

Conference schedule

Batteries, fuel cells, hydrogen technologies



www.world-of-energy-solutions.com

WORLD OF ENERGY SOLUTIONS

LET'S MOTIVATE THE MARKET!

WORLD OF ENERGY SOLUTIONS conference 2016

WORLD OF ENERGY SOLUTIONS with its three modules f-cell, BATTERY+STORAGE and e-mobility solutions highlights the commercial application of efficient and clean battery, hydrogen and fuel cell technologies in industrial production, electric mobility and urban and municipal infrastructure. Following the slogan "Let's motivate the market", this year's conference presents trend-setting technologies, new mobile and stationary applications, promising commercialization strategies and best practice cases. Furthermore, the schedule will lay a special emphasis on smart system solutions and sector coupling: From smart grids to smart regions and cities to smart homes – discover which role battery, fuel cell and hydrogen applications play in a connected world.

113 top speakers will provide you with a comprehensive update on global markets and framework conditions. Find out more about the conference on the following pages. For a detailed schedule, please refer to www.world-of-energy-solutions.com/ program

Besides the high-ranking conference, WORLD OF ENERGY SOLUTIONS is a trade fair, networking event, marketplace, industry monitor and think tank. Get connected at Messe Stuttgart, Germany, from October 10–12, 2016.





Partner



Meet the industry

Trade fair

Meet global players and innovative newcomers. Discover solutions that will advance your business: hydrogen, fuel cell and battery technologies, mobile and stationary applications, components, materials, production technologies, mobility solutions and more.

Access to the trade fair is included in your conference ticket. Monday, October 10 – Wednesday, October 12.

Evening event with f-cell award ceremony

Enjoy a magical atmosphere, delicious food and live music while networking with experts from around the globe. Highlight: the f-cell award ceremony presents the most innovative European fuel cell and hydrogen ideas.

Monday, October 10, 2016 at "Alte Reithalle" in downtown Stuttgart.

Matchmaking

Whether you are looking for a research cooperation, specific supplier or new customer: The face-to-face meetings at our matchmaking event offer an opportunity to talk to interesting potential business partners.

Free of charge for trade fair visitors / conference participants. Please register online. (Registration closes: October 6)

Tuesday, October 11, 2016: Matchmaking Wednesday, October 12, 2016: Guided trade fair tours.

Ride & Drive

Experience the future of mobility: The Ride & Drive presents the newest generation of fuel cell and battery electric vehicles. Get behind the wheel for a 20 min test drive on public streets.

Detailed conference schedule: www.world-of-energy-solutions.com/program

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CONFERENCE OVERVIEW

Monday, October 10, 2016

9:30 - 10:30	10:50 – 12:30	
A Welcome *	B International markets	

Tuesday, October 11, 2016

9:30 - 10:30	10:50 - 12:30
E Plenary	F1 Smart homes
Fieldiy	F2 Mobile applications cars
	F3 Electric aircrafts, ships and rail
	F4 Fuel cells for industry and large facilities

Wednesday, October 12, 2016

9:30 - 10:30	10:50 - 12:30		
l Discussion	J1	Heavy duty electric vehicles	
Plenary * J	J2	Safety, regulations and standards	
	J3	Batteries for industry and large facilities	
	J4	Battery management systems	

The conference will be held in English.

* German/English interpretation provided for plenaries A and I.

14:30 - 16:10	16:40 - 17:10
C1 Let's motivate the market!	D Closing
C2 Smart cities	
C3 Fuell cells for houses and small companies	
C4 Hydrogen generation	

14:30 - 16:10	16:40 - 17:10
G1 Smart grids	H Closing
G2 Mobile applications buses	
G3 Hydrogen infrastructure	
G4 Batteries for houses and small companies	

14:30 - 16:10	16:40 - 17:10
K1 Smart regions	L Closing
K2 Light duty electric vehicles	
K3 Next generation batteries	
K4 Charging infrastructure	

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MEET THE EXPERTS

SELECTED SPEAKERS



Jorgo Chatzimarkakis

(Plenary H, Tuesday, 16:40): Jorgo Chatzimarkakis was thrilled as pupil from the bestseller "In the beginning was the hydrogen", as student he promoted "Power2Gas". As EU delegate he laid

the cornerstone for the technology platform "Fuel Cell and Hydrogen". Today, he is managing director of the industry association "Hydrogen Europe" and works for the energy transition, which is only to be achieved with hydrogen.



