



May 15-16, 2024 in Bamberg

International Conference 2024

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

call for papers

Deadline: November 3rd, 2023

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 1st and 2nd Tiers from the automotive industry. The meeting of industry and academia provides plenty of space for discussion of technical issues and exchange of ideas. It is an excellent platform for presenting the latest research and technical implementations from industry.

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Main Topics

Future E / E Architectures for Passenger Cars and 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 and Standards incl. EMC
- Future Voltage Levels (48 V / 400 V / 800 V 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 its 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 48 V Components and Systems
- Power Supply and Distribution Concepts for Fault-tolerant Systems
- Challenges in Materials for Electric Vehicles

Each contribution is scheduled with 20-25 minutes for the presentation and 5-10 minutes for questions and discussion. **The conference language will be English.** Papers and slides only in English please! Additionally, posters will be presented in a poster exhibition.

Submission of Abstracts for Papers or Posters: November 3rd, 2023

- Title/Headline in English and classification into main topics
- Speaker/Author and Co-Authors: name, address, telephone, and e-mail address
- Abstract in German or English, based on template at www.eehe.de
An extended abstract of about 2 pages with a plot, diagram or chart is appreciated

Please upload your documents on www.eehe.de!

(upload will be open at 1st of September 2023!)

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.



November 3rd, 2023

February 2nd, 2024

April 19th, 2024

May 15-16, 2024 in Bamberg

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 2024** are:



Dipl.-Ing. (Univ.) Ottmar Sirch
BMW Group (passive)



Dr.-Ing. Carsten Hoff
dSPACE GmbH

Scientific advisory board and Program Committee

Prof. Dr.-Ing. Mohamed Ayeb
University of Kassel

Prof. Dr. rer. nat. Ludwig Brabetz
University of Kassel

Dipl.-Ing. Markus Demmerle
Hyundai Motor Europe Technical Center GmbH

Univ.-Prof. Dr.-Ing. Lutz Eckstein
Institute for Automotive Engineering (ika),
RWTH Aachen University

Prof. Dr.-Ing. Stephan Frei
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Dipl.-Ing. Manuel Gärtner
STMicroelectronics GmbH

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ISEA, RWTH Aachen University

Dipl.-Ing. Peter Schmitz
Ford Research Centre Aachen GmbH

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

Dr.-Ing. Marc Thele
Porsche AG

Dipl.-Inf. Dipl.-Ing. (BA) Thomas Weber
Mercedes-Benz AG

Conference Fee

1.585,- € (regular) | **1.195,- €** (online) | **545,- €** (Speaker/Posterauthor)

Contact office

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