

SYMPOSIUM PROGRAM

Monday 11th – Wednesday 13th February 2019

	Registration-The Pier Geelong Waterfront
	Monday 11th February 2019
8:00	Registration
9:00	Welcome Remarks
	Prof. Maria Forsyth and A/Prof. Jenny Pringle
9.05	Opening Remarks
	Deakin University Vice Chancellor Prof. Jane den Hollander
9:15	Prof. Gordon Wallace
	Chair: Prof. Maria Forsyth
9:20	A/Prof Leigh Johnston (Plenary) Biomedical Engineering, The University of Melbourne, Australia Efficient magnetic resonance imaging of sodium in the brain
9:50	Dr. Tamar Greaves School of Science Cluster, Department of Physics, RMIT University, Australia High throughput and machine learning approaches in the characterisation of neat ionic liquids and their mixtures
10:10	Dr. Anthony Burrell Electrochemical Energy Storage, Oklahoma State University Silicon Anodes: Where to Next?
10:30	Prof Zaiping Guo Institute for Superconducting & Electronic Materials, University of Wollongong, Australia Advanced Electrode Materials for Metal-ion Batteries
10:50	Morning tea
	Chair: Prof. Simon Moulton
11:20	Dr. Alex Harris The University of Melbourne, Australia Electrochemical Methods for Analysing and Controlling Charge Transfer at the Electrode- Tissue Interface ~ and their Application to Cochlear Implant Electrode Arrays
11:40	Dr Ben Sherlock Living Systems Institute, University of Exeter <u>Translating microscopy from bench-to-bedside: developing multiphoton microscopes</u> <u>for in vivo assessment.</u>
12:00	Dr. Kyle Wedgwood Centre of Biomedical Modelling and Analysis, University of Exeter, UK <u>Blueprints for islets: using mathematics to design islets</u>
12:20	Dr. Adrian Panow Director of Energy Deakin University, Australia The Deakin Waurn Ponds Microgrid



12:40	Lunch
	Chair: Dr. Xiaoen Wang
1:40	Prof Mauricio Isaacs Casanova Pontificia Universidad Catolica de Chile Copper (i) oxide and copper nanostructures modified electrodes for the electrochemical reduction of carbon dioxide
2:00	Dr. Nikhil Medhekar Department of Materials Engineering, Monash University, Australia In Silico Materials Design for Next Generation Batteries
2:20	Prof. Alexei Sokolov Department of Chemistry, University of Tennessee, USA Mechanisms of Ionic Conductivity in Polymer Electrolytes
2:40	Dr. John Chiefari CSIRO, Australia The use of controlled free radical polymerisation to prepare novel polymerised ionic liquid block copolymers as solid polymer electrolytes
3:00	Afternoon tea
	Chair: Dr. Luke O'Dell
3:30	Prof. Kondo-Francois Aguey-Zinsou (Plenary) Materials Research Laboratory in Nanaoscale, University of New South Wales, Australia <u>Designing better hydrogen storage materials</u>
4:00	Prof. Melanie Britton School of Chemistry, University of Birmingham, UK In Operando Visualization of Battery Chemistry by Magnetic Resonance ImagingTurning the heroic into routine.
4:20	Dr. Shanqing Zhang Centre for Clean Environment and Energy, School of Environment and Science, Gold Coast Campus, Griffith University, QLD, Australia <u>Confining SI and S in polymer composite frameworks for Li Ion batteries</u>
4:40	Prof. Aninda Jiban Bhattacharyya Indian Institute of Science, Bengaluru, India Influence of Confinement on Molecular Properties and Function
5:00	Miss Molly Patton Patton'd Studios Science, Innovation and Creative Design
5:15-7:00	Poster Session