Joeri de Ridder

(Plenary E, Tuesday, 10:00): Joeri de Ridder pioneered electric vehicles in Belgium as co-organizer of the Ecomobiel fairs in Antwerp from 2005 till 2009 and with the launch of the

first electric car on the Belgian market – the Reva. In 2009 Joeri founded Electric Drive byba with the mission to minimize the effects of climate change by encouraging carbon-neutral mobility. Since 2014 Chairman of AVERE, since 2016 also of WEVA (World Electric Vehicle Association).



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Marc Elsberg

(Closing D, Monday, 16:40 Plenary): With his thrillers BLACKOUT and ZERO Marc Elsberg succeeded something extraordinary: He wraps the important, good investigated topics of our

age in exciting novels and reaches millions of people internationally as well as responsibles from politics, economy and science, for those he is a popular interlocutor. In fall, his new thriller HELIX will be published.



Dr. Chirine Etezadzadeh

(Smart cities, Monday, 14:30): Dr. Chirine Etezadzadeh (economist) is president and founder of the SmartCity.institute, of SmartCity News.global, and CEO of the German Federal

Smart City Association (BVSC e.V.). She has worked for global leaders in the automotive industry and as a business consultant in the energy sector. Dr. Etezadzadeh holds university lectures on product development for smart cities and crusades for more cognitive interest.



Christophe Pillot

(Plenary L, Wednesday, 16:40): Christophe Pillot has built up considerable expertise in the area of battery market. He joined AVICENNE 20 years ago. Christophe gained large experience in

marketing, strategy analysis, technology and financial studies for the battery and power management fields. He developed the Battery market analysis for AVICENNE and published several annual surveys.



Peter Schwierz

(Plenary I, Wednesday, 9:30): Peter Schwierz came to electric mobility five years ago – and founded right away an industry service. electrive. net is today a standard reading for everyone, who

are developping electric mobility. Also privat he drives electric and combines the knowhow and the needs of the field – and the sometimes completely different view of the users. As "lantern parker" in Berlin Peter Schwierz wants: Fast charging, fast charging, fast charging.

CONFERENCE TIMETABLE Monday, October 10, 2016

9:30 - 10:30

A Welcome

Official opening of WORLD OF ENERGY SOLUTIONS 2016

- Minister Franz Untersteller MdL, Ministry of the Environment, Climate Protection and the Energy Sector Baden-Wuerttemberg, Stuttgart, Germany
- Dr. Walter Rogg, Stuttgart Region Economic Development Corporation, Germany
- Franz Loogen, e-mobil BW GmbH, Stuttgart, Germany

10:50 - 12:30

B International markets

Plenary chair: Anne Bräutigam, Germany Trade and Invest, Berlin, Germany

Get an update on the latest international developments in the fields of batteries, fuel cells and hydrogen technologies: China, Germany, Japan, USA.

4 parallel sessions: 14:30 - 16:10

C1 Let's motivate the market!

Session chair: Hans-Peter Wandt, Technologieberatung Wandt, Leichlingen, Germany

Whether your business is large or small – for a new technology to successfully enter and persist in the market, you need to position and promote your unique product carefully. Hear case studies from Germany, Japan, France and find out about incentives, marketing, financing, commercialization and communication strategies.

C2 Smart cities

Session chair: Stefan Slembrouck, Bundesverband Smart City e.V., Mainz, Germany

Smart city – future city. How will we live tomorrow? How will energy supply be organized in tomorrow's cities? What defines succesful decarbonisation strategies? What is the role of municipal organisations?

