

Vehicles of Tomorrow 2019

Concepts – Materials – Design

19. 11. – 20. 11. 2019

Frankfurt am Main, Germany



KEYNOTE LECTURES

Continental Automotive GmbH // Fraunhofer Institute
for Industrial Engineering IAO // ILK, TU Dresden //
Yanfeng Automotive Interiors

Concepts – Materials – Design

/ COMPLETE VEHICLE CONCEPTS

Technical concepts and vehicle design for future mobility solutions

/ MATERIAL DEVELOPMENT

The potential of innovative materials for vehicles of tomorrow

/ DESIGN

Requirements and methods – today and tomorrow

PANEL DISCUSSION

En route to the sharing society:
social benefits and customer acceptance



Dr. Alexander Heintzel
Editor-in-Chief
ATZ | MTZ Group,
Springer Nature



Dr. Hubert Pelc
Head of Specialist Media
Materials | Energies,
Springer Nature

Welcome

We can shape the mobility of tomorrow! The intelligent, connected, electric, automated car presents designers, vehicle developers, materials scientists and production specialists with new tasks, because it opens up new opportunities and allows for new concepts in areas such as the body, chassis, powertrain and interior. These require the use of innovative components and combinations of materials, which must produce safe, high-quality and cost-effective results.

In addition, the development of new business models will be a major influence, particularly on the growth of the sharing society. Future mobility solutions must be designed with not only safety and efficiency in mind, but also sustainability from the perspective of the entire product life cycle. The new international congress will be jointly organized by the fka GmbH and ATZlive. It is an information and communication platform that highlights all aspects of the mobility transformation.

We look forward to welcoming you to the conference.

On behalf of the Scientific Advisory Board

Stay at the cutting edge!

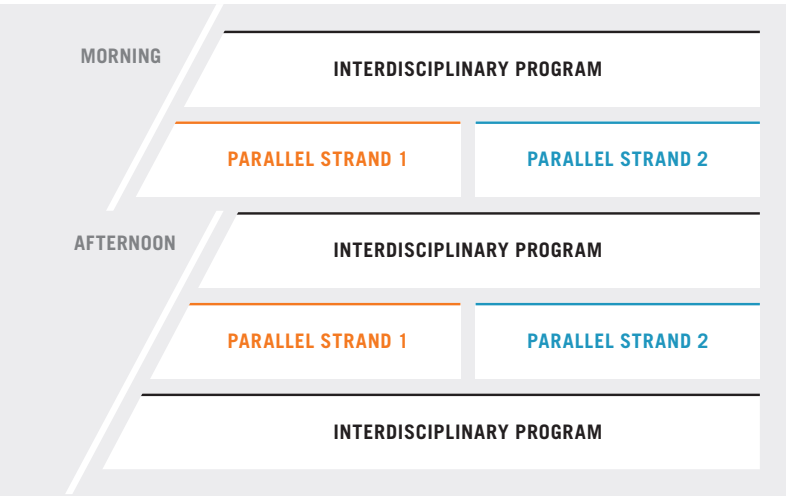
- ✓ Technical presentations from internationally renowned speakers
- ✓ Networking in the expert community
- ✓ Innovative products and services

Vehicles of tomorrow

What type of sustainable concepts will meet future mobility requirements? Digitization is leading to the growth of the "sharing society". Especially in megacities, automation and the challenges to last mile logistics are likely to increase significantly.

The question is: How can we use active development methods to design clean, efficient and intelligent mobility solutions? The international congress "Vehicles of Tomorrow" is an information and communication platform that showcases all aspects of the mobility transformation.

Program structure on both days



Accompanying exhibition on both days

Scientific Advisory Board

Our Scientific Advisory Board, which is made up of prominent figures from the relevant field, provides support during the planning phase of the conference and helps to identify suitable topics.

With its expertise the board has made a valuable contribution to the choice of themes for the lecture program.



