-Stanford Spintronic Science & Applications Center, USA *Racetrack Memory: dynamics of domain wall depinning*	*Invited Speaker* **Dr Jussi Tuovinen** VTT, Finland *Innovation Environment for Micro and Nanotechnology*
11:30	**Dr Megan Osmond** CSIRO Food & Nutritional Sciences, NSW *Biological impact in mice of short- and long-term use of sunscreens containing metal oxide nanoparticles compared to those without*	**Mr Igor Aharonovich** University of Melbourne, VIC *Ultra Bright Single Photon Emission from Diamond Nanocrystals*	**Mr Michele Giulianini** Queensland University of Technology, QLD *Poly(3-hexyl-thiophene) ordered self-assembly assisted by adhesion on carbon nanotubes*	**Dr Devika Chithrani** University Health Network, Canada *Thousand-fold Enhancement in Intracellular Delivery of Smaller Gold Nanoparticles by Liposomal Incorporation*	**Dr Jianchang Li** Northeastern University, China *Metal/SAMs/Metal Molecular Junctions for Data Storage Applications*	**Mr Michael Angliss** UniQuest, QLD *Commercialisation and technology transfer of nanotechnology – case studies from the University of Queensland*
11:45	**Dr Hong Yin** CSIRO Materials Science and Engineering, VIC *Effect of surface chemistry on cytotoxicity, reactive oxygen species (ROS), and genotoxicity induced by zinc oxide (ZnO) nanoparticles*	**Mr Christian Potzner** University of Melbourne, VIC *Suppressed Blinking in Graded Core/Shell Semiconductor Nanocrystals*	**Mr Benjamin Cunning** Queensland Micro- And Nanotechnology Centre Griffith University, QLD *One-pot covalent functionalisation of graphene*	**Prof Dar-Bin Shieh** National Cheng Kung University, Taiwan *Assessment of iron-core-gold-shell nanoparticles as potential novel anti-cancer agents: An in vitro and in vivo study*	**Prof Michael Cortie** University of Technology Sydney, NSW *Magnetic plasmons in gold semi-shells and nanorods*	**Mr Geordie Oldfield** Watermark Patent And Trade Mark Attorneys, VIC *The Power of Information – capitalising on intellectual assets and competitive assessment in the field of nanotechnology*
12:00	**Dr Bryce Feltis** RMIT and Monash Universities, VIC *Nanoparticles, Toxicity and Inflammation in Cellular Systems*	**Dr Craig Bullen** University of Western Australia, WA *High Activity Phosphine-Free Selenium Source for CdSe Nanocrystal Growth*	**Mr Mohammad Choucair** University of New South Wales *The gram-scale synthesis of carbon onions*	**Prof Clive Prestidge** University of South Australia, SA *Hybrid Nano Materials Composed of Silica Nanoparticles and Lipids: Enhancing Digestion and Drug Delivery*	**Mr Muhamma Nadeem** University of New South Wales, NSW *Two iso-structural three-dimensional metal-organic frameworks showing long-range magnetic ordering*	**Dr Grace Chan** Phillips Ormonde Fitzpatrick, VIC *Patent Strategies for Nanotechnology*
12:15	**Mr Andrew Hastings** RMIT University and CSIRO Materials Science & Engineering, VIC *Investigating the immunotoxicology of silver nanoparticles in vitro*	**Dr David Clarke** Industrial Research Limited, New Zealand *Highly luminescent LaF3:Eu3+ nanoparticles through surface modification*	**Dr Kallista Sears** CSIRO Materials Science and Engineering, VIC *Focused Ion Beam Milling to Reveal the Internal Structure of Carbon Nanotube Yarns*	**Dr Simon Moulton** ARC Centre Of Excellence For Electromaterials Science, NSW *Controlled Drug Release from Nanostructured Conducting Polymers*	**Dr Jiabao Yi** National University of Singapore, Singapore *Ferromagnetism in Dilute Magnetic Semiconductors through Defect Engineering: Li-doped ZnO*	**Mr Gerald Kreindl** EV Group, Austria *Fully Automated Hot Embossing Process Utilizing High Resolution Working Stamps*
12:30	**Lunch**					

13:30	**PARALLEL SYMPOSIA - SESSION 5**					
	SYMPOSIUM 1: Regulation of Nanomaterials (Bayside 105) Chairs: **A/Prof Tom Faunce and Dr Andrew Bartholomaeus**	**SYMPOSIUM 2A: Nanocrystals** (Bayside 103) Chair: **Prof Brahim Lounis**	**SYMPOSIUM 2B: CNTs III** (Bayside Auditorium) Chair: **Dr Mietek Jaroniec**	**SYMPOSIUM 3: Nanobiotech** (Bayside 104) Chair: **Dr Katsuhiko Ariga**	**SYMPOSIUM 4: Nanoelectronics** (Bayside 102) Chair: **Prof Alex Hamilton**	**SYMPOSIUM 6: Nanocomputation** (Bayside 106) Chair: **Prof Sean Smith**
