

PROGRAM

CONFERENCE DAY 1 | Nov. 2nd

- 8:30 | Arrival of Attendees
- 9:00 | Welcome by the Conference Chairs
- 9:15 | Keynote by Franz Kruger, Roland Berger
- 9:50 | Keynote to be announced
- 10:25 | **Electrode Production (I)**
Room Maschinhalle I Chairs: Prof. A. Kwade, Dr.-Ing. W. Haselrieder
 Customizing Lithium Ion Cells- from first material to series production
Daniela Wehrlich, Custom Cells Itzehoe
 Simulation based prediction of carbon black particle sizes in high intensity dispersion processes
Julian Mayer, TU Braunschweig/iPAT
 Optimized High-Energy NCM622 Electrodes for Lithium-Ion Batteries Fabricated by Extrusion-Based Slot-Die Coating
Sebastian Reuber, Fraunhofer IKTS
 aNIR-Technology a game changer in electrode production?
Kai K. O. Bär, adphos Digital Printing GmbH
- 11:13 | Discussion
- 11:25 | Coffee Break
- 11:45 | **Electrode Production (II)**
Room Maschinhalle I Chairs: Prof. A. Kwade, Dr.-Ing. W. Haselrieder
 Energy Efficient LIB Production
Silje Nornes Bryntesen, Norwegian University of Science and Technology (NTNU)
 Advances in water-based electrode processing for high energy Li-ion battery manufacturing: Si-Gr/NMC622 cells
Iker Boyano, Ciditec
 Effect of graphite anode morphology on the onset of lithium-plating in lithium-ion batteries
Alexander Adam, BMW Group
- 12:21 | Discussion
- 12:33 | **Industry Session**
Room Maschinhalle
 Inline quality control for continuous electrode slurry production
Adrian Spillmann, Bühler AG
 Preparation and functionalization of active materials with intensive mixers to increase the performance of electrodes
Stefan Gerl, Maschinenfabrik Gustav Eirich
 Continuous extrusion of electrodes
Nicole Neub, Coperion GmbH
- 12:53 | Lunch Break
- 13:38 | Postersession online
- 14:23 | Keynote to be announced
- 14:58 | **Cell Assembly (I)**
Room Maschinhalle I Chair: Prof. K. Dröder
 Building the pan-European battery ecosystem
Stefan Wolf, VDI/VDE Innovation + Technik GmbH
 Sustainable and automated Li-ion cell production
Ulrike Polnick, Industrie-Partner IP PowerSystems GmbH
 Powering tomorrow with energy-efficient dehumidification systems and dry rooms
André Meyer, Munters GmbH
- 15:34 | Discussion
- 15:46 | Coffee Break
- 16:06 | **Cell Assembly (II)**
Room Maschinhalle I Chair: Prof. K. Dröder
 Evaluation of flexible cell assembly processes and novel, flexible production equipment
Tobias Storz, Karlsruhe Institute of Technology – wbk Institute of Production Science
 Design parameters for a continuous stacking process in cell assembly of lithium-ion batteries
Christina Boeselager, TU Braunschweig/IWF
 Filling and Formation of large Li-ion-cells – where scaling up is non-linear
Stefan Roessler, Zentrum für Sonnenenergie und Wasserstoffforschung Baden-Württemberg (ZSW)
- 16:42 | Discussion
- 16:54 | **Battery Production 4.0**
Room Maschinhalle I Chair: Prof. C. Herrmann
 Industry 4.0 Software Architecture for Battery Cell Manufacturing
Bob Zollo, Keysight Technologies
 Analyzing and tailoring quality control measures for managing product variance in battery cell production lines.
Anna Sophia Kollenda, Technical University Munich, Institute for Machine Tools and Industrial Management (iwb)
 On-Line Solutions to Optimize Electrode Coating Uniformity in Battery Production Processes
Jay Luis, NDC Technologies
 Towards smart battery cell manufacturing: from in-line quality control to cyber-physical systems in electrode production
Marcel Dittmer, TU Braunschweig/iPAT
- 17:42 | Discussion
- 17:54 | End of Day One
- 19:00 | Reception at the Conference Lobby, Steigenberger Hotel
- 19:40 | Poster presentation
- 20:00 | Dinner at the Maschinhalle, Steigenberger Hotel

