

# 3RD INTERNATIONAL CONFERENCE ON SODIUM BATTERIES

**Registration – The Pier, Geelong Waterfront, Victoria Australia**

**Wednesday 7<sup>th</sup> December 2016**

<b>8:00</b>	<b>Registration</b>
<b>8:50</b>	<b>Prof. Maria Forsyth: Welcome remarks</b>
<b>9:00</b>	<b>Deakin University Acting Vice Chancellor Prof. Peter Hodgson: Opening</b>

**Chair: Prof. Maria Forsyth**

<b>9:15</b>	<b>Prof. Shinichi Komaba</b> Layered oxides for Na- and K-ion batteries Tokyo University of Science; Kyoto University, Japan
<b>9:45</b>	<b>Dr. Dominique Guyomard</b> Negative electrode materials for non-aqueous and aqueous Na batteries Institut des Matériaux Jean Rouxel, CNRS - Université de Nantes, France
<b>10:15</b>	<b>Morning tea</b>
	<b>Chair: Prof. Shinichi Komaba</b>
<b>10:35</b>	<b>A/Prof. Palani Balaya</b> Increasing the Energy Density of Sodium Polyanion-based Cathode Materials National University of Singapore, Singapore
<b>11:05</b>	<b>Prof. Gerbrand Ceder</b> Elucidating the Factors that Control the Capacity and Rate Capability of Layered Na-Intercalation Cathodes University of California at Berkeley, USA
<b>11:35</b>	<b>Dr. Laurence Croguennec</b> New insights into $\text{Na}_3\text{V}^{\text{III}}_{2-x}(\text{V}^{\text{IV}}\text{O})_x(\text{PO}_4)_2\text{F}_{3-x}$ developed for Na-ion batteries ICMCB-CNRS, University Bordeaux, France
<b>12:05</b>	<b>Lunch</b>
	<b>Chair: Prof. Michel Armand</b>
<b>1:25</b>	<b>Prof. Patrik Johansson</b> Towards Performant and Safe Sodium-Ion Battery Electrolytes: From Organic Solvents to Ionic Liquids Chalmers University of Technology, Sweden
<b>1:55</b>	<b>Prof. Rika Hagiwara</b> Rechargeable sodium batteries using bis(fluorosulfonyl)amide ionic liquids as electrolytes Kyoto University, Japan
<b>2:25</b>	<b>Dr. Xiaolin Li</b> Enabling high Coulombic efficiency and low temperature performance Na-ion battery hard carbon anodes with advanced electrolyte Pacific Northwest National Laboratory, USA
<b>2:55</b>	<b>Afternoon tea</b>

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<b>Chair: Dr. Andrew Basile</b>		
<b>3:15</b>	<b>Prof. Kristina Edström</b> Interface and Interphases in Na-ion batteries Uppsala University, Sweden	
<b>3:45</b>	<b>Dr. Jun Liu</b> Tailoring the Electrode Materials and SEI Reactions in Sodium Ion Batteries Pacific Northwest National Laboratory, USA	
<b>4:15 – 5:00</b>	<b>Burster Presentations</b> Eight 5-minute poster presentations	
	<b>4:15</b>	<b>Imanol Landa-Medrano</b> Characterisation of Na-O <sub>2</sub> discharge products by Synchrotron C-ray transmission Microscopy Universidad Del País Vasco, Spain
	<b>4:20</b>	<b>Faezeh Makhlooghiyazad</b> Phase behaviour and electrochemical performance of phosphonium Deakin University, Australia
	<b>4:25</b>	<b>Jaione Mtz. De Ilarduya</b> NaN <sub>3</sub> addition, a strategy to overcome the problem of sodium deficiency in P2-Na <sub>0.67</sub> [Fe <sub>0.5</sub> Mn <sub>0.5</sub> ]O <sub>2</sub> cathode for sodium-ion battery CIC Energigune, Spain
	<b>4:30</b>	<b>Shotaro Mratsubaki</b> Electrochemical Properties and Surface Layer of Hard Carbon Electrode for Potassium-Ion Batteries Tokyo University of Science, Japan
	<b>4:35</b>	<b>Divya Sehrawat</b> Cs Doped P2-Na <sub>x</sub> MnO <sub>2</sub> as ab electrode material for sodium ion batteries The University of New South Wales, Australia
	<b>4:40</b>	<b>Laurence Middlemiss</b> Structural Characterisation and Electrical Properties of Mixed Phase Layered Sodium-ion Cathode Materials The University of Sheffield, UK
	<b>4:45</b>	<b>Xingyu Chen</b> Molecular Dynamics Study of Li <sup>+</sup> /Na <sup>+</sup> Ion conduction in dual-cation PAMPS Homopolymers Deakin University, Australia
	<b>4:50</b>	<b>Ronnie Mogensen</b> Prussian White for Sodium Ion Batteries: Near Ambient Synthesis and In-operando Diffraction Study Uppsala University, Sweden
<b>5:00-7:00</b>	<b>Poster Session</b>	