C3 Fuel cells for houses and small companies

Session chair: Johannes Schiel, VDMA, Frankfurt/Main, Germany

Hear the latest news and solutions from the sector of residential fuel cell power supply from EWE Next Energy, SolidPower, HySa South Africa, Federal Ministry for Economic Affairs and Energy and Panasonic

C4 Hydrogen generation

Session chair: Dr. Christopher Hebling, Fraunhofer Institute for Solar Energy Systems ISE, Freiburg, Germany

Asahi Kasei Corporation, European Institute for Energy Research Eifer, Fraunhofer Institute for Solar Energy Systems ISE, Giner and Hydrogenics Europe will report on the latest developments in high-performance, cost-effective and marketable electrolysis and power-to-gas technologies.

16:40 - 17:10

D Closing

Plenary chair: Silke Frank, Peter Sauber Agentur Messen und Kongresse GmbH, Stuttgart, Germany

Keynote:

Vulnerability of a digital world. Marc Elsberg, Wien, Austria. The famous price-winning author has written a number of best-selling pieces of fiction on the vulnerability of our smart world.

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CONFERENCE TIMETABLE Tuesday, October 11, 2016

9:30 - 10:30

E Plenary

Plenary chair: Silke Frank, Peter Sauber Agentur Messen und Kongresse GmbH, Stuttgart, Germany

Keynote:

Barriers and opportunities for battery energy storage – research paper. Alfons Westgeest, EUROBAT, Brussels, Belgium

Electric vehicles: yesterday, today and tomorrow. Joeri de Ridder, AVERE, Brussels, Belgium

4 parallel sessions: 10:50 - 12:30

F1 Smart homes

Session chair: tbc

Residential construction and research projects aim to expand knowledge regarding environmental and human sustainability. Discuss with experts the concrete implementation of fuel cells and batteries in mobile and stationary storage applications and their interconnection in homes.

F2 Mobile applications cars

Session chair: Dr. Manuel Schaloske, e-mobil BW GmbH, Stuttgart, Germany

Hear the latest developments in fuel cell and battery cars and their components from German and international OEMs.

F3 Electric aircrafts, ships and rail

Session chair: Prof. Dr. Josef Kallo, German Aerospace Center DLR, Stuttgart, Germany

Find out about the latest developments in mobile applications for fuel cells and batteries in the non-automotive sectors: airplanes, trains and boats.

F4 Fuel cells for industry and large facilities

Session chair: Andreas Frömmel, VDMA e.V., AG Brennstoffzellen, Frankfurt/Main, Germany

Hear the latest news and solutions from the sector of large scale fuel cell power supply from Fuji N2telligence GmbH, Doosan Babcock Ltd., Friatec and more.

4 parallel sessions: 14:30 - 16:10

G1 Smart grids

Session chair: Dr. Peter Eckerle, StoREgio Energiespeichersysteme e.V., Ludwigshafen, Germany

Smart system solutions for connected users: How can technologies for power, heat and transport be linked in the most intelligent way? Experts from BridgingIT GmbH, Cisco Systems GmbH, Colruyt Group, Digital Energy Solutions GmbH & Co. KG and Leclanché SA will give their answers and sector

coupling ideas.



CONFERENCE TIMETABLE Tuesday, October 11, 2016

G2 Mobile applications buses

Session chair: Bert Witkamp, AVERE European Association for Battery, Hybrid and Fuel Cell Electric Vehicles, Brussels, Belgium

Experience the latest fuel cell and battery bus developments in Belgium, Canada, Germany and Poland. Get technical insights from the engineers.

