

# Meeting Place for the Powertrain and Sustainable Fuels Community







# 28 February and 1 March 2023 Baden-Baden | Germany

with accompanying trade exhibition



## Main topics

- Climate-friendly internal combustion engines from a global perspective
- Internal combustion engines and fuels as a complete system:  ${\rm CO_2}$  neutrality, emissions, electrification
- The use of hydrogen and synthetic fuels
- Cross-sector life cycle considerations

### Panel discussion

Energy mix for the mobility of the future

### Top speakers



Prof. Dr. Christian Beidl, TU Darmstadt | Pierre Olivier Calendini, Aramco Fuel Research Center, France | Dr. Günter Fraidl, AVL List GmbH, Austria | Christian Höllinger, Shell Austria GmbH, Austria | Prof. Dr. Thomas Koch, Karlsruhe Institute of Technology (KIT) | Elmar Kühn, UNITI German Association of Small and Medium-Sized Petroleum Companies | Jürgen Lehmann, Daimler Truck AG | Dr. Markus Müller, DEUTZ AG | Siegfried Pint, AUDI AG | Dr. Thomas Schlick, Roland Berger GmbH | Dr. Frank-Steffen Walliser, Dr. Ing. h.c. F. Porsche AG







### A WARM WELCOME **TO ALL PARTICIPANTS**

The political target in Europe is to ban vehicles powered by internal combustion engines from 2035 in order to achieve zero emissions in the transportation sector stage by stage via the "Fit for 55" package of measures. What remains unresolved in the ongoing debate is the necessary discussion between the political, scientific, and social stakeholders on the integration of electrofuels and therefore on a sector-linked assessment in the final legislation.

But with this approach, is Europe now isolating itself from the technology-neutral solutions of the leading economies in the competition between science, industry, and value chains? Effective climate change not only needs speed and competition between innovative technologies, but also requires economic considerations that are equally important.

At the 10th International Engine Congress, we bring together the current state of comprehensive scientific and technological knowledge in the overall system of non-fossil fuels and the potential of the combustion engine.

Stay abreast of current trends and benefit from a lead in knowledge!

- You can expect international speakers as well as top-level presentations and panel discussions
- The congress is a great opportunity to "network" the evening event for the engine community offers stimulating discussions in an informal atmosphere
- The trade exhibition, held in parallel, provides ample information about innovative products and services in the field of combustion engine development

We look forward to your participation.

On behalf of the program advisory boards

Prof. Dr. Peter Gutzmer Scientific Director of the Congress, Editor-in-Charge ATZ | MTZ Group

### THE INTERNATIONAL ENGINE **CONGRESS AS A HYBRID EVENT**



You have the choice:

attend the congress in person or take part via our live stream

The streaming package includes all keynote, impulse, and plenary presentations as well as the panel discussion and all presentations of the parallel sessions "passenger car engine technology", "commercial vehicle engine technology" and "sustainable fuels & energy"

The digital event platform with the live stream offers you Q&A functions, 1:1 video chats with participants, exhibitors, and speakers, as well as live opinion surveys, your personal program overview, a virtual exhibition, and other useful functions.

You can find detailed information on our website.



#### **ENGINE COMMUNITY EVENING**

As every year, ATZlive and VDI Wissensforum invite you to round off the first day of the International Engine Congress with a get-together in Baden-Baden. You can look forward to interesting conversations with colleagues over dinner and have the opportunity to expand your network

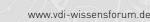
Tuesday, 28 February 2023, 19:00 h



SIMULTANEOUS INTERPRETING **GERMAN** → **ENGLISH** 

#### **ORGANIZERS**





**MEDIA PARTNER** 

MTZ

www AT7live com

#### **PARTICIPANTS**

The event is primarily aimed at engineers and technicians in the industry or those involved in research and teaching, who are engaged in the optimization of the traditional developmental areas of the combustion engine or the advancement of procedures and systems to produce conventional or renewable fuels and lubricants. The lectures will be equally attractive for chemists and biologists who work in this industry. The focus will be on both diesel and spark-ignition engines (gasoline/gas) for passenger and commercial vehicles and offhighway applications.

