



EMISSION REDUCTION AND EMISSION SENSORS

in the Automotive Industry

11 and 12 July 2018

Stuttgart, Germany, Mövenpick Airport Hotel



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CONFERENCE HOSTS

PANEL A: EMISSION REDUCTION



University of Applied Sciences Dortmund
Prof. Dr. Yves Rosefort

PANEL B: EMISSION SENSORS



EngineSens Motorsensor
Stefan Carstens

EXCERPT OF THE SPEAKERS



CTS Corporation
Dr. Alexander Sappok
Director of RF Sensors



German Patent and Trademark Office
Dr. Bettina Kuhn
Senior Government Official



Danfoss
Merwyn Lopes
Project Manager



Liebherr Machines Bulle
David Corpataux
HW Developer E/E Systeme

TOPICS

- » Applications and diagnostics of Otto particle filters
- » Exhaust gas recirculation (EGR) and pollutant reduction
- » Selective Catalytic Reduction (SCR)
- » Combination systems SCR and DPF
- » NO_x sensors
- » Oxygen sensors
- » Pressure sensors and specific applications
- » Cybersecurity and On Board Diagnosis (OBD)

BASIC PRINCIPLES OF EXHAUST GAS SENSOR TECHNOLOGY

10 July 2018 – Stuttgart

TECHNICAL SUPERVISION

Stefan Carstens, Managing Director,
EngineSens Motorsensor GmbH



OBJECTIVES

The seminar will teach attendees essential knowledge about the key sensors and how they work. Stefan Carstens will back up the theory with numerous practical examples. By the end of this one-day introduction, attendees will know and understand the main terms and background information and will be up-to-date with all of the current science and technology.

09:00 Reception with coffee & tea and distribution of the seminar documents

09:15 Opening

EngineSens Motorsensor GmbH:
Stefan Carstens, Managing Director

09:30 Applications for exhaust gas sensors

- » Where is each type of sensor used?
- » Diesel with NO_x trap and DPF
- » Diesel with DPF and SCR
- » Influences of the new driving cycle WLTC and the RDE legislation

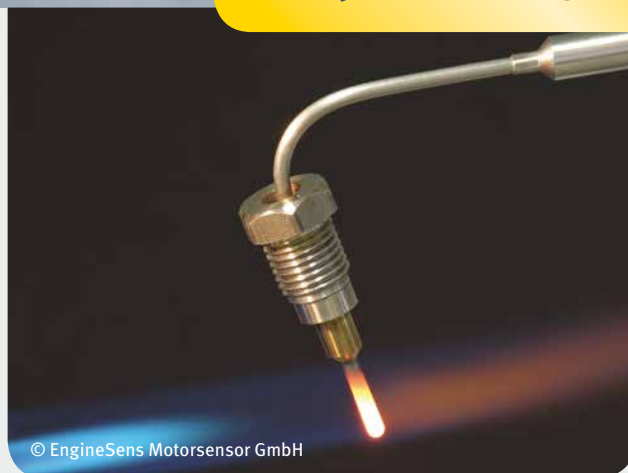
10:15 Exhaust gas temperature sensor systems

- » PT200 sensors in combined thin-film and thick-film technology
- » NTC sensors: special features of the characteristic curve
- » Special features in test bench applications
- » Type N thermocouples in a series production vehicle, specially designed for high-temperature applications above 1000°C

11:15 Coffee break & networking

11:45 Oxygen sensors

- » Step response lambda sensor: from simple type sensors to planar technology
- » Lambda sensors based on zirconia
- » Broadband lambda sensor: oxygen-reference solutions and pumped sensors
- » Superfast light-off technology



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13:15 Lunch & networking

14:15 Nitrogen oxide sensors

- » Why multiple cavities?
- » Pumping flows Ip1 and Ip2
- » Cross-sensitivities and restrictions in operation
- » Poisoning symptoms

16:15 Coffee break & networking

16:45 Soot sensor systems

- » Which concepts are available?
- » Three different concepts
- » Already in series production! Resistive soot sensors – layout and function