13:30	*Invited Speaker* **A/Prof Tom Faunce** Australian National University, ACT *Contemporary and Future Challenges for Australian Nanoregulation*	*Invited Speaker* **Dr Johan Hofkens** KU Leuven, Belgium *Light Induced Preparation of Silver Clusters and Particles*	*Invited Speaker* **Prof Plinio Innocenzi** University of Sassari, Italy *Mesoporous films: mastering the complexity by self-assembly*	*Invited Speaker* **Prof David Lynn** University of Wisconsin - Madison, USA *A 'Multilayered' Approach to the Delivery of DNA: Exploiting the Nanostructure and Chemical Structure of Polyelectrolyte Multilayers to Promote Surface-Mediated Cell Transfection and Tunable Multi-Agent Delivery*	*Invited Speaker* **Prof Andrew Briggs** Oxford University, UK *Storing information in collective spin states*	*Invited Speaker* **Prof Peter Cummings** Vanderbilt University, USA *The Interplay of Theory and Experiment in Nanoscience*
14:00	**Dr Andrei Rode** Australian National University, ACT *Laser capturing and guiding nanoparticles in air*	**Dr Qin Li** Curtin University Of Technology, WA *An Aqueous Route to Photoluminescent Carbon Dots for Targeting Cancer Cells*	**Miss Monessha Nambiar** Flinders University, SA *Peptide modified SWNT array-based copper sensor*	**Prof Martina Stenzel** University of New South Wales, NSW *Synthesis of nanoparticles for the delivery of platinum anti-cancer drugs*	**Mr Liam Hall** Centre for Quantum Computer Technology, University of Melbourne, VIC *Quantum Decoherence Imaging Using NV Centres in Diamond*	
14:15	**Ms Nicola Hall** NICNAS, NSW *NICNAS Regulatory Strategy for Industrial Nanomaterials*	**Dr Yonghurk Park** ETRI, Korea *Sonochemically grown ZnO nanorods and novel applications based on a solution process*	**Miss Haeyoung Choi** Korea Electrotechnology Research Institute, Korea *Stable CNT X-ray source with high current and long life time*	**Dr Sharon Sagnella** CSIRO Molecular and Health Technologies, NSW *Self-Assembled Nanostructured Dispersions as Therapeutic Delivery Agents*	**Prof Jason Twamley** Macquarie University, NSW *Scalable quantum register based on coupled electron spins in a room temperature solid*	**Dr Maciej Haranczyk** Lawrence Berkeley National Laboratory, USA *Approaches for Identification of Nanoporous Materials for CO2 Separation*
14:30	*Invited Speaker* **Dr Andrew Bartholomaeus** FSANZ, ACT *Nanotechnologies in Food, Regulatory Challenges and Responses*	**Mr Matthew Foley** Department Of Physics And Advanced Materials - Microstructural Analysis Unit, NSW *Cathodoluminescence Characterisation of Vapour Transport Grown ZnO Structures*	**Mr Cameron Shearer** Flinders University, SA *Mass Transport Through Nanoporous Materials: Porous Silicon and Single Walled Carbon Nanotubes*	**Dr Ben Boyd** Monash Institute Of Pharmaceutical Sciences, VIC *Plasmonic switching of liquid crystalline nanostructure for external control over drug delivery*	**Dr Charles Hill** Centre for Quantum Computer Technology, University of Melbourne, VIC *Multiple Recipient Adiabatic Passage for Interaction Free Measurement solid*	**Prof Kuo-Ning Chiang** Dept. Of Power Mechanical Engineering/National Tsing Hua University, Taiwan *A Robust Nano-Mechanics Approach for Tensile and Modal Analysis Using Atomistic-Continuum Mechanics Method*
14:45		**Dr Cuong Ton-That** University of Technology Sydney, NSW *Cathodoluminescent and Electronic Properties of ZnO Nanoparticles*	**Prof Zhong Zhang** National Center For Nanoscience And Technology, China *Macro-scale Composite Cables Constructed with Single-Walled Carbon Nanotubes*	**Dr Durga Acharya** CSIRO Materials Science and Engineering, VIC *MRI contrast agent based on cubic phase nanoparticles*	**Prof David Jamieson** University of Melbourne, VIC *Deterministic doping in nanoscale devices*	**Dr Shaoli Zhu** Nanyang Technological University, Singapore *Effect of gold-coating on surface plasmon of silver nanostructure array*
15:00	**Afternoon Tea**					

15:30	**PARALLEL SYMPOSIUM - SESSION 6**					