### PROGRAM ADVISORY BOARDS

### PASSENGER CAR ENGINE TECHNOLOGY



Prof. Dr. Peter Gutzmer Editor-in-Charge ATZ | MTZ Group



Dr. Norbert Alt COO & Executive Vice President, FEV Group GmbH



Dr. Martin Berger Vice President Corporate Research and Advanced Engineering, MAHLE International GmbH



Dr. Christian Brenneisen Head of Pre-Development & Exhaust Aftertreatment Four-cylinder In-line Gasoline Engine/Simulation Powertrain, AUDI AG



Prof. Dr. Helmut Eichlseder Director of the Institute ITnA Graz University of Technology (A)



Dr. Michael Elicker Manager Heavy Duty System Engineering, Schaeffler Technologies AG & Co. KG









Dr. Erik Schünemann Director System Engineering Powertrain Subsystems, Robert Bosch GmbH



Dr. Jörg Theobald CoF ICE: Calibration Gasoline & Diesel Engines and Battery Core, Volkswagen AG



Dr. Michael Winkler Head of Powertrain, Hyundai Motor Europe Technical Center



#### **COMMERCIAL VEHICLE ENGINE TECHNOLOGY**



Prof. Dr. Christian Beidl Director of the Institute, VKM, TU Darmstadt





Dr. Andreas Broda Vice President / Head of Fuel Based Propulsion Systems, MAN Truck & Bus SE



Jürgen Lehmann Head of R&D Engine & Aftertreatment Systems, Daimler Truck AG

**Bernhard Raser** Vice President Commercial Vehicles, AVL List GmbH [A]



Dr. Markus Schwaderlapp SVP Product Development DEUTZ AG



Dieter van der Put Global Vice President Commercial Powertrains. FEV Group GmbH

**SUSTAINABLE FUELS & ENERGY** 



Karl Dums Manager Politics and Governmental Affairs, Dr. Ing. h.c. F. Porsche AG



Dr. David Bothe Director, Frontier Economics Ltd.



**Dietmar Goericke** Managing Director, FVV e. V.



Prof. Dr. **Kurt Kirsten** Head of Advanced Engineering and Innovation, APL Automobil-Prüftechnik Landau GmbH



Prof. Dr. Thomas Koch Director of the Institute, IFKM, Karlsruhe Institute of Technology (KIT)



Dr. Wolfgang Warnecke Adviser Carbon Management, Shell Deutschland GmbH



Dr. Werner Willems Technical Specialist Powertrain Combustion Systems, Ford Forschungs zentrum Aachen GmbH

# 10 engine engine Program

## Tuesday, 28 February 2023



11:00 Coffee break 13:15 Lunch 16:00 Coffee break

08:45

Welcome and opening of the congress as well as introduction to the program of lectures Prof. Dr. Peter Gutzmer, Scientific Director of the Congress

#### **KEYNOTE LECTURES I**

Moderation: Prof. Dr. Peter Gutzmer, ATZ | MTZ Group

The decarbonization of the automotive sector as a technology driver of the future



Dr. Frank-Steffen Walliser, Vice President Complete Vehicle Architecture & Characteristics, Co-authors: Mourad Meziane, Karl Dums, all Dr. Ing. h.c. F. Porsche AG



Jens Kühlmeyer, all AUDI AG



Our way to sustainable transportation



Jürgen Lehmann, Head of R&D Engine & Aftertreatment Systems, Co-author: Gesa Reimelt, both Daimler Truck AG

Dr. Markus Müller. Member of the Executive Board. Chief Technology Officer, Chief Sales Officer, DEUTZ AG

Transformation of passcar mobil-

Siegfried Pint, Head of Development Motion/Energy,

Co-authors: Corentin Prie, Arne-Philipp Siemens,

ity - contribution of the existing

fleet to the Paris Agreement

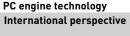
11:45



18:15

14:30

11:45



PC engine technology

Hydrogen engines



CV engine technology **Engines for future fuels** 



CV engine technology Technologies for hydrogen engines



Sustainable fuels & energy Defossilization of the transportation sector in Europe