PROGRAM

CONFERENCE DAY 2 | Nov. 3rd

- 8:30 | Keynote to be announced
- 9:05 | Keynote to be announced
- 9:40 | **Industry Session**
Room Maschinenhalle
 Design considers, safety lessons and new developments of lithium-ion batteries for industrial applications
Dr. John De Roche, Aentron GmbH
 Cerman.power+ Ceramic cooler dry Cells, made in Germany
Tim Schäfer, Envites
 Electrochemical Impedance Spectroscopy (EIS) for battery cells, module and packs
Albert Gröbmeyer, Keysight Technologies
- 10:00 | **Module & Pack Production**
Room Maschinenhalle | Chair: Prof. K. Dilger
 Matrix Production Lines – Production Power for the World of Tomorrow
Alexander Weis, SCIO Technology GmbH
 Production of Future-Proof Automotive Battery Systems
Julia Skrypalle, Webasto SE, Energy & Components, Battery Systems
 Leak testing of battery packs during pack production
Sandra Seitz, INFICON GmbH
 Laser Meets Battery Cells
Sören Hollatz, Fraunhofer-Institut für Lasertechnik ILT
- 10:48 | Discussion
- 11:00 | Coffee Break
- 11:20 | **Production of Solid State Batteries**
Room Maschinenhalle | Chairs: Prof. A. Kwade, Dr.-Ing. W. Haselrieder
 Processing of All Solid State Batteries: Recent Advances
Ingo Bardenhagen, Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM
 Structural and electrochemical characterization of polymer-based a II-solid-state cathodes manufactured by a scalable process chain
Laura Helmers, Technische Universität Braunschweig/iPAT
 Influence of the dispersing method on the performance of Lithium Solid-State batteries
Maica Morant-Miñana, CIC energiGUNE
 Processing of Sulfide Solid Electrolytes for All Solid State Battery electrodes
Henry Auer, Fraunhofer IKTS
 The potential of thin film technologies in the production of ASSB
Jutta Hesselbach, Fraunhofer Institut für Schicht- und Oberflächentechnik
- 12:20 | Discussion
- 12:32 | Lunch Break
- 13:17 | Postersession online
- 14:02 | **Electrode, Cell and Module Diagnostic during Production**
Room Maschinenhalle | Chair: Prof. C. Herrmann
 An analytical method for the quantification of magnetic particle contaminants in powder materials for lithium-ion batteries
Giulio Ferraresi, Imerys Graphite & Carbon
 Evaluation of an In-Line particle characterization method for Battery-Materials and-slurries
Sebastian Maaß, SOPAT GmbH
 Classification and risk assessment of lithium-ion battery cells by parameter-based methods
Louisa Hoffmann, Stefan Doose; TU Braunschweig/elenia, iPAT
- 14:38 | Discussion
- 14:50 | **Cell Finishing**
Room Maschinenhalle | Chair: Prof. M. Kurrat
 Formation- a critical production step for cell quality?
Philip Niehoff, MEET Batterieforschungsinstitut Münster, Universität Münster
 Prospects of using predictive quality during cell finishing to reduce the process time
Sandro Stock, Technical University of Munich (TUM) - Institute for Machine Tools and Industrial (iwb)
- 15:14 | Coffee Break
- 15:34 | **Battery Design**
Room Maschinenhalle | Chair: Prof. T. Vietor
 How to optimize Storage-Conditions by using multifunctional Battery Enclosures
Jobst Kerspe, TEB Dr. Kerspe
 "Kraftpaket 2.0" - The enabler for last mile mobility solutions
Patrik Tykesson, eBility GmbH
- 15:58 | Discussion
- 16:10 | **Sustainability**
Room Maschinenhalle | Chair: Prof. T. Vietor
 CO2 optimized battery manufacturing in Europe with upstream integration potentials
Paul Wolff, P3 automotive GmbH
 LCA of different battery cell technologies taking uncertainty corridors into account
Philipp Engels, Technische Universität Braunschweig/IWF
 Towards sustainable supply chains for batteries: Insights from a spatially differentiated assessment of environmental and social impacts
Christian Thies, Technische Universität Braunschweig/AIP
- 16:46 | Discussion
- 16:58 | End of Conference
- 18:00 | Start of Guided Tour BLB (registration required)

PROGRAM

CONFERENCE DAY 3 | Nov. 4th

9:15 | Welcome / Registration of Attendees

10:00 | Seminar Battery Production 4.0 (Wolfgang Haselrieder)

13:00 | Break

13:30 | Seminar Battery Production 4.0 (Wolfgang Haselrieder)