	SYMPOSIUM 5: Nanophotonics (Bayside 105) Chair: **Prof Laurie (Lorenzo) Faraone**	**SYMPOSIUM 2A: Nanobiomaterials I** (Bayside 103) Chair: **Prof Peter Majewski**	**SYMPOSIUM 2B: Nanosynthesis I** (Bayside Auditorium) Chair: **Prof Max Lu**	**SYMPOSIUM 3: Nanobiotech** (Bayside 104) Chair: **Prof Matt Trau**	**SYMPOSIUM 4: Nanoelectronics** (Bayside 102) Chair: **Dr Emma Mitchell**	**SYMPOSIUM 6: Nanocomputation** (Bayside 106) Chair: **Dr Shaun Hendy**
15:30	*Invited Speaker* **Prof Tanya Monro** University of Adelaide, SA *Towards nanostructured optical fibres: new properties and applications*	**Mr Lee Hoffman** Flinders University, SA *Therapeutic Applications of Gold Nanoparticle Poly(amidoamine) (PAMAM) Dendrimer Composites*	**Dr Richard Tilley** Victoria University of Wellington, New Zealand *Liquid Phase Synthesis of Nanocrystals*	**Mr Darby Kozak** University of Queensland, QLD *The Development and Validation of Novel Surfaces for Ovarian Cancer Biomarker Detection*	*Invited Speaker* **Dr David Reilly** University of Sydney, NSW *Spin Control at the Nanoscale*	*Invited Speaker* **Prof Stefano Sanvito** Trinity College Dublin, Ireland *Is DNA a metal?*
15:45		**Dr Iraj Kazeminezhad** Shahid Chamran University, Iran *Effect of Ultrasonic Waves on Properties of Electrooxidated Fe3O4 Nanoparticles*	**Prof Guowei Yang** Zhongshan (Sun Yat0sen) University, China *Laser Ablation in Liquid: From Nanocrystals Synthesis to Nanostructures Fabrication*	**Dr Stuart Thickett** University of Sydney, NSW *Lanthanide-Labeled Polymer Microspheres for Highly Multiplexed Bio-Assays Based on ICP-MS Detection*		
16:00	**Dr Timothy Davis** CSIRO Materials Science and Engineering, VIC *A Plasmonic Circuit for the Optical Detection of Single Molecules*	**Mr Seet Rui Simon Ting** Centre for Advanced Macromolecular Design, NSW *One Step Synthesis of Glyco-Nanoparticles in Water using a Glucose RAFT Stabilizer*	**Mr Amir Moezzi** University of Technology Sydney, NSW *Nano vs active zinc oxide*	**Dr Simon Corrie** University of Queensland, QLD *Getting under the skin: microprojection patch arrays for in situ biomarker detection*	**Mr Joshua Lehr** University of Canterbury, New Zealand *Patterning of surfaces with nanometer thick films by microcontact printing using aryldiazonium salts*	*Invited Speaker* **Prof Mark Biggs** University of Adelaide, SA *Towards the rational de novo design of solid-surface binding peptides for self-assembly of nano-structured materials and systems*
16:15	**Dr Ingo Koeper** Flinders University, SA *Stable nanostructures for plasmonic sensing*	**Dr Danielle Kennedy** CSIRO Molecular and Health Technologies, VIC *High throughput development of metal organic frameworks for use as MRI contrast agents*	**Miss Leonora Velleman** Flinders University, SA *Gold nanotube membranes; Fabrication of controlled pore geometries and tailored surface chemistries*	**Dr Eva Hemmer** Tokyo University of Science, Japan *Gadolinium-containing inorganic nanostructures for biomedical applications: cytotoxic aspects*	**Dr E T Kang** National University of Singapore, Singapore *Polymer Electronic Memories: Materials, Devices and Mechanisms*	
16:30	**Dr Krystyna Drozdowicz-Tomsia** Macquarie University, NSW *Plasmons in Dense Two-Dimensional Silver Nanoparticle Arrays*	**Dr Phillip Whitten** University of Wollongong, NSW *Biomimetic Artificial Muscles – From Nanofibers to Bundles*	**Dr Zhen Li** University of Queensland, QLD *Robust Solution Method to Prepare Undoped and Doped Semiconductor Nanowires*	**Prof KoonGee Neoh** National University of Singapore, Singapore *Tailoring Magnetic Nanoparticles for Biomedical Applications*	**Ms Michelle Strack** University of Melbourne, VIC *High frequency micro-mechanical cantilevers from single-crystal diamond*	**Dr Luming Shen** University of Sydney, NSW *On the friction of water flowing in carbon nanotubes*
16:45	**Dr Alison Funston** University of Melbourne *Electronic Tuning of the Surface Plasmon Resonances of Single Gold Nanorods*	**Dr Shizhang Qiao** University of Queensland, QLD *Core-shell Mesostructured Materials for Bio-separation and Drug/Biocide Delivery*	**Dr Tim Kemmitt** Industrial Research Limited, New Zealand *Solution processed Al-doped nanostructures*	**Dr Minoo Moghaddam** CSIRO Materials Science and Engineering, NSW *Supramolecular chelating amphiphiles and their targeted nanoparticles for MRI imaging and delivery of therapeutics*	**Dr Narjes Gorjizadeh** Tohoku University, Japan *Width-Dependence of Magnetic Properties of Edge-Doped Graphene Nanoribbons by Fe*	**Dr Xiaoqiao He** City University of Hong Kong, Hong Kong *A cellular automata simulation for the buckling behavior of carbon nanotubes*