Sustainable fuels & energy Process technology

#### IN FOCUS: ENERGY MIX FOR THE MOBILITY OF THE FUTURE

16-45

Moderation: Dr. Alexander Heintzel, Editor-in-Chief ATZ | MTZ Group, Prof. Dr. Christian Beidl, Director of the Institute for Internal Combustion Engines and Powertrain Systems (VKM), TU Darmstadt

**Energy tran**sition in the transportation sector - what does it mean for the energy system?



Jens Müller-Belau,

Managing Director Energy Transition, Deutsche Shell Holding GmbH



Carsten Müller, Member of the German Bundestag, CDU/CSU Parliamentary Group

**PANEL DISCUSSION** 



Dr. Markus Müller, Member of the Executive Board, Chief Technology Officer, Chief Sales Officer, DEUTZ AG



Jens Müller-Belau, Managing Director Energy Transition, Deutsche Shell Holding GmbH



Mobility of the future without internal combustion engine?

Dr. Gérard de Nazelle, Head R&D, Technology Oversight and Coordination, Saudi Aramco, Saudi Arabia



Siegfried Pint, Head of Development Motion/Energy, AUDI AG

# **Engine community evening**

## Wednesday, 1 March 2023

10:00 Coffee break 12:15 Lunch 14:30 Coffee break

Breaks X

09:00



CV engine technology Components for hydrogen engines



Sustainable fuels & energy Simulation

#### PLENARY LECTURES

Moderation: Karl Dums, Dr. Ing. h.c. F. Porsche AG

### With e-fuels to affordable CO<sub>2</sub>-neutral mobility



Elmar Kühn, CEO, UNITI German Association of Small and Medium-Sized Petroleum Companies

### Hydrogen production based on Holland Hydrogen I



Christian Höllinger, Hydrogen Mobility Platform Manager, Shell Austria GmbH, Austria, Co-author: Dr. Wolfgang Warnecke, Shell Deutschland GmbH

Worldwide passcar technology and legislation trends are we on an affordable and CO<sub>2</sub>-efficient pathway?

Dr. Günter Fraidl, Senior Vice President, Co-authors: Berhard Enzi, Dr. Rittmar von Helmolt, Dr. Christian Martin, all AVL List GmbH. Austria

13:30

15:00

PC engine technology Simulation



CV engine technology Application potentials



Sustainable fuels & energy Industrial implementation

### **KEYNOTE LECTURES II**

Roland Berger GmbH

Moderation: Prof. Dr. Peter Gutzmer, ATZ | MTZ Group

### 2030 ++: the future automotive powertrain in a global outlook



Dr. Thomas Schlick, Senior Partner,





Pierre Olivier Calendini, Research Center Director, Aramco Fuel Research Center, France

Outlook and concluding remarks 16:30 Prof. Dr. Peter Gutzmer, Scientific Director of the Congress





Prof. Dr. Christian Beidl. Director of the Institute for Internal Combustion Engines and Powertrain Systems (VKM), TU Darmstadt, Prof. Dr. Thomas Koch, Director of the Institute for Piston Machines (IFKM), Karlsruhe Institute of Technology (KIT), Co-author: Prof. Dr. André Casal Kulzer, Institute of Automotive Engineering (IFS), University of Stuttgart

During the breaks you have the opportunity to visit the exhibition!

to the parallel sessions





# **Presentations**

parallel sessions

## Tuesday, 28 February 2023



### PC engine technology

Kongress-Saal I (1st Floor)



#### **HYDROGEN ENGINES**

Moderation: Prof. Dr. Uwe Dieter Grebe, AVL List GmbH

11:45

# H<sub>2</sub> engine hybrid powertrain for future light commercial vehicles

**Dr. Jan Niklas Geiler,** Project Manager, Co-authors: Dr. Peter Bloch, both Robert Bosch GmbH, Klaus Moritz Springer, Ford-Werke GmbH, Michael Blomberg, Chair of Thermodynamics of Mobile Energy Conversion Systems (TME) and Institute of Thermodynamics, RWTH Aachen University