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<b>Thursday 8<sup>th</sup> December 2016</b>	
	<b>Chair: Prof. Patrik Johansson</b>
<b>9:00</b>	<b>Prof. Claudio Margulis</b> Structure and Dynamics of Room Temperature Ionic Liquids in the Bulk and at Interfaces The University of Iowa, USA
<b>9:30</b>	<b>Prof. Christian Masquelier</b> New structures and new compositions of electrochemically active vanadium-based phosphates for Na batteries Université de Picardie Jules Verne, France
<b>10:00</b>	<b>Dr. Vanessa Peterson</b> Advancing sodium-ion battery electrodes by understanding atomic-level function through experimental and computational methods Australian Nuclear Science and Technology Organisation, Australia
<b>10:30</b>	<b>Morning tea</b>
	<b>Chair: Dr. Matthias Hilder</b>
<b>10:50</b>	<b>Dr. Karim Zaghib</b> High Rechargeable Sodium Metal-Conducting Polymer Batteries HydroQuebec Institute of Research, Canada
<b>11:20</b>	<b>Dr. Damien Saurel</b> On the mechanism of sodium storage in disordered carbons CIC Energigune, Spain
<b>11:50</b>	<b>Dr. Ekkehard Fuglein</b> Thermoanalytical and Calorimetric Techniques for Characterisation of Emerging Battery Technologies NETZSCH-Geraetebau GmbH, Germany
<b>12:10</b>	<b>Lunch</b>
	<b>Chair: Prof. Christian Masquelier</b>
<b>1:30</b>	<b>Prof. Teofilo Rojo</b> Advanced Anode Materials for Sodium-Ion Batteries: Schiff-bases and Carbodiimides CIC Energigune & University of the Basque Country, Spain
<b>2:00</b>	<b>Prof. Yong Yang</b> Toward understanding of complex electrochemical processes of cathode materials for Na-ion batteries Xiamen University, China
<b>2:30</b>	<b>Dr. Sagar Mitra</b> Recent efforts to develop high energy density cathode materials based on vanadium oxide Indian Institute of Technology Bombay, India
<b>3:00</b>	<b>Afternoon tea</b>
	<b>Chair: Prof. Teofilo Rojo</b>
<b>3:20</b>	<b>Dr. Tiago Mendes</b> In-situ activated N-doped carbon and its application in sodium hybrid batteries Monash University, Australia
<b>3:40</b>	<b>Dr. Matthias Hilder</b> Properties of ionic liquids and their performance as electrolytes for sodium batteries Deakin University, Australia

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<b>4:00</b>	<p><b>Dr. Fangfang Chen</b> Molecular Dynamics Investigation of Sodium Ion Transport in High Na Concentration Organic Ionic Molten Salts Deakin University, Australia</p>
<b>6:00-11:00</b>	<b>Symposium Dinner at The Pier</b>

<b>Friday 9<sup>th</sup> December 2016</b>	
	<b>Chair: A/Prof. Patrick Howlett</b>
<b>9:00</b>	<p><b>Prof. Stefano Passerini</b> Advances in Na-ion Battery Materials Helmholtz Institute Ulm, Germany</p>
<b>9:30</b>	<p><b>Dr. Alexey Glushenkov</b> Anode materials for sodium-ion and potassium-ion batteries based on alloying-dealloying reaction mechanism Deakin University, Australia</p>
<b>9:50</b>	<p><b>Dr. Siti Aminah Mohd Noor</b> Novel electrolytes for emerging sodium energy storage application National Defence University of Malaysia, Malaysia</p>
<b>10:10</b>	<b>Morning tea</b>
	<b>Chair: Dr. Jerry Barker</b>
<b>10:30</b>	<p><b>Prof. Guoxiu Wang</b> Development of Novel Electrode Materials for Na-ion batteries University of Technology Sydney, Australia</p>
<b>11:00</b>	<p><b>Dr. Shulei Chou</b> Carbon Coated <math>\text{Na}_{3.32}\text{Fe}_{2.34}(\text{P}_2\text{O}_7)_2</math> Cathode Material for High-rate and Long-life Sodium-ion Batteries University of Wollongong, Australia</p>
<b>11:30</b>	<p><b>Dr. Andrew Basile</b> Enabling Sodium metal anodes using concentrated salt in organic ionic plastic crystal electrolytes Deakin University, Australia</p>
<b>12:00–2:00</b>	<b>Industry Forum on Energy Storage (Lunch)</b>
	<b>Chair: Prof. Douglas MacFarlane</b>
<b>2:20</b>	<p><b>Dr. Jerry Barker</b> Commercialization of High Energy Density Na-ion Batteries Faradion Limited, United Kingdom</p>
<b>2:50</b>	<p><b>Prof. Yong-Sheng Hu</b> Rise of Na-Ion Batteries for Energy Storage Chinese Academy of Sciences, China</p>
<b>3:20</b>	<b>Prof. Maria Forsyth: Closing Remarks</b>