17:00	**Oral Sessions Conclude**					
17:00	**Poster Session II (& Happy Hour)** - Proudly sponsored by <insert logo Realtek> Venue: Bayside Terrace					
19:00	**Conference Dinner** Venue: Parkside Ballroom					

Thursday 25 February 2010

8:00	**Registration Open**					
8:00	**Exhibition Open**					
	PLENARY SESSION 3 Venue: Bayside Auditorium A Chairs: Prof Calum Drummond and Prof Andrew Dzurak					
8:50	Introduction					
9:00	**Michal Lipson -** Cornell University , USA *Manipulating light on Chip*					
9:45	**Yoshiyuki Kawazoe -** Institute For Materials Research, Tohoku University, Japan *Paradigm Shift in Computational Materials Science*					
10:30	**Morning Tea**					
11:00	**PARALLEL SYMPOSIA - SESSION 7**					
	SYMPOSIUM 5: Nanophotonics (Bayside 105) Chair: **Prof Deb Kane**	**SYMPOSIUM 2A: Nanobiomaterials II** (Bayside 103) Chair: **Prof Akihiro Furube**	**SYMPOSIUM 2B: Nanosynthesis II** (Bayside Auditorium) Chair:**TBC**	**SYMPOSIUM 1: Education for a Safe Workplace** (Bayside 104) Chair: **Prof Joe Shapter**	**SYMPOSIUM 4: Nanoelectronics** (Bayside 102) Chair: **Prof Andrew Briggs**	**SYMPOSIUM 6: Nanocomputation** (Bayside 106) Chair: **Prof Peter Cummings**
11:00	*Invited Speaker* **Prof Richard Blaikie** University of Canterbury, New Zealand *Nanolithography with surface plasmons: near-field and far-field implementations*	*Invited Speaker* **Prof Wolfgang Parak** Philipps Universität Marburg, Germany *How colloidal nano- and microparticles could contribute to medicine*	*Invited Speaker* **Prof Zhong Zhang** National Center for Nanoscience and Technology, China *Polymer Nanocomposites and Their Potential Applications*	*Invited Speaker* **Dr Chuck Geraci** NIOSH, USA *The US NIOSH Nanotechnology Research Program: Meeting the Challenge for a Safer Workplace*	*Invited Speaker* **Prof SvenRogge** Delft University of Technology, The Netherlands *Bound singlet and triplet spin states of a single donor atom*	*Invited Speaker* **Prof Ward Thompson** University of Kansas, USA *Understanding Chemistry in Nanoconfined Solvents: What Can Spectroscopy Tell Us?*
11:30	**Mr John Foulkes** University of Canterbury, New Zealand *Improved performance in Absorbance Modulation Optical Lithography using a Plasmonic Reflector Layer*	**Prof Elena Vismara** Politecnico Di Milano, Italy *Electrostatic interactions between heparin and transition metal oxide nanoparticles*	**Mr Anishur Rahman** University of South Australia, SA *A Novel Method for Synthesis of Gd2O3 Nanoparticles*	**Dr Neale Jackson** RMIT and Monash Universities, VIC *Engineered Nanomaterials: Evidence on the Effectiveness of Workplace Controls to Prevent Exposure*	**Mr Jan Verduijn** Delft University Of Technology, The Netherlands *Observation of a Fano resonance in transport through a double donor system in Si*	**Dr Marco Califano** University of Leeds, United Kingdom *Carrier multiplication in CdSe nanocrystals: the book isn't closed yet*
11:45	**Dr Kristy Vernon** CSIRO Materials Science and Engineering, VIC *Plasmon-induced dark modes between gold nanoparticles*	**Dr Lakshman Randeniya** CSIRO Materials Science and Engineering, NSW *Thin-film composites of diamond-like carbon and nanocrystalline zirconium oxide; structure and osteoblasts viability*	**Miss Kunlanan Kiatkittipong** ARC Centre Of Excellence For Functional Nanomaterials, NSW *Investigating Preparation Parameters During Titanium Oxide Nanoribbon Synthesis*	**A/Prof Paul Wright** RMIT University, VIC *Engineered Nanomaterials: Potential substitution and modification options to reduce hazard*	**Dr Steven Schofield** University College London, United Kingdom *Attaching Organic Molecules to Silicon: Toward Single Molecule Conductance*	**Prof Debra Bernhardt** Griffith University, QLD *Thermodynamics of Small Systems*
