

Li-SM³ Conference Day 1 Morning Agenda: 26 April 2017

Time	Li-SM ³ Conference Day 1 Morning Agenda: 26 April 2017					
0830	Registration					
	Session 1: Opening Presentation & Mechanism Keynote	Speakers		Affiliation		
0900	Opening Presentation: Introduction, basics of Li-S, key challenges	Greg Offer, George Crabtree & David Ainsworth		Imperial/JCESR/OXIS		
1000	Mechanism Keynote: Towards thorough characterization of lithium/sulfur batteries using tomography techniques	Céline Barchasz		French Atomic Energy and Alternative Energies Agency (CEA)		
1030	Tea Break					
	Session 2a: Mechanism Panels	Speakers	Affiliation	Session 2b: Materials Panels	Speakers	Affiliation
1100	Operando Spectromicroscopy of Lithium-Sulfur Batteries	Elizabeth Miller	Stanford Synchrotron Radiation Lightsource	TBC	TBC	TBC
1120	Investigation of the Sulfur Redox Reaction Mechanism by the Quantitative and Qualitative Measurement of Dissolved Polysulfide Ions	Deyang Qu	University of Wisconsin Milwaukee	High performance cardanol based sustainable copolymers as cathodic materials for Li-S batteries	Bimlesh Lochab	Shiv Nadar University
1140	Multidimensional Operando Analysis of Lithium Sulfur Cells with X-Ray Radiography	Sebastian Risse	Helmholtz-Zentrum Berlin	Evaluation of solid electrolytes for all solid state Li-S batteries	Lide Rodriguez-Martinez	CIC Energigune
1200	Effective Barriers for the Polysulfide Shuttle	Diana Golodnitsky	Tel Aviv University	Performance enhancing LbL coatings on separator for lithium-sulfur batteries	Almagul Mentbayeva	Nazarbayev University
1220	Electrolyte decomposition in Li-S cells	Markus Hagen	Fraunhofer ICT	Development of High Area Loading and Stable Sulfur Electrode Through Polymer Binders Functionality Design for Lithium Sulfur Battery	Gao Liu	Lawrence Berkeley National Laboratory
1240	Polysulfide-Mediating Redox Reactions in Li-S Battery	Nae-Lih Wu	National Taiwan University	Enhanced Polysulfide Trapping and Suppressed Lithium Dendrite Forming for Lithium-Sulfur Battery Improvement	Bingqing Wei	University of Delaware
1300	Lunch					

Li-SM ³ Conference Day 1 Afternoon Agenda: 26 April 2017						
Time	Modelling Plenary Keynote		Speaker	Affiliation		
1400	Improving performance of Li-S cells in real conditions, a model-informed approach		Monica Marinescu	Imperial College London		
1430	Room Split for Panel Sessions					
Session 4a: Modelling Panel		Speakers	Affiliation	Session 4b: Materials Panel		Affiliation
1435	Embeddable state-estimation algorithms for lithium-sulfur battery management	Daniel Auger	Cranfield University	Fiber-Based Sulfur/ Poly(acrylonitrile) Cathode Materials: Cycle-Stable High-Performance Lithium-Sulfur Batteries	Michael Buchmeiser	University of Stuttgart
1455	Minutiae of Thermodynamics and Transport Phenomena in Li-S Battery Electrolytes	Mohammadhosein Safari	Hasselt University	Conducting polymers functionalizing sulfur for Li-S batteries	Yu Li	Wuhan University of Technology
1515	Solvation and solubility effects in lithium-sulfur batteries	Jessica Lück	German Aerospace Centre (DLR)	Li-S cathode materials: from nano-size effect and polysulfide trapping to in-situ wrapping	Liwei Chen	Chinese Academy of Sciences, Suzhou
1535	Tea break			Tea break		
1600	Reaction kinetics and diffusion-migration processes in an idealised lithium-sulfur cell	Geraint Minton	OXIS Energy	3D Nano-Architecture as New Cathode Hosts for High-Performance Lithium-Sulfur Batteries	Guoxiu Wang	University of Technology Sydney
1620	Microstructurally resolved multiscale models – to study the effects of C/S cathode microstructures used in Li-S batteries	Vigneshwaran Thangavel	Laboratoire de Réactivité et Chimie des Solides (LRCS)	Nanoengineering carbon cathodes for Lithium Sulphur batteries	Jordi Jacas Biendicho	IREC
1640	Development of Safe Rechargeable Li-S Battery Chemistries	Clifford Cook	U.S. Army RDECOM CERDEC CP&I	Application of High Throughput R&D Techniques to the Improvement of Li-S Batteries	Dee Strand	Wildcat Discovery Technologies
Session 5: Posters						
1700	Poster Session					
Session 6: Dinner						
1830	Pre-dinner drinks					
1900	Dinner					
2300	Depart					

