

Automotive Testing Seminar EINLADUNG

ROHDE & SCHWARZ

Make ideas real



Die Automobiltechnologie entwickelt sich schnell weiter und damit auch die Testtechniken, welche für die Entwicklung, Verifizierung und Produktion von Chipsätzen, Komponenten und Fahrzeugen erforderlich sind. Das [Automotive Testing Seminar](#) bietet Fachleuten aus der Branche die Möglichkeit, sich über aktuelle Themen im Automotive-Ökosystem und deren Auswirkungen auf die Test- und Messtechnik zu informieren - von ADAS und Radar bis hin zu elektrischen Antriebssträngen und C-V2X.

Rohde & Schwarz Österreich lädt Sie herzlich zu seinem [Automotive Testing Seminar](#) ein, das am:

Dienstag, den 07. März 2023, von 9.00 bis 17.00 Uhr
im **Grand Hôtel Wiesler, Grieskai 4-8, 8020 Graz, Österreich** stattfinden wird.

Bei dieser Veranstaltung werden Ihnen unsere R&S-Experten eine Reihe von Vorträgen zu folgenden Themen präsentieren:

- **The evolution of In-Vehicle Networks to Zonal Architecture**
- **Validation of Radar-Based ADAS and AD functions on Vehicle-in-the-Loop test beds**
- **New developments in automotive CISPR standards for electric vehicles**
- **Electric Drivetrain testing, including double-pulse testing with PE Systems**
- **Advances in C-V2X and Automotive Communications**

Sie haben auch die Möglichkeit, sich mit unseren Experten auszutauschen und Demonstrationen unserer Produkte im Ausstellungsbereich anzusehen.

Ihr Rohde & Schwarz-Team Österreich

AGENDA

Uhrzeit	Programmpunkt	Referent
08:30 – 09:00	Registrierung	
09:00 – 09:15	Begrüßung & Einleitung	
09:15 – 09:45	The evolution of In-Vehicle Networks to Zonal Architecture	Ralf Oestreicher Rohde & Schwarz
09:45 – 10:45	Validation of Radar-Based ADAS and AD functions on Vehicle-in-the-Loop test beds	Dr. Jürgen Holzinger AVL List GmbH
10:45 – 11:00	Kaffeepause	
11:15 – 12:00	New developments in automotive CISPR standards for electric vehicles	Mathias Hofer Rohde & Schwarz
12:00 – 13:00	Mittagessen	
13:00 – 13:45	Electric Drivetrain testing, including double-pulse testing with PE Systems	Ralf Oestreicher Rohde & Schwarz
14:00 – 15:00	Advances in C-V2X and Automotive Communications	Holger Rosier Rohde & Schwarz
15:00 – 15:15	Zusammenfassung	
15:15 – 17:00	Austausch & Demonstration von dedizierten Lösungen für die Automobilbranche	

Abstrakte

Thema:**The evolution of In-Vehicle Networks to Zonal Architecture****Abstrakt:**

As the automotive industry develops vehicles with increased levels of autonomous driving requiring more sensors and increased connectivity, it faces the challenge of transporting and processing a huge amount of data in the vehicle. To do this in an efficient way, it is necessary to reduce In-Vehicle Network complexity, power consumption and weight, leading to a change from domain-orientated network architecture to zonal architecture. Join this webinar to learn about this significant development in In-Vehicle Networks and how to test it effectively

Thema:**Validation of Radar-Based ADAS and AD functions on Vehicle-in-the-Loop test beds****Abstrakt:**

Due to the fact that homologation of a new cars mainly based on driving tests doesn't scale for SAE L3 and beyond, UNECE is assessing new methods including X-in-the-Loop. Vehicle-in-the-Loop testing complements driving on proving grounds or real roads in a safe, efficient and reproducible way. New products like AVL DRIVINGCUBE™ is a comprehensive Vehicle-in-the-Loop solution stimulating all sensors and actuators for most efficient and safe testing on vehicle level. It includes R&S radar test system with the advanced antenna array which is a very scalable and versatile. The small form factor and robust implementation makes the R&S radar test system the first choice for test bed operation.