17:45 Time for questions & discussion

18:00 End of the seminar



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EMISSION REDUCTION

Prof. Dr. Yves Rosefort, Host Panel A



09:15 Welcome and opening

09:30 Federal Environmental Agency
Emission legislation: future requirements
Helge Jahn, Official



Dataforce
The development of the market – foresight
Julian de Groot, Product Development
Manager Dataforce



10:30 Coffee break, World Cafés, Networking and Visit the Exhibition

11:30 Federal-Mogul Powertrain
Textile protection solutions
Andreas Buchholz, Application Engineer



P3 group
Big Data meets Real Driving Emissions
Ralf Schreiber, Project Coordinator



12:30 Lunch break, World Cafés, Networking and Visit the Exhibition

14:00 Robert Bosch
Bosch Solutions for Gasoline
Particulate Filter (GPF) Monitoring
Christian Schauz, System Engineering
Exhaust Aftertreatment Gasoline



IAV
Integral Control Approach for Diesel
engines (RDE conditions)
Enrico Neumann, Team Manager



EMISSION SENSORS

Stefan Carstens, Host Panel B



09:15 Welcome and opening

09:30 EngineSens Motorsensor
Exhaust Aftertreatment after the Diesel
Emissions Scandal: Challenges
Stefan Carstens, CEO



IHS Markit
Trends in the Automotive Sensor Market
Dr. Richard Dixon, Senior Principal Analyst,
Sensors



11:30 German Patent and Trademark Office
Patent-Searching using the example of
a Soot sensor
Dr. Bettina Kuhn, Senior Government Official



University of Bayreuth
Radio frequency sensors for catalyst
control – an overview
Prof. Dr. Ralf Moos, Department Head, BERCSpeaker



15:00 Coffee break, World Cafés, Networking and Visit the Exhibition

16:00 Roben Automotive
Cybersecurity and ISO26262:
A Topic for Exhaust Systems
Matthias Weber, CEO



IAV
Machine Learning and AI for EGT Controls
Marco Moser, Smart Data Engineer



16:00 ATESTEO
Hot-Shake Test bench for the develop-
ment of exhaust temperature sensors
Jochen Markant, Division Manager



VTT Technical Research Centre of Finland
Ammonia measurements with NH3 sensor
Timo Murtonen, Senior Scientist



17:00 Results World Cafés

17:00 Results World Cafés

18:00 Start of the evening event

EMISSION REDUCTION

Prof. Dr. Yves Rosefort, Host Panel A



09:15 Welcome and opening

09:30 European Commission – Directorate General for Climate Action – DG CLIMA
CO₂ emissions and fuel consumption from Heavy Duty Vehicles. What are the next steps in Europe?



Dr. Dimitrios Savvidis, Policy Officer

Fachhochschule Dortmund
CO₂ optimization of future automotive drives



Jakob Madalinski, Research Assistant

Source: Fachhochschule Dortmund; Photographer: Stephan Lucka

10:30 Coffee break, World Cafés, Networking and Visit the Exhibition

11:30 MANN+HUMMEL

Tackling City Pollution Problems – First Concepts of Fine Dust Filtration
Jan Eric Raschke, Program Manager



KIT

Removal and rearrangement processes of particle layers in exhaust aftertreatment systems – influence on operating behaviour and service life



Prof. Dr. Achim Dittler, Head of Gas-Particle-Systems – Institut für Mechanische Verfahrenstechnik und Mechanik (MVM)

12:30 Lunch break, World Cafés, Networking and Visit the Exhibition

14:00 Kautex Textron

Emission reduction at low temperatures
Nicolai Schumacher, Senior Manager SCR Global



ERC Emissions-Reduzierungs-Concepte
Retrofit of an SCR-System for NO_x-reduction on stationary engines



Dr. Wolfgang Schüttenhelm, Authorized Officer

15:00 Results World Cafés

16:00 Networking and end of the conference

EMISSION SENSORS

Stefan Carstens, Host Panel B



09:15 Welcome and opening

09:30 Danfoss
MES 1001 Emission Sensor: Technology, applications, ways into the future



