ATZ live

www.ATZlive.com

Electrified Mobility

Improving customer focus, reducing costs and increasing profitability

2nd International ATZ Congress
12 and 13 November 2019 | Mannheim | Germany



MOBILITY

Customer friendly, connected, intermodal systems

VEHICLES AND POWERTRAINS

Climate-neutral, zeroemission technology

ENERGY STORAGE

Batteries and hydrogen in a new powertrain portfolio

/// KEYNOTE LECTURES

Klaus Baumgärtner, BridgingIT GmbH I Prof. Dr. Uwe Dieter Grebe, AVL List GmbH I Dr. Falko Schappacher, MEET Battery Research Center, Münster University (WWU)



SCHAEFFLER

SCIENTIFIC ADVISORY BOARD



Klaus Baumgärtner BridgingIT GmbH



Dr. Wolfgang Bernhart Roland Berger GmbH



Axel Hausen Netze BW GmbH



Dr. Dirk Kesselgruber Schaeffler Technologies AG



Isabell Knüttgen e-mobil BW GmbH



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



Florian Mayr Apricum GmbH



Jürgen Schenk Daimler AG



Prof. Dr. Hans-Christian Reuss Research Institute of Automotive Engineering and Vehicle Engines Stuttgart (FKFS) Scientific Director of the Conference



Prof. Dr. Gernot Spiegelberg Technical University of Munich (TUM)



Markus Wiedemann Stuttgarter Straßenbahnen AG (SSB)

Markus Schöttle ATZlive Springer Nature

Electrified Mobility

WELCOME

Electric mobility is taking off all over the world and the annual production figures of German car manufacturers have now reached six digit number. The network of charging points is growing and billions are still being invested in the technology. A breakthrough for electric mobility is on the cards, but it will not happen until the development of the products and the expansion of the infrastructure are synchronized. The cost remains too high because the profitability levels in many disciplines are low. Without profitability there will be no breakthrough.

With the theme of "Cost down, scaling up," this year's ATZ Electrified Mobility conference is focusing on the necessary cost reductions. Making the components cheaper is an important first step, but it is not enough on its own. Leaner processes are also unlikely to do the trick, as some speakers and solution providers are warning. If we do not have the courage to adopt new business models, electric mobility will fail in many areas. A number of prominent studies have also criticized the poor sustainability record of electric mobility. This criticism is justified, but it must be incorporated into a balanced debate and countered where appropriate. However, this will only be possible if our engineers can develop more sustainable innovations. This is the purpose of the presentations and the panel discussions at the conference.

Electric mobility can only succeed if the products and the infrastructure are carefully coordinated. ATZlive is supporting this process with its related conference on Grid Integration of Electric Mobility, which is being held in parallel.

We look forward to welcoming you to both events.

On behalf of the Scientific Advisory Board

Dr. Johannes Liebl Markus Schöttle

Editor-in-Charge Senior Editor Automotive Development,

ATZ | MTZ | ATZelektronik Springer Nature

PARTICIPANTS

The ATZlive Electrified Mobility conference is aimed at managers from the automotive and mobility industries, at powertrain developers, strategic planners from vehicle manufacturers, automotive industry suppliers and development service providers, at research institutions and universities, and at NGOs and decision-makers from the world of politics and from industry associations. The conference will also be of interest to groups working with specialists in grid integration and charging technology.

PROGRAM — MORNING TUESDAY 12 NOVEMBER 2019

>> PLENARY SESSION

Musensaal

9:00 Welcome and opening of the congress

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

KEYNOTE LECTURES I

GRID INTEGRATION OF ELECTRIC MOBILITY

ELECTRIFIED MOBILITY

9:10 How sustainable is electric mobility? Cradle-to-cradle study of different drive systems

Prof. Dr. Uwe Dieter Grebe, Executive Vice President Global Business Development, Sales & International Operations, AVL List GmbH. Austria

9:35 How to develop customer-centric ecosystems? Agile, digital and open

Klaus Baumgärtner, Managing Director, BridgingIT GmbH

- 10:00 Joint app-based discussion of the keynote lectures
- 10:30 Refreshment break with coffee and tea in the exhibition area

>> PARALLEL SESSION I

Musensaal

NATIONAL AND INTERNATIONAL CONDITIONS

11:00 General conditions for the introduction of zero-emission buses in public transport – the Clean Vehicle Directive Martin Schmitz, Managing Director Engineering, Verband Deutscher Verkehrsunternehmen e. V. (VDV)

How can the Stuttgarter Straßenbahnen AG comply with air pollution control legislation?

