

# AmEC

Automotive meets Electronics & Control

15. GMM/GMA Symposium

# AmEC 2024

Automotive meets Electronics & Control

Dortmund, Westfalenhalle • March 14 – 15, 2024

[www.ame-konferenz.de](http://www.ame-konferenz.de)

## Foreword

### Automotive meets Electronics & AUTOREG – two becomes one: AmEC 2024

**Automotive meets Electronics** and **AUTOREG** are now one conference: **Automotive meets Electronics and Control (AmEC)**. We have teamed up to be able to offer you a more differentiated topic spectrum. We will share keynotes and a poster session, but we will have one track each for the topics of the predecessor conferences. This allows to maintain the character of both conferences, but also provides the opportunity for you, the participant, to attend both tracks.

The spectrum ranges from algorithms for intelligent systems over hardware enabling those systems to the implementation of the driving decisions into power electronics and control. This information flow becomes more and more integrated and implies that all participants have to work hand in hand to build the automobile of the future.

The AmEC focuses on these topics and gives you the opportunity to get in touch with OEMs and 1st and 2nd Tiers from the automotive industry. Bringing together industry and academia, there is plenty of room for you discussing technical issues and exchanging ideas. It is an excellent platform for presenting latest research work as well as technical implementations from industry.

### Automotive meets Electronics & Control – and that is where we want to meet you!

*Michael Wahl*

Universität Siegen

*Anne Stockem Novo*

Hochschule Ruhr-West

*Georg Schildbach*

Universität zu Lübeck

## Topics

### Integrated mobility concepts

- Seamless Intermodal mobility
- Mobility as a service
- Cooperative driving

### Hardware in a software-defined environment

- Semiconductor technologies and packaging trends
- Smart Sensors, actuators, circuits and devices
- Data fusion and system integration
- Power distribution and electrical drive concepts

### Software-defined vehicle

- Communication inside and outside the vehicle, V2X
- Machine Learning/Deep Learning in the automotive context
- Digital Twins and simulation concepts
- Verification & Validation

### Vehicle dynamics & control

- Vehicle and tire models
- Modeling of vehicle-driver systems
- System identification and estimation
- Control of steering, brake, suspension systems
- Control for powertrains and battery management

### Automated driving – sense, plan, act

- Driver and occupants monitoring
- Handover, HMI and user experience
- Maneuver planning & decision making
- Trajectory planning and control
- Testing and validation

This list of topics should be seen as a guideline. We are always open to other topics related to the domain of the AmEC.

## Important dates

17. 10. 2023	Deadline for submission of abstracts
17. 11. 2023	Notification of authors
29. 01. 2024	Final contribution
<b>14./15. 03. 2024</b>	<b>AmEC in Dortmund</b>

## Call for Papers

Abstracts with a length of 500–1000 words and the specification of the topical domain must be submitted via the electronic system Easy Chair. After notification of acceptance, authors are asked to submit their final contributions covering 4–6 pages. Papers can be submitted in German or English. However, only contributions in English (oral or poster) will be published at IEEEExplore.

An award will be given to the best presentation.

[www.ame-konferenz.de](http://www.ame-konferenz.de)

## Organizer

This conference is organized by the VDE/VDI Society of Microelectronics, Microsystems and Precision Engineering (GMM) and the VDI/VDE Society for Measurement and Control Technology (GMA).

## Contact

Society of Microelectronics, Microsystems and Precision Engineering (VDE/VDI GMM)

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