Version 13

Li-SM^3 Conference Day 1 Morning Agenda: 26 April 2017

Time			
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		

Time	Session 2a: Mechanism Panels	Speakers	Affiliation	Session 2b: Materials Panels	Speakers	Affiliation
1100	Operando Spectromicroscopy of Lithium-Sulfur Batteries	Elizabeth Miller	Stanford Synchotron Radiation Lightsource	A robust, water-based, functional binder framework for high-energy Li-S batteries	Matthew Lacey	Uppsala University
1120	Investigation of the Sulfur Redox Reaction Mech-anism by the Quantitative and Qualitative Meas-urement 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 Ananlysis 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					

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Time	Li-SM^3 Conference Day 1 Afternoon Agenda: 26 April 2017					
	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**	**Speakers**	**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	Nitrogen doped carbon materials in Lithium-Sulfur batteries for low electrolyte contents	Susanne Doerfler	Fraunhofer IWS
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	Return to main hall for Session 4a		
	Session 5: Posters					
1700	Poster Session with drinks sponsored by MACCOR					
	Session 6: Dinner					
1830	Pre-dinner drinks					
1900	Dinner					
2300	Depart					

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Li-SM^3 Conference Day 2 Morning Agenda: 27 April 2017

Time			Affiliation	Session 7b: Mechanism Panel	Speakers	Affiliation
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_2S particle size influence on the first charge working mechanism of Li_2S-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	X-Ray and Raman studies on all-solid-state Li-S batteries built around LiBH4 solid electrolyte	Jessica LeFevre	Technical University of Denmark	Investigation of polysulfide transport in lithium sulphur batteries via optical transmission spectroscopy	Davide Moia	Imperial College London
1230	Advances in Suppressing the Polysulfide Shuttle in Lithium-Sulfur Batteries	Sri Narayan	University of Southern California	A Quantitative Tool to Predict the Phase Composition of Lithium-Sulfur	James Dibden	University of Southampton
1250	Lunch					

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Time	Li-SM³ Conference Day 2 Afternoon Agenda: 27 April 2017		
	Session 8: Applications	**Speakers**	**Affiliation**
1350	Keynote: High Energy Density Lithium-Sulfur Batteries for NASA and	Ratnakumar Bugga	NASA Jet Propulsion Laboratory
1420	Lithium Sulfur Application in Automotive	Nikita Hall	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		

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Li-SM3 Conference Poster Session Agenda: 26 April 2017 - page 1 of 2

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Mech	Mechanism Posters	Presenter	Affiliation
1	The mechanism of Li2S conversion into sulphur	Alen Vizintin	National Institute of Chemistry, Slovenia
2	Current inhomogeneity in Lithium Sulfur batteries	Ian Hunt	Imperial College London
3	Graphene-based cathodes for next generation lithium-sulfur batteries	Iñigo Charola	Graphenea
4	Behavior of Lithium Polysulfides in Different Solvents	Kirsi Jalkanen	University of Muenster
5	EIS investigation of polysulfide electrochemistry on carbon and lithium surfaces	Sara Drvarič Talian	National Institute of Chemistry, Slovenia
6	Volumetric expansion of Lithium-Sulfur cell during operation	Sylwia Waluś	OXIS Energy Ltd
Mod	**Modelling Posters**	**Presenter**	**Affiliation**
1	Study of electrolyte structure and dynamics in Li-S batteries using molecular dyamics simulations with charge-scaling	Chanbum Park	Helmholtz-Zentrum Berlin for Materials and Energy
2	Tab design in Lithium Sulfur cells: A modelling approach	Raj Purkayastha	OXIS Energy Ltd
3	Improving the performance of Li-S cells, a model-informed approach	Teng Zhang	Imperial College London
Mat	**Materials Posters**	**Presenter**	**Affiliation**
1	2D and 3D nanostructured graphenes as electrode matrices in Li-S batteries	Almudena Benítez	Universidad de Córdoba
2	PANi wrapped Ketjen Black Carbon/Sulphur composites for Li-S batteries	Carlotta Francia	Politecnico di Torino
3	Exploring 3D microstructural evolution in Li-Sulphur battery electrodes using in-situ X-ray tomography	Chun Tan	University College London
4	A LiNO3 free electrolyte applicable for the Li-S battery	Christine Weller	Dresden University of Technology
5	Solid-state lithium sulfur batteries using nanoconfined complex hydrides as solid electrolytes	Didier Blanchard	Technical University of Denmark
6	Application of Freestanding Metal Oxide Containing Bacterial Cellulose Interlayers as Polysulfide Adsorbers in Li2S Based Lithium-Sulfur Batteries	Elif Ceylan Cengiz	Gebze Technical University
7	The Use of Multilayer Graphene Coated Separators as a Shuttle Inhibitor Interlayer for Li-S Batteries	Elif Ceylan Cengiz	Gebze Technical University
8	Application of Poly(3,4-ethylenedioxythiophene) Polystyrene Sulfonate (PEDOT-PSS) to Cathode for Improvement of Charge-discharge Property of Lithium Sulfur Battery	Hiroki Nara	Waseda University

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Mat	Materials Posters	Presenter	Affiliation
9	Enhancement of energy capacity of lithium sulphur battery by modification of carbon host	Jin Won Kim	Research Institute for Solar and Sustainable Energies, South Korea
10	New route to higher energy Li-S batteries	Marco Agostini	Chalmers University of Technology
11	A Mechanism Study of MOF-based Separator with Enhanced Stability in Li-S Battery	Mengliu Li	King Abdullah University of Science and Technology
12	Bio-waste derived carbon: Scaffold for sulfur cathode and interlayer for Li-S batteries	N Kalaiselvi	Central Electrochemical Research Institute, India
13	High Performance LiS Batteries using as Mould a Disordered Carbon with Dual Porosity Derived from Cherry Pits	Noelia Moreno Villegas	Universidad de Córdoba
14	Different function of electrolyte salt in high-performance Li-S coin cells and pouch cells	Peter Kovacik	OXIS Energy Ltd
15	Covalently Bonded Lithium Sulfide on Polyacrylonitrile Composite Cathode Material	Tzu-Ching Liu	National Taiwan University of Science and Technology
16	A microporous carbon as long cycle performance cathode materials for lithium sulfur batteries	Shuangke Liu	National University of Defense Technology, China
17	Chitosan/Expanded Graphite (C/EG) coated separators: A dual physical/chemical route to inhibit polysulfide shuttle	Syed Ali Abbas	National Tsing Hua University
18	Critical Coupling of Binders and Electrolytes for Flexible Freestanding Li-S Battery Electrode with High Performance	Wandi Wahyudi	King Abdullah University of Science and Technology
19	Synthesis of Novel Multifunctional Polyimide-Cl Ionic Liquid/polyacrylonitrile Binder to Improve Capacity and Stability for Lithium-Sulfur Batteries	Yu-Wei Huang	National Taiwan University of Science and Technology
App	**Applications Posters**	**Presenter**	**Affiliation**
1	Hardware-in-the-loop (HIL) test of a Li-S battery module	Abbas Fotouhi	Cranfield University
2	Ultra-Low Temperature Battery (ULTB) Project	Jacob Locke	OXIS Energy Ltd
3	Battery Management Controller for Li-S batteries	Jordi Pegueroles	Ficosa
4	Test rig for a dynamic cell temperature control based on cycle parameters	Karsten Propp	Cranfield University
5	Self-Balancing Feature of Lithium-Sulfur Batteries Based on Self-discharge due to Polysulfide Shuttle	Vaclav Knap	Aalborg University