G3 Hydrogen infrastructure

Session chair: Reinhold Wurster, Ludwig-Bölkow-Systemtechnik GmbH, Ottobrunn, Germany

What do we need to build up a working hydrogen infrastructure system? Where do we stand? Which challenges do we still need to tackle? Viewpoints from representatives of NOW GmbH, H₂Mobility, Hydrogenious Technologies GmbH, H₂ Energy and McPhy Energy Deutschland GmbH.

KEY REASONS TO VISIT THE CONFERENCE:

- + Get market data and insight facts that you won't get without us so easy and efficient.
- + 113 lectures inform you about the latest sector and technology developments.
- + Our top level speakers present news from all around the globe: Austria, Belgium, Canada, China, Germany, France, Italy, Netherlands, Japan, Norway, Poland, Slovenia, South Africa, Spain, Sweden, Switzerland, United Kingdom, USA.
- + You will hear expert answers and views on the questions that move the industry most.
- + You have the chance to network with high-ranking experts and key players from industry, science and politics.

G4 Batteries for houses and small companies

Session chair: Dr. Oliver Weinmann, BVES Bundesverband Energiespeicher e.V., Berlin, Germany

Latest Solutions for stationary battery storage for single and multi-family houses and small companies, introduced by ABO Wind AG, Apricum, Caterva GmbH, Vattenfall etc.

16:40 - 17:10

H Closing

Plenary chair: Silke Frank, Peter Sauber Agentur Messen und Kongresse GmbH, Stuttgart, Germany

Keynote:

Hydrogen and fuel cells: game changer in the energy union. Jorgo Chatzimarkakis, Hydrogen Europe, Brussels, Belgium

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CONFERENCE TIMETABLE

Wednesday, October 12, 2016

9:30 - 10:30

I Plenary discussion

Plenary chair: Peter Schwierz, electrive.net, Berlin, Germany

Plenary discussion with high-end representatives from industry and politics: The energy turn-around: Will Germany be left behind? Will electric mobility be the saving anchor?

4 parallel sessions: 10:50 - 12:30

J1 Heavy duty electric vehicles

Session chair: Prof. Dr. Marcus Geimer, Karlsruhe Institute of Technology KIT, Karlsruhe, Germany

Electric mobility is not only about passenger cars. Airport Stuttgart, Daimler AG, Loop Energy, Siemens, Transportation Power Inc. will show how e-mobility solutions in heavy duty commercial vehicles help to reduce emissions and fuel consumption.

J2 Safety, regulations and standards

Session chair: Prof. Dr. Jens Tübke, Fraunhofer Institute for Chemical Technology ICT , Pfinztal, Germany

How safe are high voltage battery systems? What do we have to consider while working with hydrogen? What is the latest status of testing standards? Hear answers from European Hydrogen Association, MANN+HUMMEL GmbH, Taranis GmbH, K.Tex and more.

J3 Batteries for industry and large facilities

Session chair: Thomas Speidel, Bundesverband Energiespeicher e.V., Berlin, Germany

Hear the latest business and industry solutions from the sector of stationary battery storage: AEG Power Solutions GmbH, Leibniz Universität, The Mobility House GmbH, etc.

J4 Battery management systems

Session chair: Matthias Puchta, Fraunhofer Institute for Wind Energy and Energy System Technology IWES, Kassel, Germany

Learn more about reliability, safety and degradation of batteries in operation, from simple charging status displaying up to high complex systems with data interfaces and power electronics.

4 parallel sessions: 14:30 – 16:10

K1 Smart regions

Session chair: Dr. Michael Münter, Landeshauptstadt Stuttgart, Germany

Learn how new mobility solutions contribute to improve quality of life and to reduce air pollution in urban and rural areas. Case studies from: Amsterdam, Catalonia, Ljubljana, Milano and Upper Rhine Valley.

K2 Light duty electric vehicles

Session chair: Alfons Westgeest, EUROBAT Association of European Automotive and Industrial Battery Manufacturers, Brussels, Belgium

Hear more about how e-mobility solutions in light commercial vehicles like small delivery vehicles, parcel service, small sweepers, forklifts, etc. help to reduce emissions and fuel consumption, e.g. in cities.

