



May 14–15, 2025 in Bamberg

International Conference 2025

electrical + electronic systems in hybrid & electric vehicles
electrical energy management

call for papers

Deadline: October 31st, 2024

Unique synthesis from industry and science!

The eehe conference focuses on the topics mentioned below and offers the opportunity to get in touch with OEMs and tier 1 and tier 2 suppliers from the automotive industry. It is an excellent platform for industry and science to discuss current technological developments, exchange ideas and present the latest research results and implemented use cases from industry.

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Main Topics

Future E/E architectures for passenger cars, heavy duty & other vehicles

- E/E architectures, topologies and systems for
 - Hybrid/electric and hydrogen/fuel cell vehicles
 - Reliable power supply systems for automated driving and X-by-Wire
 - Domain, zonal and centralized architectures
- Electrical charging systems and vehicle-to-x solutions
- High voltage safety & standards incl. EMC
- Future voltage levels (48V/400V/800V and beyond)
- Interoperability and EMC challenges

Energy management in future E/E architectures

- Electrical energy management and operating strategies
 - Control strategies for improved efficiency
 - Diagnostics and safety
 - Connectivity, big data, cloud computing and cyber security
- Battery management systems & algorithms
- Energy management for vehicle-to-x (grid, home, device)

Components for future E/E architectures

- Components for energy storage, power distribution and conversion
 - Batteries, converters, chargers and inverters
 - Semiconductors and passive components
 - Wiring harnesses and connectors
 - Integration
- New technologies and materials for power electronics and the requirements for qualification, reliability and robustness

Test and validation for hybrid and electric vehicles

- New test methods and tools for components, systems and vehicles
- Innovations for simulation and virtual development
- Software validation with non-deterministic self-learning and machine-learning algorithms

Focus Topics

- Test and validation for hybrid and electric vehicles
- Standardization for future charging systems and its influence on vehicle systems
- Comprehensive BEV/FCEV solutions and their impact on energy and low voltage architectures
- Challenges of replacing lead-acid starter batteries
- Fuel cell vehicle systems: Technical aspects, technologies and components
- High voltage and 48V components and systems
- Power supply and distribution concepts for fault-tolerant systems
- Challenges in materials for electric vehicles

Every presentation (20 – 25 minutes) is followed by a 5 – 10 minute Q&A session. **The conference language will be English.** Papers and slides only in English please! Additionally, posters will be presented in a poster exhibition.

Deadline for abstract submission: October 31st, 2024

- Title/ headline in German and English
- Speaker/author and co-authors: name, address, telephone and e-mail address
- Abstract in German or English, based on template shown on www.eehe.de (an extended abstract of about 2 pages with a plot, diagram or chart would be appreciated)
- Classification into main topics

Please upload your documents on www.eehe.de!

We strive for the greatest possible transparency and visibility. The use of Open Researcher and Contributor IDs (ORCID for short) ensures that individual contributions are clearly assigned to their authors. The Digital Object Identifiers, DOIs for short, ensure permanent and facilitated access, easy citability and good visibility of the contributions.



Milestones

Deadline for submission of abstracts for presentations or posters.

Deadline for submission of the final presentations.



October 31st, 2024

January 17th, 2025

April 18th, 2025

Please upload your documents on www.eehe.de!

Confirmation of participation to the authors.

Welcome Kongresshotel Bamberg
Mußstraße 7
96047 Bamberg

Conference chairs

The chairmen of the international conference **eehe 2025** are:



Dipl.-Ing. (Univ.) Ottmar Sirch
formerly BMW Group (retired)



Dr.-Ing. Carsten Hoff
dSPACE GmbH



Dipl.-Inf. Dipl.-Ing. (BA) Thomas Weber
Mercedes-Benz AG
(future successor to O. Sirch as conference chairman)

Advisory board

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Dipl.-Inf. Guido Schütte
Hella GmbH & Co. KGaA

Dr.-Ing. Marc Thele
Porsche AG

Conference Fee

1.585,- € (regular) | 545,- € (speaker/poster author)

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