Markus Wiedemann, Business Unit Manager of the Bus Division, Stuttgarter Straßenbahnen AG (SSB)

12:00 Comprehensive assessment of critical raw materials for BEVs and FCEVs

Aline Hendrich, Consultant Energy & Mobility, B. Reuter, J. Hengstler, S. Kupferschmid, M. Schwenk, thinkstep AG

12:30 Lunch in the exhibition area

IN CONJUCTION WITH GRID INTEGRATION OF ELECTRIC MOBILITY

For electric mobility to achieve a breakthrough, the transport concepts, the vehicles and the infrastructure must interact smoothly. For this reason, our well-established ATZlive events **Electrified Mobility** and **Grid Integration of Electric Mobility** are taking place this year in the same location and at the same time.

The participants have the option of moving over to the parallel conference and broadening their horizons.

You can find the complete program for the Grid Integration of Electric Mobility conference online:

www.atzlive.de/en/grid





>> PARALLEL SESSION II

Bruno Schmitz Saal

ELECTRIC CHARGING

- 11:00 **Smart charging of EVs: barriers and possible solutions**Baerte De Brey, Chief International Officer, L. Driessen,
 ElaadNL, Netherlands
- 11:30 What economic and technical benefits do integrated charging solutions bring for high power charging (HPC) parks?
 Roman Scholdan, eMobility Consultant, S. Schrader,
 P3 group GmbH
- 12:00 Wireless charging of electric vehicles from pre-development to volume production a field report Thomas Nindl, Chief Operating Officer, BRUSA Elektronik (München) GmbH; H. Stauss, BRUSA Elektronik AG, Switzerland
- 12:30 Lunch in the exhibition area

PROGRAM — AFTERNOON TUESDAY 12 NOVEMBER 2019

>> PARALLEL SESSION I

Musensaal

ENERGY STORAGE SYSTEMS I

14:00 Second life: Benefiting from the untapped potential of EV batteries

Florian Mayr, Partner, Apricum GmbH

14:20 Battery-as-a-Service: the key to the crucial cost reductions in electric mobility

Dr. Wolfgang Bernhart, Senior Partner, Global Co-Head of Technology Team – Automotive, Roland Berger GmbH

14:40 Germany as a location for battery cell production – the first companies and joint ventures position themselves (Speaker inquired)

15:00 Joint app-based discussion of the energy storage systems I session

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

>> PLENARY SESSION

Musensaal

INTRODUCTORY PRESENTATION AND PANEL DISCUSSION

16:00 **Introductory presentation:**

Demystifying electric mobility – how to scale up a sustainable and profitable industry? Patrick Schaufuss, Associate Partner, McKinsey & Company, Inc.

16:20 Panel discussion:

Cost down and scaling up – electric mobility in ramp-up mode, but with modern costing models

approx.

17:45 End of the first day of the congress

19:30 **Networking Dinner**

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

>> PARALLEL SESSION II Bruno Schmitz Saal

VEHICLES

14:00	The differing electric mobility market expectations of China and Europe – challenges from the perspective of Chery Automobile Jochen Tüting, Managing Director, Chery Europe GmbH
14:20	Electric mobility in China – China revolutionizes the car market by taking a leading role Franco Bellillo, Deputy General Manager, Vice President Purchasing, Beijing Electric Vehicle Co. Ltd.
14:40	nextmove – Long-term experience of 400 rental cars from various manufacturers in an everyday EV test Stefan Möller, General Manager, O. Raguse, nextmove
15:00	Joint app-based discussion of the Vehicles session

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



PROGRAM — MORNING WEDNESDAY 13 NOVEMBER 2019

>> PARALLEL SESSION I

Musensaal

MANAGEMENT AND MARKETS

9:00 Future multi-modal mobility

Jürgen Schlaht, Vice President Innovation Management, Siemens Mobility GmbH

9:30 The role of a contract manufacturer in the era of electrification

Kurt Bachmaier, Vice President Sales & Marketing, Magna Steyr Fahrzeugtechnik AG & Co KG, Austria

10:00 Electric mobility in Norway – highly developed and yet still facing challenges (Speaker inquired)

10:30 Refreshment break with coffee and tea in the exhibition area

ENERGY STORAGE SYSTEMS II

11:00 Battery pack design: the challenges and benefits of modular battery modules – the LIGHT battery: a modular, cylindrical system design

Tobias Mayer, CEO, E. Donzow, LION Smart GmbH

Sustainable, resource-efficient manufacturing of highquality battery cells using digitization and Industry 4.0 tools Prof. Dr. Kai Peter Birke, Head of the Electrical Energy Storage Systems Work Group, Institute for Photovoltaics (ipv), University of Stuttgart, J. Wanner, Institute for Energy Efficiency in Production (EEP), University of Stuttgart; M. Weber, Fraunhofer Institute for Manufacturing Engineering and Automation (IPA)

12:00 Lunch in the exhibition area

FUEL CELLS

9:00 Technology, infrastructure and costs – challenges, but no Bermuda triangle for the fuel cell!

