

The Future Will Be Driven by Vehicle Electrification

16th
INTERNATIONAL

aaabc

advanced
automotive
battery
conference

europa

18 - 21 MAY 2026

MAINZ, GERMANY

2026 CONFERENCE PROGRAMS

TUESDAY & WEDNESDAY | 19-20 MAY

WEDNESDAY & THURSDAY | 20-21 MAY

PRE-CONFERENCE TUTORIALS:
MONDAY 18 MAY

LARGE-SCALE SYMPOSIUM:
MONDAY 18 MAY

Join a global audience of battery technologists from leading automotive OEMs and their key suppliers for a must-attend 4 days exploring development trends and breakthrough technologies.



CHEMISTRY - PART 1



CHEMISTRY - PART 2



HEAVY DUTY



xEV BATTERY TECHNOLOGY



RECYCLING



RAW MATERIALS



ENGINEERING



AI FOR ENERGY STORAGE



MANUFACTURING



MANUFACTURING PRODUCTION



xEV BATTERY APPLICATIONS

SAVE UP TO €200!

REGISTER BY 17 APRIL

2026 CONFERENCE PROGRAMS

TUESDAY & WEDNESDAY | 19-20 MAY

WEDNESDAY & THURSDAY | 20-21 MAY

PRE-CONFERENCE TUTORIALS:
MONDAY 18 MAY

LARGE-SCALE SYMPOSIUM:
MONDAY 18 MAY



CHEMISTRY - PART 1



CHEMISTRY - PART 2



HEAVY DUTY



xEV BATTERY
TECHNOLOGY



RECYCLING



RAW MATERIALS



ENGINEERING



AI FOR ENERGY
STORAGE



MANUFACTURING



MANUFACTURING
PRODUCTION



xEV BATTERY
APPLICATIONS

TOP REASONS TO ATTEND

- » Learn first-hand about the technical and business directions from major automakers currently active in the European market
- » Hear key global market outlook data on the forecasted consumption trends for China, Japan, Korea, Europe, and the United States
- » Meet leading energy storage technologists from all automakers active in the European market
- » Discuss fast-charging solutions coming to the market to support electrification goals for the coming decade
- » Get an in-depth international overview of the industry including current trends, competitive analysis, and examination of the key

players and their strategies for market growth

- » Discover the latest technological advancements in high specific energy batteries with long cycle life and low cost
- » See how key players are overcoming challenges to commercialisation for the specialty EV battery market while assessing consumer demand and competing technologies
- » Understand the many facets of the international battery raw materials market, including advances in mining and processing with an emphasis on sourcing and cost control strategies by manufacturers
- » Network at the largest international gathering of advanced energy storage technology developers and integrators in Europe

FEEDBACK FROM PREVIOUS EVENTS

"People show what will be the future, but it's also dealing with practical questions, it's not just a dream."

- Muriel Desaegeer, PhD, Toyota Motor Europe

"We see experts from the car companies, the battery suppliers, and the system integrators. The presentations are of excellent quality."

- Eckhard Karden, PhD, formerly Ford Research Center

"The annual visit of AABC is a must for any developer or scientist working on battery technologies for automotive applications."

- Arnold Lamm, PhD, e-Technologies GmbH, formerly Daimler AG

AABC EUROPE SPONSORS

GOLD SPONSORS



BRONZE SPONSOR





18 MAY 2026 | MAINZ, GERMANY

TUTORIALS*

*All Access or separate registration required

MONDAY 18 MAY 10:00-11:30

TUT1: Battery Safety and Abuse Tolerance

Instructor:
Shmuel De-Leon, CEO, Shmuel De-Leon Energy Ltd.

TUT2: Cathode Active Materials: The Strategic Core of Performance, Cost, and Sustainability

Instructor:
Tom Van Bellinghen, Founder, Lithink

TUT3: Technology Innovation in The Chinese Battery Industry

Instructor:
Mark Lu, PhD, Senior Industrial Analyst, Industrial Economics & Knowledge Center, Industrial Technology Research Institute

MONDAY 18 MAY 13:00-14:30

TUT4: Solid-State Batteries

Instructor:
Juergen Janek, PhD, Professor, Solid-State Ionics & Electrochemistry, Justus Liebig University, Giessen

TUT5: Battery Recycling: Market and Methods

Instructor:
Steve Sloop, PhD, President, OnTo Technology LLC

TUT6: Improving the Energy Density of Batteries with Silicon-Based Anodes

Instructor:
Dee Strand, PhD, CSO, R&D, Wildcat Discovery Technologies, Inc.

TUT7: The Rechargeable Battery Market: Value Chain and Main Trends

Instructor:
Fabrice Renard, Senior Advisor, Avicenne Energy

MONDAY 18 MAY 15:00-16:30

TUT8: Cell and Pack Design for xEVs

Instructor:
Kevin Konecky, Vice President, Battery Systems Engineering, Spiro

TUT9: Global EV Market Demand: In-Depth Insights, Future Projections and the Impact on the Battery Supply Chain

Instructors:
Viktor Irlé, Co-Founder & Market Analyst, EV Volumes
Rob Price, Global Key Account Manager, EV Volumes

TUT10: AI for Battery Applications

Instructor:
Tal Sholklipper, PhD, CEO & Co-Founder, Voltaiq

TUT11: Critical Minerals and Battery Supply Chains: Challenges, Geopolitics and Sustainable Solutions

Instructor:
Kimberly Berman, Independent Consultant, Pivot Research

FEEDBACK FROM PREVIOUS EVENTS

"Must-attend conference if you are working on batteries for automotive electrification. It tells us always the latest and hottest topics, worldwide trends, and is a good networking opportunity."

- Masato Origuchi, Automotive Cells Company, formerly Renault

OFFICIAL MEDIA SPONSOR



MEDIA SPONSORS





18 MAY 2026 | MAINZ, GERMANY

LARGE-SCALE BATTERY ENERGY STORAGE SYSTEMS

Innovations in Safe, Efficient, and Scalable Energy Storage

MONDAY 18 MAY

7:30 Registration and Morning Coffee

7:50 Organiser's Remarks

Ian Murray, Associate Conference Producer, Cambridge EnerTech

7:55 Chairperson's Remarks

Matthias Vetter, PhD, Energy Storage Chief Expert, Huawei Nuremberg Research Center

BESS BATTERY INTELLIGENCE

8:00 Spiking Neural Networks: A Game-Changer for Battery Reliability and Performance

Tedjani Mesbahi, PhD, Full Professor, ICube-CNRS Laboratory, INSA Strasbourg, France

The growth of electric mobility and stationary energy storage increases demand for accurate, real-time battery State-of-X (SOX) estimation, including SOC, SOH, and RUL. These metrics are vital for safety, usable energy, and cost reduction, especially for widely adopted LFP batteries. While conventional ML models are accurate, their complexity limits BMS deployment. This work explores lightweight spiking neural networks, enabling low-power, low-latency SOX estimation for EV and grid-scale energy storage.

8:30 Immediate Remaining Capacity Estimation of Heterogeneous Second-Life Battery Energy Storage System via Deep Generative Transfer Learning

Shengyu Tao, Ph.D., Researcher, Energy Systems and Optimal Controls, Department of Electrical Engineering, Chalmers University of Technology

Assessing the remaining capacity of retired lithium-ion batteries is essential for unlocking their second-life potential. However, this process is hindered by data scarcity and heterogeneity. This work proposed a deep generative transfer learning that can synthesise realistic pulse voltage response data and align heterogeneous domains without historical records. The approach achieves high accuracy with minimal field data, outperforming existing methods. It offers a scalable pathway toward sustainable battery repurposing.

NON-LFP CHEMISTRIES

9:00 Designing Long-Life, Grid-Scale Sodium-ion Cells: Translating NFPP/HC Chemistry into Manufacturable BESS Platforms

Brandon Kelly, PhD, Chief Scientist, Peak Energy

This presentation outlines Peak Energy's cell-level development approach for NFPP/HC sodium-ion batteries for grid-scale energy storage. Performance data from large-format cells are used to highlight cycling behaviour, calendar-life considerations, and safety-relevant characteristics. The discussion focuses on how cell-level tradeoffs and operating strategies support scalable, long-life sodium-ion solutions for bankable battery energy storage systems.

9:30 Networking Coffee Break

10:00 European Cell Manufacturing for BESS: NMC Production and Long-Term Plan for Li-S

Ratnakumar Bugga, PhD, Senior Fellow, Lyten

Lyten has been developing lithium-sulfur (Li-S) battery technology since 2018, and, following the recent acquisition of the former Northvolt assets, has expanded into giga-scale cell production.

LARGE-SCALE ENERGY-STORAGE DEPLOYMENT

10:30 Battery-Enabled Flexibility and Stability for Power Grids with Large Shares of Renewables



Matthias Vetter, PhD, Energy Storage Chief Expert, Huawei Nuremberg Research Center

Renewable shares in Europe's grids keep rising; Germany has reached ~60%, with most generation from volatile wind and solar. Further growth needs large-scale flexible assets integrated into the grid, and batteries are suitable for nearly all such tasks. The transition also shifts operation toward safe grids dominated by power-electronic assets, where storage with grid-forming inverters is key. This presentation overviews market developments and technology solutions for flexibility and grid stability.

11:00 Considerations in Grid-Scale Energy-Storage Deployment

Kotub Uddin, PhD, CTO Energy Storage, Envision Energy

This talk will cover Envision's updates on BESS safety, grid stability, and long-duration energy storage.

11:30 Session Break - Lunch on Your Own

BESS SAFETY

12:55 Chairperson's Remarks

Sam Jaffe, Vice President, Business Development and Product, Mana Battery

13:00 Enhancing Battery Safety in BESS Applications: Direction-Injection Fire Suppression in an Integrated Mitigation Strategy

Mark Ellis, Senior Vice President, Head of Battery (BESS) Technology, Volvo Energy

Thermal runaway is a defining safety concern for BESS applications. Reliably interrupting the exothermic chain reaction to mitigate low-frequency, high-severity events is a critical objective. Minimising the likelihood of costly battery damage or lost availability from unintentional deployment is a key related performance goal. This work describes the successful design and validation of a direct-injection fire-suppression system using a novel agent that achieves both safety and performance targets.

13:30 How UL9540A Large-Scale Fire Test Influences Large BESS Safety Worldwide

Thomas Fedderau, Senior Product Manager, EIA, UL International Germany

UL9540A is established as the leading fire-safety standard in the US, influencing the upcoming harmonized EU standards under Article 12 of the EU Battery Regulation. Revision 5 has now been published as a draft and is expected to take effect in 2026. The new revision introduces major changes, particularly in the Large Scale Fire Test. Additionally, a specialized variant for residential applications is available under UL9540B.

14:00 Sponsored Presentation (Opportunity Available)

14:30 Networking Coffee Break

BESS MARKETS AND APPLICATIONS

15:00 Energy Storage In-field Lifetime for 25 years? How BMS Can Support Such Claims

Wenzel Prochazka, PhD, Senior Product Manager, Electrification Systems, NXP Semiconductors Austria

NXP's BESS 1500V reference design supports maximizing battery longevity by combining multiple technologies not only as begin-of-life datasheet specifications. High precision voltage measurements qualified for >20 years, backed with a safety certified system layout, Cybersecurity and combined with cost effective end-of-life passive or active balancing capability maximizing State of Health.



18 MAY 2026 | MAINZ, GERMANY

LARGE-SCALE BATTERY ENERGY STORAGE SYSTEMS

Innovations in Safe, Efficient, and Scalable Energy Storage

15:30 ESS North America Overview and Forecast

Sam Jaffe, Vice President, Business Development and Product, Mana Battery

This presentation will explore the size and growth of the US stationary energy storage market. A special focus will be on datacenter battery usage and deployment.

16:00 AI, Data Centres, and the Energy Challenge: The Role of BESS in Powering the Future

Shan Tomouk, BESS & Energy Research Lead, Rho Motion

As AI continues to advance and integrate into everyday applications, energy consumption is expected to surge. This talk will explore how Battery Energy Storage Systems (BESS) can support the rapid expansion of data centres, ensuring reliability, efficiency, and sustainability. We will discuss the benefits of behind-the-meter (BTM) storage, examining how onsite battery solutions help data centres manage peak loads, reduce costs, and enhance resiliency.

16:30 Close of Symposium



19 - 20 MAY 2026 | MAINZ, GERMANY

LITHIUM BATTERY CHEMISTRY — PART 1

Advancements in Lithium-ion and Beyond

MONDAY 18 MAY

8:00 Registration and Morning Coffee

TUESDAY 19 MAY

7:00 Registration and Morning Coffee

MARKET OVERVIEW

8:30 Organiser's Remarks

Victoria Mosolgo, Conference Producer, Cambridge EnerTech

8:35 Chairperson's Remarks

Martin Winter, PhD, Director & Professor, Electrochemical Energy Technology, University of Muenster

8:40 Evolving Prospects for Battery Chemicals: Correcting Forecasts in a Changing European Landscape

Hauke Simon, PhD, Director Strategy, EY Parthenon

Just a few years ago, Europe's battery ambitions seemed limitless. Capacity projections surged ahead of reality, in some cases projecting volumes beyond realistic European demand. Today, the picture looks different. Demand growth is recalibrating, cost pressure is intensifying, and scaling-up has proven more complex than anticipated. This talk cuts through outdated forecasts and examines what the new European reality means for strategy, investment decisions, and competitive positioning in battery chemicals.

9:10 Advanced & Beyond Lithium-ion Technologies for Mobility Applications

Patrick Bernard, PhD, Director, Research, SAFT

Saft is developing new Li-ion products reflecting current market needs in mobility applications: LTO cell for heavy cycling, phosphate-based technologies LFP, LMFP for safety critical. Next generation materials will allow the development of future generations of Li-ion batteries: HV phosphates cathodes, Si rich anodes, and niobium oxide-based anodes. Beyond advanced Li-ion batteries, Saft develops in parallel solid state technologies following polymers and sulfides pathways.

9:40 Challenges in Future Cell Chemistry for Sports-Car Application

Congcong Shang, PhD, Battery Cell Responsible, Ferrari SpA

10:10 Grand Opening Coffee Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

IMPROVED CELL CHEMISTRY

10:55 Cell Chemistry and Engineering

Pauline Herve, Battery Cell Engineer, Alpine Cars

11:25 High-Capacity Negative Electrodes

Egbert Figgemeier, PhD, Senior Manager, IEK 12, Helmholtz Institute Muenster

Replacing carbon-based materials with silicon in negative electrodes for lithium-ion-batteries promises a boost of capacity and is therefore a major R&D topic. Nevertheless, widespread commercial automotive applications with silicon-modified anodes are still at the horizon, but not a commercial fact. Issues regarding volume variations, particle disintegration, and electrolyte consumption are hurdles still to overcome. The presentation will summarise latest efforts and prospects with regard to commercialisation of silicon-based anodes.

11:55 Presentation to be Announced

12:25 Networking Luncheon (Sponsorship Opportunity Available)

13:20 Dessert Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

STROPOWER

SODIUM ION

13:50 Chairperson's Remarks

Egbert Figgemeier, PhD, Senior Manager, IEK 12, Helmholtz Institute Muenster

13:55 Sodium-ion Batteries in Automotive Applications: A New Technology for Hybridisation

Asmae El Mejdoubi, PhD, Chief Product Officer, TIAMAT

This presentation will highlight the performance characteristics of NVPF-HC sodium-ion cells, developed specifically to meet the demands of the high power battery market. These cells demonstrate competitive energy density, excellent power capability, and robust cycling behaviour, making them ideal for hybrid automotive applications. This comprehensive overview aims to position sodium-ion as a credible and strategic technology in the evolving landscape of automotive electrification.

14:25 Design of Sustainable and Recyclable Electrolytes for Lithium-ion and Sodium-ion Batteries

Andrea Balducci, PhD, Professor Applied Electrochemistry, Center for Energy & Environmental Chemistry, Friedrich Schiller University Jena

In this work we report about the design of novel bio-derived and low-fluorinated electrolytes, based on the solvents Tetraethoxyglyoxal (TEG) and γ -valerolactone (GVL) displaying good transport properties, high safety, high sustainability, and a low price. In addition, we will present a water-based recycling process that allows the recovery and reuse of these electrolytes.

14:55 Binder Design Strategy for Next-Generation LIBs- Interfacial Stabilization in Aqueous LFP Cathodes and High-Si Anodes

Stella Deheryan, Application Manager, ENEOS Materials Europe Belgium

ENEOS Materials Corporation is a manufacturer of binder materials for lithium-ion battery and has a large variety of binder products. This presentation highlights a binder design strategy for next-generation batteries, enabling robust interfacial stabilization in aqueous LFP cathodes and high-Si anodes. The advanced binders deliver strong adhesion, high flexibility, and suppression of side reactions, resulting in improved electrode integrity and cycle performance, and reduced gas generation.

15:25 Refreshment Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

LITHIUM SULFUR

15:55 Lithium-Sulfur Batteries: Progress in Cycle Life, Rate Capability, and Specific Energy through Solid-Solid Conversion Chemistry

Holger Althues, PhD, Head, Chemical Surface Technology Group, Fraunhofer Institute for Material & Beam Technology

Sulfidic solid-state electrolytes enable the efficient solid-solid conversion of sulfur and suppress any polysulfide diffusion in solid-state Li-S cells. Further, high-energy Li-S cells were built and evaluated utilising a semi-solid concept. Based on those results, the talk will cover recent progress in materials, processes, and cell design for solid-state Li-S batteries.