Prof. Dr. Lutz Eckstein
RWTH Aachen
University

Scientific Director of the Conference

Dr. Nico Depner
fka GmbH

David Gagliardi
Pininfarina Deutschland GmbH

Dr. Alexander Heintzel
Editor-in-Chief
ATZ | MTZ Group,
Springer Nature

Jörg Hölig
EDAG Engineering GmbH

Dr. Hubert Pelc
Head of Specialist
Media Materials | Energies,
Springer Nature

Michael Reichenbach
Vice Editor-in-Chief ATZ,
Springer Nature

Thomas Siebel
Editor lightweight.design,
Springer Nature



08:45 **Welcome and opening of the conference**

09:00 – 10:00

KEYNOTE LECTURES

- 09:00

KEYNOTE

**Disruption in mobility –
new trends, new concepts and new business models?!**
Dr. Florian Herrmann, Managing Director, Head of Mobility and
Innovation Systems Research Unit, Fraunhofer Institute
for Industrial Engineering (IAO)
- 09:30

KEYNOTE

New automotive interior experiences: our interior vision 2030
Han Hendriks, Chief Technology Officer,
Yanfeng Automotive Interiors

10:00 Refreshment break with coffee and tea in the exhibition area

10:30 – 12:00, PARALLEL STRAND 1

NEW BUSINESS MODELS

- 10:30

Intermodality strategy and vehicle requirements at Volkswagen
Augustin Friedel, Intermodality Services, Volkswagen AG
- 11:00

**THE ONO Pedal Assisted Transporter –
trailblazing emission-free transportation of goods within cities**
(Tretbox GmbH inquired)
- 11:30

Purpose-built mobility vehicles
Wolfgang Bernhart, Senior Partner, Global Co-Head of Technology
Team – Automotive, Roland Berger GmbH

12:00 Lunch in the exhibition area

The current conference program
and further information
can be found online:

www.atzlive.com/vehicles



10:30 – 12:00, PARALLEL STRAND 2

THE POTENTIAL OF NEW DEVELOPMENT METHODS

- 10:30

**Integrative development approach
for future vehicle requirements**
Prof. Dr. Ralph Mayer, Head of Professorship Vehicle
Systems Design, TU Chemnitz
- 11:00

**Customized mobility: innovation management
and the product development process**
David Hedderich, Research Manager Autonomous Driving,
Dr. Markus Kowalski, Team Leader Innovation Management,
e.GO Mobile AG
- 11:30

Fail Fast – the key to success for automotive software?
Heiko Herchet, Head of Car IT, trive.me, EDAG Engineering GmbH

13:30 – 14:00

INTRODUCTORY LECTURE

- 13:30 The aesthetic of future automotive mobility experience – the premises, the opportunities and the challenges from a designer's perspective**

Anders Warming, Designer & Founder, Warming Design

14:00 – 15:30, PARALLEL STRAND 1

COMPLETE VEHICLE CONCEPTS I

- 14:00 Highly automated vehicles for the mobility transformation**
(speaker inquired)
- 14:30 EDAG CityBots – autonomous transport and work vehicle as mobility concept**
Johannes Barckmann, Global Design Manager,
EDAG Engineering GmbH
- 15:00 SVEN – shared mobility as driver for a vehicle package with 2.50 m length**
Michael Hog, Global Vice President Vehicle, FEV Europe GmbH

14:00 – 15:30, PARALLEL STRAND 2

THE POTENTIAL OF NEW MATERIALS AND PROCESSES

- 14:00 Amorphous metals enable weight reduction for high performance components in automotive**
Dr. Jürgen Wachter, Head of Business Unit Heraeus AMLOY,
Heraeus Deutschland GmbH & Co. KG
- 14:30 Automotive front panels – proven technologies enabling aesthetic styling, design & sensor integration**
Michael Fischer, Head of Business Development Technologies,
ENGEL AUSTRIA GmbH, Austria
- 15:00 Dual-curing adhesives for short cycle times and high-precision alignment of components**
Dr. Stephan Pröller, Product Manager,
DELO Industrie Klebstoffe GmbH & Co. KGaA

15:30 Refreshment break with coffee and tea in the exhibition area

16:00 – approx. 17:15

PANEL DISCUSSION**HIGHLIGHT**

- 16:00 En route to the sharing society: social benefits and customer acceptance**

- 19:00 Networking dinner**



Enjoy a pleasant evening and interesting conversations over dinner with colleagues and speakers.

