

PROGRAM SCHEDULE

Monday, February 19, 2018

07:30 – 08:20

Registration.

08:20 – 08:30

Welcome: IAS, TUM, BMW Group.

08:30 – 12:35

Morning Session, Chairman: Ellen Ivers-Tiffée, Karlsruhe Institute of Technology.

08:30 – 09:15

Yang-Kook Sun, Hanyang University.

Compositionally Graded Cathode Material with Long-Term Cycling Stability for Electric Vehicles Application.

09:15 – 10:00

Marca M. Doeff, Lawrence Berkeley National Laboratory.

Electrochemical Characteristics of Layered Transition Metal Oxide Cathode Materials for Lithium Ion Batteries: Bulk and Surface Behavior.

10:00 – 10:45

Y. Shirley Meng, University of California San Diego.

Role of Strain and Defects in Classical Layered Oxides and Lithium Rich Layered Oxides - Pushing the Limit of Intercalation.

10:45 – 11:05

Coffee Break.

11:05 – 11:50

Naoaki Yabuuchi, Tokyo Denki University.

Cation-Disordered Rocksalt Oxides for High-Capacity Lithium/Sodium Batteries.

11:50 – 12:35

Pascal Hartman, BASF SE.

Cathode Active Materials for Next-Generations of Lithium-Ion Batteries.

12:35 – 13:50

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

13:50 – 17:10

Afternoon Session, Chairman: Jakub Reiter, BMW Group.

13:50 – 14:35

Hubert A. Gasteiger, Technical University of Munich.

Impedance Diagnostic to Characterize Electrode Performance and to Deconvolute Cell Ageing Mechanisms.

14:35 – 15:20

Adam S. Best, CSIRO Manufacturing.

Ionic Liquid Electrolytes - Opportunities and Challenges for Lithium Batteries.

15:20 – 15:40

Coffee Break.

15:40 – 16:25

Dee Strand, Wildcat Discovery Technologies.

Challenges in Electrolyte Development for Silicon Anodes.

16:25 – 17:10

Larry Hough, Solvay.

Materials for Advanced Lithium Ion Batteries.

19:00

Conference Dinner (Restaurant Poseidon, Garching).

Tuesday, February 20, 2018

08:30 – 12:35

Morning Session, Chairman: Jürgen Garche, FCBAT Ulm.

08:30 – 09:15

Zhengming (John) Zhang, Celgard.

The Challenges that Hinder the Progress of Various New Energy Storage Systems beyond Li-Ion Batteries.

09:15 – 10:00

Clare P. Grey, Cambridge University.

New Approaches for Determining SEI Structure on Silicon Anodes and Local Structural Changes in Disordered Anode Systems.

10:00 – 10:45

Jürgen Pfeiffer, Wacker Chemie AG.

On the Way to Silicon-Based Anode Active Materials – Beyond Cycle Stability.

10:45 – 11:05

Coffee Break.

11:05 – 11:50

Kristina Edström, Uppsala University.

Breaking Down Complex Systems such as Interfaces in Li-Ion and Na-Ion Batteries into its Components.

11:50 – 12:35

Gleb Yushin, Georgia Institute of Technology.

Conversion-type Electrodes and Ceramic Separators for Next Generation Li-Ion Batteries.

12:35 – 13:50

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

13:50 – 17:10

Afternoon Session, Chairman: Yang Shao-Horn, Massachusetts Institute of Technology.

13:50 – 14:35

Sebastian Scharner, BMW Group.

Quantitative Safety Characterization of Li-Ion Cells.

14:35 – 15:20

JaeHyun Lee, LG Chem.

Progresses and Challenges of High Energy Density Technology.

15:20 – 15:40

Coffee Break.

15:40 – 16:25

Wenjuan Liu Mattis, Microvast Inc.

Enabling Competent Electrical Vehicles.

16:25 – 17:10

Peter Axmann, Zentrum für Sonnenenergie- und Wasserstoff-Forschung, Ulm.

Limiting Factors of High Energy Electrodes for Lifetime and Safety.

17:10 – 17:30

Concluding remarks: Peter Lamp, BMW Group.