16:25 A Strategy for Building High-Cycle Life Lithium/Sulfur Batteries

Steven Visco, PhD, CEO & CTO, PolyPlus Battery

PolyPlus Battery Company has developed a unique Li-ion/sulfur battery technology based on the combination of inexpensive aqueous polysulfide positive electrodes with graphite or silicon negative electrodes. We have demonstrated that the waste product H₂S can be converted to aqueous Li₂S at very low cost and this lithiated aqueous cathode can be used with conventional Li-ion anodes with the introduction of a ceramic membrane (LATP) to produce high-cycle life batteries.

16:55 Presentation to be Announced

CAMX



19 - 20 MAY 2026 | MAINZ, GERMANY

LITHIUM BATTERY CHEMISTRY — PART 1

Advancements in Lithium-ion and Beyond

17:25 Networking Reception in the Exhibit Hall with Poster Viewing
(Sponsorship Opportunity Available)

18:30 Close of Day

WEDNESDAY 20 MAY

8:00 Registration and Morning Coffee

SOLID STATE AND PERFORMANCE

8:25 Organiser's Remarks

Victoria Mosolgo, Conference Producer, Cambridge EnerTech

8:30 Chairperson's Remarks

Martin Winter, PhD, Director & Professor, Electrochemical Energy Technology, University of Muenster

8:35 Sponsored Presentation (Opportunity Available)

9:05 Ultra-High-Power Round Li-ion Cell Design for High-Performance Applications

Verena Drews, PhD, Head of Product Development & Engineering, V4SMART GmbH & Co. KG

Conventional round lithium-ion cells suffer from high temperature increase due to high internal resistance and, therefore, cannot provide the actual available performance. Hence, V4SMART develops and produces lithium-ion cells in Germany with a new mechanical cell design in combination with unique electrode and electrolyte recipes to enable new high-power applications.

9:35 Tailoring of Layered Electrode Materials by Doping and Co-Intercalation for Na-ion Batteries

Philipp Adelhelm, PhD, Professor, Institute of Chemistry, Humboldt-University Berlin

10:05 Latest Technical Advancements and Applications in Li-Metal-Polymer based Solid-State Batteries

Blue Solutions

Sofia Perticarari, Electrochemistry Innovations Manager, Electrochemistry Innovations, Blue Solutions

As a pioneer in solid-state batteries, Blue Solutions continues to advance its solid-state chemistry in diverse and multiple applications. In addition to OEM work, one example is a demonstrated 70% improvement in range for a two-wheeler. We'll present the latest results of our chemistry for automotive and other applications based on our lithium-metal and polymer electrolyte with a sustainable cell design.

10:35 Presentation to be Announced

E-MAGY
on with silicon

11:05 Coffee Break in the Exhibit Hall with Poster Viewing (sponsorship Opportunity Available)

CATHODES

11:50 Enabling High-Performance Cathodes

Simon Lorger, PhD, New Business Development Manager, Cabot Corporation
Cabot's battery materials are critical components of lithium-ion batteries, enabling improved conductivity at the lowest loadings and reliability for next generation batteries. We will present advancements in Cabot's carbon materials and dispersions that enable enhanced performance across lithium ion and emerging battery chemistries. Additionally, we will highlight conductive dispersions, new developments for cathodes, including LITX conductive carbons for the growing battery energy storage system market.

12:20 Olivine Cathode Materials

Chirranjeevi Balaji Gopal, PhD, CTO & Co-Founder, Mitra Chem

LMFP-based cathode materials have been heralded as the next-generation of olivine-based cathode beyond LFP. Yet there are several key technological challenges to be solved ahead of their commercial deployment. This talk will discuss the design trade-offs needed to achieve high-capacity, high-stability

LMFP cathode materials, methodologies to gain a mechanistic understanding of synthesis, and electrochemical performance in cells.

12:50 Innovative Materials for high performance separators

ARKEMA

Francois Beaume, PhD, Technical Lead on Separator Coating Arkema

The separator plays a pivotal role in battery systems, directly influencing safety, performance, and manufacturing efficiency. Arkema will present its latest advancements in materials designed to enhance separator functionality : innovative adhesive solutions tailored for ceramic coating layers and breakthroughs in "sticky separator" technologies enabling efficient battery assembly at room temperature.

13:20 Networking Luncheon (Sponsor Opportunity Available)

14:10 Dessert Break in the Exhibit Hall with Poster Viewing
(Sponsorship Opportunity Available)

14:40 Close of Track



19 - 20 MAY 2026 | MAINZ, GERMANY

EV TECHNOLOGY FOR HEAVY-DUTY APPLICATIONS

Exploring Innovation in HEV Batteries and Infrastructure

MONDAY 18 MAY

8:00 Registration and Morning Coffee

TUESDAY 19 MAY

7:00 Registration and Morning Coffee

INDUSTRY TRENDS

8:30 Organiser's Remarks

Sarah Stockwell, PhD, Conference Producer, Cambridge EnerTech

8:35 Chairperson's Remarks

Tom Maul, Principal Product Manager—Innovation, Elysia Battery Intelligence

8:40 Battery Trends and Technology Choices for Medium- and Heavy-Duty Electrification

Ali Adim, Manager, Head of Battery Research, Mobility, S&P Global

This session explores the electrification of medium- and heavy-duty vehicles, highlighting battery chemistry forecasts, supply-chain trends, and technology choices for different applications using the latest MHCV battery forecast at S&P Global Mobility. It also examines how standardisation of modules and packs can reduce costs and accelerate adoption, providing delegates with a clear view of the key drivers shaping the commercial-vehicle battery landscape.

CHEMISTRY FOR HEAVY-DUTY APPLICATIONS

9:10 LMFP-NMC-Blend Chemistry for Commercial-Vehicle Application: Understanding of Lithiation and Delithiation Mechanisms

Dragoljub Vrankovic, PhD, Manager, Team Cell Technology, Daimler Truck

Battery-electric trucks can be the future backbone of the transport industry—combining maximum energy efficiency with good flexibility. Daimler Truck AG has proven with a number of projects and products on a global scale how capable these electric trucks can be. This presentation will investigate the special needs of batteries and cells for commercial vehicles with a special focus on the lithiation and delithiation mechanisms in LMFP-NMC blends.

9:40 Battery-Chemistry Considerations for Heavy-Duty Trucks

John Forgie, PhD, Electrochemistry Senior Manager, Accelera by Cummins

With concerns on range, cost, and charging infrastructure to mass adoption of BEV heavy-duty trucks, hybrid battery powertrains offer an alternative that combines the traditional ICE with a battery to provide an intermediate step towards electrification. The electrochemistry considerations and performance requirements in cell design differs to that of BEV, which will be discussed in the various levels of hybridisation as investigated at Accelera.

10:10 Grand Opening Coffee Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

CHEMISTRY FOR HEAVY-DUTY APPLICATIONS [CONT.]

10:55 From Northvolt Roots to Scania Integration: Engineering a Next Generation Industrial Battery Platform

Chris Wiak, CTO, Scania Industrial Batteries

Scania Industrial Batteries transforms Northvolt's industrial legacy into a unified platform delivering rugged, modular, software enhanced energy systems for demanding off road applications. This session explores how the carve out accelerates electrification in demanding industrial segments, enhances product resilience, and enables end to end solutions, positioning Scania as a leader in heavy duty electrification.

APPLICATION-DRIVEN DEVELOPMENT

11:25 Implementation of Fast-Charge Batteries for Heavy-Duty Applications

Brian Barnett, PhD, CTO, Nyobolt

Batteries capable of fast charge hold great interest for electrification of multiple heavy-duty applications. These require many charge–discharge cycles, often high-discharge power, and limited trade-off of energy density. Fast charge supports higher uptime and work rates. Nyobolt is working with partners in robotics, mining, and construction to implement batteries capable of 5–10-minute full SOC charging, high cycle life, and acceptable thermal attributes. Technology and implementation efforts are described.

11:55 Engineering the Safest Heavy Duty Battery Packs: NextGen LFP & NMC Without Compromise

• **IMPACT**

Bartek Kras, Vice President, IMPACT Clean Power Technology

Heavy-duty vehicle electrification faces conflicting demands: low cost per kWh, higher energy density, 15-year lifetime, and uncompromised safety. Impact addresses this with two European-manufactured battery platforms: standardized ultra-low-cost LFP packs using next-generation blade cells with 4,000+ cycles, and high-energy semi-solid NMC packs exceeding 200 Wh/kg at pack level. Design trade-offs and competitiveness are discussed.

12:25 Networking Luncheon (Sponsorship Opportunity Available)

13:20 Dessert Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

APPLICATION-DRIVEN DEVELOPMENT [CONT.]

13:50 Chairperson's Remarks

John Forgie, PhD, Electrochemistry Senior Manager, Accelera by Cummins

13:55 BEV Systems for Underground Mining Applications

Tuulia Ahlman, MSc, BEV Business Development Manager, Sandvik

Battery-electric heavy-duty vehicles face very different challenges in a mining environment compared to on-road BEVs. This talk will give an overview of typical duty cycles that actual, deployed underground mining BEV fleets see, how a vehicle-battery-charger system is optimised for this type of application, and what are OEMs looking for in emerging battery technology to enable the next horizon of improvements.

14:25 Electrifying the (Almost) Impossible: Battery System Architecture Development to Unlock Zero-Emission Mining

Allan Paterson, PhD, Head, Battery Development, Fortescue ZERO

Electrifying ultra-heavy mining equipment was long considered beyond practical reach. This presentation explains how Fortescue leverages advances in battery chemistry, pack architecture, thermal, structural, and control design to redefine zero-emission heavy industry. Lessons from motorsport and high-performance electrification inform solutions for multi-megawatt duty cycles, harsh environments, and fleet-scale optimisation, highlighting the architectural innovations needed to shift from diesel dependence to fully electric mine sites across global mining operations worldwide.

14:55 Advancing Battery Development for Commercial Vehicles

Verena Loefqvist Klass, PhD, Unit Head Cell R&D Sweden, TRATON AB

Commercial vehicle batteries face demanding requirements, including high energy throughput, multi pack configurations, and robust thermal strategies. This presentation shares insights from recent Traton battery research; we highlight methods for deriving battery insights from field data, accelerating development through efficient test analysis and making use of hybrid models - illustrating a path towards durable, cost efficient battery systems for commercial vehicles."

15:25 Refreshment Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)



19 - 20 MAY 2026 | MAINZ, GERMANY

EV TECHNOLOGY FOR HEAVY-DUTY APPLICATIONS

Exploring Innovation in HEV Batteries and Infrastructure

APPLICATION-DRIVEN DEVELOPMENT [CONT.]

15:55 Batteries for Long-Haul Electric Trucks

Hanna Bryngelsson, PhD, Vice President Technology Strategy and Planning, Volvo Group

This presentation offers a concise overview of batteries tailored for long-haul electric trucks, focusing on key performance needs, system challenges, and the evolving role of energy storage in enabling sustainable freight transport across demanding routes and operational conditions.

16:25 Innovating Battery Systems for Emerging Heavy-Duty Needs

Sebastian Kratzer, Senior Manager, Architect Battery Pack & System, MAN Truck & Bus SE

The TRATON Common Battery Platform enables a unified and scalable battery architecture across Scania and MAN for both trucks and buses. This presentation provides insights into the technical design foundations, cross brand modularization strategy, and industrialization approach behind the platform. It also covers key R&D aspects of the cell technology, pack design, BMS, and validation.

16:55 Sponsored Presentation (Opportunity Available)

17:25 Networking Reception in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

18:30 Close of Day

WEDNESDAY 20 MAY

8:00 Registration and Morning Coffee

APPLICATION-DRIVEN DEVELOPMENT [CONT.]

8:25 Organiser's Remarks

Sarah Stockwell, PhD, Conference Producer, Cambridge EnerTech

8:30 Chairperson's Remarks

Brian Barnett, PhD, CTO, Nyobolt

8:35 Sponsored Presentation (Opportunity Available)

9:05 Synergy between Heavy Duty and Motorsports

Denis Gorman, Head of Powertrain, RML Group

Heavy duty necessarily involves high powers to move large masses. Therefore, great opportunity exists to transfer technology to/from motorsports applications. Here, an analysis of the common aspects and the unique challenges is presented.

9:35 Haul More Tonnes: Leveraging Software-Defined Vehicles and Ecosystems in Electrified Mining

Tom Maull, Principal Product Manager—Innovation, Elysia Battery Intelligence

Electrifying haulage pushes batteries to their limits: heat, dust, ultra-fast charging, and near-zero downtime. This talk shows how software-defined vehicles, paired with the Elysia embedded-and-cloud ecosystem, close the loop between onboard control and fleet insights for safe performance at-scale. Using targeted telematics, diagnostics/prognostics, and degradation-aware simulation, operators optimise assignments while protecting weaker packs and extracting more from stronger ones: improving range, charge time, lifetime, and total cost of ownership.

10:05 Optimizing Li-ion Battery Compression for Heavy-Duty Vehicle Applications

Inigo Gandiaga, Senior Researcher, Energy Storage and Management, Ikerlan

This presentation will provide an overview of our recent research on the role of mechanical compression in Li-ion battery performance and durability. It will focus on how controlled pressure influences degradation and reliability, highlighting key considerations for meeting the demanding operational and battery-pack integration requirements of heavy-duty applications.

10:35 Sponsored Presentation (Opportunity Available)

11:05 Coffee Break in the Exhibit Hall with Poster Viewing

(Sponsorship Opportunity Available)

APPLICATION-DRIVEN DEVELOPMENT [CONT.]

11:50 From Concept to Reality: Development, Validation, and Manufacturing of LMFP Commercial-Vehicle-Specific Battery Cells

Philip Stephenson, PhD, General Manager, PACCAR Technical Center

Development and validation of commercial-vehicle battery cells requires detailed understanding of the expected system design and use cases for the cells, in the context of battery packs, pack systems, and full vehicles. This presentation will cover requirements, definition, and design for commercial-vehicle-specific battery cells, discuss challenges and approaches toward development and validation of cells, and provide a progress update on new LMFP-based cell testing.

12:20 Presentation to be Announced

12:50 Sponsored Presentation (Opportunity Available)

13:20 Networking Luncheon (Sponsor Opportunity Available)

14:10 Dessert Break in the Exhibit Hall with Poster Viewing

(Sponsorship Opportunity Available)

14:40 Close of Track



19 - 20 MAY 2026 | MAINZ, GERMANY

BATTERY RECYCLING

Advanced Recycling Methods for Sustainable Battery Materials Supply

MONDAY 18 MAY

8:00 Registration and Morning Coffee

TUESDAY 19 MAY

7:00 Registration and Morning Coffee

MARKET DEMAND AND SUPPLY-CHAIN DYNAMICS

8:30 Organiser's Remarks

Sarah Stockwell, PhD, Conference Producer, Cambridge EnerTech

8:35 Chairperson's Remarks

Steve Sloop, PhD, President, OnTo Technology LLC

8:40 Global Battery-Recycling Market Dynamics

Beatrice Browning, PhD, Battery Recycling Technology Lead, Benchmark Mineral Intelligence

In 2025, the global battery-recycling market faced a pivotal regulatory shift. Europe and India moved to restrict black mass exports, while China legalised its import. These changes reshaped prices, trade flows, regional technologies, and commercial structures. This presentation outlines Benchmark's view of today's recycling landscape and examines how regulation, investment, and supply chains are expected to influence market evolution through 2026, and the years beyond, globally and strategically.

9:10 Recycling in an Evolving Battery Landscape – a Ten-year Outlook

Milan Thakore, Principal Analyst - EV & Battery Supply Chain, Market & Strategy, Wood Mackenzie

With battery chemistries, formats and end uses in flux, we examine the impact on the battery recycling market. Raw materials pricing and policy will also be considered to provide an overview of the sector over the next ten years.

9:40 Future Scenarios for the LIB-Recycling Supply Chain

Aki Fujita, Principal, Arthur D. Little

This presentation will discuss a three-dimensional approach for battery-materials reclamation: deactivation, direct recycling, and design. The service of lithium-ion batteries and recycling of their materials is at the forefront of the reestablishment of the global supply chain of critical-materials refining and manufacturing. The industrialisation of this requires innovative processes and design to realise cost and safety demands in the next generation of lithium-ion manufacturing.

10:10 Grand Opening Coffee Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

CIRCULAR ECONOMY

10:55 Driving Circularity: Updates on the EU Legal Framework for EV-Battery Recycling and Their Business Implications

Jan Tytgat, PhD, Director, Government Affairs EU, Umicore

This contribution provides the latest updates on EU rules shaping EV-battery recycling. Key topics include delegated acts on recycling efficiency and material recovery (including end-of-waste and export conditions), recycled content calculation, and carbon footprint reporting. We'll examine how these evolving requirements impact compliance and the business case for recycling, offering insights into obligations and opportunities within the EU's circular economy framework.

11:25 SAE J3327 Electric-Vehicle Battery Traceability Standard: Updates and Pilot-Program Progress

Bryant Polzin, Process Engineer & Deputy Director, ReCell Center, Argonne National Laboratory

SAE International has created a standard for a battery traceability record to harmonise US and EU requirements for incentives and regulations. This standard has laid out an information collection framework, accompanied by a guide to supply-chain mapping and material calculations, and verification options. This presentation will address the items covered in the standard as well as the feedback that was received from the pilot program on the standard.

11:55 Building a Scalable Battery Strategy: Repair First Mindset

Speaker to be Announced, Cox Automotive Inc

This presentation explores how a repair-first mindset can transform EV battery lifecycle management. It highlights why premature recycling reduces value, and how structured repair processes can lower costs, extend battery life, and retain critical components within the ecosystem. Attendees will gain practical insights into building scalable, circular battery strategies for manufacturers and fleets.

 EV Battery Solutions

12:25 Networking Luncheon (Sponsorship Opportunity Available)

13:20 Dessert Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

CIRCULAR ECONOMY (CONT.)

