

PROGRAM SCHEDULE

Monday, March 13, 2017

07:30 – 08:20

Registration.

08:20 – 08:30

Welcome: IAS, TUM, BMW Group.

08:30 – 12:35

Morning Session, Chairman: tbd.

08:30 – 09:15

Werner J.F. Weppner, Chr.-Albrechts University Kiel.

Strategies for All-Solid-State Devices for Emerging Energy Storage Technologies.

09:15 – 10:00

John A. Kilner, CIC EnergiGUNE.

Ceramic Based Electrolytes for All Solid State Batteries.

10:00 – 10:45

Thomas F. Fässler, Technische Universität München.

Lithium-Phosphido Silicates and Germanates – A New Class of Solid-State Lithium-Ion Conductors.

10:45 – 11:05

Coffee Break.

11:05 – 11:50

Virginie Viallet, Université de Picardie Jules Verne, CNRS UMR 7314, Amiens.

All-Solid-State Batteries with Sulfide-Based Solid Electrolytes: Achievements and Ongoing Challenges.

11:50 – 12:35

Martin Winter, MEET Battery Research Center, University of Münster.

Rechargeable Lithium Metal Anodes: Opportunities and Challenges.

12:35 – 13:50

Lunch Reception (IAS Faculty Club, 4th floor).

13:50 – 17:10

Afternoon Session, Chairman: Vasiliki Tileli, École Polytechnique Fédérale de Lausanne.

13:50 – 14:35

Yang Shao-Horn, Massachusetts Institute of Technology.

Descriptor for Lithium Conductivity based on lattice dynamics.

14:35 – 15:20

Zonghai Chen, Argonne National Laboratory.

Tracing Strain across Solid-Solid Interfaces.

15:20 – 15:40

Coffee Break.

15:40 – 16:25

Dee Strand, Wildcat Discovery Technologies.

Approaches to Cathodes for Solid State Batteries.

16:25 – 17:10

Felix Richter, University of Oxford.

A 3D Ordered Bicontinuous Ceramic-Polymer Composite Electrolyte for Lithium Batteries.

19:30

Conference Dinner (Restaurant Poseidon, Garching).

Tuesday, March 14, 2017

08:30 – 12:35

Morning Session, Chairman: Nenad Markovic, Argonne National Laboratory.

08:30 – 09:15

Ellen Ivers-Tiffée, Karlsruhe Institute of Technology.
Design Rules for All-Solid-State Li-Ion Batteries.

09:15 – 10:00

Jeff Sakamoto, University of Michigan.
Transitioning Advanced Ceramic Electrolyte into Manufacturable Solid-State EV Batteries.

10:00 – 10:45

Mareike Wolter, Fraunhofer-Institut für Keramische Technologien und Systeme, Dresden.
Concepts for Large Format Bipolar Batteries.

10:45 – 11:05

Coffee Break.

11:05 – 11:50

Yifei Mo, University of Maryland.
Insights and Rational Design of Solid-Solid Interfaces in All-Solid-State Li-ion Batteries from Computation.

11:50 – 12:35

Wolfgang A. Wall, Technische Universität München.
Challenges and Potential of Simulation Methods for All Solid State Batteries.

12:35 – 13:50

Lunch Reception (IAS Faculty Club, 4th floor).

13:50 – 16:45

Afternoon Session, Chairman: Hubert Gasteiger, Technische Universität München.

13:50 – 14:35

Stefano Passerini, Helmholtz Institute Ulm, Karlsruhe Institute of Technology.
Development of Polymer Electrolytes for Lithium Batteries.

14:35 – 15:20

Brian Francisco, Solid Power, Louisville, CO.
Enabling Bulk-Type Solid State Batteries through Advanced Electrolytes.

15:20 – 15:40

Coffee Break.

15:40 – 16:25

Sandeep Unnikrishnan, TNO-Holst Centre, Eindhoven.
Can Thin-Film Batteries Drive a Car?

16:25 – 16:45

Concluding remarks: Peter Lamp, BMW Group.