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# Call for Papers

**Electric/Electronics for Mobile Machines 2024** 



### Hand in your abstract covering these topics:

- Alternative vehicle concepts
- Electrification and alternative propulsion systems
- Automation and Autonomy
- (Smart) Sensors and algorithms
- Software Platforms, Interoperability and Connectivity
- Software defined vehicles

## Deadline for abstract submission:

March 1, 2024

www.vdi-wissensforum.de/ en/01TA111024

- + Exhibition
- + Free entrance to the parallel event ELIV 2024

#### **Preface**

Exciting changes are on the horizon in the field of mobile machinery. The introduction of the first autonomously driving tractors, agricultural robots, and construction machinery in practical use is a remarkable success. However, to be truly autonomous and efficient, all work processes must be automated. The industry is meeting this challenge with the help of intelligent sensor technology and artificial intelligence. At E/E for Mobile Machines 2024, inspiring ideas and innovations will be presented that illustrate how the performance of machines increases with the degree of automation.

E/E for Mobile Machines 2024 is a great opportunity to discuss new technologies, processes, robotics, artificial intelligence, and machinery for efficient agriculture. The program committee cordially invites you to present your research and developments. The diverse topics list covers all important aspects of mobile machinery. Be an active member of the international engineering community and provide insights into your work!

Let your contribution drive the industry forwards. I'm keen to see what the future of mobile machines holds!

#### Dr.-Ing. Carsten Hoff

Chairman of the Program Committee

#### **Topics**

#### 1. Alternative vehicle concepts

- 1.1 New machine concepts like e.g. AgBots
- 1.2 Combination of hydraulics, electrics, and software

#### 2. Electrification and alternative propulsion systems

- 2.1 Electrification
- 2.2 Charging
- 2.3 Batteries for mobiles machines
- 2.4 Hydrogen and alternative fuels

#### 3. Automation and Autonomy

- 3.1 Process automation & process planning
- 3.2 Assistance systems and ease of use, collaboration between machines and humans
- 3.3 Architectures for highly automated or autonomous machines
- 3.4 Safe localization
- 3.5 Functional Safety for highly automated machines

#### 4. (Smart) Sensors and algorithms

- 4.1 Environmental sensors and perception
- 4.2 Use of AI and machine learning for sensors Validation of

#### 5. Software Platforms, Interoperability and Connectivity

- 5.1 Farm Management System & Building Information Management
- 5.2 Fleet management
- 5.3 Impact of European Data Act
- 5.4 Cyber security

#### 6. Software defined vehicles

- 6.1 New architectures
- 6.2 High performance ECUs
- 6.3 Over the air updates
- 6.4 Continues validation and homologation

#### **Program committee**



Prof. Dr.-Ing. Thomas Herlitzius, Chair of Agricultural Systems and Technology, Technische Universität Dresden



Dr.-Ing. Carsten Hoff, CEO, dSPACE GmbH, Paderborn (Chair)



Dr.-Ing. Georg Kormann, Manager Engineering H&F, Technology Integration & Advanced Engineering, John Deere GmbH & Co. KG, Kaiserslautern



Dipl.-Ing. Ralf Leinenbach, Head of Technical Sales, HYDAC Electronic GmbH, Saarbrücken



Dr.-Ing. Steffen Mutschler, Director Sales & Product Management Electrification of Mobile Machines, Bosch Rexroth AG, Elchingen







#### **Call for Submission of Contributions**

Are you an expert in one of the areas listed among the focus topics? Then we call on you to actively contribute to the success of the conference with a presentation!

Please submit an abstract in English (approx. 500 words) no later than March 1, 2024

at **www.vdi-wissensforum.de/en/01TA111024** in the section "Call for Papers". All submissions must be **PDF files**.

#### The abstract must include:

- The meaningful title for your paper
- The data of the presenters and of max. 2 co-authors (title, first name, surname, position in the company, department, address, telephone and fax number, email)
- A summary of the content with the core statements of your contribution
- A statement on the degree of innovation
- A list of your own publications on the topic

#### Schedule

- Deadline for submission of abstracts: March 1, 2024
- Notification of acceptance: End of April 2024
- Deadline for submission of manuscripts: September 2, 2024

The oral presentations are limited to 25 minutes plus 5 minutes for discussion.

#### Participation fee

Speakers participate in the conference free of charge (one person per presentation). Travel expenses will not be reimbursed.

#### **Further questions?**



#### Your contact:

Dr. Maria Georgiou-Smith Phone: +49 211 6214-467 Email: georgiou-smith@vdi.de

#### **Exhibition & Sponsoring**

The next VDI "Electric/Electronics for Mobile Machines" will take place in conjunction with the International Congress ELIV, which is the world's largest congress for automotive electronics. Once again, in 2024, at the trade show accompanying the congress, more than 100 companies will present innovative and forward-looking products and services from the industry.

The exhibition is the central marketplace of the congress, where participants can catch up on trends in the industry. Take advantage of this attractive platform for corporate presentation and boost your advertising impact. Exhibit at and/or sponsor this event and impress the industry's leading decision-makers.

#### Who should exhibit?

Manufacturers, suppliers and service providers for the automotive industry covering the following areas:

- Software and connected systems
- Automated driving and driver assistance systems
- Electrical power supply/E-mobility
- Electronic components and control devices
- Infotainment
- Comfort electronics
- HMI, operation and display
- Lighting and visibility
- Diagnostics/testing/integration
- Development services
- Start-ups
- etc.

Don't hesitate to contact us for further information on the exhibition and sponsoring:



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### Please note!

If your registration as an exhibitor or sponsor is received by May 6, 2024 your company name will be printed in the exhibitors' list as part of the program brochure.

This flyer will be sent out to some 10,000 selected addresses in Germany and abroad!



## Call for Papers Electric/Electronics for Mobile Machines 2024

# Your proposal for the future of electrics and electronics for mobile machines!

Any more questions? Simply contact us!

#### VDI Wissensforum GmbH

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www.vdi-wissensforum.de/en/01TA111024

#### ✓ Please register for:

Price per Person plus VAT	Electric/Electronics for Mobile Machines 2024	
	☐ <b>October 16-17, 2024, Bonn, Germany</b> (01TA111024)	
Participation Fee	EUR 1.890,- (Super Early Bird, valid until December 31, 2023) EUR 1.990,- (Early Bird, valid until March 15, 2024) EUR 2.090,- (Regular rate, valid after March 16, 2024)	
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🤪 HRS

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Conference Venue

World Conference Center Bonn, Platz der Vereinten Nationen 2, 53113 Bonn, Germany, Email: info@worldccbonn.com

Accommodation:

A limited number of rooms have been reserved for congress participants. Please visit www.eliv-congress.com for further information.

More Hotels close to the conference venue may be found via our HRS service

ww.vdi-wissensforum.de/hrs

Hotel Reservation: Hotels close to the conference venue may be found via our HRS service www.vdi-wissensforum.de/hrs

Services: The price includes beverages during breaks, lunch as well as the evening function. Participants will have online access to the congress documents (E-Book).

Exclusive offer: All participants at this event are entitled to a free three-month trial VDI membership. (Offer applies exclusively to new members.)

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