13:50 Chairperson's Remarks

Bryant Polzin, Process Engineer & Deputy Director, ReCell Center, Argonne National Laboratory

13:55 Recycling Challenges of Low-Value Anode and Cathode-Battery Materials: A Sustainability Perspective

Marcel Weil, Scientific Research Group Leader, Research for Sustainable Energy Technologies, ITAS & HIU, Karlsruhe Institute of Technology

Recycling of batteries under the EU Battery Directive is essential to recover valuable materials and reduce environmental harm, but also plays a key role in advancing a circular economy and ensuring sustainable use of critical resources. Central attention is given to the recycling challenges of low-value anode and cathode, addressing economic challenges, technological hurdles, and pathways to improve material recovery and advance circular approaches across present and future battery technologies.

14:25 Advancing Battery Precycling for Sustainable End-of-Life Management

Charles Stuyck, Business Unit Manager, SORTBAT

This presentation explores precycling—the safe dismantling and preparation of large end-of-life batteries for reuse or recycling. It highlights key processes, safety considerations, and market drivers shaping battery after-life strategies, and discusses how effective precycling supports circular value chains and sustainable-material recovery in a growing global battery ecosystem.

14:55 Impurities in Recycled Battery Materials: Anticipating Performance Deviations

Nadia Chibani, PhD, Research Engineer, Ampere

The EU Battery Regulation mandates rising recycled content in EV-battery active materials—by 2031: 16% Co, 6% Li, 6% Ni; by 2036: 26% Co, 12% Li, 15% Ni. Impurities in recycled feedstocks can disrupt active-material formation and battery-grade quality. Using thermodynamic modelling and multi-scale characterisation, this work pinpoints impurity signatures and thresholds where properties diverge, clarifying their impacts before recycled materials reenter the battery value chain.

15:25 Refreshment Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)



19 - 20 MAY 2026 | MAINZ, GERMANY

BATTERY RECYCLING

Advanced Recycling Methods for Sustainable Battery Materials Supply

RECYCLING METHODS

15:55 Post-Treatment Battery Recycling: Technologies, Markets, and the Path to Secure Supply Chains

Kevin Hobbie, Senior Vice President Operations, Green Li-ion

This presentation provides post-treatment recycling market insights, examining how post-treatment refining improves supply-chain security while navigating regulatory challenges. It reviews recycling routes for PCAM, MHP, lithium, and graphite, highlighting technical hurdles and quality gaps. Pyrometallurgical, hydrometallurgical, and non-solvent aqueous methods are compared to assess efficiency and sustainability. Finally, it outlines opportunities for next-generation recycling to meet regional minimum recycled-content requirements across evolving global battery supply chains and markets.

16:25 Characterisation of Process Water from Shredding of Lithium-ion Batteries

Sascha Nowak, PhD, Head of Analytics & Environmental, Electrochemical Energy Technology, University of Münster

Water-using recycling processes—such as wet crushing and electrohydraulic fragmentation—generate large amounts of contaminated process water, resulting in increased costs for the disposal of hazardous waste and safety guidelines. To improve wastewater management, safety, and sustainability of water-assisted recycling processes, comprehensive knowledge of the battery components in the water are required. Analytical techniques can play an important role during these processes, including wet shredding processes, wastewater management, and analytical techniques.

16:55 Sponsored Presentation (Opportunity Available)

17:25 Networking Reception in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

18:30 Close of Day

WEDNESDAY 20 MAY

8:00 Registration and Morning Coffee

RECYCLING METHODS (CONT.)

8:25 Organiser's Remarks

Sarah Stockwell, PhD, Conference Producer, Cambridge EnerTech

8:30 Chairperson's Remarks

Sascha Nowak, PhD, Head of Analytics & Environmental, Electrochemical Energy Technology, University of Münster

8:35 Sponsored Presentation (Opportunity Available)

9:05 Innovative Direct Recycling for a Sustainable Battery Value Chain

Andreas Bittner, PhD, Executive Director, CellCircle UG

Dr. Bittner will give an introduction into CellCircle's innovative direct recycling and its benefits for a sustainable battery value chain in Europe. His presentation includes the concept for recovering ready-to-use active materials from end-of-life batteries and production waste, innovative recycling technologies as well as respective lifecycle assessment. Findings from the Horizon Europe project ReUse will show the potential of this next-generation process for economic and ecological LFP battery recycling.

9:35 Direct Recycling and Battery Deactivation to Improve Safety and Profitability in the EV Industry

Steve Sloop, PhD, President, OnTo Technology LLC

This presentation will discuss a three-dimensional approach for battery materials reclamation: Deactivation, Direct Recycling, and Design. The service of lithium-ion batteries and recycling of their materials is at the forefront of the reestablishment of the global supply chain of critical materials refining and manufacturing. The industrialization of this requires innovative processes and design to realize cost and safety demands in the next generation of lithium-ion manufacturing.

10:05 A Bio-Enabled Circular Economy for Lithium-ion Battery Cathode Metals

Louise Horsfall, PhD, Chair of Sustainable Biotechnology, University of Edinburgh

Metal ions in high concentration are toxic to living things. Microorganisms mitigate this toxicity by exporting metal ions from the cell and precipitating the ions as metal nanoparticles or minerals, preventing reentry and reducing metal-ion availability. We are harnessing this capability to recover metals from lithium-ion battery leachates, using engineering biology to optimise processes and improve scale up. The recovered materials have been well-characterised and show potential for reuse.

10:35 Talk Title to be Announced

Elizaveta Kessler, Business Development Manager Power Storage, Market Segment eMobility EU, Henkel KGaA



11:05 Coffee Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

11:50 Securing the Raw-Material Base for Tomorrow's Solutions by Integrating Electrochemical Approaches into Hydrometallurgical Processing

Sandra Pavon Regana, Dr-Ing, Group Manager, Hydrometallurgical Recycling and Raw Materials Chemistry, Fraunhofer IKTS

Integrating electrochemical strategies into hydrometallurgical processing offers a promising pathway to secure the lithium material base required for tomorrow's energy and mobility solutions. This work presents innovative electrochemical approaches that enhance lithium recovery efficiency, reduce reagent consumption, and minimise environmental impact. By coupling selective electro-extraction with sustainable process optimisation, we demonstrate how electrochemical methods can strengthen lithium supply-chain resilience and support the transition toward a circular, low-carbon battery materials economy.

12:20 Lithium Recovery in Europe: Driving Circular Economy with the CLIMA Process

Simon Bremer, PhD, Head, Development, Accurec Recycling GmbH

The CLIMA process is Accurec's innovative solution for lithium recovery from end-of-life batteries, combining thermal treatment with hydrometallurgical technology. This zero-waste process enables efficient recycling of diverse battery chemistries without mandatory discharging, achieving high-purity lithium carbonate at a fraction of the energy and CO₂ footprint compared to conventional methods. In this presentation, the CLIMA process is evaluated within the context of Europe's dynamic market, recycling approaches, and evolving legislative framework.

12:50 Sponsored Presentation (Opportunity Available)

13:20 Networking Luncheon (Sponsor Opportunity Available)

14:10 Dessert Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

14:40 Close of Track



19 - 20 MAY 2026 | MAINZ, GERMANY

BATTERY ENGINEERING

Building Better Batteries through Improvements in Battery Safety, Cell Engineering, and Battery Management Systems

MONDAY 18 MAY

8:00 Registration and Morning Coffee

TUESDAY 19 MAY

7:00 Registration and Morning Coffee

BATTERY INFORMATION AND INFRASTRUCTURE

8:30 Organiser's Remarks

Victoria Mosolgo, Conference Producer, Cambridge EnerTech

8:35 Chairperson's Remarks

Cheng Zhang, PhD, Associate Professor, Coventry University

8:40 EVE-Ai Battery Fleet Analytics: A Universal Intelligence Layer for EV Fleets and Energy Infrastructure

Serena Carelli, PhD, Battery Modeling, Electra Vehicles Inc.

EVE-Ai provides a unified cloud-edge intelligence layer that resolves poor battery visibility, unplanned downtime, uncertain lifetime, and fragmented data. It delivers real-time SoH, SoC, RUL, early fault detection, and prescriptive guidance that links technical health to business value. With adaptive models, digital twins, and chemistry-agnostic design, it scales seamlessly across EV, BESS, grid, and renewable assets.

9:05 Pioneering Next-Generation xEV Battery Innovations: The All-New Nissan LEAF

Kenji Hosaka, Battery Engineering, Deputy General Manager, Nissan Japan

Nissan has introduced the all-new, 3rd generation LEAF to the European market, building on years of real-world EV experience. This presentation explores how the unique insights gained from previous LEAF models enabled breakthrough battery innovations, developed exclusively for the 3rd generation model. It also demonstrates how these advancements deliver a superior electric mobility experience that only the 3rd generation LEAF can provide.

9:30 Battery Performance Insights: Analysing BMS Data

Wieslaw Brys, Senior Electrical Engineer, Hardware Design, Amazon Robotics

This talk delves into the operational insights gained from Battery Management System (BMS) data. It highlights key metrics, data analysis techniques, and their role in monitoring battery performance, ensuring safety, and optimising system efficiency during real-world operation.

9:55 How BMS Enable BESS Resilience of Critical Infrastructure

Uwe Wiedemann, PhD, Managing Director, Sales & Business Development, Munich Electrification GmbH

The market for utility scale battery energy storage systems (BESS) is growing rapidly and the numbers of planned BESS installations in Europe are skyrocketing. They have to be fast and deploy hundreds of MWh of batteries—at the same time they need to secure the invested assets by considering resilience against cyber attacks from an early project stage until end of life.

10:10 Grand Opening Coffee Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

CELL AND PACK MONITORING

10:55 Advanced Cell Diagnostics: Monitoring Tools for Prototype Battery Systems

Cheng Zhang, PhD, Associate Professor, Coventry University

Innovative battery diagnostics, key to high performance and safe systems, are emerging across Europe. Our projects explore prototype cells with distributed thermal arrays, fibre-optics, reference electrodes and other for battery optimisation and self-healing. These adaptive methodologies suit various systems and industrial applications. Integrating new monitoring solutions into

cells and battery management systems provides unprecedented insights into battery state for characterisation, prototyping, and optimisation.

11:25 Electrochemical Modelling in the Battery Design Process

Simon Schwunk, Lead HV Battery & Cell Simulation, Energy System, Porsche AG

Modelling is part of modern product development. For battery cells electric circuit models are widely used, since they are simple and quick. The talk highlights shortcomings of those models under different operating conditions. Electrochemical models show main advantages in scalability, inter- and extrapolation and knowledge of inner states like the anode potential which limits fast charging. The usage is mapped on a development process.

11:55 Presentation to be Announced

12:25 Networking Luncheon (Sponsorship Opportunity Available)



13:20 Dessert Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

SAFETY TESTING AND REGULATIONS

13:50 Chairperson's Remarks

Natalia Lebedeva, PhD, Scientific Project Officer, Energy Storage, European Commission

13:55 International Regulations for Electric Vehicle Battery Safety Testing: Current Trends and Updates

Natalia Lebedeva, PhD, Scientific Project Officer, Energy Storage, European Commission

In this presentation recent changes in the regulatory requirements for safety testing of battery electric vehicles and, where applicable, their batteries are discussed.

14:25 Impact and Diagnostics of Self-Discharge for Lithium-ion Batteries

Andreas Jossen, Professor & Head, Technical University, Munich

This presentation examines the mechanisms and impacts of self-discharge in lithium-ion batteries, highlighting diagnostic methods to identify degradation pathways. Understanding self-discharge behavior supports improved battery health assessment, performance prediction, and safety management across diverse applications.

14:55 Safety Assessment of Significantly Aged Commercial Cylindrical Cells for Estimation of Second Life Potential

Carlos Ziebert, PhD, Head of Calorimeter Center, Thermophysics & Thermodynamics Group, Karlsruhe Institute of Technology

Over recent years, we conducted extensive calendar and cyclic ageing studies on commercial cylindrical cells using ARC heat-wait-see tests. Results show strong correlations between temperature, charge/discharge rates, and key safety thresholds (onset, venting, thermal runaway), informing improved thermal and safety management for first- and second-life lithium-ion cells.

15:25 Refreshment Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

PREVENTING THERMAL RUNAWAY

15:55 Thermal Runaway and Safety Challenges of Lithium-ion Batteries in Electric Vehicle Applications

Lee Feng, Senior Manager, Amazon

Lithium-ion safety remains one of the most critical technical challenges for electric vehicle users across transportation sectors. This talk will explore key safety concerns related to battery failure, with a particular focus on thermal runaway phenomena, contributing factors, and implications for electric vehicle design and operation. Emphasis will be placed on real-world safety considerations, emerging mitigation strategies, and the importance of coordinated technical and organisational approaches to addressing these risks.



19 - 20 MAY 2026 | MAINZ, GERMANY

BATTERY ENGINEERING

Building Better Batteries through Improvements in Battery Safety, Cell Engineering, and Battery Management Systems

16:25 Engineering Safer Batteries: Insight into Processes Causing Self-Heating

Ulrike Krewer, Professor & Head, Karlsruhe Institute of Technology

Exposing Li-ion batteries to temperatures above 60°C leads to thermal degradation and potentially thermal runaway. This talk gives an insight into these processes including the underlying reaction network at the electrodes and in the electrolyte. Operando electrochemical mass spectrometry reveals a temperature-triggered complex sequence of various degradation gases during heating; the evolution pattern is reproduced by kinetic models, which give an unprecedented insight into the occurring reactions and crosstalk.

16:55 Presentation to be Announced

17:10 Sponsored Presentation (Opportunity Available)

17:25 Networking Reception in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

18:30 Close of Day



WEDNESDAY 20 MAY

8:00 Registration and Morning Coffee

MODELLING AND PERFORMANCE

8:25 Organiser's Remarks

Victoria Mosolgo, Conference Producer, Cambridge EnerTech

8:30 Chairperson's Remarks

Michael Schoenleber, Co-Founder & CTO, Batemo GmbH

8:35 Mechanical feedback between cells and cell barriers and its impact on battery life

John Williams, VP Tech Svcs, Tech Svcs, Aspen Aerogels

The evolution of cell-face pressure within a pouch- or prismatic module is a negotiation between cells, cell barriers, and the module housing itself. While designers think of this primarily as a mechanical problem, it is also an electrochemical one. Cells have opinions about how tightly they're held, opinions that manifest through state-of-health (SOH). This talk will present cycling data on cells with various mechanical constraints, with the goal of identifying SOH-optimal clamping conditions.



9:05 Beyond Data Correlation: Understanding and Mastering Battery Aging with Fast, Physical, and Accurate Models

Michael Schoenleber, Co-Founder & CTO, Batemo GmbH

In this talk, we introduce a methodology that combines aging measurements, intermediate characterisations, and physical aging models and exemplify it through a case study involving the Molicel INR21700-P50B cell. The underlying idea is to use optimised routines to identify aging physically along the different trajectories of aging tests and to integrate the parameters to simulate the full behaviour of aged cells under all scenarios.

9:35 Dynamic Regulation of Operating Pressure and Temperature to Improve the Performance of New Generation Batteries

Serge Montambault, PhD, Researcher, Battery System Engineering, Hydro Quebec

New generation batteries, including Li-ion, require the application of operating pressure, which is of strategic importance in cell operation. In addition to the pressure value, the uniformity of pressure distribution across the cell is critical, especially when the cell volume varies during use. The Intelligent Cycling System developed by Hydro-Québec allows the application of isostatic hydraulic pressure, in addition to dynamically regulating the pressure and operating temperature of the cells.

10:05 Advanced Electrode Engineering for Architected and Dry-Processed Battery Electrodes

Jonghyun Park, PhD, Professor, Mechanical & Aerospace Engineering, Missouri University of Science & Technology

This talk outlines an advanced electrode engineering approach to architected and dry-processed battery electrodes, leveraging field- and laser-assisted strategies—micro-electric-field (μ -EF) casting and femtosecond-laser structuring—together with dry-processing routes. These methods control particle alignment, porosity, and ion-transport pathways to realize hyper-thick electrodes up to \sim 1000 μ m with high areal capacity and stable cycling. Case studies will show how the resulting architectures improve rate capability and durability while enabling scalable, solvent-lean manufacturing.

10:35 Overview and Application of Advanced Characterization and Modeling Techniques for Polymeric Battery Materials

Tobias Waffenschmidt, Senior Specialist CAE, Corporate Research Systems Laboratory (CRSL), 3M

Polymeric materials play key roles in vibration control, thermal protection, impact resistance, and overall battery pack durability. Accurately predicting the mechanical performance of these polymers is critical for reliable battery pack engineering. Although finite element analysis is commonly used for structural evaluation, the nonlinear, rate dependent, temperature dependent behavior of polymeric and adhesive materials introduces significant modeling challenges. This talk outlines advanced mechanical modeling strategies developed specifically for polymeric materials used in battery systems. It reviews characterization methods that capture essential behaviors under battery relevant conditions, including thermal gradients, dynamic loading and crush events. Methods for material model calibration and parameter identification are presented. The talk concludes with verification and validation studies that illustrate the applicability, accuracy, and limitations of these models.



11:05 Coffee Break in the Exhibit Hall with Poster Viewing (sponsorship Opportunity Available)

CELL AND PACK

11:50 Cell and Pack Design

Ahmed Abaza, PhD, Tech Manager, High Voltage Battery Technology, Jaguar Land Rover Ltd.

12:20 Electric Aircraft Battery Engineering 101

Zi Jian Yeo, Principal Battery Engineer, Battery, Sora Aviation

Which cell to use, 2170, 46xx, or pouch cell? How to size a battery pack for an electric aircraft? These are the typical questions in battery engineering for electric aircraft. The talk will get into the basic of Li-ion battery design with tangible aerospace best practices.