CONFERENCE TIMETABLE

Wednesday, October 12, 2016

K3 Next generation batteries

Session chair: tbc

How do next generation battery systems distinguish themselves from existing solutions? Developments in battery chemistry, packaging charging strategies, thermal management, production, etc.

K4 Charging infrastructure

Session chair: Andreas-Michael Reinhardt, LEMnet Europe e.V., Ilmenau, Germany

Fast charging? Mobile charging? Charging at all times and everywhere? Discuss with us, Freshmile, BMW and more the different concepts.

16:40 - 17:10

L Closing

Plenary chair: Silke Frank, Peter Sauber Agentur Messen und Kongresse GmbH, Stuttgart, Germany

Keynote:

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The rechargeable battery market and main trends 2015 – 2025. Christophe Pillot, AVICENNE Energy, Puteaux, France

WORLD OF ENERGY SOLUTIONS conference 2016 features:

FFATURED COMPANIES

Excerpt: Here are some of the companies and institutions that

ABO Wind AG + AEG Power Solutions GmbH + Agenzia Mobilità Ambiente e Territorio s.r.l. + Metropoolregio Amsterdam + Apricum GmbH + Asahi-Kasei Corporation + AVERE European Association for Battery, Hybrid and Fuel Cell Electric Vehicles + AVICENNE Energy + Ballard Power Systems Inc. + BMW of North America, LLC + BridgingIT GmbH + Bundesverband Energiespeicher e.V. + Bundesverband Solare Mobilität e.V. + Generalitat de Catalunya + CATARC China + Caterva GmbH + Automotive Technology and Research Center + Cisco Systeme GmbH + CEP Clean Energy Partnership + Colruyt Group + Daimler AG + Deutsches Zentrum für Luft- und Raumfahrt e.V. + Digital Energy Solutions GmbH & Co. KG + Doosan Babcock Ltd. + Ekoenergetyka-Polska + electrive.net e-mobil + BW GmbH + EUROBAT + EIFER Europäisches Institut für Energieforschung + Exide Technologies GmbH & Co. KG + FCBAT Consulting Ulm + FAST Federazione delle associazioni scientifiche e tecniche + Flughafen Stuttgart GmbH + Ford-Werke GmbH + Fraunhofer-Institut für Chemische Technologie ICT + Fraunhofer-Institut für Solare Energiesysteme ISE + Fraunhofer-Institut für System- und Innovationsforschung ISI + Fraunhofer-Institut für Windenergie und Energiesystemtechnik IWES + Freshmile SAS + FuelCell Energy Solutions GmbH + Fuji N2telligence GmbH + Generalitat de Catalunya + Germany Trade and Invest - Gesellschaft für Außenwirtschaft und Standortmarketing mbH + Giner, Inc. + H2 Energy AG + H2 Mobility Deutschland GmbH & Co. KG + Honda R&D Europe (Deutschland) GmbH + Hydrogen Europe + Hydrogenics Europe NV. + Hydrogenious Technologies GmbH + HySA Systems + Japan Strategic Capital Co., Ltd + Karlsruher Institut für Technologie + Strategische Partner – Klimaschutz am Oberrhein e.V. + K.TeX Knein Technische Textilien GmbH + Leclanché SA + Gottfried Wilhelm Leibniz Universität Hannover + City of Ljubljana + Loop Energy + LBST Ludwig-Bölkow-Systemtechnik GmbH + MANN+HUMMEL GmbH + McPhy Energy Deutschland GmbH + Ministerium für Umwelt, Klima und Energiewirtschaft Baden-Württemberg + METI Ministry of Economy, Trade and Industry + Next Energy EWE-Forschungszentrum für Energietechnologie e. V. + NOW Nationale Organisation Wasserstoff- und Brennstoffzellentechnologie GmbH + NSB Niederelbe Schiffahrtsgesellschaft mbH & Co. KG + PowerCell Sweden AB + Rabbit Publishing GmbH + Siemens AG + Bundesverband Smart City e.V. + SmartCity.institute + SOLIDpower GmbH + StoREgio Energiespeichersysteme e.V. + StreetScooter GmbH + Landeshauptstadt Stuttgart + SymbioFCell + TARANIS GmbH + Technologieberatung Wandt + Tesla Motors Headquarter + The Mobility House GmbH + ThyssenKrupp Marine Systems GmbH + Transportation Power, Inc. + U.S. Department of Energy + Vattenfall GmbH + VDMA Verband Deutscher Maschinen- und Anlagenbau e.V. + Windcloud (Braderup) GmbH + Wirtschaftsförderung Region Stuttgart GmbH + Wystrach GmbH + ZP Zuhause Plattform GmbH + Zuweso GmbH