Tuesday 12 th February 2019		
	Dr. Danah Al-Masri	
9:00	Dr. Cara Doherty (Plenary) CSIRO, Melbourne Australia Porous Materials for Energy Applications and Sensing Devices	
9:30	Prof Min Gu Research and Innovation, RMIT University, Melbourne Australia <u>Laser patterning in nanomaterials for nanophotonics</u>	
9:50	Dr. Cristina Pozo_Gonzalo Institute for Frontier Materials, Deakin University, Australia Carbon-based materials for air cathodes in Na-O ₂ batteries	
10:10	Prof. Dan Li Chemical Engineering, University of Melbourne, Australia When graphene meets electrolytesFrom colloidal processing, energy storage to nanoionics	
10:30	Morning tea	
	Prof. Geoff Spinks	
11:00	Prof. Mario Romero-Ortega Department of Bioengineering, University of Texas at Dallas, USA Bioelectronic Applications of Graphene Fiber electrodes	
11:20	Prof. Jean Le Bideau University of Nantes, France UV-cured ionogels' host networks: effects of mesh size and ethylene oxide content.	
11:40	Prof. Buzz Palmer MedTech Innovator, Melbourne Australia Entrepreneurship - the Great Australian Hippopotamus	
12:00	Prof. Dermot Diamond National Centre for Sensor Research, Dublin City University, Ireland Materials Based Sensing and Control	
12:20	Prof. Ray Baughman University of Texas at Dallas, USA Energy Harvesting, Energy Storing, and Actuating Yarns and Textiles	
12:40	Lunch	
	Dr. Anita Quigley	
1:40	Prof. Lianzhou Wang Australian Institute for Bioengineering and Nanotechnology, The University of Queensland, Australia Designing Semiconductor Photoelectrodes for Integrated Photo-electrochemical Water Splitting	



2:00	Dr. Nerea Casado Perez POLYMAT, Donostia-San Sebastián, Spain <u>Poly(3,4-Ethylenedioxythiophene)Materials For Electrochemical Energy Storage</u>
2:20	A/Prof. Drew Evans Future Industries Institute, University of South Australia, SA Anion interactions with vapour deposited PEDOT
2:40	Prof. Mia Woodruff Science and Engineering Faculty, Queensland University of Technology, Brisbane, Australia Title and abstract TBC
3:00	Afternoon tea
	A/Prof. Jenny Pringle
3:30	Prof. Austen Angell (Plenary) School of Molecular Sciences, Arizona State University, USA <u>A new anion for ionic liquids and a new alkali cation conductor for lithium batteries</u>
4:00	Prof. Kyoko Fujita Department of Pathophysiology and School of Pharmacy, Tokyo University, Japan Hydrated Ionic Liquid for the Re-naturation of Aggregated Proteins
4:20	Prof. Hwan Kyu Kim Department of Advanced Materials Chemistry, Korea University <u>Carbon-based Nanomaterials for Superior Performance Dye-Sensitized Solar Cells</u>
4:40	Prof. Richard Kaner University of California, Los Angeles, USA Conducting Polyaniline and Oligoanilines: Morphologies and Emergent Applications
7:00	Symposium Dinner at The Pier



	Wednesday 13th February 2019
	ACES Showcase
	Welcome and Introduction
8:15	Prof. Gordon Wallace
	Director of ARC Centre of Excellence for Electromaterials Science
8:30	Electromaterials
	Theme Leader: Prof. David Officer
9:00	Electrofluidics and Diagnostics
	Theme Leader: Prof. Brett Paull
9:30	Soft Robotics
	Prof. Gursel Alici: Theme Leader
10:00	Synthetic Energy Systems
10.00	Theme Leader : Prof. Doug Macfarlane
10:30	Morning tea
11:00	Synthetic Bio Systems
	Theme Leaders: Profs. Mark Cook / Rob Kapsa
11:30	Ethics Policy Public Engagement
11.50	Theme Leader: Susan Dodds
12:00	Certificate in Entrepreneurship Presentations
12:30	Symposium Closing – Prof. Maria Forsyth
1:00	Lunch