12:50 Sponsored Presentation (Opportunity Available)

13:20 Networking Luncheon (Sponsor Opportunity Available)

14:10 Dessert Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

14:40 Close of Track



19 - 20 MAY 2026 | MAINZ, GERMANY

HIGH-PERFORMANCE BATTERY MANUFACTURING

Global Production of Safe, Efficient, Higher Energy Density Batteries

MONDAY 18 MAY

8:00 Registration and Morning Coffee

TUESDAY 19 MAY

7:00 Registration and Morning Coffee

ADVANCES IN CELL MANUFACTURING

8:30 Organizer's Remarks **Organiser's Remarks**

Craig Wohlers, General Manager, Cambridge EnerTech

8:35 Chairperson's Remarks

Sam Jaffe, Vice President, Business Development and Product, Mana Battery

8:40 Bridging the Technology Gap for European Competitiveness via Cell Production Machinery

Kamil Burak Dermenci, PhD, Senior Researcher, Electrical Engineering and Energy Technology Research Group, VUB—Vrije Universiteit Brussel

EU must enhance its battery cell production machinery to diminish its dependence on Asian suppliers and attain sustainable mobility. The talk will cover integrated machinery development, encompassing automated modular slurry mixing, novel coating and drying systems, and integrated calendaring technology. Industry 4.0 principles are included through AI-based quality control, a collaborative data space, and digital interfaces enabling process optimization, scrap reduction, and supports battery passport development.

9:10 Ultrafast Laser Structuring Providing Refinement on Electrode Design for Cylindrical Batteries

Wilhelm Pflöging, PhD, Head of Group Laser Materials Processing/Lithium-ion Batteries, Institute for Applied Materials (IAM-AWP), Karlsruhe Institute of Technology (KIT)

Manufacturing 4690 cells involves the use of laser structuring for thick-film electrodes. Those batteries undergo an accelerated electrolyte filling process. Electrolyte rewetting during battery operation is significantly enhanced, contributing to an increased cycle lifetime and prevents lithium plating during fast charging. The R2R pilot line is undergoing further development to enhance process efficiency. It uses advanced, high-power, ultrafast lasers which have been successfully used with various types of electrode materials.

9:40 AM Batteries' Powder-to-Electrode Dry Manufacturing Technology

Christopher Mohajer, Director, AM Batteries

This session will demonstrate how AM Batteries' Powder-to-Electrode dry manufacturing process delivers batteries that are lower cost, higher performance, and more sustainable. We'll present recent results across NMC, LFP, and Si-C; show why dry electrodes are an enabling technology for solid-state and sodium-ion; compare capex, opex, energy use, and footprint versus wet coating and alternative dry methods; and outline a production-ready roadmap.

10:10 Grand Opening Coffee Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

10:55 How to Charge Faster & Safer with an eisBMS Chipset

Wenzel Prochazka, PhD, Senior Product Manager, Electrification Systems, NXP Semiconductors Austria

A battery management system (BMS) chipset with built-in Electrochemical Impedance Spectroscopy (EIS) may bring lab-grade diagnostics into vehicles. These features may be used to support fast charging current setting and temperature monitoring in a faster, safer, and more accurate control loop. This presentation will explore the reality of implementation.

11:25 Improving Cell Properties and Production Processes through Physics-Based Computer Simulations

Jochen Zausch, PhD, Senior Scientist, Team-Leader Electrochemistry and Batteries, Flow and Material Simulation, Fraunhofer ITWM

We propose to apply computer simulations to support process development in cell and battery production to increase process understanding and optimise production parameters. We will present our approach for describing the foam encapsulation process for batteries with cylindrical cells using an advanced foam expansion model and an efficient numerical solver. Additionally, we'll also touch on our approaches for estimating the electrolyte wetting time and improving the calendaring process.

11:55 Sponsored Presentation (Opportunity Available)

12:25 Networking Luncheon (Sponsorship Opportunity Available)

13:20 Dessert Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

ADVANCES IN CELL MANUFACTURING

13:50 Chairperson's Remarks

Wilhelm Pflöging, PhD, Head of Group Laser Materials Processing/Lithium-ion Batteries, Institute for Applied Materials (IAM-AWP), Karlsruhe Institute of Technology (KIT)

13:55 Disordered Rocksalt Cathode Materials: A Promising Material for Next-Generation Lithium-ion Batteries

Dee Strand, PhD, CSO, R&D, Wildcat Discovery Technologies, Inc.

Development of advanced US-patented cathode materials is critical to establishing next-generation domestic battery materials. Wildcat will highlight breakthrough performance of high energy, low cost, and cobalt- and nickel-free Disordered Rocksalt (DRX) cathodes. Wildcat has significantly improved performance in cycle life, voltage fade, and resistance growth while maintaining high energy density. The material has also been demonstrated with roll-to-roll coating and multi-layer pouch cells.

14:25 Advancing Silicone Foam Technology: Tailored Properties and Optimised Dispensing Solutions

Chia-Hsin Ko

Dow will present how material innovation, advanced testing, and simulation-driven process optimisation enable tailored foam properties, predictive dispensing models, and foam growth simulations—delivering reliable, efficient solutions that meet stringent EV safety and manufacturing standards.

14:55 Optimising Battery Materials

Keri Goodwin, PhD, Chief Technologist, Formulation, CPI

CPI supports partners in the battery-materials and cell-technology areas to accelerate the translation of their innovations from lab- to commercial-scale. We undertake materials scale-up, automated formulation, coating, and characterisation, alongside extensive know-how in process chemistry and engineering. Here we present case studies demonstrating our work in this field with examples of materials, slurry, and cell development. Use of our materials scale-up facility (AMBIC) will also be detailed.

15:25 Refreshment Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

15:55 Introduction of the Beff Navigator: DX Development Acceleration Platform to Shorten Time-to-Market

Shunsuke Amagai, Founder & Co-CEO, Beff

Beff delivers integrated solutions from design to mass production using deep lithium-ion expertise. Beff Navigator accelerates material and cell development with a rapid end-to-end process—from concept and specification design to prototyping, testing, and validation—enabling faster time-to-market. Our professional engineers provide expert support for precise specifications, high-quality prototyping and testing, and advanced analysis, ensuring efficient and



19 - 20 MAY 2026 | MAINZ, GERMANY

HIGH-PERFORMANCE BATTERY MANUFACTURING

Global Production of Safe, Efficient, Higher Energy Density Batteries

reliable development. This presentation will highlight our methodologies and real-world applications using the Beff Platform.

16:25 DRYtraec Process: Shear-Based Dry Electrode Manufacturing for Lithium-ion and Next-Gen Battery Technologies

Arthur Dupuy, PhD, Research Associate, Fraunhofer IWS

Dry electrode manufacturing has emerged as a key innovation for next-generation lithium-ion and solid-state batteries, overcoming the environmental and economic limits of wet-chemical processes. The DRYtraec process, developed by Fraunhofer IWS, enables scalable, solvent-free electrode production through differential roll-speed calendaring, ensuring high-quality electrodes with excellent electrochemical performance. This presentation highlights DRYtraec's principles, advantages, and results across lithium-ion, sodium-ion, lithium-sulfur, and solid-state battery technologies.

16:55 Sponsored Presentation (*Opportunity Available*)

17:25 Networking Reception in the Exhibit Hall with Poster Viewing
(*Sponsorship Opportunity Available*)

18:30 Close of Day

WEDNESDAY 20 MAY

8:00 Registration and Morning Coffee

ADVANCES IN CELL MANUFACTURING

8:25 Organizer's Remarks Talk Title to be Announced

Craig Wohlers, General Manager, Cambridge EnerTech

8:30 Chairperson's Remarks

Jochen Zausch, PhD, Senior Scientist, Team-Leader Electrochemistry and Batteries, Flow and Material Simulation, Fraunhofer ITWM

8:35 Sponsored Presentation (*Opportunity Available*)

9:05 Accelerate Battery Technology Commercialisation through Product Validation and Prototyping

Christian Ruediger, PhD, Managing Director, Chem4Batteries GmbH

Chem4Batteries provide concrete metrics on how the commercialisation of innovative technologies across the battery value chain can be accelerated. The company will emphasise its services, particularly in battery material validation and battery cell prototyping. Focus is placed on the state-of-the-art benchmarking and prototyping laboratory located in Berlin. Target groups include raw material suppliers, battery material producers, cell manufacturers, battery recycling companies, and end-users (OEMs) who are pursuing targeted cell improvements.

GLOBAL MARKET OPPORTUNITIES IN BATTERY MANUFACTURING

9:35 Impacts of AI on the Battery Industry: How Can AI Revolutionise Battery Development and Industrialisation?

Ines Miller, Associate Partner, Battery Technology, P3 Group

AI is transforming our daily work and the battery industry is no exception. In R&D, it can predict new materials and combinations and can also optimise cell and battery designs. In production, it can drive efficiency through predictive maintenance and real-time control. Vertical integration will be key to success, providing end-to-end data access and ownership.

10:05 The Path forward to Cost Reduction in Manufacturing

Sam Jaffe, Vice President, Business Development and Product, Mana Battery

This talk will review the different stages (electrode manufacturing, cell assembly, and cell formation) and steps (up to nineteen, ranging from mixing to coating to calendaring to electrolyte filling and OCV testing) and will explore approaches to reducing both capex and opex costs in each.

10:35 Sponsored Presentation (*Opportunity Available*)

11:05 Coffee Break in the Exhibit Hall with Poster Viewing
(*sponsorship Opportunity Available*)

11:50 Optimising the Manufacturing Process of Sodium-ion Batteries by Using Physics-Based Modelling and AI

Alejandro Franco, PhD, Professor, Université de Picardie Jules Verne

I present an integrated framework utilising pilot line process data, physics-based modelling, and AI to optimise sodium-ion battery electrode manufacturing. Applications of our approach include the investigation on how process parameters influence the textural and electrochemical features of hard carbon electrodes. This multi-scale methodology allows bridging the gap between material properties and final cell performance, adapting our previously validated ARTISTIC approach from lithium-ion batteries.

12:20 Advancing Bipolar Battery Technology: From Research to Industrialisation

Michael Clauss, Technical Consultant, Battery System Integration, IAV GmbH

Since 2014, IAV has been developing bipolar batteries to increase volumetric efficiency and reduce costs through simplified designs. Early research projects focused on materials, manufacturing processes, and vehicle integration. Today, collaboration with OEMs targets higher technology readiness and scalable production. This presentation outlines manufacturing-driven development steps, industrialisation challenges, and the role of advanced solid-state electrolytes enabling high-performance bipolar battery manufacturing.

12:50 Sponsored Presentation (*Opportunity Available*)

13:20 Networking Luncheon (Sponsor Opportunity Available)

14:10 Dessert Break in the Exhibit Hall with Poster Viewing
(*Sponsorship Opportunity Available*)

14:40 Close of Conference



19 - 20 MAY 2026 | MAINZ, GERMANY

xEV BATTERY APPLICATIONS

Applications for the Future Growth of Electric Vehicles Globally

MONDAY 18 MAY

8:00 Registration and Morning Coffee

TUESDAY 19 MAY

7:00 Registration and Morning Coffee

MARKET EXPANSION OF xEVs AND THEIR BATTERIES

8:30 Organiser's Remarks

Craig Wohlers, General Manager, Cambridge EnerTech

8:35 Chairperson's Remarks

Conrad Szczuka, Officer, Battery Policy, European Commission



8:40 Electrics and Electronics: The Future of the HV Architecture at Volkswagen.

Arno Perner, PhD, Battery Cell and Battery System Innovations for Electric Vehicles, Volkswagen AG

Volkswagen AG plans to massively increase the proportion of electric vehicles by 2030. The focus of battery development is on attractive products in the segments Affordable, Range & Performance. Focus of this presentation will be on the electrics and electronics architecture of current and future BEV platforms as well as the design guidelines for optimising customer value with minimized variance.



9:10 Battery Technology of the New All-Electric Porsche Cayenne

Nina Winterholler, Head of Battery Mechanics, Porsche

The new all-electric Porsche Cayenne features innovative battery technology. The presentation covers mechanical architecture from cell to HV battery, with the module being Porsche's first in-house production, and also addresses the efficient cooling system. Key KPIs such as fast-charging capability, power performance, and function-integrated design are emphasised. Attendees will gain in-depth insights into technical advancements and challenges in electromobility.



9:40 An Example of Interactions Between Mechanics and Electro-Chemistry in Battery Cell Development

Edwin Knobbe, PhD, Technical Project Manager, Battery Cell Competence Centre, BMW

BMW has introduced with the BMW iX3 the sixth-generation BMW eDrive technology, which sets new standards for efficiency and long-distance capability. The BMW group has shown that battery cell designs can be influenced by the so-called Electrolyte Motion induced Salt Inhomogeneity (EMSI-effect). This presentation will focus on a solid mechanical perspective of the EMSI-effect by modelling the granular behavior of the porous coating in an anode.

10:10 Grand Opening Coffee Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

10:55 Delivering EV Range and Value through Innovation

Andy Oury, Battery Engineer and Business Planning Manager, General Motors
General Motors is building an electrification powerhouse, having launched a dozen EVs into the market, ranging from the Equinox EV to the Cadillac Escalade IQ. Mr. Oury will provide an update on GM's battery strategy, focusing on engineering the right battery for the right vehicle—aligning performance, cost, and range with customer needs.

11:15 Root Cause Analysis and Repair of Defective Battery Packs at Stellantis

Horst Mettlach, Global Tech Specialist Traction Batteries, Stellantis
With increasing market share of electrified vehicles and continuously rising numbers of traction batteries, there is a demand for battery service and

repair. Stellantis has set up refurbishment centers within Europe based on the experience gained in Rüsselsheim since 2011. Traction batteries of various types can be analysed and repaired. The talk will explain the integrated methodology for root cause analysis and repair of defective battery packs at Stellantis.

11:35 From Field Data to Design: Optimizing Heavy-Duty Batteries Through Application-Specific Cell Testing

Kristina Pfeifer, PhD, R&D Engineer, Product Engineering, Daimler Truck AG
Long-haul trucks operate under duty cycles that differ substantially from those of passenger cars and other light vehicles. This work presents a methodology that replaces this one-size-fits-all approach with a truck-specific ageing procedure based on recorded field data. The resulting test protocols reveal significant differences in degradation behavior, enabling more accurate service-life prediction and more informed cell selection for heavy-duty electrification.

11:55 Presentation to be Announced

12:25 Networking Luncheon (Sponsorship Opportunity Available)

VOLTAIQ

13:20 Dessert Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

MARKET EXPANSION OF xEVs AND THEIR BATTERIES

13:50 Chairperson's Remarks

Kristina Pfeifer, PhD, R&D Engineer, Product Engineering, Daimler Truck AG

13:55 Driving Competitiveness from Chemistry to Cell: Cost Roadmap, Key Levers Localisation, and Forex Dynamics

Er-Rami Fatima-Ezzahra, PhD, Junior Battery Cell Costing Expert, Renault SAS
This presentation outlines the roadmap connecting battery cell chemistry, cost drivers, and localisation strategies in a rapidly evolving global market. The talk provides a concise view of the key technical and economic levers needed to optimize future battery programs, balancing chemistry innovation, localised manufacturing, and Forex risk management.

14:25 Battery Swapping: The Cornerstone of Grid-Interactive Electric Mobility

Frank Kindermann, PhD, Head of Battery System Europe, Battery System Development, NIO

Battery swapping is emerging as a holistic solution that bridges vehicle applications and grid services, redefining energy delivery for electric mobility. Standardized battery packs, as demonstrated by NIO's approach, support modular upgrades in chemistry, thermal management, and diagnostics, ensuring backward compatibility and continuous innovation. Beyond convenience, swap stations can act as distributed energy hubs, integrating renewable sources and enabling demand-side management.

xEV MARKET OUTLOOK

14:45 Electric Vehicles and Batteries Market Trends and Outlook

Teo Lombardo, PhD, Analyst, Energy Technology Perspectives, International Energy Agency

EVs and batteries are at a turnaround: tight profit margins across the battery supply chain favor large and integrated producers, and increased competition in the EV market pushes toward cheaper chemistries. This presentation from the IEA summarizes the latest market trends, recent developments, and outlook of the electric vehicle and battery markets, highlighting the challenges and opportunities in this rapidly evolving landscape.

15:05 Battery Materials Trends and Potential Disruptions

Dylan Khoo, Senior Analyst, Battery Materials, Argus Media
Challenges to the battery supply chain have never been more significant than they are now, and critical minerals have come to the forefront of global discussion. This presentation will cover forecasts for the supply, demand, and



19 - 20 MAY 2026 | MAINZ, GERMANY

xEV BATTERY APPLICATIONS

Applications for the Future Growth of Electric Vehicles Globally

price of key battery materials along with potential disruptions including export controls, capacity challenges, and demand shifts.

15:25 Refreshment Break in the Exhibit Hall with Poster Viewing
(Sponsorship Opportunity Available)

REGULATORY CHALLENGES & OPPORTUNITIES

15:55 Navigating the EU Battery Regulatory Landscape: From Batteries Legislation to Standardisation and Market Trends

Conrad Szczuka, Officer, Battery Policy, European Commission

As the EU moves toward a circular and climate-neutral economy while aiming for boosting its competitiveness, the regulatory framework for batteries is evolving rapidly. Representing the European Commission's Joint Research Centre (JRC), this presentation provides a strategic update on the implementation of the EU Batteries Regulation, looking at the latest developments in omnibus amendments, implementing legislation and the rollout of the Battery Passport.

xEV BATTERY TECHNOLOGY

16:25 Advanced Battery Fire Protection Materials: Bridging Safety and Performance Challenges in EV Battery Systems

Sze-Sze Ng, Principal Technical Service Scientist, Dow

Roman Vanecek, Application Scientist, Automotive, Dow

Zheren Wang, Group Lead Battery, Battery Development, Forward Engineering GmbH

As battery safety regulations tighten, advanced fire protection materials are key to safer, lighter, and more flexible EV battery designs. This presentation surveys different approaches from battery packs on the road, system-level and material-level validation methods, and highlights recent advances in polymeric material research.

