ORGANIC BATTERY DAYS 2026 – SCIENTIFIC PROGRAMME

5–7 October 2026

PL Plenary lecture IL Invited lecture CL Contributed lecture

Monday, 5 October 2026

08:00–08:45 **Registration**

08:45–09:10 **Conference opening & welcome**
Prof. Dr. Ulrich S. Schubert
Prof. Dr. Andreas Marx (President of the Friedrich Schiller University Jena, Germany)

Session 1 Battery Systems & Cell Concepts

09:10–09:50 **PL | Prof. Dr. Jodie Lutkenhaus** – *Texas A&M College of Engineering, USA*
Organic batteries for low temperature operation

09:50–10:20 **IL | Prof. Dr. Xinliang Feng** – *Technische Universität Dresden, Germany*
Aqueous metal-ion batteries - from printable electronics to large-scale energy storage systems

10:20–10:50 **Coffee break**

Session 2 Mechanisms & Advanced Characterization

10:50–11:20 **IL | Prof. Dr. Michael J. Aziz** – *Harvard University, John A. Paulson School of Engineering and Applied Sciences, USA*
Molecular lifetime, capacity fade and capacity recovery with organic active species

11:20–11:50 **IL | Prof. Dr. Hirofumi Yoshikawa** – *Kwansei Gakuin University, Japan*
Multi-valent ion batteries using organic framework structure materials

11:50–12:20 **IL | Prof. Dr. Steven Renault** – *French National Centre for Scientific Research, France*
Unlocking the second electron in the electrochemical delithiation-lithiation of p-DHT derivatives - Cu^{2+} effect

12:20–12:50 **IL | Dr. Ingo Manke** – *Helmholtz-Zentrum Berlin für Materialien und Energie, Germany*
Three-dimensional morphology of polymer-based batteries - combining tomographic 3D imaging with modeling and simulation

12:50–13:10 **Conference photo**

13:10–14:10 **Lunch**

Session 3 Battery Systems & Cell Concepts

14:10–14:40 **IL | Prof. Dr. Nara Kim** – *Linköping University, Sweden*
Sustainable stretchable organic batteries for wearable electronics

14:40–15:10 **CL | Dr. Nagaraj Patil** – *IMDEA Energy Institute, Spain*
From redox polymers to practical electrodes: engineering high areal capacity in organic batteries

15:10–15:30 **CL | Dr. Anubhav Kumar** – *Friedrich Schiller University Jena, Germany*
A naphthalene diimide based neutral pH hybrid redox flow battery

Session 4 Materials Design & Synthesis

15:30–15:50 **CL | Prof. Dr. Jiande Wang** – *College of Materials Science and Engineering, Hunan University, China*
Conjugated sulfonamides for next generation energy storage

15:50–16:10 **CL | Dr. Ji Eon Kwon** – *Korea Institute of Science and Technology, Republic of Korea*
Indolocarbazole: a high-voltage multi-electron p-type redox center for organic electrode materials

16:10–16:30 **CL | Dr. Ryota Akai** – *National Institute of Advanced Industrial Science and Technology (AIST), Japan*
Redox-active porous organic cage as a positive-electrode material for rechargeable lithium batteries

16:30–17:00 **Coffee break**

Session 5 Mechanisms & Advanced Characterization

17:00–17:20 **CL | Prof. Dr. Philippe Poizot** — *Nantes Univsité/CNRS-IMN, France*
Electrochemical evaluation of extended viologens as negative electrode materials for anion-ion rechargeable batteries.

