PROGRAM SCHEDULE

Monday, March 14, 2022

07:30 - 08:15

Registration.

08:15 - 08:30

Welcome: IAS-TUM, TUM, BMW Group.

08:30 - 12:35

Morning Session, Chairman: Stefan Sedlmaier, BMW Group.

08:30 - 09:15

Jürgen Janek, Justus Liebig University Gießen; BELLA, Institute of Nanotechnology, KIT. *Kinetics, Rate Limitations and Aging of Interfaces in Solid State Batteries.*

09:15 - 10:00

Jeff Sakamoto, University of Michigan. Enabling Lithium Metal Batteries Using Oxide Ceramic Electrolyte.

10:00 - 10:45

Jennifer L. M. Rupp, Technical University of Munich; TUMInt Energy Research GmBH. *Design of Solid State Battery Materials and Prototypes.*

10:45 - 11:05

Coffee Break.

11:05 - 11:50

Stefano Passerini, Helmholtz Institute Ulm; KIT. Electrode/Electrolyte Interlayers to Enable Solid State Electrolytes in Lithium batteries.

11:50 – 12:35

Y. Shirley Meng, The University of Chicago; University of California San Diego. *Solid State Batteries – Chemistry, Electrochemistry and Mechanical Concerns.*

12:35 - 13:50

Lunch Reception.

13:50 - 17:10

Afternoon Session, Chairwoman: Sandra Ehgartner, BMW Group.

13:50 - 14:35

Wolfgang Zeier, University of Münster; Helmholtz-Institute Münster. Understanding (Effective) Ionic Transport in Solids and Solid-State Batteries.

14:35 - 15:20

Wolfgang A. Wall, Technical University of Munich; TUMint Energy Research GmbH. Modeling 3D-Resolved Electro-Chemo-Mechanics of ASSB with a Focus on Interface Effects.

15:20 - 15:40

Coffee Break.

15.40 - 16:25

Dee Strand, Wildcat Discovery Technologies. Effect of Anode Type on Dimensional Changes in Cells During Cycling.

16.25 - 17:10

Alex Yu, Factorial Energy. *Current Status and Challenges in Development of Solid-State Battery.*

19:00

Conference Dinner (Restaurant Poseidon, Garching).

Tuesday, March 15, 2022

08:30 - 12:35

Morning Session, Chairwoman: Clara Berg, Technical University of Munich.

08:30 - 09:15

Martin Winter, MEET Battery Research Center, University of Münster; Helmholtz-Institute Münster.

Production and Processing of Lithium Metal to Electrodes for Next Generation Lithium Batteries.

09:15 - 10:00

Clare P. Grey, University of Cambridge; The Faraday Institution. New Ways of Tracking Function: DNP, NMR and Optical Microscopy on Current and Next Generation Materials.

10:00 - 10:45

Yang Shao-Horn, Massachusetts Institute of Technology. *Interfacial Dynamics and Transfer in Lithium Batteries.*

10:45 - 11:05

Coffee Break.

11:05 – 11:50

Khalil Amine, Argonne National Laboratory. Advanced Lithium-Sulfur Battery for Enabling Electrification of Vehicles.

11:50 - 12:35

Brett L. Lucht, University of Rhode Island. Electrolyte Oxidation and the Role of Acidic Species in Capacity Loss of Lithium Ion Batteries.

12:35 – 13:50

Lunch Reception.

13:50 - 17:10

Afternoon Session, Chairman: Christian Sedlmeier, Technical University of Munich.

13:50 - 14:35

Margret Wohlfahrt-Mehrens, ZSW - Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg.

Routes for Improved Electrode Manufacturing of Nickel Rich Positive Electrodes.

14:35 – 15:20

Stefan Koller, Varta Innovation. *Towards Silicon Based Lithium Ion Batteries.*

15:20 - 15:40

Coffee Break.

15.40 - 16:25

Florencia Marchini, Umicore. Solid-State Batteries at Umicore.

16:25 - 17:10

Rüdiger Daub, Technical University of Munich, Fraunhofer IGCV Towards Pilot-scale Production of Sulfide-based All-solid-state Batteries.

17:10 - 17:30

Concluding remarks: TUM, BMW Group.