16:55 Presentation to be Announced

17:25 Networking Reception in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

18:30 Close of Day

WEDNESDAY 20 MAY

8:00 Registration and Morning Coffee

xEV BATTERY TECHNOLOGY

8:25 Organiser's Remarks

Craig Wohlers, General Manager, Cambridge EnerTech

8:30 Chairperson's Remarks

Sze-Sze Ng, Principal Technical Service Scientist, Dow

8:35 Sponsored Presentation (Opportunity Available)

9:05 Enhanced Battery Safety with ASSB: Navigating Regulations, Design, and Real-World Solutions

Paul Schiffbaenker, Product Manager, Electrification, AVL List GmbH

Global safety standards like GB38031-2025 and ECE-R100 v5 are reshaping battery design. We detail their implications for business model readiness in global markets, address proven strategies to prevent thermal propagation, and examine effective use of simulation tools. Gain insights from real-world demonstrators and design guidelines – while questioning whether LFP is truly the ultimate safe choice, or if ASSB's promise conceals challenges such as Li-metal ignition risk and swelling effects.

9:35 Continuously Adapting: Scalable Pack Solutions for Right-Sizing Autonomy and Cost in a Changing Market

Alexander Fandakov, PhD, Team Manager of Battery & E Traction, Powertrain Research & Technology, IAV GmbH

As demand grows for customer-focused xEVs with high autonomy and competitive pricing, the rise of cylindrical cells supports adaptability to different applications, and supply chain concerns increasingly shape cell chemistry and pack design decisions. This presentation introduces a scalable cell-to-pack approach using cylindrical cells, cutting costs and maximising volume utilisation while improving heat transfer, charging rates, and reparability by eliminating potting, thus delivering cost-effective autonomy "rightsized" for the respective application.

10:05 How CEA Battery Prototyping Activities Can Serve a Growing Industry: Presentation of Cell Design Program with Stellantis

Eric Mayousse, Engineer, Electricity & Mobility, CEA

The CEA's battery prototyping laboratory has the advantage of being versatile. It can produce industry relevant electrodes (centimeters to meters) to manufacture prototypes of various sizes (0-10Ah). This scale allows for the evaluation of numerous KPIs for mature chemistries, as well as the exploration of new processes (reduced solvent or dry) and new generations of batteries (Gen4, Gen5). To illustrate this, the collaboration between CEA and Stellantis will be presented.

10:35 Presentation to be Announced

11:05 Coffee Break in the Exhibit Hall with Poster Viewing
(Sponsorship Opportunity Available)

xEV VENTURE PARTNERING AND INVESTMENT

11:50 PANEL DISCUSSION: World-Wide Venture: How Leveraging International Partnerships Can Level-Up the Innovation Ecosystem

Moderator: Ulderico Ulissi, PhD, Head of Overseas Tech & Start-up Cooperation, CATL

Strategic partnering is key to the success of global electrification. This featured panel of international experts will provide key insights into the state of investment opportunities and how start ups can be prepared to successfully navigate the VC and CVC landscape. The panel will also preview the Rise and Pitch breakout sessions.

Panelists:

Theodora Preda, Principal, Plug and Play Tech Center

Gyen Ming Angel, Managing Director, Prosemino

Mark Windeknecht, PhD, Climate Tech Investor, World Fund

12:50 Sponsored Presentation (Opportunity Available)

13:20 Networking Luncheon (Sponsor Opportunity Available)

14:10 Dessert Break in the Exhibit Hall with Poster Viewing
(Sponsorship Opportunity Available)

14:40 Close of Conference





20 - 21 MAY 2026 | MAINZ, GERMANY

LITHIUM BATTERY CHEMISTRY — PART 2

Advancements in Lithium-ion and Beyond

WEDNESDAY 20 MAY

13:20 Registration Open

13:20 Networking Luncheon (Sponsor Opportunity Available)

14:10 Dessert Break in the Exhibit Hall with Poster Viewing
(Sponsorship Opportunity Available)

CELL AGING

14:40 Organiser's Remarks

Victoria Mosolgo, Conference Producer, Cambridge EnerTech

14:45 Chairperson's Remarks

Martin Winter, PhD, Director & Professor, Electrochemical Energy Technology, University of Muenster

14:50 Cell Aging Analysis

Qianye Huang, PhD, Senior Cell Engineer, Battery Cell Hardware, Volvo Cars

15:20 Impact and Diagnostics of Self-Discharge for Lithium-ion Batteries

Andreas Jossen, Professor & Head, Technical University, Munich

Self-discharge in lithium-ion batteries leads to capacity loss, reduced efficiency, and reliability concerns. This work reviews its underlying mechanisms, impact on performance, and key diagnostic approaches.

15:50 Sponsored Presentation (Opportunity Available)

16:05 Process Control and moisture measurement in the battery life-cycle



Gerhard Kirner, Head of Process Analytics HUB EMEA, Process Analytics, Metrohm Deutschland GmbH & Co. KG

Modern batteries require tight process windows and precise material specs for long life. Measurements are essential across the entire life-cycle: predicting outcomes in R&D, ensuring consistent quality in production, and enabling efficient material recovery in recycling. Moisture strongly affects cell quality. The presentation highlights applications and control mechanisms from ore over production to recycling.

16:20 Refreshment Break in the Exhibit Hall with Poster Viewing

(Sponsorship Opportunity Available)

16:50 Polymer Interphases Designed with Single-Ion Conducting Polymers

Robert Dominko, PhD, Lab Head, Materials Chemistry, National Institute of Chemistry

Interphase stability is crucial for long-term battery performance, especially in all-solid-state systems. A mixed ionic–electronic conducting layer on NMC811 cathodes modulates interfacial kinetics and enables stable cycling under pressure-free conditions. For lithium metal anodes, a protective coating based on modified cellulose, a single-ion conducting polymer, and LiNO₃ promotes uniform Li⁺ transport, suppresses dendrite formation, and improves Coulombic efficiency and cycling stability.

17:20 Li-ion Separator Improvements, Enabling Lower-Cost Cells, Dynamics of Western-China Collaboration

Peter Frischmann, PhD, Co-Founder & CEO, Sepion Technologies

Sepion brings a differentiated approach to replacing graphite anodes with lithium metal by combining the latest in nanoscience, polymer chemistry, and cell engineering to safely unlock a 40% increase in electric vehicle range with a gigafactory-compatible solution.

17:50 Performance Trends in Commercial Battery Technologies

Miha Podbreznik, Technology Manager, Strategy, Fraunhofer Research Facility Production Battery Cell FFB

This presentation provides an overview of performance trends in commercial automotive battery technologies. By examining cells across different formats

and chemistries, the session highlights how designs have evolved, which factors influence current performance levels, and where future developments may head. The talk offers a perspective on the technological directions shaping next-generation electric vehicle batteries.

18:20 Close of Day

THURSDAY 21 MAY

8:00 Registration and Morning Coffee

SOLID STATE

8:25 Organiser's Remarks

Victoria Mosolgo, Conference Producer, Cambridge EnerTech

8:30 Chairperson's Remarks

Juergen Janek, PhD, Professor, Solid-State Ionics & Electrochemistry, Justus Liebig University, Giessen

8:35 Presentation to be Announced

9:05 All-Solid-State Sulfide Ceramic Batteries—Performance, Innovation, Interface Engineering, and Safety

Benoit Fleutot, PhD, Lead Researcher, CEETES, Hydro Quebec

Despite progress in lithium-ion batteries, all-solid-state batteries (ASSBs) offer higher energy density. Sulfide-based electrolytes show promise but face moisture sensitivity and interfacial instability. Hydro-Québec develops ceramic composite ASSBs, optimising cathode interactions and lithium metal interfaces. Innovations like ultra-thin lithium anodes enable over 700 cycles. Electrochemical analysis guides improvements, bringing sulfide-based ASSBs closer to commercialisation and transforming future battery technology with safety.

9:35 Engineering Electrode-Electrolyte Interfaces for All-Solid-State Battery

Zhe Li, PhD, Senior Researcher and Battery Material Lead, Battery R&D, General Motors

Solid-state batteries offer improved safety, wider operating temperatures, and simplified system integration compared to lithium-ion batteries. However, poor interfacial compatibility remains a key barrier to practical application. In this talk, we present strategies leveraging oxide and sulfide solid electrolytes to enhance interfacial stability and extend cycling performance, tailored to diverse vehicle applications.

10:05 Sulfide and Halide Solid Electrolytes: Status, Challenges, and Materials Design for Solid-State Batteries

Juergen Janek, PhD, Professor, Solid-State Ionics & Electrochemistry, Justus Liebig University, Giessen

In this presentation, the current status of sulfide-based SSBs and the recent development of halide solid electrolytes will be briefly discussed, as well as the potential need for targeted design of cathode active materials for SSBs.

10:35 Coffee Break in the Exhibit Hall with Poster Viewing

(Sponsorship Opportunity Available)

SOLID STATE [CONT.]

11:05 Ceramic All-Solid-State Batteries with Ni-Rich NMC Cathodes—Energy-Efficient Processing and Recycling

Martin Finsterbusch, PhD, Group Leader, Solid State Batteries, Forschungszentrum Juelich GmbH

A new strategy is presented to achieve fully ceramic LLZO-NMC cathodes for all-solid-state batteries with areal capacities up to 5 mAh/cm² using pressure assisted sintering (FAST/SPS), also reducing the required energy and processing time by more than 80%. The interface structure and its evolution upon cycling is investigated in detail and strategies are presented to reverse the degradation by component-based recycling, making the presented ASBs more attractive for industrialisation.





20 - 21 MAY 2026 | MAINZ, GERMANY

LITHIUM BATTERY CHEMISTRY — PART 2

Advancements in Lithium-ion and Beyond

11:35 SUBLIME EU—Sulfide Electrolyte Solid State

Seyedhosein Payandeh, PhD, Cell Expert, FEV

Transport produces around a quarter of EU greenhouse gas emissions, with most coming from road transport. Widespread adoption of electric vehicles is therefore essential. SUBLIME aims to accelerate EV uptake by tackling key consumer challenges—reducing costs and enabling longer driving ranges with fast charging.

12:05 Commercialising Next-Generation Lithium-Metal Battery Technology for Electric Vehicle Applications

Martin M. Winterkorn, PhD, Director, QuantumScape

Solid-state batteries promise to revolutionise energy storage with longer range, faster charging, and improved safety. Many players have shown promising proofs of concept, but the major challenge is scaling the technology to meet the massive global battery demand. This talk will cover solid-state lithium-metal battery benefits for electric vehicles and other applications, advanced separator production processes, unique commercialisation strategies including non-exclusive licensing models and current progress toward market deployment.

12:35 Sponsored Presentation (Opportunity Available)

13:05 Networking Luncheon (Sponsorship Opportunity Available)

13:45 Dessert Break in the Exhibit Hall with Last Chance for Poster Viewing

SOLID STATE [CONT.]

14:15 Chairperson's Remarks

Martin Winter, PhD, Director & Professor, Electrochemical Energy Technology, University of Muenster

14:20 Composite Cathodes for Oxide Ceramic All-Solid-State Batteries

Dina Fattakhova-Rohlfing, PhD, Head, Electrochemical Storage, Forschungszentrum Juelich

All-solid-state batteries based on LLZO electrolytes offer high safety and energy density but face challenges in forming stable composite cathodes with high-energy CAMs. We demonstrate additive-free, fully ceramic NCM/LLZO composite cathodes enabled by optimized LLZO composition and low-temperature FAST/SPS processing, achieving dense microstructures, improved interfacial stability, high active material loading, and promising areal capacities.

14:50 Solid Oxide-Based Electrolytes for Advanced Metal Batteries

Venkataraman Thangadurai, PhD, Chair, Energy & Faraday Institution; Adjunct Professor, School of Chemistry, University of St. Andrews

Recent progress and future directions in solid-state oxide-based membranes for next-generation batteries will be discussed. Special attention will be given to Li-based garnets and sodium silicate-based electrolytes for alkali metal batteries.

15:20 The Future of Polymer Electrolytes in EV Applications

Gunther Brunklaus, PhD, Group Leader, Ionics in Energy Storage, IEK 12, Forschungszentrum Juelich

Solid-state batteries enable future operation of electric vehicles. In this talk we discuss candidate polymer electrolytes for lithium metal batteries that afford reasonable cycle life and electrochemical stability. Synergistic performance improvements are demonstrated with hybrid electrolytes that allow for straightforward cell assembly. Relevant aspects of cell designs are addressed, also evaluating the consequences of externally applied pressure as often neglected criterion in view of key performance indicators of polymer-based batteries.

15:50 Session Break

ROADMAP TO 2040

16:05 Chairperson's Remarks

Craig Wohlers, General Manager, Cambridge EnerTech

16:10 PANEL DISCUSSION: Roadmap to 2040: Opportunities & Illusions



Moderator: Martin Winter, PhD, Director & Professor, Electrochemical Energy Technology, University of Muenster

This panel of experts will discuss forecasts for 2040, providing insights about opportunities, challenges, barriers, and key factors shaping the 2040 roadmap and where the industry is going in the near term.

Panelists:

Wolfgang Bernhart, Senior Partner, Automotive Competence Center, Roland Berger GmbH

Fabrice Renard, Senior Advisor, Avicenne Energy

17:05 Close of Conference



20 - 21 MAY 2026 | MAINZ, GERMANY

xEV BATTERY TECHNOLOGY AND MARKET

Driving the Future Growth of Electric Vehicles Globally

WEDNESDAY 20 MAY

13:20 Registration Open

13:20 Networking Luncheon (Sponsor Opportunity Available)

14:10 Dessert Break in the Exhibit Hall with Poster Viewing
(Sponsorship Opportunity Available)

xEV BATTERY TECHNOLOGY

14:40 Organiser's Remarks

Craig Wohlers, General Manager, Cambridge EnerTech

14:45 Chairperson's Remarks

Andreas Braun, Product Area Manager, Battery Systems & Methodology, AVL Deutschland GmbH

14:50 EV Battery Thermal Explosion 1D Analysis Technology

Dongyeong Kim, Research Engineer, Vehicle Safety Validation Team, Hyundai Motor Co

Securing EV Thermal runaway safety is a key challenge for automakers, and real-life verification for this requires a lot of time and money. This presentation introduces innovative 1D analysis technology that accurately models the thermal runaway heating mechanism of battery component developed by Hyundai Motor Company. This technology will enable preemptive verification before physical testing, dramatically increasing development efficiency and changing the paradigm of next-generation battery safety design.

15:10 Ahead of the Heat: EIS for Early Warning and Prevention of Thermal Runaway

Claire Leveugle, PhD, Senior Principal Engineer, Automotive, Analog Devices

This presentation will demonstrate how Electrochemical Impedance Spectroscopy (EIS) can provide early warning of thermal runaway (TR) in electric vehicle (EV) battery packs. By measuring the impedance of individual cells, we can unlock insights into internal failures that precede TR.

15:30 Solid-State Batteries (SSB) Update and the Safety of Solid and Liquid Batteries (LSB)

John Zhang, PhD, CTO/CSO, Polypore International

This presentation will address the safety behavior and underlying mechanisms of SSBs, with direct comparison to liquid-state batteries (LSBs). Testing results show that, during internal shorts in high-energy systems, the severity of fire and explosion follows the order: SSB > LSB. The data indicate a counterintuitive trend—the greater the liquid content in the battery, the safer its behavior under abuse conditions.

15:50 Presentation to be Announced

16:20 Refreshment Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)

16:50 Advancing Automotive Battery-Pack Safety with Innovative Venting Units

Juergen Kosicki, Manager, MANN+HUMMEL

Vents are crucial for battery pack safety, especially under thermal runaway conditions. As battery cell chemistry and pack designs evolve, selecting appropriate venting units becomes increasingly important. The presentation provides an overview of regulatory and technological trends influencing vent design and introduces additional features such as gas sensors and hot particle filters.

17:20 Lithium-Sulfur Batteries: Progress in Cycle Life, Rate Capability, and Specific Energy through Solid-Solid Conversion Chemistry

Holger Althues, PhD, Head, Chemical Surface Technology Group, Fraunhofer Institute for Material & Beam Technology

Lithium-Sulfur-Batteries provide enhanced specific energy at low material costs. However, the liquid based sulfur conversion chemistry involving dissolved

polysulfides leads to many unsolved challenges. Utilising solid-solid sulfur conversion pathways leads to completely different specifications on cell level. The talk will discuss chances and challenges of this technology based on data achieved on multilayer pouch cells.

17:50 Battery Platform Updatability

Joern Neuhausen, PhD, Director, PwC Strategy

Automotive OEMs and suppliers face rapid innovation cycles in cells, BMS, and battery system, intensifying performance and cost pressure and stretching platform investments. Our platform updateability blueprint shows how early definition of battery platform updateability across defined mechanical, electrical, thermal, and software interfaces enables the fast phase-in of new technologies within existing platforms.

18:20 Close of Day

THURSDAY 21 MAY

8:00 Registration and Morning Coffee

xEV BATTERY TECHNOLOGY (CONT.)

