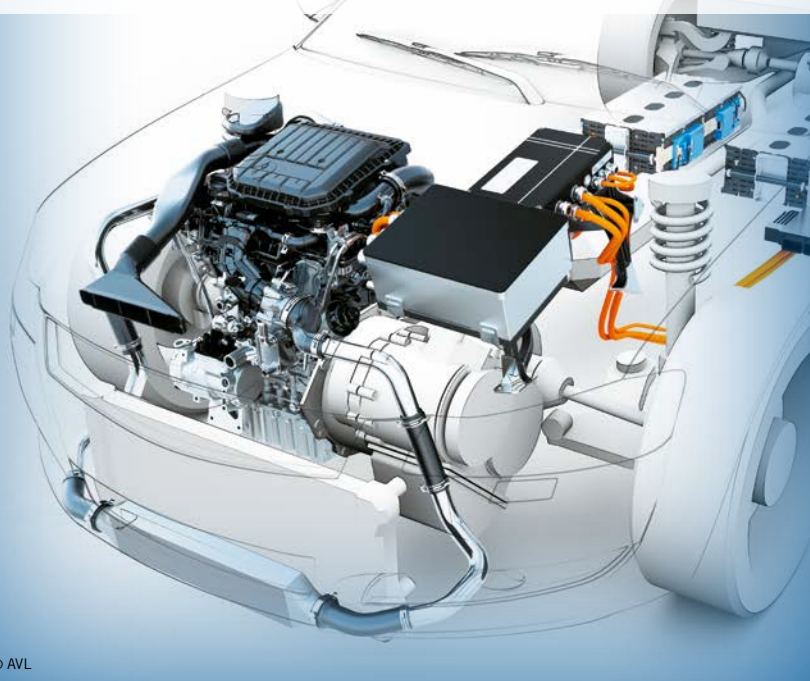


The Powertrain of Tomorrow

Finding the global powertrain mix

14th International MTZ Conference on Future Powertrains

22 and 23 January 2020 | Hanau near Frankfurt/Main | Germany



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ELECTRIFIED COMPLETE SYSTEM

From hybrids to fuel
cell drive systems

COMBUSTION ENGINES

Different role in
partnership with
electric motors

ENERGY STORAGE AND ENERGY RESOURCES

Traction batteries
and CO₂-neutral fuels

/// SCIENTIFIC DIRECTOR

Dr. Johannes Liebl, Editor-in-Charge ATZ | MTZ | ATZelektronik

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Impressions of the 2019 conference



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The Powertrain of Tomorrow

WELCOME

At the MTZ Conference on “The Powertrain of Tomorrow” in January 2019, we concluded that the internal combustion engine will continue to play a key role in the powertrain mix in the future. It also became apparent that this engine will have to develop in various forms in order to fulfill the requirements of the different powertrain configurations. Not only must the technical development of all components be optimized with regard to their intended use, the components must also be able to withstand consideration in a holistic, cradle-to-grave context.

A crucial factor will be energy storage. Should development be focused on batteries as a storage medium? What are the possibilities of industrialization for chemical storage media such as synthetically produced gases or liquid fuels? How can we prevent the cost of energy from excluding parts of the population from the benefits of mobility?

In 2020, it is our aim to answer these burning questions and also to closely examine the powertrain solutions that are currently emerging. How will existing powertrains continue to develop? Will the huge variety of powertrain configurations lead to dead ends? Can modern engines of any kind meet the high standards being imposed? And not least: is our infrastructure capable of providing and distributing the energy required?

Our long-standing partner Schaeffler will support us in answering these vitally important questions. I would like to invite you to be actively involved in this discussion by presenting a paper. Further details on submitting your paper can be found in this Call for Papers.

On behalf of the Scientific Advisory Board

Dr. Johannes Liebl
Editor-in-Charge ATZ | MTZ | ATZelektronik

PARTICIPANTS

The MTZ Conference “The Powertrain of Tomorrow” is aimed at managers and experts in powertrain development and electrification. It is a must-attend event for engine and vehicle manufacturers, their suppliers and development partners, teaching staff and engineers from universities, representatives from authorities and associations, and technicians active in this field.

Media Partner

MTZ

MAIN SUBJECT AREAS

Future Powertrain Systems

- Further development of internal combustion engines
- Low-voltage and high-voltage hybrids
- Plug-in hybrids
- All-electric powertrains
- Fuel cell drive systems
- Electrified transmissions

Traction Batteries

- Benchmarking the state of the art
- Potentials of new technologies
- Cell development and materials
- Life cycle: production, use, recycling

CO₂-Neutral Fuels

- Development
- Standardization and production
- Admixtures and application

Energy and Thermal Management

- Electric charging processes: conductive, inductive, bidirectional
- Battery management
- Use of thermal flows
- Efficiency improvements and emission reduction
- Operating strategies in connected powertrains

CO₂ and Emissions

- RDE of electrified powertrains
- Energy/fuel consumption of electrified powertrains
- Tank-to-wheel vs. well-to-wheel vs. cradle-to-grave

Development Methods

- Process chain of simulation and testing
- Virtual application
- Digital development tools

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elke.vanlon@springernature.com

CALL FOR PAPERS

Are you interested in presenting a paper on one of these subjects?

If so, please send a short version of your proposed paper to:

Gabriele Bozsa | ATZlive
Abraham-Lincoln-Straße 46 | 65189 Wiesbaden | Germany
Phone +49 611 7878-160 | Fax +49 611 7878-452
gabriele.bozsa@springernature.com

Your submission proposal should contain:

- The title of the paper in English
- The name of the speaker and any co-authors with job title, company address in English, telephone number, and e-mail address
- Main points of the paper's contents and a short abstract in English
- Classification under one of the main subject areas in English
- Brief indication of the innovative value of the work in English
(Please submit documents in PDF or Microsoft Word format)

The Scientific Advisory Board for the conference will decide whether to accept each paper on the basis of the short version.

Information on the conference and the conference documentation

The time allowed for presentation is 20 minutes with a subsequent discussion. The registration fee will be waived for one speaker per paper presented. The language of the manuscripts and slides is English. After the congress, your paper will be published as part of the conference proceedings at Springer Vieweg and on the online platforms Springer Link and Springer Professional.

Schedule

Deadline for submission proposals: **13 June 2019**
Notification of the authors: **in August 2019**
Submission of final manuscripts: **28 November 2019**
The final conference program will be published in October 2019.

DEADLINE FOR SUBMISSION PROPOSALS

13 JUNE 2019