12:15

# Driving hydrogen engines towards a zero-impact emission level

Sebastian Roiser, University Project Assistant, Co-authors: Stefan Beringer, Dr. Eberhard Schutting, Prof. Dr. Helmut Eichlseder, all Institute of Thermodynamics and Sustainable Propulsion Systems (ITnA), Graz University of Technology, Austria, Tobias Rabe, Ilona Krinn, both Robert Bosch GmbH, Dr. Katja Adelmann, Umicore AG & Co. KG

12:45

# Application of a hydrogen powertrain on a light commercial vehicle

**Dr. Gavin Dober,** Manager Combustion and System Analysis, BorgWarner Inc., Luxembourg, Co-authors: Mathieu Da Graca, Emmanuel Ouali, Laurent Doradoux, all BorgWarner Inc., France



#### INTERNATIONAL PERSPECTIVE

Moderation: Prof. Dr. Helmut Eichlseder, Graz University of Technology

14:30

# A study of abnormal ignition in a hydrogen combustion engine

Naoyoshi Matsubara, Assistant Manager, Carbon Neutral Development Div., Co-authors: Yoshinori Miyamoto, Shiro Tanno, all Toyota Motor Corporation, Yuya Abe, Denso Corporation, all Japan

15.00

#### Electrification strategy for China

Ingo Scholten, Vice President & CTO, Co-authors: Zhao Fucheng, Phil Newman, all Geely Powertrain Research Institute, China

15:30

# Biofuels as a strategy for CO₂e reduction in Brazil

**Roger Guilherme,** Mechanical Engineer, Co-authors: Felipe Cifoni, both Volkswagen do Brasil, Brazil, Prof. Dr. Thomas Garbe, Volkswagen AG

### CV engine technology

Forum (Ground floor)



#### **ENGINES FOR FUTURE FUELS**

Moderation: Prof. Dr. Christian Beidl, TU Darmstadt

11:45

# Commercial engine concepts for the flexible use of low-carbon and sustainable fuels

Anton Arnberger, Technical Expert Commercial Gas Engines, Co-authors: Bernhard Raser, Martin Wieser, all AVL List GmbH, Austria, Janos Szabo, AVL List GmbH, Hungary

12:15

# Liebherr's fuel injection portfolio strategy for future fuels

Patrick Send, Project Manager Generic Development, Co-authors: Dennis Herrmann, both Liebherr-Components Deggendorf GmbH, Richard Pirkl, Mario D'Onofrio, both Liebherr Machines Bulle SA, Switzerland

12:45

#### FEV's pathway to an ICE powertrain powered by future fuels, achieving the maximum efficiency

Dieter van der Put, Global Vice President Commercial Powertrains, FEV Group GmbH, Co-authors: Dr. Kai Deppenkemper, Dr. Tolga Uhlmann, Dr. Dominik Lückmann, all FEV Europe GmbH

#### PROCESS TECHNOLOGY

Sustainable fuels & energy

**DEFOSSILIZATION OF THE** 

TRANSPORTATION SECTOR IN EUROPE Moderation: Dietmar Goericke, FVV e. V.

An evaluation of the legal framework

Strategies for a CO<sub>2</sub>-optimal propulsion

mix - life cycle analysis based on the

Osama Mahmood, all Frontier Economics Ltd.,

Dr. Ulrich Kramer, Technical Expert Future Fuels,

Prof. Dr. Thomas Koch, Director of the Institute, Co-author:

Dr. David Bothe, Director, Co-authors: Dr. Christoph Gatzen,

André Pfannenschmidt, Carolin Baum, Fabian Schrogl,

Dr. Olaf Toedter, both Institute for Piston Machines (IFKM),

of modern IC-based drivetrains

Karlsruhe Institute of Technology (KIT)

FVV Fuels Studies IV and IV b

Ford-Werke GmbH

Auditorium (Basement)