8:25 Organiser's Remarks

Craig Wohlers, General Manager, Cambridge EnerTech

8:30 Chairperson's Remarks

Michael Harenbrock, PhD, Principal Expert, Engineering Electric Mobility, MANN+HUMMEL GmbH

8:35 Sponsored Presentation (Opportunity Available)

9:05 Hybrid Battery Enclosure: Integrating Cooling Plate in One-Shot Injection-Moulding Process

Rene Krouss, Development Engineer, Innovation & Research, Textron Inc.

Innovative integration of an aluminum cooling plate, serving as the enclosure base, into a thermoplastic battery housing via one-shot injection moulding enables significant cost and weight reduction. The design supports C2P/C2M architectures, reduces pack Z-height, and enhances mechanical functionality. Proven manufacturability, validated performance, and safety meet all housing requirements while maintaining thermal performance from aluminum cold plates.

9:35 Advances in Novel Pressure Management Systems for Conventional and Solid-State Battery Systems

Javier Zurbitu, PhD, CTO, BATTBELT

Internal pressure management within battery packs is gaining critical relevance due to its direct implications for operational safety, durability, and overall performance. Moreover, emerging battery technologies introduce additional challenges associated with higher internal pressures and increased cell swelling. This presentation addresses recent technological developments for internal pressure control in both conventional lithium-ion systems and next-generation solid-state battery systems, without compromising energy density, packaging efficiency, or cost competitiveness.

10:05 Progress in Solid-State Li-Air Batteries: From Scientific Concepts to Engineering Prototypes

Tim Lin, PhD, CTO and Founder, Solid Energies

Lithium-air batteries (LaB) offer theoretical energy density of ~5200 Wh/kg through complete 4-electron oxygen reduction to Li₂O, rivaling gasoline's energy content. Current liquid-electrolyte LaBs yield incomplete reduction, delivering a fraction of theoretical capacity. Solid Energies Inc. advance solid-state lithium-air battery (SSLaB) technology, overcoming these limitations through the integration of a novel polymer-based solid-state electrolyte with multiscale porous cathodes, transforming SSLaB technology from laboratory concept to practical ultrahigh-energy-density products.

10:35 Coffee Break in the Exhibit Hall with Poster Viewing
(Sponsorship Opportunity Available)





20 - 21 MAY 2026 | MAINZ, GERMANY

xEV BATTERY TECHNOLOGY AND MARKET

Driving the Future
Growth of Electric
Vehicles Globally

xEV BATTERY TECHNOLOGY [CONT.]

11:05 From Regulation to Technology to Business: A Holistic Approach to Sustainability in Battery Development

Andreas Braun, Product Area Manager, Battery Systems & Methodology, AVL Deutschland GmbH

Sustainability in battery development poses a major challenge: aligning regulations, engineering, and business models under growing complexity. This presentation introduces a structured approach that helps organisations map challenges and opportunities across these dimensions. Attendees will learn how this framework supports compliance, design-for-x, digitally enabled lifecycle strategies, and resilience—providing a practical roadmap to turn sustainability requirements into actionable solutions and competitive advantage.

11:35 Global LFP Adoption in BEVs – A Game Changer for Margin Parity?

Dennis Gallus, Principal, Roland Berger GmbH

Price parity between battery electric vehicles (BEVs) and internal combustion engines (ICE) remains the critical enabler for achieving OEM BEV penetration targets. This presentation synthesizes current market developments, OEM strategic responses, and the geopolitical trade-offs shaping the pathway to margin parity in a LFP-centric BEV landscape.

xEV GLOBAL MARKET OUTLOOK

12:05 Sodium and Beyond: Novel Chemistries for Automotive Applications

Chloe Herrera, Senior Analyst, Lux Research

Cost and supply chain security has inspired an uptick in battery chemistries alternatives to Li-ion. In particular, Na-ion is poised to directly compete with Li-ion in terms of cost and application suitability for certain use cases. This talk will provide Lux Research's outlook on the cost and innovation of Na-ion batteries and beyond, and provide an actionable framework to build up the industry.

12:35 Sponsored Presentation (Opportunity Available)

13:05 Networking Luncheon (Sponsorship Opportunity Available)

13:45 Dessert Break in the Exhibit Hall with Last Chance for Poster Viewing

xEV GLOBAL MARKET OUTLOOK [CONT.]

14:15 Chairperson's Remarks

Dennis Gallus, Principal, Roland Berger GmbH

14:20 Forecasting 2030 Battery Costs—Impact of Production Cost on Future Battery Landscape

Shivangee Chauhan, Research Analyst, Benchmark Mineral Intelligence

The session will examine the key drivers of battery cost reduction, with recent Chinese developments used as a platform for identifying potential opportunities for Western producers to optimise production cost. Utilising Benchmark's mine-to-grid battery supply chain coverage, these insights into 2030 battery cost will inform potential demand scenarios for technology adoption, assessing the cost competitiveness of alternative technologies including sodium ion and solid-state batteries.

14:50 A Comprehensive Overview of Global start-ups for Advanced Air Mobility

Christian Scheidler, Editor-in-Chief, EV-portal

An electric revolution is taking place in the aircraft sector. Rapid advances in the energy density of lithium-ion cells are enabling a new category of electric aircraft that can take off and land vertically like a helicopter, but with less noise, no emissions, at a much lower price, and with greater safety.

15:20 Forecasting the Future of Battery Technology

Jard Van Ingen, CEO & Co-Founder, Focus LLC

Breakthroughs in battery technology are accelerating, but leaders still struggle to see which chemistry or architecture will dominate next. This session introduces a first-of-its-kind agentic forecasting method developed by GetFocus from MIT research that uses global patent data, NLP, and improvement-rate modeling to quantify the true pace of battery innovation. Attendees will gain a clear, data-driven view of where xEV battery technology is heading and how fast.

15:50 Session Break

ROADMAP TO 2040

16:05 Chairperson's Remarks

Craig Wohlers, General Manager, Cambridge EnerTech

16:10 PANEL DISCUSSION: Roadmap to 2040: Opportunities & Illusions



Moderator: Martin Winter, PhD, Director & Professor, Electrochemical Energy Technology, University of Muenster

This panel of experts will discuss forecasts for 2040, providing insights about opportunities, challenges, barriers, and key factors shaping the 2040 roadmap and where the industry is going in the near term.

Panelists:

Wolfgang Bernhart, Senior Partner, Automotive Competence Center, Roland Berger GmbH

Fabrice Renard, Senior Advisor, Avicenne Energy

17:05 Close of Conference



20 - 21 MAY 2026 | MAINZ, GERMANY

GLOBAL BATTERY RAW MATERIALS

Balancing Supply, Demand & Costs for Battery Component Materials

WEDNESDAY 20 MAY

13:20 Registration Open

13:20 Networking Luncheon (Sponsor Opportunity Available)

14:10 Dessert Break in the Exhibit Hall with Poster Viewing
(Sponsorship Opportunity Available)

GLOBAL DEMAND FOR BATTERY RAW MATERIALS

14:40 Organiser's Remarks

Craig Wohlers, General Manager, Cambridge EnerTech

14:45 Chairperson's Remarks

Stefan Debruyne, Director of External Affairs, SQM International

14:50 Due Diligence in the EU Batteries Regulation—2026 Update

Alex Graf, Specialist Advisor to the European Commission, Kumi Consulting

Despite the delay until 2027, the EU Batteries Regulation still includes one of the first regulatory obligations to implement risk-based due diligence in line with OECD frameworks. Profound changes to current practices are expected. About one year before the due diligence obligations' application, learn the latest about the current status of EUBR due diligence, existing practice and risk-based due diligence—practical insights and how to get started—if you haven't?

15:20 Sustainability Strategies and Perspectives along the Battery Value Chain

Maximilian Stephan, Research Associate, Fraunhofer Institute for Systems and Innovation Research ISI

Sustainability along the battery value chains, as well as resilient battery ecosystems, are gaining momentum in European ambitions. This talk presents a roadmap for sustainable batteries that builds on the circular economy 9R framework. The roadmap prioritises high-impact and feasible 9R pathways to strengthen Europe's battery resilience and competitiveness and accumulates market assessments, and R&D, industrial, and policy actions.

15:50 Sponsored Presentation (Opportunity Available)

16:20 Refreshment Break in the Exhibit Hall with Poster Viewing

(Sponsorship Opportunity Available)

16:50 How Local Value-Chain Initiatives Will Reshape Battery-Materials Markets

David Steven Jacoby, Managing Director, Energy Consulting, Boston Strategies International

It's no secret that many countries aim to reduce dependence on foreign sources of critical minerals by re-shoring their value chains. This presentation analyses how tariff negotiations and strategic trade realignments will impact mining, processing, and assembly of batteries and other products reliant on cobalt, nickel, graphite, lithium, and rare earths across three scenarios—growth, comparative advantage, and technology standardisation—highlighting implications for CFOs, CEOs, and CTOs investing in value chain continuity.

MARKET OPPORTUNITIES IN BATTERY RAW MATERIALS

17:20 Lithium, Cobalt, Graphite: Trends and Fundamentals for Key Battery-Metals Trio

Lukasz Bednarski, Principal Analyst, S&P Global

In this presentation, we will delve into the critical trio of battery metals: lithium, cobalt, and graphite. We will explore the current market dynamics for these essential metals, highlighting key trends and providing forecasts for their supply & demand fundamentals and prices.

17:50 The LFP Effect: Manufacturing Breakthroughs Are Rewriting Lithium Investing

Cameron Hughes, Battery Market Analyst, CRU Group

Chinese LFP producers are able to now use synthesis routes that take lithium chloride/sulphate directly, skipping full carbonate conversion. This lowers project capex, boosts yields, and streamlines logistics—reshaping costs and timelines through the industry. As intermediates proliferate, carbonate's benchmark role fades, favoring investments in those linked directly to the Chinese value chain and those willing to adapt.

18:20 Close of Day

THURSDAY 21 MAY

8:00 Registration and Morning Coffee

MARKET OPPORTUNITIES IN BATTERY RAW MATERIALS [CONT.]

8:25 Organizer's Remarks

Craig Wohlers, General Manager, Cambridge EnerTech

8:30 Chairperson's Remarks

Richard Clark, Senior Adviser, Allied Graphite

8:35 Sponsored Presentation (Opportunity Available)

9:05 China's Lithium-Battery Market Update

Floyd Ping, Senior Consulting Manager, Battery Market, SMM

Rapid growth of global lithium-ion battery demand, geopolitical factors, and technological development have a great impact on the lithium-ion battery industry, specifically on raw materials. Heavy investment in the raw materials sector could lead to overcapacity once EV sales' growth is lower than expected. Different types of batteries also could reduce dependency on certain raw materials. Huge fluctuation in raw-materials prices could deeply damage the battery industry and beyond.

9:35 Sustainable Lithium Supply—SQM at the Forefront of Transparent Mining Assurance

Stefan Debruyne, Director of External Affairs, SQM International

This presentation highlights the vital role of innovation in driving sustainable mobility, with SQM at the forefront as the world's leading lithium producer. We will explore SQM's commitment to ESG principles, resource-efficient production, and innovative efforts to reduce its footprint. Emphasis will also be placed on SQM's collaborative work with indigenous communities, focusing on value sharing and co-creation, alongside insights into the growing lithium demand and SQM's capacity expansion.

10:05 Nickel Market Review: Trends and Developments in 2026

Francisco Pinto, Manager, Market Research & Statistics, International Nickel Study Group

The presentation will review recent developments in the global nickel market, covering mine and primary nickel production, usage, and international trade. It will discuss factors likely to influence the market in 2026 and beyond. The analysis will draw on INSG's monthly data and the short-term forecast discussed and approved by its member countries.

10:35 Coffee Break in the Exhibit Hall with Poster Viewing

(Sponsorship Opportunity Available)

11:05 Evolving Supply Chains from Next-Generation Battery Technologies

Max Reid, Head of Battery Technology and Costs, CRU Group

Upcoming innovations in battery chemistries and technologies promise improvements in performance, cost, and battery safety. However, they have the potential to upheave traditional supply chains via new routes and new players. This presentation analyses the potential demand for new technologies,



20 - 21 MAY 2026 | MAINZ, GERMANY

GLOBAL BATTERY RAW MATERIALS

Balancing Supply, Demand & Costs for Battery Component Materials

including semi-solid, all-solid-state, LMFP, and LMR, and their impact on raw material demand and supply chains.

11:35 Cathode Active Materials: The Strategic Core of Performance, Cost, and Sustainability

Tom Van Bellinghen, Founder, Lithink

Cathode active materials (CAM) occupy a pivotal position in lithium-ion battery systems, as they are the single most influential component across all three core design criteria: performance, cost, and CO₂ footprint. Understanding cathode materials—both from a technical and a supply-chain perspective—is therefore essential for anyone working to advance next-generation battery technologies or scale-up sustainable energy storage solutions.

12:05 Anode Active Material Supply-Chain Developments and Diversification

Joe Williams, Head of Technical Marketing, Syrah Global DMCC

Graphite anode supply diversification is underway. Production volume of graphite from East Africa, particularly Mozambique (Balama), increases underpinning ex-China Anode production. Anode production in USA (Syrah Technologies) continues to grow, as does Indonesian production. Additionally, Korean, Middle East, Indian, and Moroccan production capacity is under construction. In this session we walk through growth and production investment, market dynamics and customer preferences at the Battery cell and NG AAM production levels.

12:35 Sponsored Presentation (Opportunity Available)

13:05 Networking Luncheon (Sponsorship Opportunity Available)

13:45 Dessert Break in the Exhibit Hall with Last Chance for Poster Viewing

MARKET OPPORTUNITIES IN BATTERY RAW MATERIALS [CONT.]

14:15 Chairperson's Remarks

Francisco Pinto, Manager, Market Research & Statistics, International Nickel Study Group

14:20 Anode Materials—Where Is the Lithium-ion Battery Industry Headed?

Richard Clark, Senior Adviser, Allied Graphite

China dominates the lithium-ion battery anode space, but the West wants supply security. We have ongoing competition at the anode between synthetic and natural graphite and various forms of silicon-containing materials, as well as a reemergence of lithium. This presentation will provide a coherent projection of the future, based on the presenter's work of more than 25 years in the anode space.

14:50 Critical Materials and Supply-Chain Constraints

Robert Burrell, PhD, Research Manager, Project Blue

Supply chain issues facing battery raw materials will be explored in detail, along with extraction and processing costs of midstream battery materials and downstream battery cells. As downstream production ramps in Europe and North America this decade, underlying supply chains will become stretched, opening the door for challenge but also opportunity. These themes and an overall market-demand outlook for the sector will be presented.

15:20 Role of Kemira in Building European pCAM Production

Piritta Salonen, Principal Scientist, Research & Innovation, Kemira

Europe's battery sector faces limited local production and heavy reliance on imports from Asia. Kemira, with over a century of experience in chemistry and proven expertise in metal salts for water treatment, is applying this knowledge to develop sustainable iron-based materials for battery applications such as LFP. This presentation will discuss how Kemira's portfolio and R&D enable regional production and strengthen Europe's position in the global battery market.

15:50 Session Break

ROADMAP TO 2040

16:05 Chairperson's Remarks

Craig Wohlers, General Manager, Cambridge EnerTech

16:10 PANEL DISCUSSION: Roadmap to 2040: Opportunities & Illusions



Moderator: Martin Winter, PhD, Director & Professor, Electrochemical Energy Technology, University of Muenster

This panel of experts will discuss forecasts for 2040, providing insights about opportunities, challenges, barriers, and key factors shaping the 2040 roadmap and where the industry is going in the near term.

Panelists:

Wolfgang Bernhart, Senior Partner, Automotive Competence Center, Roland Berger GmbH

Fabrice Renard, Senior Advisor, Avicenne Energy

17:05 Close of Conference



20 - 21 MAY 2026 | MAINZ, GERMANY

AI FOR ENERGY STORAGE

Optimising Future Energy-Storage Systems with Artificial Intelligence

WEDNESDAY 20 MAY

13:20 Registration Open

13:20 Networking Luncheon (Sponsor Opportunity Available)

14:10 Dessert Break in the Exhibit Hall with Poster Viewing
(Sponsorship Opportunity Available)

AI-ACCELERATED BATTERY DEVELOPMENT

14:40 Organiser's Remarks

Ian Murray, Associate Conference Producer, Cambridge EnerTech

14:45 Chairperson's Remarks

Weihan Li, Junior Professor, RWTH Aachen University

14:50 Characterisation and Design of Battery Electrodes with Generative AI

Isaac Squires, CEO, Polaron

The development of next-generation batteries is bottlenecked by slow, manual scientific workflows. While industrial manufacturing is highly automated, materials research remains expert-driven and iterative. This talk will explore how AI can shorten this loop—from automated microstructural characterisation and multimodal reconstruction to data-driven design and optimisation. Using real industrial case studies, we'll show how Polaron's platform accelerates the path to higher-performing battery materials.

15:20 Integrating AI/ML, Physics, and Real-World Test Data for Battery Material Development—Without Overtraining

Brian Sisk, PhD, CTO, Sepion Technologies

Artificial intelligence and machine learning have transformed battery research, progressing integration of computational techniques with chemistry/physics. Starting with quantitative models, progressing through multiphysics models and "digital twins," we now see AI/ML being used as primary research tools. Without physics-based models and real-world test data, we incur the risk that "models training models" loses fidelity. This presentation focuses on the integration of AI/ML, physics, and testing to reduce overtraining risk.