12:00	**Dr Dragomir Neshev** Australian National University, ACT *The study of transmission properties of tri-layer fishnet metamaterial*	**Dr Yen Truong** CSIRO Materials Science and Engineering, VIC *The effect of fibre alignment of electrospun membranes on fibroblast cell adhesion - a comparison between smooth and textured fibres*	**Dr Selvi Dev** University of Western Australia, WA *Process Intensification: Nano Hydroxyapatite Precipitate using Rotating Tube Processing*	**Dr Jurg Schutz** CSIRO Materials Science and Engineering, VIC *Synthetic aerosols from fine carbon nanotubes of 10 nanometres diameter*	**Dr David Simpson** University of Melbourne, VIC *Manipulation of diamond nano-crystals onto photonic devices*	**Dr Ramzi Kutteh** ANSTO, NSW *Stokesian dynamics simulation of sub-micron hydrodynamically interacting nonspherical particles*
12:15	**Dr Robert Carman** Macquarie University, NSW *Development of incoherent EUV/VUV light sources: tailoring the output pulse characteristics for materials processing applications*	**Dr Margaret Butler** Australian Institute for Bioengineering and Nanotechnology, QLD *Fluorescent Layered Double Hydroxide Nanoparticles for Biological Studies*	**Mr Domagoj Belic** University of Canterbury, New Zealand *Size-controlled chiral bimetallic nanoclusters*	**Mrs Francesca Calati** La Trobe University, VIC *AccessNano: Enabling access to Nanotechnologies in Australian Schools*	**Prof Alex Hamilton** University of New South Wales, NSW *Radio-frequency reflectometry for high speed, low noise measurements of strongly interacting 2D hole systems*	**Mr Alireza Seyed-Razavi** RMIT University/CSIRO, VIC *The Coarsening mechanism as described by the BCF and LSW Theories*

12:30	**Lunch**					
13:30	**PARALLEL SYMPOSIA - SESSION 8**					
	SYMPOSIUM 5: Nanophotonics (Bayside 105) Chair: **Prof Min Gu**	**SYMPOSIUM 2A: NanoFabrication I** (Bayside 103) Chair: **Prof Wolfgang Parak**	**SYMPOSIUM 2B: Nanosynthesis III** (Bayside Auditorium) Chair: **Prof Zhong Zhang**	**SYMPOSIUM 1: Nanotechnologies in Society, Health & the Environment** (Bayside 104) Chair: TBA	**SYMPOSIUM 4: Nanoelectronics** (Bayside 102) Chair: **Prof Sven Rogge**	**SYMPOSIUM 6: Nanocomputation** (Bayside 106) Chair: **Prof Stefano Sanvito**
13:30	*Invited Speaker* **Prof Sanjay Krishna** University of New Mexico, USA *Infrared Retina: Enhanced Functionality in the Pixel*	*Invited Speaker* **Prof Michael Giersig** Freie Universitaet Berlin, Germany *Nanosphere Lithography Principle Applied to the Design of nanomaterials different morphology, electronic and optic properties*	*Invited Speaker* **Prof Yasuro Niidome** Kyushu University, Japan *Photochemical Synthesis and Surface Analysis of Gold Nanorods*	**Mr Peter Chesworth** Dept Of Innovation, Industry, Science And Research, ACT *Regulation of Nanotechnologies: An Australian Government view on the recent changes and upcoming challenges*	*Invited Speaker* **Michelle Simmons** Centre for Quantum Computer Technology, University of New South Wales, NSW *Spectroscopy of Few Electron Single Crystal Silicon Quantum Dots*	*Invited Speaker* **Prof Jinlong Yang** University of Science and Technology of China, China *Nearly Free Electron States in Graphene Nanoribbon Superlattices.*
14:00	**Rob Van Der Heijden** COBRA Research Institute, The Netherlands *Optofluidic tuning of Quantum Dot incorporated InGaAsP Photonic Crystal Nanocavities*	**Miss Azzuliani Supangat** University of Newcastle, NSW *Low-temperature Synthesis of Carbon Nanostructure by Thermal Chemical Vapor Deposition on Indium Tin Oxide (ITO)-coated glass of Iron catalyst*	**Mr Johnathan Edgar** University of Technology Sydney, NSW *Synthesis of highly anisotropic gold nanoparticles*	**Panel Discussion**	**Dr Giordano Scappucci** Centre for Quantum Computer Technology, University of New South Wales, NSW *Towards atomic-scale devices in Ge fabricated in ultra-high vacuum by scanning-tunneling microscopy*	**Dr Karl-Heinz Muller** CSIRO Materials Science and Engineering, NSW *Modeling thermoelectric properties of assemblies of nanocrystals*