Prof. Dr. Christian Mohrdieck, Director Fuel Cell and CEO, Mercedes-Benz Fuel Cell GmbH

9:30 **PEM fuel cell stack for automotive applications**Dr. Mohsine Zahid, Director Global Business Development
Battery & Fuel Cell, Dr. M. Quintus, A. Diez, ElringKlinger AG

10:00 Moving toward volume production – Industrialization of fuel cells for the commercial vehicle industry
Manfred Stefener, Managing Director in the Fuel Cell Division,
Freudenberg Sealing Technologies

10:30 Refreshment break with coffee and tea in the exhibition area

THERMAL MANAGEMENT FOR BATTERIES & E/E

11:00 Driving and charging – TWO worlds – ONE thermally balanced wiring system!

Tracing the link from contact physics to safe operation Uwe Hauck, Director Technology & Innovation, Dr. Michael Ludwig, Senior Product Development Engineer, Dr. H. Schmidt, Dr. M. Leidner, M. Wolf, TE Connectivity Germany GmbH

11:30 New high-performance and high-efficiency high-voltage batteries – thanks to innovations in thermal management Jürgen Hofmann, Head of Development Components, R. Schmidt, C. Riester, Fritz Dräxlmaier GmbH & Co. KG

12:00 Lunch in the exhibition area

PROGRAM — AFTERNOON WEDNESDAY 13 NOVEMBER 2019

>> PLENARY SESSION

Musensaal

SOLUTIONS FROM GRID OPERATORS

13:00 A transnational approach to a DSO-controllable electric mobility charging infrastructure

Reinhard Nenning, Head of Grid Planning and Power Quality, Vorarlberger Energienetze GmbH, Austria

- 13:30 Providing a grid-friendly, large-scale, affordable chargeBIG infrastructure using intelligent load and charge management Sebastian Ewert, Head of Corporate Startup, chargeBIG, MAHLE Filtersysteme GmbH
- 14:00 Developing customer-centric electric mobility ecosystems

 Presentation of the workshop results

 Klaus Baumgärtner, Managing Director, BridgingIT Group
- 14:30 Refreshment break with coffee and tea in the exhibition area

KEYNOTE LECTURES II

GRID INTEGRATION OF ELECTRIC MOBILITY

ELECTRIFIED MOBILITY

- 15:00 A comparison of electric mobility in Germany and other countries from a political perspective (Speaker inquired)
- 15:25 Research into the production of battery cells What does it mean to be Germany's leading institute in this field?

 Dr. Falko Schappacher, Director of the MEET Battery Research Center, Münster University (WWU)
- 15:50 Electric mobility in Germany Industrial funding initiatives from a business perspective (Speaker inquired)
- 16:15 Joint app-based discussion of the keynote lectures
- 16:30 Closing remarks Dr. Johannes Liebl, Editor-in-Charge ATZ | MTZ | ATZelektronik, Springer Nature

approx.

16:45 End of the congress

WORKSHOP

Developing customer-centric electric mobility ecosystems

"How can we establish an agile, open and connected electric mobility ecosystem, where vehicles can be charged just as easily as they can be refilled with conventional fuels and where new business models covering all aspects of value added services are set up?"

In this interactive workshop, which is being held separately from and in parallel with the lectures of each conference, representatives of the automotive, energy and IT industries will be able to discuss this question.

Moderators:

Lars Christiansen, CEO, Seed Investments GmbH, BridgingIT Group Dr. Reha Tözün, Business Manager, BridgingIT Group

The workshop takes place at 11:30 a.m. on November 12. The number of participants is limited. To take part in the workshop, please register before the event by sending an email to:

ATZlive@springernature.com

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: Elke van Lon
Phone +49 611 7878-320
elke.vanlon@springernature.com



THE CONFERENCE IS SUPPORTED BY BRIDGING IT

bridgingIT is an independent technology and management consultancy business that offers customised IT solutions for the specific needs of our diverse client base. The company provides these services across an array of industries, bringing together a wide variety of skill sets and an optimal blend of technical and methodological expertise. With its holistic end-to-end approach, bridgingIT, together with its whollyowned subsidiaries fastahead, Heidelberg Mobil and craftingIT, fosters innovation along the entire value chain of its clients.



www.bridging-it.de

MEDIA PARTNERS





THE CONFERENCE IS SUPPORTED BY SCHAEFFLER AG

The Schaeffler Group is a leading global supplier to the automotive and industrial sectors. Its portfolio includes high-precision components and systems for engines, transmissions, and chassis, together with roller and plain bearing solutions for a wide variety of industrial applications. Schaeffler is already playing a major role in shaping the "mobility of tomorrow" with innovative and sustainable technologies for electric mobility, digitization, and Industry 4.0.