15:50 Presentation to be Announced

16:20 Refreshment Break in the Exhibit Hall with Poster Viewing (Sponsorship Opportunity Available)



AI FOR BATTERY MANUFACTURING APPLICATIONS

16:50 Battery Manufacturing Process Modelling and Optimisation Based on a Hybrid (AI and Physics-Based) Approach

Mona Faraji-Niri, PhD, Assistant Professor, Energy Systems, Energy Innovation Centre, University of Warwick

The manufacturing process of batteries has about 140 steps and almost 600 variables, which make the optimisation of battery performance against the manufacturing process very challenging. AI techniques provide an opportunity to formulate and understand the impact of key variables, and eventually, when combined with physics-based models and experimental practices, can support products' predictability and reduce the number of tests and experiments needed for their design and optimisation.

17:20 AI-Driven Anomaly Detection in Battery-Cell Manufacturing Using Scanning Acoustic Microscopy

Moritz Kroll, PhD, Battery Data Science, Electrical Energy Storage, Fraunhofer Institute for Solar Energy Systems

Manufacturing anomalies in battery cells can compromise safety and longevity of energy storage systems. Scanning acoustic microscopy offers a promising approach for rapid, cost-effective, and reliable in-line inspection of battery cells. Unsupervised feature extraction from ultrasonic time-series data, combined with clustering algorithms, enables automated anomaly identification,

localisation, and classification, reducing production waste and enhancing battery safety.

AI FOR BATTERY RECYCLING

17:50 AI-Powered Identification and Sorting of Unlabeled Lithium-ion Batteries

Elixabete Ayerbe Olano, PhD, Team Leader, Modelling and Postmortem Analysis, FDTN CIDETEC

Industrial battery sorting demands fast, non-destructive, and cost-effective diagnostics, yet conventional methods are often too slow or resource-intensive. CIDETEC explored simple voltage measurements combined with explainable machine-learning strategies to classify lithium-ion chemistries and estimate state-of-health (SOH) from different C-rate data. This approach captures degradation trends and supports cell reuse decisions, offering a scalable, practical solution for automated, high-throughput battery diagnostics without requiring extensive historical data or laboratory testing.

18:20 Close of Day

THURSDAY 21 MAY

8:00 Registration and Morning Coffee

LEVERAGING REAL-WORLD BATTERY DATA

8:25 Organiser's Remarks

Ian Murray, Associate Conference Producer, Cambridge EnerTech

8:30 Chairperson's Remarks

Brian Sisk, PhD, CTO, Sepion Technologies

8:35 Sponsored Presentation (Opportunity Available)

9:05 What Battery Field Data Can Tell Us and How AI Helps Us Hear It

Weihan Li, Junior Professor, RWTH Aachen University

Field data from batteries offers an enormous and often underused opportunity to accelerate innovation in battery technology. In this talk, I will explore the key challenges and emerging opportunities associated with leveraging real-world operational data throughout the battery development cycle.

9:35 BMINN: Learning Chemical Potentials of Battery Electrodes from Routine Current-Voltage Data

Changfu Zou, PhD, Professor, Electrical Engineering, Chalmers University of Technology

Phase transitions in battery electrodes govern rate performance, safety, and lifetime, yet their underlying thermodynamics are typically accessible only through specialised cells and costly *operando* characterisation. Here, we introduce Bayesian model-integrated neural networks (BMINN) to reconstruct thermodynamically consistent electrode chemical potentials and Gibbs free energies directly from cycling data. The obtained detailed free-energy landscapes accurately capture staging structures, energy barriers, and phase-separation dynamics of graphite electrodes.

10:05 Leveraging AI to Accelerate Diagnostics of Ageing Modes towards Precise Mitigation of Battery Degradation

Hajjun Ruan, PhD, Assistant Professor, Institute for Clean Growth & Future Mobility, Coventry University

Diagnosing battery degradation is challenging due to the complex, nonlinear, and path-dependent nature of the problem. We develop a rapid, generalised diagnostic that quantifies degradation modes of batteries aged under various conditions, without performing extensive ageing experiments for AI training. The identified modes are employed to advance derating control, effectively managing fast degradation. This work highlights the value of AI in identifying degradation modes and mitigating battery degradation.



20 - 21 MAY 2026 | MAINZ, GERMANY

AI FOR ENERGY STORAGE

Optimising Future Energy-Storage Systems with Artificial Intelligence

10:35 Coffee Break in the Exhibit Hall with Poster Viewing
(Sponsorship Opportunity Available)

AI FOR BATTERY MONITORING

11:05 Fast Charge and ROM-AI, Bridging the Gap between Cell and Pack Design

Philippe Desprez, PhD, Principal Expert, Automotive Cells Company (ACC)

Fast-charge management is a must to democratise EV usage. Charging time is the companion criterion to embedded energy for increasing EV acceptance. We will discuss experimental high-throughput screening approach advantages and challenges. Then fast-charge digital-twin approach is presented with use of ROM-AI to connect EV fast-charge time to cell design and material choice. Finally, AI capability for design exploration and guidance towards global design optimization.

11:35 Connecting Patterns to Principles: Explainable AI for Monitoring Battery Health

Eibar J. Flores, Research Scientist, SINTEF Industry

We highlight the role of differential curves as vital signs of battery health. Moving beyond low-rate characterisation, we show that data-driven methods can uncover patterns from high-rate differential capacity. Explainable AI attributes poor cell health to phase transitions in active materials, linking material behavior to operational outcomes. Using AI to connect data patterns to electrochemical principles supports the diagnosis of battery health and guides design choices for longer battery lifetime.

12:05 Intelligent Battery-Management System for Li-Metal Batteries

Kostyantyn Khomutov, Co-Founder and CEO, GBatteries

Li-metal batteries offer exceptional energy density but face safety and cycle-life challenges. GBatteries' Intelligent Battery Management System uses adaptive pulse-based control to enhance performance, reduce degradation, and enable prediction, detection, and prevention of safety events. Validated in drone and aerospace applications, it improves runtime by up to 63%. This session explores how intelligent control accelerates the safe adoption of Li-metal batteries for electric mobility.

12:35 Sponsored Presentation (Opportunity Available)

13:05 Networking Luncheon (Sponsorship Opportunity Available)

13:45 Dessert Break in the Exhibit Hall with Last Chance for Poster Viewing

LEVERAGING REAL-WORLD BATTERY DATA [CONT.]

14:15 Chairperson's Remarks

Mona Faraji-Niri, PhD, Assistant Professor, Energy Systems, Energy Innovation Centre, University of Warwick

14:20 Data-Driven Battery-Safety Prediction

Jun Xu, PhD, Associate Professor Mechanical Engineering, Spencer Lab, University of Delaware

This work unifies physics-based electrochemo-mechanical modelling with machine-learning tools to rapidly identify battery safety risks, including defective cells, internal short circuits, and thermal-runaway precursors. Large datasets generated from coupled mechanical and electrochemical simulations enable accurate risk classification across states of charge, loading conditions, and cell formats. The work demonstrates a powerful physics-informed, data-driven approach for real-time battery safety assessment.

14:50 Understanding Forecasting Performance for Market Participation of Battery Energy Storage Systems

Paolo Gabrielli, Principal Engineer, Energy Management & Markets, Huawei

This contribution investigates the performance of electricity price forecasting when using forecasts to maximize the revenue of battery energy storage systems (BESS) into multiple electricity markets, including wholesale electricity markets as well as frequency reserve markets. More specifically, we study the correlation between forecasting performance and BESS profitability, we investigate several performance metrics, and we assess which performance metrics are most suited when focusing on energy market applications.

15:20 AI-Based High-Precision Time Series Regression and Its Application in Energy Storage

Michael Grill, Head of Artificial Intelligence & Simulation, FKFS

Many issues in design, monitoring, and optimisation of battery storage systems are based on time series, for example, from sensor signals. The real systems behind the sensor are inherently inertial. In battery cells, these inertia effects often occur simultaneously on different scales (e.g. electrochemical processes and thermal inertia). AI approaches must therefore be able to deal with inertia effectively. Possible solutions and applications will be presented in the lecture.

15:50 Session Break

ROADMAP TO 2040

16:05 Chairperson's Remarks

Craig Wohlers, General Manager, Cambridge EnerTech

16:10 PANEL DISCUSSION: Roadmap to 2040: Opportunities & Illusions



Moderator: Martin Winter, PhD, Director & Professor, Electrochemical Energy Technology, University of Muenster

This panel of experts will discuss forecasts for 2040, providing insights about opportunities, challenges, barriers, and key factors shaping the 2040 roadmap and where the industry is going in the near term.

Panelists:

Wolfgang Bernhart, Senior Partner, Automotive Competence Center,

Roland Berger GmbH

Fabrice Renard, Senior Advisor, Avicenne Energy

17:05 Close of Conference



20 - 21 MAY 2026 | MAINZ, GERMANY

GLOBAL BATTERY MANUFACTURING PRODUCTION

Maximising Production Efficiency & Quality to Deliver on Global Demand

WEDNESDAY 20 MAY

13:20 Registration Open

13:20 Networking Luncheon (Sponsor Opportunity Available)

14:10 Dessert Break in the Exhibit Hall with Poster Viewing
(Sponsorship Opportunity Available)

SCALING GLOBAL BATTERY PRODUCTION

14:40 Organizer's Remarks

Craig Wohlers, General Manager, Cambridge EnerTech

14:45 Chairperson's Remarks

Peter Lamp, PhD, Senior Strategic Advisor, Scires Battery Technologies GmbH

14:50 Battery Supply Chains

John Kwon, General Counsel of Global Legal & Strategy, Contemporary AmpereX Technology Limited (CATL)

This presentation will address strategies for optimising a manufacturing base and supply chain to support the latest battery products.

15:20 Mass Production Processes for Semi-Solid and Solid-State Batteries: From the "Laboratory" to the "Production Line"

Mark Lu, PhD, Senior Industrial Analyst, Industrial Economics & Knowledge Center, Industrial Technology Research Institute

The solid-state battery market is beginning to differentiate between "mass-producible semi-solid-state" and "all-solid-state batteries under development." Semi-solid-state batteries were delivered and installed in vehicles in China between 2024 and 2025, with common manufacturing processes employing "in-situ curing" technology to solve the solid-solid interface contact problem. Some Chinese manufacturers are also preparing continuous manufacturing processes for all-solid-state batteries; this report will be updated with the latest developments in 2026.

15:50 Sponsored Presentation (Opportunity Available)

16:20 Refreshment Break in the Exhibit Hall with Poster Viewing

(Sponsorship Opportunity Available)

16:50 The European Battery Industry's Outlook against Chinese Market Dominance and Declining EV Sales Growth

Wolfgang Bernhart, Senior Partner, Automotive Competence Center, Roland Berger GmbH

Outlook on achieving manufacturing targets with on-demand supply balance for Li, Ni, Co, Mn, and graphite; alternative feedstock and processing routes; comparing costs and CO2 emission; strategies to secure critical raw materials adopted by major players; framework for holistic evaluation of manufacturing strategies.

17:20 Lessons Learned in Battery Manufacturing Scale-Up and How UKBIC Bridge the Gap between R&D and Commercialization Scale-Up

Yahya Alvar, Head, Business Development, UK Battery Industrialization Center

This talk will present the lessons learned in battery manufacturing scale-up and how UKBIC bridges the gap between R&D and commercialisation scale-up.

17:50 Regulatory and Market Developments for Batteries and Battery Raw Materials—and Their Contractual and Financial Implications

Thomas Voland, Partner, Clifford Chance Partnerschaft mbB

The regulatory framework and the markets for batteries and battery raw materials are changing rapidly. After years of tightening regulatory requirements lawmakers are now deregulating the product and manufacturing requirements. However, new challenges have arisen, e.g., in relation to trade restrictions. In this session, we will provide a snapshot of legal evolutions in the battery supply chain and discuss, amongst others, state intervention, contractual implications and impacts on financing of projects.

18:20 Close of Day

THURSDAY 21 MAY

8:00 Registration and Morning Coffee

SCALING GLOBAL BATTERY PRODUCTION

8:25 Organizer's Remarks Talk Title to be Announced

Craig Wohlers, General Manager, Cambridge EnerTech

8:30 Chairperson's Remarks

Wolfgang Bernhart, Senior Partner, Automotive Competence Center, Roland Berger GmbH

8:35 Sponsored Presentation (Opportunity Available)

9:05 European Battery Ecosystem - Status and Challenge

Peter Lamp, PhD, Senior Strategic Advisor, Scires Battery Technologies GmbH

This presentation will cover the present status of an European battery ecosystem and address the challenges to grow it to a sustainable, profitable business for the involved industries along the value chain. Present hurdles and possible measures to improve the situation are discussed.

9:35 Why LFP Economics in Europe Are Still Misunderstood: Lessons from Real Gigafactory Cost Models

Fabrice Renard, Senior Advisor, Avicenne Energy

This talk would focus on the gap between perceived and actual LFP competitiveness in Europe, drawing on detailed cost models used to advise European gigafactory projects. It would highlight where cost assumptions tend to break down, how LFP compares to NMC under European industrial conditions, and what this really means for OEM and cell maker decision-making.

10:05 Morocco - Emerging Battery Hub

Idriss Alami, Managing Partner, EV Battery, ALEXEC Consulting Sp z o o

Morocco is emerging as a new battery hub close to Europe providing opportunities for vertical integration and closed loop campaigns. This presentation shall give an overview about the ongoing battery projects and landscape in Morocco and related opportunities in regards to Manufacturing, Sourcing, Recycling and how Morocco will make the global battery supply chain more resilient.

10:35 Coffee Break in the Exhibit Hall with Poster Viewing

(Sponsorship Opportunity Available)

11:05 Global Cost Disparities in Battery Cell Production: A China-Europe Comparison

Luke Sweeney, Senior Battery Analyst, Fastmarkets

We will introduce Fastmarkets' Battery Cost Model in analysing global disparities in battery cell production, specifically comparing Europe to China. And, in doing so, introduce our integrated Cathode Active Material (CAM) cost model to outline CAM's role in overall cell economics. Finally, we'll provide a forward-looking forecast, projecting battery cell production costs over the next five years, highlighting key trends and influencing factors shaping the industry.

11:35 How to Find the Right Manufacturing Partners without Gigafactory References

Simon Voss, Founder and Chief, BETTERE GmbH

Many gigafactories in the planning phase face a significant challenge. The cost pressure is immense, and prices for Li-ion batteries continue to decline. At the same time, there are only a few suppliers with qualified gigafactory references available. So, how can the right partners be identified who stay within the budget and successfully manage production ramp-up without having a gigafactory reference?

12:05 Navigating Battery Industry Risks

Simon Engelke, PhD, Founder & Chair, Battery Associates

The battery industry faces significant risks across supply chain, commercial, and societal impact dimensions. This presentation explores the key challenges



20 - 21 MAY 2026 | MAINZ, GERMANY

GLOBAL BATTERY MANUFACTURING PRODUCTION

Maximising Production Efficiency & Quality to Deliver on Global Demand

of raw material access, financing, and cell sourcing strategies. It also highlights key commercial risks like warranties and second-life suitability, alongside pressing concerns such as battery fires and grid stability. Attendees will gain insights on emerging strategies to address these challenges and drive sustainable growth of the battery sector.

12:35 Decoding Success: Key Differentiators in Battery Factory Project Outcomes—and What That Means for the Next Generation of Gigafactories

Eric Boschert, Battery Manufacturing Expert, Jacobs Engineering

This talk explores what truly separates successful battery factory projects from those that struggle, drawing on lessons learned across Europe and North America. We'll examine how rapid technology evolution—from NMC to LFP and beyond—is reshaping manufacturing strategies and driving new design requirements.

13:05 Networking Luncheon (Sponsorship Opportunity Available)

13:45 Dessert Break in the Exhibit Hall with Last Chance for Poster Viewing

INNOVATION IN R&D FOR MANUFACTURING

14:15 Chairperson's Remarks

Max Reid, Head of Battery Technology and Costs, CRU Group

14:20 Generative Engineering & Digital Twins for Scalable Battery Innovation

Katharina Gerber, Engagement Manager for the Battery Industry, Siemens

This presentation explains how global battery manufacturers accelerate innovation and scale production using advanced simulation tools. It covers the entire process from material design through slurry mixing, coating, drying, calendaring, and cell formation. By combining physics-based models with AI-driven optimisation, manufacturers achieve rapid design iterations, prevent defects, automate processes, reduce costs, improve quality, and shorten time-to-market for next-generation battery technologies.

14:50 Advanced Mechanical Components for Current & Future Cells

Peter Kritzer, PhD, Principal Expert E Mobility & Batteries, Freudenberg Sealing Technologies GmbH & Co KG

Mechanical cell components offer a significant, but currently underestimated potential to improve cells. This presentation gives an overview of Freudenberg's product portfolio for Lithium Cells. Presented products are Cell Caps and Cell Stack Envelopes. In each case a "Generation 1" is presented, which can be implemented in current projects. The "Generations 2" will show, how cell performance like safety and cycle life can be improved by lateral thinking approaches.

15:10 Process Control of Twin-Screw Extrusion for Performant, Continuous Electrode Mixing

Philip Bellchambers, PhD, Research Fellow, WMG, University Of Warwick

Precise, controlled, repeatable and traceable electrode mixing is fundamental to maximising efficiency and yield, and cannot be compensated for by consolidation during calendaring. This talk presents an overview of current research on effective control of electrode microstructure through continuous extrusion processing, quantifying the impact upon processability, sustainability and electrochemistry. Examples demonstrate the often-overlooked significance of electrode mixing when screening materials, rapid process development, and process advantages for large-scale manufacturing.

15:30 Perspectives of Next Gen Li-S Batteries and Analysis of the International Playing Field

Christoph Neef, PhD, Senior Scientist, Fraunhofer Institute for Systems and Innovation Research ISI

Li-S technology has great potential for improving the specific energy of batteries and reducing costs. However, it has not yet achieved a commercial breakthrough. The presentation will analyse the current research and industrial structure for Li-S development and production based on company announcements and technology data. A comparison reveals a differentiated picture between research players, start-ups, and established battery manufacturers from Europe, the US, and Asia.