Li-SM³ Conference Day 2 Morning Agenda: 27 April 2017

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0900	Registration					
	Session 6: Materials Plenary Keynote	Speaker	Affiliation			
0930	Rational Design of Polymeric Materials for Ion and Electron Transport in Lithium-Sulfur Batteries	Brett Helms	Lawrence Berkeley National Laboratory			
1000	Room Split for Panel Sessions					
	Session 7a: Materials Panel	Speakers	Affiliation	Session 7b: Mechanism Panel	Speakers	Affiliation
1005	Li Metal Anode Protection to Inhibit Dendrite Growth in Safe Lithium-Sulfur Batteries	Qiang Zhang	Tsinghua University	Lithium/Sulfur Battery Assembled in the Discharged State. The Effects of Binders and Cycling on Cell-Impedance Parameters and Fading	Emanuel Peled	Tel Aviv University
1025	Sulfur Nanoparticles Coated with Polyelectrolyte Nanomembranes for Sulfur Cathode	John Muldoon	Toyota Research Institute of North America	Viscosity Depending Ion Transport in High Energy Lithium-Sulfur Batteries	Brigitta Sievert (née Pascucci)	German Aerospace Center (DLR)
1045	Li ₂ S particle size influence on the first charge working mechanism of Li ₂ S-based Li-ion batteries analyzed by operando X-ray Absorption and Emission spectroscopies coupled with operando X-ray Diffraction	Alice Robba	CEA	Solid-Phase Cycling of Sulfur Cathodes using Coulombic Charging under Convective Flow	Donald Dornbusch	University of Missouri-Columbia
1105	Tea break			Tea break		
1130	A Materials-Based Redesign of the Lithium-Sulfur Battery	Kevin Zavadil	Sandia National Laboratories	Qualitative analysis of GITT measurements of Li-S batteries	Nuria Garcia-Araez	University of Southampton
1150	Enhanced specific energy for Li-S cells through a new cathode concept based on dryfilm electrodes and perforated current collectors	Holger Altheus	Fraunhofer IWS	Spatially Resolved Operando X-Ray Absorption Spectroscopy and Fluorescence Mapping: Interconnection of Electrolyte Species and Electrodes in Lithium-Sulfur Batteries	Anna Freiberg	Technical University Munich
1210	Understanding the Effect of a Fluorinated Ether Electrolyte on the Performance of Lithium-Sulfur Batteries	Zhengcheng (John) Zhang	Argonne National Laboratory	Investigation of polysulfide transport in lithium sulphur batteries via optical transmission spectroscopy	Davide Moia	Imperial College London
1230	TBC	TBC	TBC	A Quantitative Tool to Predict the Phase Composition of Lithium-Sulfur	James Dibden	University of Southampton
1250	Lunch					

Li-SM ³ Conference Day 2 Afternoon Agenda: 27 April 2017			
Time	Session 8: Applications	Speakers	Affiliation
1350	Keynote: High Energy Density Lithium-Sulfur Batteries for NASA and DoD Applications	Ratnakumar Bugga	NASA Jet Propulsion Laboratory
1420	Lithium Sulfur Application in Automotive	John Bailey	Ricardo
1450	Airbus Zephyr – Using Lithium Sulfur Batteries to Revolutionise Communications	Sarah Bassett	Airbus Defence & Space
1520	Closing remarks	Greg Offer, George Crabtree & David Ainsworth	Imperial/JCESR/OXIS
1530	Depart		