14:15	**Mr Xin Gai** Australian National University, ACT *High-Q chalcogenide photonic crystal cavities produced by E-beam lithography and photosensitivity*	**Ms Amanda Rider** University of Sydney, NSW *Simulation of the ion-assisted growth of ordered Ge self-assembled quantum dot arrays on Si(100) : A "nano-minefield" approach*	**Dr Andrew Vogt** Flinders University, SA *Single-Walled Carbon Nanotube Attachment to Silicon via Click Chemistry and RAFT*		**Mr Jason Chen** University of New South Wales, NSW *The dependance of Zeeman spin-splitting on the magnetic field orientation in hole quantum wires fabricated on a (100) AlGaAs/GaAs heterostructure*	**A/Prof Rodion Belosludov** Tohoku University, Japan *Metal-Organic Framework Materials for Gas and Drug Separation: Theoretical Study*
14:30	**Dr Stefania Castelletto** University of Melbourne, VIC *Quantum Optics of Novel Color Centers in Nanodiamonds*	**Dr Ari Ramelan** Sebelas Maret University, Indonesia *MOCVD-Grown GaSb Quantum Dots and Its Microanalysis Using X-ray Photoelectron Spectroscopy (XPS)*	**Dr Paolo Falcaro** CSIRO Materials Science and Engineering, VIC *Effect of surfactants in zinc-based metallorganic framework synthesis: a sphere inside a cube*		**Dr Floris Zwaneburg** University of New South Wales, NSW *Observation of the single-electron regime in a highly tunable silicon quantum dot*	**Dr Tamsyn Hilder** Australian National University, ACT *Mimicking biological ion channels using boron nitride nanotubes*
14:45	**Dr Mark Fernee** University of Queensland, QLD *Charge and spin properties of semiconductor nanocrystals revealed by spectral fine structure*	**Mr Jung-Hyun Kang** Australian National University, ACT *Vertical GaAs Nanowires Grown on Si substrates Coated with Buffer Layers*	**Ms Xiaoxue Xu** University of Western Australia, WA *Micro-sized copper single crystalline plates synthesized via a hydrothermal process*		**Mr Bent Weber** Centre for Quantum Computer Technology, University of New South Wales, NSW *Atomic-scale Si:P dopant wires*	**Dr Aijun Du** University of Queensland, QLD *Predicting the Synthesis of Specific Type of Single Walled C or C/BN Nanotube through the Graphene or Boron Nitride Nanoribbons*
15:00	**Afternoon Tea**					
15:30	**Exhibition Closed**					

15:30	**PARALLEL SYMPOSIUM - SESSION 9**					
	SYMPOSIUM 5: Nanophotonics (Bayside 105) Chair: **Prof Laurie (Lorenzo) Faraone**	**SYMPOSIUM 2A: NanoFabrication II** (Bayside 103) Chair: **Mr Jim Williams**	**SYMPOSIUM 2B: Measurement I** (Bayside Auditorium) Chair: **Dr Anita Hill**	**SYMPOSIUM 2C: Electochemistry I** (Bayside 104) Chair: TBA	**SYMPOSIUM 4: Nanoelectronics** (Bayside 102) Chair: **Prof Paul Meredith**	**SYMPOSIUM 6: Nanocomputation** (Bayside 106) Chair: **Prof Salvy Russo**
15:30	**Mr Ahmad Ashrif A Bakar** School of ITEE, QLD *Analysis of Nanometer Displacement Measurement Using the Self-Mixing Technique Based on VCSEL*	**Dr Qiang Gao** Australian National University, ACT *Influence of growth conditions on the morphology and crystal structure of InP nanowires*	**Dr Anita Hill** CSIRO Materials Science and Engineering, VIC *Designing Nanoscale Porosity in Membranes*	**Mr Ian Goon** ARC Centre Of Excellence For Functional Nanomaterials, NSW *Gold-Coated Magnetic Nanoparticles as 'Electrodes Without Wires' for Improved Electrochemical Sensor Platforms*	*Invited Speaker* **Dr Scott Watkins** CSIRO Molecular and Health Technologies, VIC *Organic solar cells based on small molecule, polycyclic aromatic compounds: materials and interfaces*	*Invited Speaker* **Prof Aibing Yu** University of New South Wales, NSW *Molecular modeling of clayed based nanocomposites*
15:45	**Mr Hai Wang** Sun Yat-Sen University, China *Synthesis of one-dimentional nanomaterials and their application in dye-sensitized solar cells based on all Ti*	**Dr Hadi Zareie** University of Technology Sydney, NSW *Patterning Nanostructures For ZnO Nanorod Growth*	**Dr Geoff Willmott** Industrial Research Limited, New Zealand *Pressure dependence of particle transport through resizable nanopores*	**Mr Blake Plowman** RMIT University, VIC *Electrochemical Formation of Platinum Nanostructures for Fuel Cell Applications*		
