# Lithium Battery Chemistry Symposium 2016

Held at AABC Europe 2016

Mainz, Germany 25 – 28 January 2016

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## Tuesday, 26 January

#### Lithium-Ion Materials R&D

7:30 Registration 8:30 **Chairperson's Opening Remarks** Prof. Martin Winter, Chair, Applied Materials Science for Electrochemical Energy Storage and Conversion, Institute of Physical Chemistry (IPC) - Founding Scientific Director, MEET Battery Research Center, WWU Münster - Founding Director, Helmholtz Institute "Ionics in Energy Storage" 8:35 SEI: Yesterday, Today, and Tomorrow 1 Prof. Emanuel Peled, Emeritus Professor, School of Chemistry, Tel Aviv University 8:55 Electrolyte Additive Decomposition and Anodic Stability of Conductive Carbons in Lithium-Ion Batteries Examined by On-Line Electrochemical Mass Spectrometry (OEMS) N/A Dr. Hubert Gasteiger, Chair, Technical Electrochemistry, Technical University of Munich 9:15 Tailoring of Material Morphology for Improving the Electrochemical Performance of Cathode Materials for Lithium-Ion Batteries

Jie Li, Group leader, MEET Battery Research Center, Muenster University

- 9:35 Novel Li-Ion Battery Electrolyte Materials: What Can We Envisage for the Future? 25 Dr. Patrick Johansson, Professor, Chalmers University
- 9:55 Q&A
- 10:10 Grand Opening Coffee Break with Exhibit & Poster Viewing

#### Lithium-Ion Industrial R&D

11:00	<b>Chairperson's Opening Remarks</b> Prof. Martin Winter, Chair, Applied Materials Science for Electrochemical Energy Storage and Conversion, Institute of Physical Chemistry (IPC) - Founding Scientific Director, MEET Battery Research Center, WWU Münster - Founding Director, Helmholtz Institute "Ionics in Energy Storage"
11:05	Designing Cathode Materials for Next Generation Electric Vehicles 34 Dr. Christoph Erk, Research Scientist, Lithium-ion Batteries Cathode Materials, BASF
11:25	Present and Future Development of Battery Materials at FMC43Marina Yakovleva, Commercial Manager, New Product and Technology Development, FMC Corporation
11:45	Modeling Lithium Ion Battery Costs and Materials N/A Julia Atwood, Analyst, Energy Smart Technologies, Bloomberg New Energy Finance
12:05	Evaluation of Materials and Concepts for Future Automotive xEV Batteries N/A Dr. Peter Lamp, Head, Research Battery Technology, BMW Group
12:25	Q&A

12:40 Networking LUNCH



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#### Beyond Lithium Ion

- 14:40 Chairperson's Opening Remarks Klaus Brandt, Independent Consultant
- 14:45
   Overview of Rechargeable Li Batteries before LIB
   55

   Dr. Klaus Brandt, Independent Consultant
   55
- 15:05
   "Solidifying" Batteries Solid Electrolytes in Lithium (Ion) Batteries
   N/A

   Dr. Jürgen Janek, Director, Materials Research Laboratory (LaMa), Scientific Director, Institute of Physical Chemistry, Justus-Liebig-University Giessen & BELLA, Institute of Nanotechnology, Karlsruhe Institute of Technology
- 15:25
   Room-Temperature Sodium Batteries Craze or Opportunity?
   62

   Prof. Philipp Adelhelm, Institute for Technical Chemistry and Environmental Chemistry, Center for Energy and Environmental Chemistry (CEEC), Jena University
- 15:45
   Development of Full Cell Chemistries for Magnesium Batteries
   65

   Dr. Anthony Burrell, Department Head, Electrochemical Energy Storage, Argonne National Laboratory
- **16:05 Zinc-Air: The Oldest Innovative Battery 80** Prof. Hajime Arai, Professor, Office of Society-Academia Collaboration for Innovation, Kyoto University
- 16:25 Q&A
- 16:45 Networking Reception with Exhibit & Poster Viewing

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17:45 Close of Day