 ${\bf Moderation: Karl\ Dums,\ Dr.\ Ing.\ h.c.\ F.\ Porsche\ AG}$ 

# Innovative approaches for energy-efficient hydrogen and e-fuel production

**Jürgen Rechberger,** Vice President Hydrogen & Fuel Cell, Co-authors: Martin Rothbart, Dr. Rittmar von Helmolt, all AVL List GmbH, Austria

15:00

# Direct Air Capture – CO<sub>2</sub> from ambient air as a raw material for defossilized products

 $\mbox{\bf Dr. Marc Rüggeberg,}$  Head of  $\mbox{\rm CO}_2$  Economy,  $\mbox{\bf Dr. Andreas Grote,}$  Technical Expert Combustion Processes, Co-authors: Peter Kawelke, Dr. Christine Schütz, all Volkswagen AG

15:30

# Kerosene as an enabler for synthetic fuels in road transport – or is it the other way around?

**Dr. René Stahlschmidt,** Head of Sales, Co-author: Kevin Günther, both Chemieanlagenbau Chemnitz GmbH [CAC]



# Influence of hydrogen combustion on

# engine components in full load operation Christian Trabold, Project Manager Hydrogen Engines,

Co-authors: Tino Gallas, both MAHLE GmbH,
Dr. Peter Grabner, Kevin Gschiel, both Institute of
Thermodynamics and Sustainable Propulsion Systems
(ITnA), Graz University of Technology, Austria

15:00

# Tribological challenges of the cylinder bore in H<sub>2</sub> ICEs

Hans-Peter Böhm, Manager R&D, Nagel Maschinen- und Werkzeugfabrik GmbH, Co-authors: Sebastian Duda, Christian Maisch, both ELGAN GmbH, Urban Morawitz, Daniel Schulz, both Ford-Werke GmbH

15:30

# Resistant cast iron for a 50 % efficient hydrogen engine

André Ferrarese, R&D Director, Co-authors: Elio Augusto Kumoto, both Tupy SA, Brazil, Martin Wieser, AVL List GmbH, Austria, Dr. Ralf Marquard, LHP Europe GmbH



# **Presentations**

parallel sessions

## Wednesday, 1 March 2023



### PC engine technology

Kongress-Saal I (1st Floor)



#### **ENGINE COMPONENTS**

Moderation: Dr. Martin Berger, MAHLE International GmbH



#### Potential analysis of a variable valve train system in the scope of synthetic fuel

Friedemar Knost, Research Assistant, Co-authors: Philipp Demel, Alexander Mokros, Prof. Dr. Christian Beidl, all Institute for Internal Combustion Engines and Powertrain Systems (VKM), TU Darmstadt



#### On-board monitoring for EU7 challenges and possible approaches

Peter Götschl, Lead Engineer Emission Strategies. Co-authors: Kurt Klumaier, Dr. Reinhard Merl, all AVL List GmbH, Austria



#### **SIMULATION**

Moderation: Tobias Mink, APL Automobil-Prüftechnik Landau GmbH



#### A study on the fuel-saving potential of a multicriteria speed trajectory planning for HEV

Dominic Waldenmayer, Research Assistant, Co-authors: Katharina Bause, Prof. Dr. Dr. Albert Albers, all Institute of Product Engineering (IPEK), Karlsruhe Institute of Technology (KIT), Johannes Buyer, Prof. Dr. Hermann Koch-Gröber, both Institute of Automotive Engineering and Mechatronics (IKM), Heilbronn University of Applied Sciences



#### The combined power of physical and Al-based powertrain models trained on field data

Dr. Michael Grill, Department Head 0D/1D Simulation, Co-authors: Timo Hagenbucher, Dr. Qirui Yang, Prof. Dr. André Casal Kulzer, all Research Institute for Automotive Engineering and Powertrain Systems Stuttgart (FKFS)

### CV engine technology

Forum (Ground floor)



### **COMPONENTS FOR HYDROGEN ENGINES**

Moderation: Dr. Andreas Broda, MAN Truck & Bus SE

#### LNT as an effective solution to minimize NO, emissions of hydrogen combustion engines

Simon Bruckmeier, Controls Developer, Co-authors: Daniel Koch, Dr. Bárbara Costa, all KEYOU GmbH