16:00	**Dr Peter Reece** University of New South Wales, NSW *Optical Trapping and Charactersation of Semiconductor Nanowires*	**Miss Maria Messing** Lund University, Sweden *A comparative study on the effect of gold particle type on nanowire growth*	**Dr Tamar Greaves** CSIRO Molecular and Health Technologies, VIC *Small angle X-ray scattering (SAXS) investigation of the nanostructure of protic ionic liquids, with and without added surfactants*	**Mr Te-Ming Kung** National Cheng Kung University, Taiwan *Effect of Cu ions on the microstructure of Cu oxide formation in cu electro-polishing processes*	**Dr Michael Toney** Stanford Synchrotron Radiation Lightsource, USA *Nanoscale Morphology of Bulk Heterojunctions in Organic Photovoltaics*	**Dr Shaun Hendy** Industrial Research Limited, New Zealand *The rolling of droplets on superhydrophobic surfaces*
16:15	**Dr Lan Fu** Australian National University, ACT *Study of strain compensation effect on quantum dot solar cells*	**Mr Peter Felfer** University of Sydney, NSW *Fabrication of atom probe samples from interfaces with a focused ion beam: working with precision in the sub 100nm world*	**Miss Aurelia Dong** CSIRO Materials Science and Engineering, VIC *Application of PALS to understand structure in self-assembled systems: Investigations with a dilutable microemulsion*	**Mr Suriya Ounnunkad** ARC Centre of Excellence For Electromaterials Science, NSW *Superior Electrochemical Platforms based on Polymer Carbon Nanotube Composite Electrodes*	**Mr Thomas Ellis** University of New South Wales, NSW *Conducting Polymer Discotic Hybrids for Organic Semiconductor Applications*	**Dr Nicola Gaston** Industrial Research Limited, New Zealand *Superheating of gallium clusters: curious properties of a molecular metal*
16:30	**Miss Hannah Jane Joyce** Australian National University, ACT *Defect-Free GaAs and InAs Nanowires for Optoelectronic Device Applications*	**Mr Dipak Maity** National University of Singapore, Singapore *Functionalized Magnetite Nanoparticles for Cancer Hyperthermia Application*	**Mr Gregory Staib** Macquarie University, NSW *Optical Surface Profilometry and AFM of Spider Web Silks*	**Mr Mingliang Wang** University of Western Australia, WA *Electrochemical deposition of Co-Ni alloy nanowires*	**Mrs Fargol Hasani Bijarbooneh** ISEM, NSW *Compact Modeling of Nano-Structured Dye Sensitized Solar Cell*	**Dr Haibo Guo** CSIRO Materials Science and Engineering, VIC *Tribochemistry of diamond surfaces: monolayer changes friction*
16:45	**Prof Ming-Hua Mao** National Taiwan University, Taiwan *Single-mode Emission from Quantum-dot Microdisk Lasers*	**Mr Pawel Kowalczyk** University of Canterbury, New Zealand *STM investigations of Bi islands deposited on HOPG*	**Mr Aaron Thornton** University of Wollongong, NSW *A Mathematical Investigation into Nanoscale Gas Separation: Effects of Pore Size and Temperature*	**Mr Ylias Sabri** RMIT University, VIC *Gold Nanoprisms Based QCMs as Sensitive and Selective Hg Vapor Sensors*	**Dr Jacek Jasieniak** CSIRO Materials Science and Engineering, VIC *Hybrid Inorganic/ Organic Semiconductor Solar Cells: Effects of Modifying the Surface Chemistry of the Inorganic Component*	**Dr Nan Zeng** CSIRO Materials Science and Engineering, VIC *Flash-Illuminated Gold Nanoparticle Heating and Heat Transfer in a Porous System*
17:00	**Oral Sessions Conclude**					
17:00	**Poster Session III (& Happy Hour)** - <insert suuported by QLD Govt logo> Venue: Bayside Terrace					
19:00	**OECD program for the safety testing of manufactured nanomaterials - meeting for the Australian consortium, and interested parties** Venue: Bayside 106					

Friday 26 February 2010

8:00	**Registration Open**					
9:00	**PARALLEL SYMPOSIA - SESSION 10**					
	SYMPOSIUM 5: Nanophotonics (Bayside 105) Chair: **Dr Hoe Tan**	**SYMPOSIUM 2A: Nanomaterials I** (Bayside 103) Chair: **Dr Kostya Ostrikov**	**SYMPOSIUM 2B: Nanomaterials II** (Bayside Auditorium) Chair: **Prof Colin Raston**	**SYMPOSIUM 2C: Nanomaterials III** (Bayside 104) Chair: **Prof Yasuro Niidome**	**SYMPOSIUM 4: Nanoelectronics** (Bayside 102) Chair: **Dr Stuart Parkin**	**SYMPOSIUM 6: Nanocomputation** (Bayside 106) Chair: **Prof Karl-Heinz Muller**