17:20–17:40 **CL | Prof. Dr. Edwin Otten** — *University of Groningen, Netherlands*
Molecular insights into capacity fade in non-aqueous redox flow batteries

Session 6 Theory, Modelling & Data-Driven Discovery

17:40–18:00 **CL | Prof. Dr. Riccardo Alessandri** — *KU Leuven, Belgium*
Multiscale modeling of structural, ionic, and electronic properties of radical-containing polymers for all-organic Batteries

18:00–18:20 **CL | Prof. Dr. Doreen Mollenhauer** — *Helmholtz Institute for Polymers in Energy Applications Jena, Germany*
Computational exploration of structure-property relationships in redox-active organic materials

18:20–18:40 **CL | Dr. Daniel Tabor** — *Department of Chemistry, Texas A&M University, USA*
First-principles and machine learning strategies for modeling organic batteries

18:40–19:00 **CL | Dr. Clara Zens** — *Friedrich Schiller University Jena, Germany*
Molecular insights into charge transport in conjugated radical batteries

Evening Events

19:00 **Walk to Botanical Garden**
19:30 **Welcome and Opening at Botanical Garden (speakers, registered participants with regular fee)**

and

19:15 **PhD and Early-stage Researcher Networking & Discussions (drinks / snacks)**
Conference site

Tuesday, 6 October 2026

8:00–8:30 **Registration**

Session 7 Battery Systems & Cell Concepts

08:30–09:10 **PL | Prof. Dr. Birgit Esser** — *Ulm University, Germany*
Organic electrode materials in next-generation batteries

09:10–09:40 **IL | Dr. Rebeca Marcilla** — *IMDEA Materials Institute, Spain*
Membrane-free redox flow batteries - design strategies and performance enhancement

09:40–10:00 **CL | Prof. Dr. Zhongfan Jia** — *Flinders University, Australia*
Caging polyhalide anions in polycyclodextrin for long-lasting aqueous zinc-iodine batteries

10:00–10:20 **CL | Dr. Carlo Caianiello** — *KTH Royal Institute of Technology, Sweden*
Bipolar molecules and posolytes for aqueous organic flow batteries: exploring new chemistries for different pH

10:20–11:00 **Coffee break**

Session 8 Sustainability, Circularity & Translation

11:00–11:30 **IL | Dr. Cedrik Wiberg** — *Rivus Batteries GmbH, Germany*
Challenges and experiences from commercializing organic flow batteries

11:30–12:00 **IL | Dr. Tobias Janoschka** — *Jena Flow Batteries GmbH, Germany*
From milliwatts to megawatts - bringing an organic flow battery technology to scale

12:00–12:20 **CL | Laura Plein** — *University of Cologne, Germany*
How “green” is your functional material? Assessing environmental impacts of multi-step synthetic protocols in material sciences at various technology levels

12:20–12:40 **CL | Kristína Rabatinová** — *Friedrich Schiller University Jena, Germany*
Life-cycle assessment of organic redox flow batteries for long-duration energy storage

12:40–13:00 **CL | Dr. Tilmann J. Neubert** — *Friedrich Schiller University Jena, Germany*
Sustainable quinones at electrochemical interfaces: what can we learn from organic batteries for adhesives and carbon capture?

13:00–14:00 **Lunch**

14:00–15:30 **Parallel breakout sessions**
1. Battery characterization at Helmholtz Zentrum Berlin: BESSY II and tomography
   Prof. Dr. Yan Lu, Dr. Ingo Manke, Anna Anochin
2. DFG Priority programme "Polymer-based Batteries" (SPP2248): selected topics
3. Laboratory Tours: HIPOLE Jena and FSU Jena
4. From modeling to advanced physicochemical characterization of polymers: understanding organic battery materials at HIPOLE Jena/CEEC
   Prof. Dr. Doreen Mollenhauer, Prof. Dr. Ivo Nischang

15:30–16:00 **Coffee break**

Session 9 Materials Design & Synthesis

16:00–16:20 **CL | Prof. Dr. Matthieu Becuwe** — *LRCS UPJV-CNRS, France*
Conductive positive electrode materials using molecular and material engineering

16:20–16:40 **CL | Dr. Lionel Dubois** — *Commissariat à l'énergie atomique (CEA), France*
A systematic study of hydroquinone dicarboxylate isomers for Li-ion batteries applications