#### Benefits of a driven-turbo for hydrogen internal combustion engines

Thomas Waldron, Executive Vice President, Co-authors: Jared Brin, both SuperTurbo Technologies Inc., USA, Hans Seitz, Wilfried Hochegger, both AVL List GmbH, Austria

### Sustainable fuels & energy

Auditorium (Basement)



#### SIMULATION

Moderation: Dr. Werner Willems, Ford Forschungszentrum Aachen GmbH

#### Simulation study on laminar flame speed of ammonia-hydrogen blends using artificial neural networks

Kai Gaukel, Application Engineer Engine Simulation, Gamma Technologies GmbH, Co-authors: Tingting Li, Khashayar Ebrahimi, Kevin Roggendorf, Navin Fogla, all Gamma Technologies LLC, USA

#### Towards the optimization of the piston design for a premixed ammonia combustion engine with a CFD modeling approach

Virginie Morel, Project Leader, Aramco Overseas Company, Co-authors: Deepak Kumar, Emitech Group, Prof. Christine Rousselle, Université d'Orléans, Sébastien Houillé, Stellantis, all France



#### A hydrogen engine for buses - a highly competitive CO<sub>2</sub>-neutral solution which could be quickly implemented

Moderation: Bernhard Raser, AVL List GmbH

APPLICATION POTENTIALS

Prof. Christian Nellen, Head of Powertrain R&D, Nils Monney, Development Engineer, both Sustainable Engineering Systems Institute (SeSi), University of Applied Sciences and Arts Western Switzerland, Co-author: Laura Amaudruz-Andres. Transports publics fribourgeois Trafic SA, all Switzerland

#### 4x2 tractor with a hydrogen combustion engine - highest performance with lowest emissions

Florian Lindner, Development Engineer Exhaust Aftertreatment, Co-authors: Dr. Andreas Broda, Dr. Stephan Schraml, Dominic Hyna, all MAN Truck & Bus SE



#### INDUSTRIAL IMPLEMENTATION

Moderation: Dr. Wolfgang Warnecke, Shell Deutschland GmbH

#### Haru Oni: the entry into the mass production of renewable energy for the mobility of the future

Karl Dums, Senior Manager eFuels, Co-authors: Jan Ohmstedt, Fabian Ehrat, Marcos Marques, Dietmar Schwarzenthal, all Dr. Ing. h.c. F. Porsche AG

#### Renewable fuels - what's next? Outlook, new technologies, and regulation

Mats Hultman. Head of OEM Partnerships. Neste Corporation, Sweden, Co-author: Dr. Teemu Sarjovaara, Neste Corporation, Finland

As of 16 February 2023





### **EXHIBITION AND SPONSORSHIP**

**GOLD SPONSOR 2023** 

# LIEBHERR 人SEM

#### **COFFEEBREAK SPONSOR 2023**



#### **EXHIBITORS ALREADY REGISTERED FOR 2023**

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- G+L innotec GmbH
- JA-Gastechnology GmbH • Liebherr Components AG
- MAN Truck & Bus SE
- Poppe+Potthoff GmbH • Dr. Ing. h.c. F. Porsche AG
- SEM AB Swohoda

### YOUR CONTACT PARTNERS

Take your pick from a variety of options.

**ACCOMPANYING EXHIBITION** 

development service providers.

The exhibition provides the ideal presentation platform for companies

who supply components for internal combustion engines or develop

and optimize engines and engine parts as well as those active in the

components, systems, and modules for diesel and gasoline engines,

fields of sustainable fuels and energy. These include suppliers of

companies that produce measuring and testing equipment, and

participants and present your products and services effectively to

a selected specialist audience, be part of this event as an exhibitor or

sponsor! This industry meeting place gives you the ideal opportunity to take part in technical discussions with the participants and to

make new contacts within the industry. In addition to each exhibition

to chat, but also to hold 1:1 video calls with all participants. We will

for you in accordance with your specific wishes and requirements.