9:00	*Invited Speaker* **Prof David Officer** University of Wollongong, NSW *Saving the planet with nanostructured porphyrins*	*Invited Speaker* **Prof Akihiro Furube** National Institute of Advanced Industrial Science and Technology, Japan *Ultrafast plasmon-induced electron transfer dynamics in gold-TiO2 nanoparticle*	*Invited Speaker* **Dr Chiara Neto** University of Sydney, NSW ***Reliable measurements of slip using the AFM***	*Invited Speaker* **Prof Colin Raston** University of Western Australia, WA *Controlling the Assembly of Fullerenes into Nano-whiskers and Nano-toroids*	*Invited Speaker* **Prof Robert Stamps** University of Western Australia, WA *Domain wall dynamics and high frequency excitations in multilayered and patterned ferroics*	*Invited Speaker* **Prof Shengbai Zhang** Rensselaer Polytechnic Institute, USA *Energetics and idealism versus kinetics and realism: First-principles theory of graphene oxides*
9:30	**Mr Nicholas Stokes** Institute For Nanoscale Technology, NSW *Novel nanoparticle-based gold coatings for solar glazing*	**PRESENTER TBC**	**Ms Barbara Fairchild** University of Melbourne, VIC *The graphite/diamond interface in ion implanted single crystal diamond*	**Dr Dinesh Kumar Venkatachalam** Australian National University, ACT *Size controlled growth of silica nanowires by thermal decomposition of thin gold films on silicon*	**Dr Anthony Morfa** University of Melbourne, VIC *ZnO from Nanoparticle Inks*	**Prof John Dobson** Griffith University, QLD *Dispersion Forces In Nanostructures: Beyond Pairwise-Additive Theories*
9:45	**Mr Craig Johnson** University of New South Wales, NSW *Up-conversion of near-infrared light in erbium-doped porous silicon for photovoltaics*	**Dr Yonggang Zhu** CSIRO Materials Science and Engineering, VIC *Negative capillary pressure of -17 bar in nanochannels: fact or myth?*	**Mr Carlo Bradac** Macquarie University, NSW *Prediction and Measurement of the Size Dependent Stability of Fluorescence in Nano-Scale Diamonds*	**Dr Matthias Karg** University of Melbourne, VIC *Controlled 2D arrangements of inorganic/organic core-shell hybrid particles*	**Dr Andrew McDonagh** University of Technology Sydney, NSW *Laser ablation of thin films on gold surfaces: an effective tool for thin film characterization*	**Dr Hong Zhang** University of Queensland, QLD *Computer Simulation of Hybrid Organic-Inorganic Nanoparticles in siRNA Delivery Applications*
10:00	**Mr Ting Han** Australian National University, ACT *Low loss chalcogenide glass waveguides fabricated by thermal nanoimprint lithography*	**Prof John Sader** University of Melbourne, VIC *Energy Dissipation in Microfluidic Resonators*	**Dr Eskender Mume** Australian National University, ACT *Nuclear Sensors for Assessing the Binding Properties of Porous Materials*	**Dr Erden Sizgek** CSIRO Materials Science and Engineering, NSW *Design of Oxides and carbones with Hierarchical Porosity For Nuclear Separations*	**Mr Thomas Saerbeck** University of Western Australia, WA *A New Approach to the Creation of Magnetically Modulated Structures*	**Dr Christopher Escott** Centre For Quantum Computer Technology, NSW *Tunnelling rates in silicon qubit devices*
10:15	**Mr Venkatesan Dhanasekaran** Anna University Chennai, India *Preparation and Characterization of Rare Earth (Pr, Nd) doped ZnO nanoparticles*	**Dr Chuanpin Chen** CSIRO Materials Science and Engineering, VIC *Microfluidic Method for Synthesis of Monodisperse Gold Nanoparticles*	**Mr Lucas Johnson** Flinders University, SA *Microphase Separated Block Copolymers as Templates for the Directed Cross-Phase Assembly of Segmented Nanorods*	**Mr Mohammadreza Khorasaninejad** University of Waterloo, Canada *APDMS Mediated Self-Assembly of Alumina Quantum Dot Spheres*	**Mr Khalid Muhieddine** University of New South Wales, NSW *Novel Annealing Processes for Soluble Acenes*	**Dr Ahmad Reza Oliaey** Islamic Azad University, Tonekabon Branch, Iran *Spin polarized bonding analysis of endohedral Boron nitride nanocage: Density functional theory study*
10:30	**Morning Tea**					
	PLENARY SESSION 4 AND CONFERENCE CLOSING Venue: Bayside Auditorium A Chairs: Prof Calum Drummond, Prof Andrew Dzurak and Dr Cathy Foley					
11:00	**John Boland -** Trinity College Dublin, Ireland *Controlling Connectivity on the Nanoscale: A Route to Designer Materials and Novel Devices*					
11:45	**Presenter TBC**					
12:30	**Conference Closing**					
13:00	**Conference Concludes**					
13:30	**Post Conference Tours Depart**					