15:50 Session Break

ROADMAP TO 2040

16:05 Chairperson's Remarks

Craig Wohlers, General Manager, Cambridge EnerTech

16:10 PANEL DISCUSSION: Roadmap to 2040: Opportunities & Illusions



Moderator: Martin Winter, PhD, Director & Professor, Electrochemical Energy Technology, University of Muenster

This panel of experts will discuss forecasts for 2040, providing insights about opportunities, challenges, barriers, and key factors shaping the 2040 roadmap and where the industry is going in the near term.

Panelists:

Wolfgang Bernhart, Senior Partner, Automotive Competence Center, Roland Berger GmbH

Fabrice Renard, Senior Advisor, Avicenne Energy

17:05 Close of Conference



PRESENT A POSTER
AND **SAVE €150**

[LEARN MORE](#)

POSTER INFORMATION

AABC encourages attendees to gain further exposure by presenting their work in the poster sessions. To secure an onsite poster board and/or ensure your poster is included in the conference materials, your full submission must be received, and your registration paid in full by 17 April 2026.

Register and indicate that you would like to present a poster. Once your registration has been fully processed, we will send an email with a unique link and instructions for submitting your materials.

Full time graduate students including Masters, PhD Candidates and post-docs presenting a poster can attend the conference sessions for €449.

Reasons you should present your R&D findings at this conference:

- Your poster will be seen by this exclusive group of technical and business development executives from major European and international battery companies, automotive technology centers and the global materials and energy industries
- Discuss your research and collaborate with interested attendees and speakers
- Your poster will be published in our conference materials
- Receive a €150 discount off your registration

FEEDBACK FROM PREVIOUS EVENTS

"AABC is the event to get up to date with the state of automotive battery technology and meet the experts, suppliers and scientists. A unique opportunity for learning and networking."

- Roland Matthé, Stellantis

HOTEL & TRAVEL INFORMATION

➔ Join us in Mainz!

CONFERENCE VENUE: Mainz Congress, Rheingold Hall
Rheinstrasse 66
55116 Mainz, Germany

HOST HOTEL: Hilton Mainz
Rheinstrasse 68
55116 Mainz, Germany

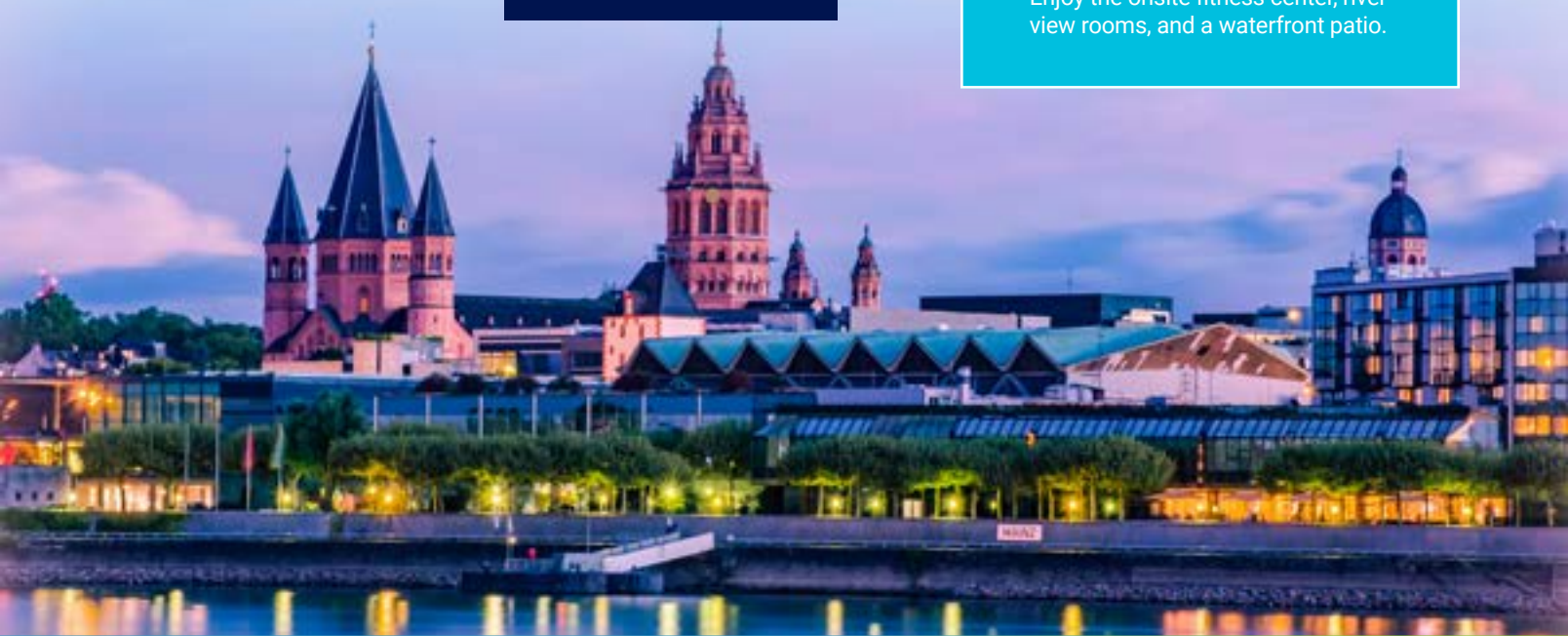
DISCOUNTED ROOM RATE:
€219 Single / €239 Double + VAT

**DISCOUNTED ROOM RATE
CUT-OFF DATE:** 3 April 2026

RESERVE TODAY

TOP REASONS TO STAY AT HILTON MAINZ

- No commute since the conference venue is connected to the hotel.
- Located just 30 km from Frankfurt Airport.
- The hotel is nestled on the banks of the Rhine River, a kilometer from the historic old town.
- Explore St. Stephen's Church, Gutenberg Museum, Mainz Cathedral and more.
- Enjoy the onsite fitness center, river-view rooms, and a waterfront patio.



Can't Join Us In Person?

Connect from anywhere.

Join via our robust virtual platform and access these dynamic features:



INTUITIVE
INTERFACE



COMPANY
BRANDING



DOWNLOADS



LIVE CHAT



LIVE
SESSIONS



RECORDED
SESSIONS



POSTER
SESSIONS

SPONSORSHIP AND EXHIBIT OPPORTUNITIES

SIGNATURE SPONSORSHIP

EXHIBIT HALL & DELEGATE PASSES

- Four Main-conference Registrations
- Complimentary registration for the speaker
- 2m x 6m exhibit space
- Two booth staff passes

THOUGHT LEADERSHIP & BRANDING

- Your choice of one of the following:
 - o 6-8 One-on-one meetings with selected prospects (20 minutes each)
 - o Tote bags (Exclusive)
 - o Wi-Fi Sponsorship (Exclusive)
 - o Charging Kiosk (Exclusive)
- 30-minute presentation within a specific track and the opportunity to participate in the Q&A panel discussion
- Digital Advertisement displayed at the event
- Logo on AAB home webpage with a link to your company's homepage
- Company logo featured in conference materials and on conference signage
- One-week post-event: Full contact information of all participants (GDPR-compliant)

KEYSTONE SPONSORSHIP

EXHIBIT HALL & DELEGATE PASSES

- Three Main-conference Registrations
- 2m x 3m exhibit space
- Two booth staff passes

THOUGHT LEADERSHIP & BRANDING

Your choice of:

- o Networking Reception
- o Networking Luncheon
- Logo on AAB home webpage with a link to your company's homepage
- One-time use of post-conference mailing lists (for a physical mailing) using a 3rd party mail house (GDPR Compliant)
- Company listing including contact information and 50-word description in Conference Materials (deadlines permitting)

GOLD SPONSORSHIP

EXHIBIT HALL & DELEGATE PASSES

- Two Main-conference Registrations
- Complimentary registration for the speaker
- 2m x 3m exhibit space
- Two booth staff passes

THOUGHT LEADERSHIP & BRANDING

- Your choice of:
 - o 6 - 8 One to One Meetings
 - o 15- or 30-minute presentation within a specific conference program
 - o Conference Lanyards
- One-time use of post-conference mailing lists (for a physical mailing) using a 3rd party mail house (GDPR Compliant)
- Company listing including contact information and 50-word description in Conference Materials (deadlines permitting)

PLATINUM SPONSORSHIP

EXHIBIT HALL & DELEGATE PASSES

- Three Main-conference Registrations
- 2m x 3m exhibit space
- Two booth staff passes

THOUGHT LEADERSHIP & BRANDING

- VIP Dinner
- During the event, your company will host an Invitation-only VIP Dinner for 10 - 12 guests and up to 3 representatives from your company. We can accommodate up to 15 seats total. This is a strict cap.
- We will select a high-end restaurant near or at the conference venue to host the dinner. Your Client Services Specialist (CSS) will manage the invitations, guest communications, and on-site logistics.
- Approximately 1-2 months from the start of the event, your CSS will send you and your team an introductory email including:
 - o Information on the selected restaurant.
 - o A blind pre-registration list of event attendees. (title, department, company, location)
 - o A draft invitation to be sent to your prospective guests.
 - o A link to a spreadsheet hosting your confirmed guest list.
- One-time use of post-conference mailing lists (for a physical mailing) using a 3rd party mail house (GDPR Compliant)
- Company listing including contact information and 50-word description in Conference Materials (deadlines permitting)

SILVER SPONSORSHIP

EXHIBIT HALL & DELEGATE PASSES

- Two Main-conference Registrations
- 2m x 3m exhibit space
- One booth staff pass

THOUGHT LEADERSHIP & BRANDING

- Sponsor of Coffee or Refreshment Break
- Sponsor will have the opportunity to provide a 2-3 minute video to be displayed in the meeting rooms prior to the break
- One-time use of post-conference mailing lists (for a physical mailing) using a 3rd party mail house (GDPR Compliant)
- Company listing including contact information and 50-word description in Conference Materials (deadlines permitting)

BRONZE SPONSORSHIP

EXHIBIT HALL & DELEGATE PASSES

- Two Main-conference Registrations
- 2m x 3m exhibit space
- One booth staff passes

THOUGHT LEADERSHIP & BRANDING

- An 8' (2 ½ meters) Display Board will be prominently displayed at the event (sponsor will submit artwork to CET)
- One-time use of post-conference mailing lists (for a physical mailing) using a 3rd party mail house (GDPR Compliant)
- Company listing including contact information and 50-word description in Conference Materials (deadlines permitting)

INCLUDED WITH ALL SPONSORSHIP LEVELS

- Logo on AAB sponsors webpage with a link to your company's homepage
- Company listing including contact information and 50-word description in Conference Materials (deadlines permitting)
- Discount for additional delegate conference registrations
- Conference website listing with URL link back to your corporate website
- One-time use of pre- and post-conference mailing lists (for a physical mailing) using our 3rd party mail house or your mail house
- Company name and URL link included in Conference Proceedings package delivered electronically
- Co-operative email campaign inviting your clients and prospects to attend at a discount

For more information regarding sponsorship opportunities, please contact:



Companies A-K
SHERRY JOHNSON
Lead Business Development Manager
+1 781.972.1359
sjohnson@cambridgeenertech.com



Companies L-Z
ROD EYMAEL
Senior Business Development Manager
+1 781.247.6286
reymael@cambridgeenertech.com

SAMPLE LIST OF 2025 DELEGATES

3M Co, Sr Application Engineer,
EMEA ePowertrain Grp

Amazon Robotics, Sr Electrical
Engineer, Hardware Design

American Honda Motor Co Inc, Sr
Project Engineer, PEM

Arkema, R&D Engineer, CNT &
Battery Applications

Asahi Kasei Corp, Project Dev
Engineer, Battery Materials

Belenos Clean Power Holding Ltd,
Head, Battery

BMW Grp, Head, Research Battery
Technology

Cabot Corp, New Bus Dev Mgr
CEA, Research Engineer, LITEN

Daimler Truck AG, R&D Engineer,
Product Engineering

Deutsches Elektronen
Synchrotron DESY, Beamline
Scientist, FS PETRA D

Dow Chemical Co, Instrument
Technician

ExxonMobil Corp, Customer &
Application Tech Dev Mgr, Carbon
Materials Venture

Ferrari SpA, Battery Cell
Responsible, R&D

Fraunhofer Institute for Solar
Energy, Process Engineer, Battery
Material Tech & Scale Up &
Electric

GDI, Process Engineer, PECVD

General Motors Co, Sr Researcher,
Battery Cell & Pack

Hankook & Company Co Ltd,
Team Mgr, R&D & Quality

Henkel KGaA, Specialist
Sustainable Batteries, Product
Dev
Battery Solutions

Hitachi Ltd, Chief Researcher,
R&D Grp

Honda R&D Co Ltd, Staff Engineer,
Battery Research & Dev

Hyundai MOBIS, Principal
Research Engineer, HEV Battery
System Dev Team

JX Nippon Oil & Energy Corp,
Researcher, R&D

Korea Electronics Technology
Institute, Principle Engineer,
Advanced Batteries Research Ctr

Lucid Motors Inc, Mgr, Battery Cell
Lifetime & Parameterization

Mercedes Benz AG, Head, HV
Battery System Dev

Nissan Motor Co Ltd, Battery
Research Engineer, Research &
Advanced Engineering

Panasonic R&D Co of America,
Engineering Mgr, Energy Storage
R&D

Paraclete Energy Inc, VP Special
Projects

Porsche AG, Dir Battery Systems,
Electrical Electronic Engineering

PwC, Dir

QuantumScape Corp, Sr Engineer,
Cell Dev

Robert Bosch GmbH, Sr Expert,
Mobility Aftermarket

S&P Global, Sr Analyst Critical
Minerals, Metals & Mining

Samsung SDI Europe GmbH,
R&D Scientist, Next Generation
Batteries

Shell Deutschland GmbH, Global
Product Mgr, E Coolants &
Thermal Fluids

Sherwin Williams Co, Global
Market Mgr & Energy & EV
Battery,
General Industrial

Siemens AG, Project Mgr, R&D

Tata Motors Ltd, Lead Engineer,
Battery Dev & Cell Integration

Toshiba Electronics Europe
GmbH, Sr Mgr, Battery Marketing

Toyota Motor Europe, Sr Engineer,
Advanced Powertrain

Volkswagen AG, Battery Cell
Specialist, Li ion Battery Cells &
Pre Dev

Volvo Grp, Sr Cell Engineer,
Battery Hardware

VIEW MORE ATTENDEES!

2025 SPONSORS & EXHIBITORS

24M Technologies Inc

3M Corp RESEARCH LAB

4a engineering GmbH

A123 Systems GmbH

Addionics

Amionx

Amprius Technologies

AMTAS GmbH

ANDRITZ Bitrode Corp

ANDRITZ Sovema SpA

Arbin Instruments

Arkema

Armor Battery Films

Arranged BV

Ascend Elements

Aspen Aerogels

AVL Deutschland GmbH

Battery Dynamics GmbH

Battery Show

Bio Logic Science Instruments

Blue Solutions

Breathe Battery Technologies Ltd

BS&B Safety Systems Ltd

BTR New Material Group Co Ltd

Cambridge Innovation Institute

CAMX Power

CarbonX BV

CELLERATE

Chanhen Chemical Corp

Chem4Batteries GmbH

Chroma ATE Europe BV

Cognition Energy

Coperion GmbH

Coreshell Technologies

CustomCells Holding GmbH

Daejoo Electronic Materials Co Ltd

Delfort

Deutsche Aerogel GmbH

Digatron Systems SRL

Dragonfly Energy Corp

E Lyte Innovations GmbH

E magy

E One Moli Energy Canada Ltd

Eatron Technologies

Echion Technologies LTD

Elkem GmbH

ENEOS Materials Europe Belgium BV

ESI Elemental Scientific

Exponent Inc

FEV Europe GmbH

FOM Technologies

Freudenberg FST GmbH

Fuchs Lubricants Germany GmbH

GDI

HCM Co Ltd

Henkel KGaA

Holst Centre

Honeywell Romania

hte GmbH

Huntsman Advanced Materials

Illumion Ltd

Laminar Co Ltd

MACCOR Inc

Meet Battery Research Ctr

Metrohm Deutschland GmbH & Co
KG

Morgan Advanced Materials

Munters GmbH

Nanocyl SA

NanoNord AS

Neware Technology Hong Kong Ltd

Oerlikon Friction Systems Germany
GmbH

Onejoon Thermal Solutions GmbH

OnTo Technology LLC

PCC Thorion GmbH

PEC

PI KEM Ltd

Purem GmbH

rhd instruments GmbH & Co KG

Rogers Germany GmbH

RTD Talos Ltd

SAE Intl

Saint Gobain Tape Solutions

Schroedinger GmbH

Shell Lubricant Solutions

Shmuel De Leon Energy Ltd

Sino Applied Technology Taiwan
Co Ltd

SIONIC Energy

Speedgoat GmbH

Sphere Energy SAS

Stropower Technologies Co Ltd

Syensqo

TechnoPac GmbH

Tenneco Etain SAS

The Pack

Thermal Hazard Technology

Thermo Fisher Scientific Inc

Topsoe AS

TotalEnergies

TWAICE Technologies GmbH

Ultra Resource Technology Ltd

Umicore

Uncountable

UniverCell Holding GmbH

Voltaiq Inc

VTT Tech Research Ctr of Finland

Wildcat Discovery Technologies Inc

WOLQE GmbH

Xing Mobility Inc

Yangzhou Nanopore Innovative
Materials Technology Ltd