PROGRAM

CONFERENCE DAY 1 | Nov. 2nd

8:30 I Arrival of Attendees

9:00 I Welcome by the Conference Chairs

9:15 I Keynote by Franz Kruger, Roland Berger

9:50 I Keynote to be announced

10:25 I Electrode Production (I)

Room Maschinenhalle 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 I Discussion

11:25 I Coffee Break

11:45 I Electrode Production (II)

Room Maschinenhalle 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 I Discussion

12:33 I Industry Session

Room Maschinenhalle

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

Continous extrusion of electrodes
Nicole Neub, Coperion GmbH

12:53 I Lunch Break

13:38 I Postersession online

14:23 I Keynote to be announced

14:58 I Cell Assembly (I)

Room Maschinenhalle 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 I Discussion

15:46 I Coffee Break

16:06 I Cell Assembly (II)

Room Maschinenhalle 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 continouos 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 I Discussion

16:54 I Battery Production 4.0

Room Maschinenhalle 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 I Discussion

17:54 I End of Day One

19:00 I Reception at the Conference Lobby, Steigenberger Hotel

19:40 I Poster presentation

20:00 I Dinner at the Maschinenhalle, Steigenberger Hotel

PROGRAM

CONFERENCE DAY 2 | Nov. 3rd

8:30 I Keynote to be announced

9:05 I Keynote to be announced

9:40 I 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 I Module & Pack Production

Room Maschinenhalle I 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 I Discussion

11:00 I Coffee Break

11:20 I Production of Solid State Batteries

Room Maschinenhalle I 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 ll-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 I Discussion

12:32 I Lunch Break

13:17 I Postersession online

14:02 I Electrode, Cell and Module Diagnostic during Production

Room Maschinenhalle I 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 I Discussion

14:50 I Cell Finishing

Room Maschinenhalle I 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 I Coffee Break

15:34 I Battery Design

Room Maschinenhalle I 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 I Discussion

16:10 I Sustainability

Room Maschinenhalle I 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 I Discussion

16:58 I End of Conference

18:00 I Start of Guided Tour BLB (registration required)

PROGRAM

CONFERENCE DAY 3 | Nov. 4th

9:15 I Welcome / Registration of Attendees

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

13:00 I Break

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