PROGRAM WEDNESDAY >

09:00 – 10:00

KEYNOTE LECTURES**KEYNOTE**

- 09:00** **Lightweight materials in the automotive industry of tomorrow – the engineer as the driving force behind environmentally responsible lightweight design**
 Prof. Dr. Hubert Jäger, Member of the Management Board, Institute of Lightweight Engineering and Polymer Technology (ILK), Technical University of Dresden

KEYNOTE

- 09:30** **User experience in future mobility: challenges – criteria – solution concepts**
 Dr. Karsten Michels, Head of Interior Systems & Technology, Continental Automotive GmbH

During the breaks you have the opportunity to visit the exclusive exhibition.

10:00 Refreshment break with coffee and tea in the exhibition area

10:30 – 12:00, PARALLEL STRAND 1

INTERIOR CONCEPTS

- 10:30** **New materials and production methods for the vehicle interiors of tomorrow**
 Markus Leder, Head of Engineering Germany, Pininfarina Deutschland GmbH
- 11:00** **Steering wheel and restraint system heading for automated driving**
 Dr. Christian Strümpfer, Team Leader HMI / Human Factors, Joyson Safety Systems Aschaffenburg GmbH
- 11:30** **Project PURE: the freedom to move – automotive interior of the future 2035**
 Marko Boving, Senior Manager Strategic Product Planning Automotive & Commercial Vehicles, GRAMMER AG

10:30 – 12:00, PARALLEL STRAND 2

THE POTENTIAL OF NEW JOINING TECHNOLOGIES

- 10:30** **Automotive industry: actual and future requirements in joining technology**
 Dr. Marco Bastian, Global Senior Market Manager Transportation, Lohmann GmbH & Co. KG
- 11:00** **New adhesive solutions for future vehicle concepts**
 Helmut Hanke, Marketing Manager Automotive Adhesives & Sealant, Covestro Deutschland AG
- 11:30** **Structural adhesive and sealing solutions for battery applications**
 Dr. Felix Koch, R&D Manager Structural Adhesives, DuPont de Nemours, Inc., Switzerland

12:00 Lunch in the exhibition area

13:00 – 13:30

START-UP PITCHES

13:00 Technology and business models for future mobility solutions

13:30 – 15:00, PARALLEL STRAND 1

COMPLETE VEHICLE CONCEPTS II

- 13:30 Coquille – new mobility
Andreas Groß, Senior Vice President Vehicle Body, IAV GmbH
- 14:00 Tailored for automation – purpose design for autonomous urban mobility in UNICARagil
Torben Bøddeker, Research Assistant, Institute for Automotive Engineering (ika), RWTH Aachen University
- 14:30 From prototype into series production for attendant-free driverless mobility: the EZ10 GEN 3
Dr. Arwed Schmidt, Technical Sales Lead, EasyMile GmbH

13:30 – 15:00, PARALLEL STRAND 2

LIGHTWEIGHT CONSTRUCTION AND SUSTAINABILITY

- 13:30 Potentials of low-carbon aluminium products in automotive applications – ensuring sustainable mobility concepts throughout the entire life cycle
Leif Hagebeuker, Automotive Application Engineer, Norsk Hydro ASA; Dinesh Thirunavukkarasu, Scientific Assistant, fka GmbH
- 14:00 Thermoplastic composites technologies for future aircraft structures
Georg Doll, Scientific Assistant, Institute of Structures and Design [in cooperation with Institute of Materials Research, German Aerospace Center e. V. (DLR)]
- 14:30 High performance sustainable materials for automotive applications: dream or reality?
Philippe Godano, Global Product Manager Interior Floor & Product Marketing Manager, Autoneum Management AG, Switzerland

