Battery Simulation Day 2025

23 October 2025 | Heilbronn, GER (Audi Sport GmbH, Böllinger Höfe)

Join us for the Battery Simulation Day 2025 - Advancing Battery Technology through Numerical Simulation

Battery Simulation Day is a dedicated event that brings together industry experts and researchers to explore how numerical simulation is shaping the future of battery technology. Under the theme “Enhancing Performance, Safety, and Efficiency,” the program includes inspiring keynotes, expert talks, a panel discussion, a technology exhibition, and an exclusive factory tour at the manufactory Audi Sport GmbH at the Böllinger Höfe - all paired with valuable networking opportunities. Whether you're a researcher, engineer, or decision-maker, this event offers a unique platform to connect with leading minds in battery development, exchange experiences, and discuss the challenges and innovations that will define the next generation of electric mobility.

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DASSAULT SYSTEMES

GAME CHANGER SIMULATION

TARGET AUDIENCE

The Battery Simulation Day is designed for professionals and researchers involved in the development, testing, and integration of battery technologies. The event is ideal for:

- **Simulation and modeling experts** working on battery systems
- **Engineers** from OEMs, suppliers, and battery manufacturers
- **Researchers and scientists** in electrochemistry, thermal management, and material science
- **Product developers** and **system integrators** in e-mobility and energy storage
- **AI and data science professionals** focusing on battery-related applications
- **Decision-makers** and **project managers** seeking to leverage simulation for innovation and efficiency
- **Software and technology providers** offering solutions in the battery simulation space

Whether you're developing next-gen battery packs, optimizing performance, or exploring AI-driven approaches, this event offers valuable insights and connections across the entire battery simulation ecosystem.

CALL FOR PRESENTATIONS

We invite experts from industry and academia to contribute to the Battery Simulation Day. This event will bring together thought leaders, practitioners, and researchers to share insights and advancements in the field of battery simulation for electric mobility.

We are looking for 15-minute presentations (in English) that address simulation-driven approaches, real-world applications, and future challenges in battery technology.

Suggested topics include:

Fundamental Modeling Approaches
- Continuum and Multiphysics Models
- Coupling of Electrochemical, Thermal, and Structural Behavior
- Parameter Estimation and Model Validation

Degradation and Lifetime Prediction
- Lithium Plating, SEI Growth, and Thermal Runaway
- Data-driven vs. Physics-based Lifetime Models
- Accelerated Aging Simulations

Machine Learning and Data-Driven Models
- Hybrid Modeling: ML + physics
- Surrogate Models for Real-time Applications
- Model Training with Sparse/Real-world Data

Best Practice Experiences
in the use of simulation and challenges from the perspective of battery cell manufacturers, suppliers of battery packs and OEMs

Who should submit:
Engineers, scientists, and technology leaders from battery R&D, automotive companies, simulation providers, and academic institutions.

How to apply:
Submit your presentation title, abstract (max. 3,000 characters), speaker name and affiliation to **events@asc-s.de** by **29 August 2025**. Participation is free of charge for speakers.

More information:

YOUR VISABILITY
Be part of the BSD exhibition and showcase your innovations - contact us at **sponsoring@asc-s.de** to secure your spot.

Event organizer: Automotive Solution Center for Simulation e.V. | Curiestrasse 2 | 70563 Stuttgart, GER