Merwyn Lopes, Project Manager

CARIT Automotive
NO_x sensor for applications in exhaust gas systems: Measuring principles, sensor design, testing results



Dirk Bleicker, Head of R&D

11:30 TRAFAG

Controlled engine – Controlled emissions: Trafag sensors in engine technology



Dr. Dieter Zeisel, CEO

Fraunhofer IKTS

Multilayer ceramic flame ionization detectors with internal fuel gas supply for gas sensor applications



Dr. Steffen Ziesche, Group Leader

14:00 Liebherr Machines Bulle

Special requirements for sensors in the off-road area



David Corpataux, HW Developer E/E Systeme

IAV

Microwave Antenna for Direct SCR Load Measurement



Marco Moser, Smart Data Engineer

15:00 Results World Cafés

SIMULTANEOUS INTERPRETATION ON BOTH CONFERENCE DAYS



Take advantage of our early bird fee with a discount of **100 €** for registration until **1 May 2018!**

CONFERENCE DATE

Seminar Basic principles of exhaust gas sensor technology

Tuesday, 10 July 2018

5th International Specialist Conference: Emission Reduction and Emission Sensors

Wednesday and Thursday, 11 and 12 July 2018

CONFERENCE VENUE

Mövenpick Hotel Stuttgart Airport & Messe

Flughafenstraße 50

70629 Stuttgart

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hotel.stuttgart.airport@movenpick.com

www.moevenpick-stuttgart-airport.com

ACCOMODATION

Single room: 153 € incl. breakfast plus VAT

Please place your reservation directly with the hotel using the code word "SV Veranstaltungen".

Please note: We will set aside a number of rooms for you until 14 May 2018. Any bookings after this date can only be considered according to availability.

PARTICIPATION FEE

Seminar + Conference

2.595 € plus VAT

Conference without Seminar

1.895 € plus VAT

Only Seminar

995 € plus VAT

Services for conference participants:

- » Conference documents
- » Refreshments in the breaks
- » Lunch on both conference days
- » Joint evening event on the first conference evening
- » World Cafés and Networking

REGISTRATION

Please register using the attached registration coupon or via the internet at www.sv-veranstaltungen.de an. Upon reception of your written application you will be registered as a participant and get a written confirmation as well as an invoice, which is to be settled before the start of the event. (Event number 818.101.17)

In case of a cancellation after the cancellation period (26 June 2018) or in case of non-participation, the full participation fee will be charged; However, a substitute participant may be appointed. Cancellations before this date will be charged with 150 € plus VAT for administrative efforts. Any cancellations shall be made in writing.

The organiser reserves the right to shift the entire event or parts thereof as regards the venue and/or the time, to amend the same or to cancel it at short-term notice.



ORGANISED AND CONDUCTED BY



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5TH INTERNATIONAL CONFERENCE: EMISSION REDUCTION AND EMISSION SENSORS

11 and 12 July 2018

Stuttgart, Germany, Mövenpick Airport Hotel

ADVISORY BOARD



**EngineSens
Motorsensor**
Stefan Carstens



**MAN Diesel &
Turbo**
Konstantin
Eberle



TE Connectivity
Dr. Jörn Bullert



IAV
Marco Moser



**MTU
Friedrichshafen**
Martin Rabold

EXHIBITORS

ATESTEO

P3

Registration | Online on www.sv-veranstaltungen.de – email: register@sv-veranstaltungen.de

- Two in one: Conference Emission Reduction and Emission Sensors + Seminar Basic Principles of Exhaust Gas Sensor Technology**, 10 to 12 July 2018: 2.595 €* (818.101.17)
- Only Conference Emission Reduction and Emission Sensors**
11 to 12 July 2018: 1.895 €*
- Only Seminar Basic Principles of Exhaust Gas Sensor Technology**
10 July 2018: 995 €*
- Please send us information on **exhibition and sponsoring opportunities free of charge.**

100 € early bird discount:
until 1 May 2018

* All prices plus VAT – discounts cannot be combined.

20% discount



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