

# 5<sup>TH</sup> WORKSHOP „LITHIUM-SULFUR-BATTERIES“

November 21 - 22, 2016, International Congress Center Dresden

## November 21, 2016

12:00 - 13:00 Registration

13:00 *Welcome and opening*  
Prof. Dr. Eckhard Beyer  
Fraunhofer IWS Dresden, Technische Universität Dresden, Germany

### Session I Trends in Material Development

Chair: Prof. Dr. Eckhard Beyer, Fraunhofer IWS, TU Dresden

13:15 *Materials for lithium-sulfur batteries*  
Prof. Linda Nazar  
University of Waterloo, Canada

14:00 *Nanostructured Li-Metal Anode to inhibit dendrite growth in safe Lithium-Sulfur-Batteries*  
Prof. Dr. Qiang Zhang  
Tsinghua University, Beijing (China)

14:30 *New electrolyte compositions for enhanced Li-S batteries*  
Sören Thieme  
Fraunhofer IWS Dresden, Germany

15:00 *Coffee break*

### Session II Materials and Mechanisms

Chair: Dr. Holger Althues, Fraunhofer IWS

15:30 *Li-S cell development at Oxis*  
Lisset Urrutia  
Oxis Energy LTD, Abingdon, Oxfordshire, UK

16:00 *Highly conductive porous VN nanoribbons/graphene composite with chemical anchoring effect for high-Energy Li-S Batteries*  
Dr. Zhenhua Sun  
Chinese academy of science, Shenyang, China

16:30 *Ultramicroporous carbon infused sulfur as cathode for sustainable Lithium-Sulfur Batteries*  
Dr. Anji Reddy Munnangi  
Helmholtz-Institut Ulm, Germany

17:00 *Investigation of the Role of Polysulfide Diffusion in Li-S Batteries Using Spatially Resolved Operando X-ray Absorption Near Edge Spectroscopy*  
Anne Berger  
Technische Universität München, Germany

17:30 *Modelling / Mechanisms of Li-S cells*  
Dr. Gregory Offer  
Imperial College London, UK

18:00 - 22:00 *Poster session and get together at Int. Congress Center Dresden*

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## November 22, 2016

### Session III Cell design and Applications

Chair: Prof. Dr. Stefan Kaskel, Fraunhofer IWS, TU Dresden

- 09:00 *The reversibility of solid-state Li-S cell based on a sulfide electrolyte*  
Dr. Yuichi Aihara  
Samsung R&D Institute, Japan
- 09:30 *Li-S cell design: Role of inactive components*  
Dr. Holger Althues  
Fraunhofer IWS Dresden, Germany
- 10:00 *Coffee break*
- 10:30 *Graphene derived carbons with controlled porosity for Lithium-Sulfur Battery cathodes: an electrochemical study*  
Dr. Alberto Varzi  
Helmholtz-Institut Ulm, Germany
- 11:00 *Projekt EuroLiS*  
Prof. Robert Dominko  
Univerisität Ljubljana, National Institute of Chemistry, Slovenia
- 11:30 *Reinforced 3-D lithium electrode for lithium-sulfur batteries. Preparation and properties*  
Dr. Elena Kuzmina  
Ufa Institute of Chemistry of the Russian academy of sciences, Russia
- 12:30 *Lunch break*
- 13:30 *Batteries for electric VTOL aircraft*  
Moritz Schuhmann  
Lilium GmbH, Gilching, Germany
- 14:00 *Li-S for automotive applications*  
Dr. Barbara Stiaszny  
BMW Group, Munich, Germany
- 14:30 *Concluding remarks*  
Prof. Dr. Stefan Kaskel  
Fraunhofer IWS Dresden, Germany
- 15:30 *Optional: Lab tour at Fraunhofer IWS*  
(duration ca. 1,5h, bus transfer provided)