15:00 Refreshment break with coffee and tea in the exhibition area

15:30 – 16:00

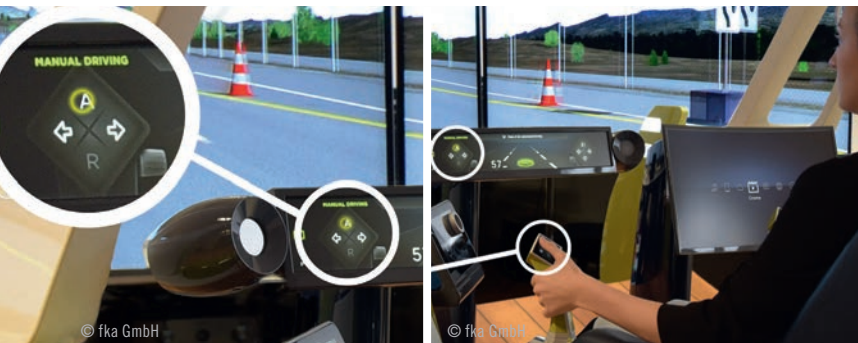
KEYNOTE LECTURE

15:30

KEYNOTE

 Shaping the mobility of the future
(speaker inquired)

16:00 Closing remarks



fka GmbH

For more than 35 years fka has been an innovative engineering service provider for research and development tasks for the automotive industry and its suppliers.

It was founded as a spin-off from the Institute for Automotive Engineering (ika) of RWTH Aachen University in 1981. Thanks to its very close collaboration with ika, fka has not only access to a staff of more than 450 people as well as to numerous test bench facilities.

fka delivers its worldwide customers with the full range of engineering services including conception and simulation, as well as design and engineering of prototypes, and their experimental testing.

Classical departments such as Chassis, Body, Drivetrain and Automated Driving collaborate closely with the cross section departments, where the development of vehicle concepts is increasingly coming into focus.

The systematic approach while developing vehicle concepts for nowadays and future mobility enables targeting all facets of a user-orientated, technical and esthetic design. The variety of the inhouse development in combination with renowned vehicle designers enables fka to create exciting interdisciplinary vehicle concepts from the idea to the prototype.

Cooperation partner



www.fka.de/en

Your presentation platform

Take this opportunity to present your latest products and services to the specialist audience: as an exhibitor in our exclusive exhibition and/or as a sponsor with an attractive advertising presentation. Make use of this industry meeting place to make valuable contacts with customers. For information on the various presentation options, please contact:

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RESEARCH. KNOWLEDGE. PROGRESS.

Developing the future – today's production facilities need to meet the requirements of tomorrow. This is one of the main challenges facing vehicle manufacturers. Innovations in manufacturing processes, resource use, the effectiveness of value chains and increasing automation and digitization are all helping to shape smart vehicle production. ATZproduction provides the latest information from the fields of research and development and includes in-depth technical reports on all aspects of vehicle manufacturing. In addition to the print edition, we offer an **interactive e-magazine**. You can also benefit from the extensive information in our **unique online archive**, which gives you the option of **downloading PDF files**.

ATZ production

WORLDWIDE



www.my-specialized-knowledge.com/ATZproduction-worldwide

Registration fee

€ 1,295.– plus VAT

This includes the conference documentation, the catering during breaks and the evening event on 19.11.2019.

Date

19.11. – 20.11.2019

Venue

House of Logistics and Mobility (HOLM)
Bessie-Coleman-Straße 7
60549 Frankfurt am Main, Germany

Languages used in the presentations

German and English with simultaneous interpreting
(German – English / English – German)

Hotels

Some hotels have room blocks at reduced prices for the participants.
You can find more information on the events page of our website.

**Online Registration
and Further Information:**

www.atzlive.com/vehicles

**Participants**

The conference is aimed at anyone who takes a solution-oriented approach to the vehicle development process and who is involved with design, development, materials and production. It is a meeting place for decision-makers, material and development engineers, technical specialists and plant and factory managers at car and commercial vehicle manufacturers, automotive industry suppliers, machinery manufacturers, engineering service providers, universities and industry associations.

**Further Information
and Online Registration:**

www.atzlive.com/vehicles



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Your contact person at ATZlive

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The organizers