event platform. This will enable you not only to upload documents and

also be happy to design individual sponsoring and exhibition packages

package, every exhibitor will be given a virtual stand in our digital

If you would like to make contact with prominent congress

**ATZlive** Mr. Alex Woidich Event & Sales Manager Phone +49 611 7878-206 alex.woidich@springernature.com

VDI Wissensforum GmbH Martina Slominski Team Leader Exhibition & Sponsorship Phone +49 211 6214-385 slominski@vdi.de





We are happy to inform you about the various presentation opportunities available: www.motorenkongress.de/en/exhibition-and-sponsoring

#### **REGISTRATION FEE**

#### Participation on site

Keynote, impulse, and plenary presentations, panel discussion as well as passenger car engine technology, commercial vehicle engine technology or sustainable fuels & energy € 1,695.- plus VAT

€ 1,595.- plus VAT for VDI members

#### Participation via live stream

Keynote, impulse, and plenary presentations, panel discussion as well as passenger car engine technology, commercial vehicle engine technology and sustainable fuels & energy

€ 995.- plus VAT

€ 895.- plus VAT for VDI members

Both participant packages include all submitted conference documents and the use of the digital event platform. If you are attending the conference in person, the conference fee also includes catering during the coffee and lunch breaks and the evening event.

#### Mode of payment

By bank transfer after receipt of an invoice or by credit card (MasterCard, Visa).

Participants with a billing address outside Germany, Austria and Switzerland are requested to pay by credit card.

#### DATE

28 February and 1 March 2023

#### LANGUAGES USED IN THE PRESENTATIONS

On site: German and English with simultaneous interpreting (German - English / English - German)

Virtually via live stream: English

#### **INFORMATION ON CORONAVIRUS SAFETY**

The health and safety of our customers and employees is our top priority. We have therefore developed a safety concept to ensure protection against the risk of coronavirus. We will closely observe official national and regional regulations and will, of course, comply with current coronavirus protection measures. This may in some circumstances result in

If you are prevented from attending the conference in person for health reasons or due to travel restrictions, you have the opportunity

**Online Registration** and Further Information:



#### **VENUE**

Kongresshaus Baden-Baden Augustaplatz 10 76530 Baden-Baden | Germany Phone +49 7221 304-0 www.kongresshaus.de

#### **HOTELS**

Various hotels in Baden-Baden - all centrally located have room blocks at reduced rates for participants.

The complete list of hotels can be found on the event website: www.ATZlive.com

Conference participants may book rooms either online or directly at Baden-Baden Kur & Tourismus GmbH.

Your contact person at Baden-Baden Kur & Tourismus GmbH is: Conventions & Events Team Phone +//9 7221 275-271 sales@baden-baden.com

Please make your reservation by 30 January 2023 at the latest.

this year to participate in the conference virtually via our live stream. The digital event platform offers you Q&A functions, 1:1 video chats with participants, exhibitors, and speakers, live opinion surveys, your personal program overview, a virtual exhibition, and other useful functions









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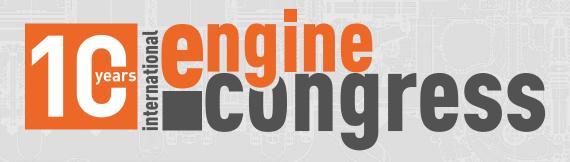
some restrictions for participants.

#### Participants – service and registration

Head of Events



Abraham-Lincoln-Straße 46 ATZlive@springernature.com www.ATZlive.com



# Meeting Place for the Powertrain and **Sustainable Fuels Community**







# **Further Information** and Online Registration:



www.enginecongress.com

10th International Engine Congress 2023 28 February and 1 March 2023 | Baden-Baden | Germany or virtually via live stream

#### THE ORGANIZERS

#### **ATZlive**

#### // Spotlight on Powertrain and Vehicle Engineering //

ATZlive organizes its high-caliber conferences for vehicle and engine specialists together with key representatives from research and industry to ensure that they are tailor-made to the needs of the participants and address the very latest issues. Our close collaboration with the editorial teams of our specialist magazines ATZ and MTZ keeps us fully up-to-date on the latest topics and trends on the market.

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