16:40–17:00 **CL | Dr. Rukiya Matsidik** — *TU Chemnitz, Germany*
Aromatic diimides: versatile building blocks for organic battery electrode materials

Session 10 Mechanisms & Advanced Characterization

17:00–17:20 **CL | Emilio Avellone** — *Technical University of Munich (TUM), Germany | Massachusetts Institute of Technology (MIT), USA*
Diagnosing performance-limiting factors in iron–AQDS redox flow batteries

17:20–17:40 **CL | Dr. Koosha Ehtiati** — *Friedrich Schiller University Jena, Germany*
Electrochemical characterization of flow battery active materials: rotating disc electrode voltammetry vs. electrochemical impedance spectroscopy

17:40–18:00 **CL | Jonathan Caroni** — *CiQus, Universidade de Santiago de Compostela, Spain*
Advanced organic polymer electrodes for lithium and sodium-ion batteries

Poster session

18:00–21:00 **Poster session (drinks/snacks)**
Session 1: 18:00-19:30
Session 2: 19:30-21:00
Dinner buffet start: 19:00
ZAF Atrium (Center for Applied Research)

19:00–20:00 **Scientific advisory board meeting**
(internal meeting)
ZAF SpaceBox 10G

Wednesday, 7 October 2026

8:00–8:30 **Registration**

Session 11 Electrolytes, Interfaces & Transport

08:30–09:10 **PL** | **Prof. Dr. Ho Seok Park** — *Korean Academy of Science & Technology (KAST), Republic of Korea*
Two-dimensional organic frameworks for electrolyte and interfacial engineering in lithium metal batteries

09:10–09:40 **IL** | **Prof. Dr. Jean-Francois Gohy** — *Université catholique de Louvain, Belgium*
Novel approaches towards polymer-based electrolytes

09:40–10:00 **CL** | **Prof. Dr. Kenichi Oyaizu** — *Waseda University, Japan*
Polymers to stabilize the supercooled liquid state of Li Salts: an approach to organic solid state batteries

10:00–10:20 **CL** | **Prof. Dr. Andrea Balducci** — *Friedrich-Schiller University Jena, Germany*
The impact of electrolyte formulation on the electrochemical performance of PTMA-based electrodes

10:20–11:00 **Coffee break**

Session 12 Mechanisms & Advanced Characterization

11:00–11:20 **CL** | **Prof. Dr. Shrayesh Patel** — *University of Chicago, USA*
Mediator-driven redox targeting for polymeric flow batteries

11:20–11:40 **CL** | **Dr. Leslie Rocio Arias-Aranda** — *Université de Rennes, France*
Symmetric aqueous redox flow batteries and reference ferri/ferrocyanide pair: a critical look on the stability of ferrocene derivatives at neutral pH.

11:40–12:00 **CL** | **Dr. Michael Walter** — *University of Freiburg / FIT, Germany*
Characterizing sulfur–organic networks formed by inverse vulcanization using X-ray spectroscopy

CL | **Dr. Klemen Pirnat** — *National Institute of Chemistry, Slovenia*
12:00–12:20 Study of four electron exchange on benzene and naphtalene ring

Session 13 Materials Design & Synthesis

12:20–12:40 **CL** | **Dr. Tianyang Chen** — *The Chinese University of Hong Kong (Shenzhen), China*
Sustainable 2D layered cathode for alkali-ion batteries

12:40–13:00 **CL** | **Julie Schulz** — *LRCS UMR 7314, France*
Synthesis of organic macromolecular materials for solid organic batteries

13:00–13:20 **CL** | **Rika Yamamoto** — *Keio University, Japan*
Exploration of quinone-based polymers for organic cathode active materials of lithium-ion batteries

Concluding Remarks

13:20 **Poster Prices**
Concluding Remarks & Farewell
Prof. Dr. Ulrich S. Schubert

13:40 **Light lunch**