Thema:**New developments in CISPR automotive EMI standards for electric vehicles****Abstrakt:**

Automotive EMI standards are developing quickly to address the impact of electric and hybrid vehicles on the electromagnetic environment. Recent changes in CISPR 25 & CISPR 36 and the ongoing revision of CISPR 12 as well as a demand to reduce test time and record the disturbance characteristic of the device under test bring new requirements for vehicle manufacturers and component suppliers. Usage of FFT-based measuring instruments is the key for addressing these topics. The presentation will address the applicability of FFT-based receivers for EMI compliance measurements against international standards, gives an inside view on the technology of such receivers and will conclude with practical use cases. In this presentation, you will learn more about:

- New developments in CISPR EMI standards for automotive applications
- Overview of FFT-based receivers for EMI testing
- Practical approach to EMI testing

Thema:

Electric Drivetrain testing, including double-pulse testing with PE Systems

Abstrakt: folgt in Kürze

Thema: Advances in C-V2X and Automotive Communications

Abstrakt:

Cellular-V2X promises to make driving safer, more efficient and it is critical for the implementation of Advanced Driver Assistance Systems (ADAS). However, it also brings new challenges to maintain reliable connectivity between vehicles, infrastructure, pedestrians and other road users and ensure the correct operation of ADAS features. In this presentation, you can learn about the latest developments in LTE and 5G C-V2X standards in accordance with organizations such as 3GPP, ETSI & C-SAE and obtain an overview of the very dynamic regional and global market. In addition, get insights into C-V2X network architecture as well as messaging, RF, protocol and TCU application testing.

Referenten



Ralf Oestreicher
Automotive Market Segment Manager
Rohde & Schwarz

Ralf Oestreicher is an Automotive Market Segment Manager at Rohde & Schwarz where he is focussed on bringing together product strategy, business development and marketing to ensure the company's e-Mobility test solutions meet customer requirements. Prior to joining R&S, Ralf was Global Key Account Manager at Isabellenhuette Heusler gaining in-depth knowledge of electric vehicle testing.



Dr. Jürgen Holzinger
Department Manager Advanced Solution Lab
ADAS/AD Testing Solutions
AVL List GmbH

Dr. Jürgen Holzinger, is leading ADAS/AD Virtual testing team inside AVL and has more than 10 years' experience in testing and simulation. He has been focusing mainly on the development of complex Vehicle-in-the-Loop projects where simulation of ADAS system is required. Prior to AVL, Juergen worked for Magna Steyr as a Project Manager responsible for different stages of car assembly and verifications. He holds the doctorate degree in Mechanical engineering and Driving dynamics from TU Graz.



Mathias Hofer
Team Leader Application Engineering EMC
Rohde & Schwarz

Mathias Hofer is the Team Leader of the EMC application engineering team at Rohde & Schwarz, responsible for the complete EU area. Prior to joining Rohde & Schwarz, Mathias has been working in the Test & Measurement area for 15 years, dealing with a wide range of applications from RF/ μ Wave, to Optics, and High-Speed Communications. Besides his team-lead position, he is engaged heavily in day-to-day work in EMC projects, working closely with customers on their EMC testing requirements, also acting as a strong source of know-how, industry trends, as well as best-practice in EMC to customers across the region.



Holger Rosier
Technology Manager, 5G Automotive
Rohde & Schwarz

Holger Rosier is a Technology Manager at Rohde & Schwarz within the Automotive Market Segment. His focus is on wireless communications technologies for vertical industries, in particular for connected cars. Before joining Rohde & Schwarz, Holger was a Senior Technology Lead for IoT with Huawei Technologies in Germany. In this position, he led joint 5G V2X research industry projects Holger holds a University degree in Electrical Engineering & Information Technology from the RWTH Aachen University. He combined post-graduate studies on 3GPP technologies and ultra-wideband (UWB) communication with consultancy for Cooperative Intelligent Transportation Systems (C-ITS).