The company generated sales of approximately 14.2 billion euros in 2018. With around 90,500 employees, Schaeffler is one of the world's largest family businesses and, with around 170 locations in over 50 countries, has a worldwide network of manufacturing plants, research and development facilities, and sales companies.

Schaeffler submitted more than 2,400 patent registrations in 2018, which makes it Germany's second most innovative company according to the DPMA (German Patent and Trademark Office) and one of the industry's leading innovators.

SCHAEFFLER

www.schaeffler.com

REGISTRATION FEE

€ 1,295.- plus VAT

This includes the conference documentation, coffee breaks, soft drinks, two lunches, and the evening reception.

VFNIIF

Congress Center Rosengarten Rosengartenplatz 2 68161 Mannheim | Germany

HOTEL

We have made an advance block booking of a limited number of rooms at a discounted price. The Congress Center is directly linked to the hotel. Please book your hotel room by October 27, 2019 quoting the keyword "ATZlive".

Hotel Dorint

Friedrichsring 6
68161 Mannheim I Germany
Phone +49 621 12510
reservierung.mannheim@dorint.com
€ 140.– Single room, including breakfast

LANGUAGES USED IN THE PRESENTATIONS

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

THE NEW eMAGAZINE ATZworldwide AND ATZelectronics worldwide

All the participants in the conference will receive our new English-language eMagazine free of charge and without any obligation.

We will give you free access for 30 days.



CONDITIONS

Cancelations are possible until 21 October 2019. If a cancelation is made after this date, the full registration fee will be charged. Cancelations must be made in writing. The date of the postmark will determine whether the deadline has been met. If you are unable to attend, we will be happy to accept a substitute participant.

Should a speaker be unable to attend at short notice by reason of force majeure, illness, accident, or other circumstances for which ATZlive cannot be held responsible, another qualified person will be appointed to the exclusion of any claim for compensation. Should the event be canceled altogether, we will of course refund the registration fee.

No conference documentation may be reproduced or transferred to third parties without the express written consent of ATZlive. Photographing the presentation slides and taking audio and video recordings of the event are not permitted.

The General Terms and Conditions for Events by Springer Fachmedien Wiesbaden GmbH apply, as published on the website www.atzlive.de/en/standard-terms-of-business/.

Your personal details will be stored electronically in compliance with the GDPR. The ATZlive privacy policy applies. You can find it at www.ATZlive. de/datenschutz/. We will not disclose your address to third parties for advertising purposes. If you do not wish to receive information about our publishing products, please send an e-mail with your address details to widerspruch.springerfachmedien-wiesbaden@springer.com.

Please send the registration form by post or fax or scan and e-mail it to:
ATZlive | Springer Vieweg
Springer Fachmedien Wiesbaden GmbH
Nadine von Widekind
Abraham-Lincoln-Straße 46 | 65189 Wiesbaden | Germany
Phone +49 611 7878-212 | Fax +49 611 7878-452
ATZlive@springernature.com
www.ATZlive.com

THE ORGANIZER



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 with on the latest topics and trends on the market.

Springer, with its automotive technology brands the ATZ and MTZ Group, is part of Springer Nature, one of the world's leading publishing groups for scientific, educational, and specialist literature.

Electrified Mobility

12 and 13 November 2019 | Mannheim | Germany

I have read the General Terms and Conditions* and I would like to register at a cost of € 1,295.– plus VAT.

* The General Terms and Conditions for Events by Springer Fachmedien Wiesbaden GmbH apply, as published on the website www.atzlive.de/en/standard-terms-of-business/

Registration data	□ Ms. □ Mr.
Family name	
First name	Acad. title
Company / Institute	
Department / ZIP code	
Function	
Street / P.O. box	
Postal code / City	Country
Phone	Fax
E-mail of the participant	
Invoice address (if different from above address	\$)
VAT No	
Please send my free trial access to ☐ ATZelectronics worldwide to the e-	

Date, Signature

FAX TO +49 611 7878-452 OR E-MAIL TO ATZLIVE@SPRINGERNATURE.COM