

10th Workshop Lithium-Sulfur Batteries

July 3 – 4, 2023
Fraunhofer IWS | Dresden



PROGRAM*

Monday, July 3, 2023

Session 1: Cathode Chemistry | Chair: Stefan Kaskel

- 13:00 (CET) Opening
Stefan Kaskel | Fraunhofer IWS, TU Dresden
- 13:05 Plenary: Advances in rechargeable alkali metal/Cl₂ batteries
Hongjie Dai | Stanford University
- 13:50 Surface-active organosulfur additives for Li-S cells
Magdalena Muhr | University of Nottingham
- 14:10 Electrolyte design for enhanced power capability of Li-S-batteries
Sebastian Kirchhoff | TU Dresden
- 14:30 The potential of SPAN as cathode active materials for Li-S rechargeable batteries
Toru Yano | ADEKA CORPORATION
- 14:50 [Coffee Break](#)

Session 2: Cell Development | Chair: Holger Althues

- 15:30 Keynote: Strategies for commercialization of Li-S batteries
Changhoon Lee | LG Energy Solution
- 16:00 Lithiated and metallic molybdenum disulfide as cathode host for high-performance lithium-sulfur batteries
Ismail Sami | University of Cambridge
- 16:20 2D graphene-based activated carbon-containing sulfur cathode and electrolyte engineering: a perfect marriage for the development of high energy density, safe and long cycle life lithium-sulfur batteries
Alexander Santiago | CIC energiGUNE
- 16:40 Developing for production, developing for markets, developing for success
Michael Liedtke | Zeta Energy Corp.
- 17:00 Concluding Remarks: *Stefan Kaskel | Fraunhofer IWS, TU Dresden*
- 17:05 [Lab Tour, Poster Session and Get Together](#)

10th Workshop Lithium-Sulfur Batteries

July 3 – 4, 2023
Fraunhofer IWS | Dresden



Tuesday, July 4, 2023

Session 3: Material Design | Chair: Stefan Kaskel

- 09:00 (CET) Opening
Stefan Kaskel | Fraunhofer IWS, TU Dresden
- 09:05 Plenary: Lithium-sulfur batteries with stabilized electrodes and interfaces
Arumugam Manthiram | University of Texas at Austin
- 09:50 Characterisation of lithium storage mechanisms in carbon current collectors using nuclear magnetic resonance spectroscopy (NMR)
Samantha Southern | Imperial College London
- 10:10 Composite electrode designs for stable lithium-sulfur batteries
Zijian Zheng | The Hong Kong Polytechnic University
- 10:30 High-sulfur fibrous cathode for enhanced lithium-sulfur battery performance
Wei-Nien Su | National Taiwan University of Science and Technology
- 10:50 [Coffee Break](#)

Session 4: Mechanisms | Chair: Holger Althues

- 11:30 Keynote: Understanding abnormal phenomena in anode-free lithium-sulfur batteries
Bing Joe Hwang | Taiwan Tech
- 12:00 NMR spectroscopic investigations of the performance limiting mechanisms of lithium-sulfur batteries
Jana Fritzke | University of Cambridge
- 12:20 Relevance of the electrode and cell design for the performance of Li-S Batteries – Continuum modeling as a tool for battery development
Timo Danner | German Aerospace Center (DLR)
- 12:40 On the nanoscale evolution of solid discharge products in Li-S batteries using operando scattering, electron microscopy and stochastic modelling
Christian Prehal | University of Salzburg
- 13:00 Concluding Remarks: *Holger Althues | Fraunhofer IWS*
- 13:05 [Lunch](#)