REGISTRATION AND GENERAL INFORMATION

Conference fees

3-day-ticket, October 10 – 12, 2016	EUR	1,050*
2-day-ticket, October 10/11, 11/12, 10/12, 2016	EUR	850*
1-day-ticket, October 10 or 11 or 12, 2016	EUR	475*
Evening event, October 10, 2016	EUR	95*
Student fees see www.world-of-energy-solutions.com/program		

* VAT will be added to all prices stated.

The conference fees include the one-day / two-day / three-day participation at the conference, access to the trade fair. documentation (access to online platform), drinks and lunch during the days booked.

The conference ticket is valid for all conference sessions on the day/ days booked.

Registration

In written form (online/post/fax), addressed to Peter Sauber Agentur Messen und Kongresse GmbH. Following receipt of your application, you will get a letter of confirmation and the invoice (digital). You will receive your name tag and documents at the check-in desk upon presentation of the letter of confirmation.

Cancellations

Cancellations prior to September 1, 2016 will be credited or refunded after deduction of a 25% processing fee. Refunds are not possible for cancellations received after September 1, 2016. Certainly a substitute can be nominated instead. Changes to the program can still occur. These do not justify cancellations. Please look online

for the current program status at www.world-of-energy-solutions.com/ program

Payment

Payment immediately online or after receipt of invoice. In the case of registration at short notice, it is possible to pay on site by credit card (VISA, MasterCard, JCB cards) or cash. Please note that participation is only possible after payment.

Organizer and registration

Peter Sauber Agentur Messen und Kongresse GmbH Wankelstrasse 1 70563 Stuttgart, Germany Phone: +49 711 656960-50 Fax: +49 711 656960-905702 E-Mail: wes@messe-sauber.de

Accommodation

Stuttgart Marketing GmbH Phone: +49 711 2228-100 hotels@stuttgart-tourist.de Password: WES2016

Venue

Messe Stuttgart ICS International Congress Center Messepiazza 1 70629 Stuttgart, Germany www.messe-stuttgart.de

You can also register online at www.world-of-energy-solutions.com/ registration

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3-day-ticket, October 10–12, 2016	- EUR 1,05	1,05
2-day-ticket, October 10/11 11/12 10/12, 2016	- EUR	85
1-day-ticket, October 10 or 11 or 12, 2016	EUR	47
Evening event, October 10, 2016	EUR	6
* Actual VAT will be added to all prices stated.		
Please mark your sessions: Wednesday, October 12, 2016	er 12, 2	2016

Please send a seperate form /copy for each participant or register

REGISTRATION FORM

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October 12, 2016	Session K1
Wednesday,	Session J1

Session K2	Session K3	Session K4
Session J2	Session J3	Session 4

Monday, October 10, 2016

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Session J3	Session J4	

Session C3 Session C4

Session C2

Session C1

Session B

Sponsoring

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> Session G1 Session G2

Session F2 Session F1

Tuesday, October 11, 2016

Session G3 Session G4

Session F3 Session F4

Please send me information for exhibitors.

Date/Signature

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Messe Stuttgart



Host



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