IEEE Santa Clara Valley EMC Chapter Meeting Announcement

Join us for this unique opportunity to interact with global ISO/CISPR D Automotive EMC Experts!

Antenna and EMC Measurement Test Challenges of Autonomous Vehicles:

The Latest Test Methods and Standards Development Impacting the Future of the Automotive Industry

Date: **Tuesday, March 6, 2018**

Time:	6:15 pm	Complimentary dinner
	7:00 pm	Welcome from Giuseppe Selli, Cisco, IEEE Santa Clara Valley EMC Chapter Chair
	7:05 pm	**Overview on ISO/CISPR D Automotive EMC Committee Activity**, Craig Fanning, Elite Electronic Engineering, CISPR D Chair
	7:20 pm	**"Vehicle Level Antenna Pattern and Advanced Driver Assistance Systems (ADAS) Measurement"**, Garth D'Abreu, ETS-Lindgren
	8:00 pm	**ISO/CISPR D Automotive EMC "Ask the Experts" Panel**: Don Seyerle, GM; Keith Frazier, Ford; Robert Kado, FCA ***(See presentation abstracts and speaker bios below.)***
	8:45 pm	Adjourn

Location: Siemic, 775 Montague Expressway, Milpitas, CA 95035, phone (408) 526-1188

Register: Click here to register now on line. Please register by March 3 to ensure adequate seating and dinner is available for all. Thank you!

Questions: Janet O'Neil, ETS-Lindgren, cell (425) 443-8106, email j.n.oneil@ieee.org

Thank you to our meeting sponsors!

TECHNICAL PROGRAM

Overview on ISO/CISPR D Automotive EMC Committee Activity

Craig Fanning, Chair, CISPR D Committee on Automotive EMC, Working Group 2, Elite Electronic Engineering, Downers Grove, Illinois

Abstract: Over 50 automotive EMC experts from the Americas, Europe and Asia participate on the ISO/CISPR automotive EMC standards committees. The experts represent manufacturers of automotive vehicles and components as well test and instrumentation suppliers. They are responsible for writing the standards that verify the performance and quality of products manufactured in the automotive industry. As chair of the CISPR D working group 2 committee, Craig Fanning will provide a brief overview on how these committees and working groups operate, the significant standards currently under revision, and future activity related to today's modern vehicles.

Vehicle Level Antenna Pattern and Advanced Driver Assistance Systems (ADAS) Measurement
Garth D'Abreu, ETS-Lindgren, Cedar Park, Texas

Abstract: In the rapidly evolving industry of autonomous vehicles, the ability to successfully provide vehicle level antenna pattern and ADAS measurements will be key to the future of this market and address public safety concerns. This presentation details the essential aspects of the market demands and how innovative testing solutions help drive the technologies forward to real-life applications.

Ask the Experts Panel
Moderated by Craig Fanning, Elite Electronic Engineering, Downers Grove, Illinois

Abstract: Our Automotive EMC expert panelists include Don Seyerle of General Motors (GM), Keith Frazier of Ford and Robert Kado of Fiat Chrysler Automobiles (FCA). Based in the greater Detroit area, collectively they have over 80 years of experience working in the Automotive EMC industry. Our panelists are active contributors to the CISPR, ISO, SAE and corporate EMC standards for the automotive industry. They are part of the US delegation convening in the Silicon Valley for the ISO/CISPR D automotive EMC standards committee meetings. Don't miss this opportunity to ask questions of these automotive EMC standards experts; such as why a test is performed in a certain way, how was the frequency limit determined for a test, which antenna type is preferred for certain tests, etc.

SPEAKER BIOGRAPHIES

Craig Fanning is the manager of the EMC testing department at Elite Electronic Engineering located in the greater Chicago area. As manager, Craig supervises EMC laboratory scheduling, test resource management, sector operations and business planning. He also oversees all EMC programs to ensure efficiency and customer satisfaction from scheduling through invoicing. In addition to managing the EMC lab, Craig drives Elite's lean and process improvement efforts as well as new service development. Mr. Fanning's area of technical specialization is in automotive, truck, and construction equipment test standards. He is an active member of the SAE EMC committees, ISO TC22/SC3/WG3 USTAG, and CISPR D USTAG Lead Technical Advisor, and CISPR/D/WG2 Convener. Craig is a member of the IEEE EMC Society and has authored several papers presented at its annual symposium. He received his BSEET engineering degree from DeVry Institute of Technology in 1986. He also has a Certificate in Business Administration and a Certificate in Lean Operations and Principals, both from University of Illinois at Chicago. Craig holds iNARTE certifications as an EMC Technician and as an EMC Accredited Test Laboratory Engineer.

Garth D'Abreu is the Director, Automotive Solutions at ETS-Lindgren based at the corporate headquarters office in Cedar Park, Texas. He has primary responsibility for the design and development functions worldwide within the Systems Engineering group, specializing in turnkey solutions for Automotive EMC and Wireless test integration. Some of these more complex full vehicle and electronic sub-assembly (ESA) test chambers involve his coordination with the RF engineering team on custom components, and the certified, internal Building Information Modeling (BIM) team at ETS-Lindgren. Due to his considerable industry experience, he is the ETS-Lindgren global subject matter expert responsible for the ongoing research and development of Automotive EMC / Wireless test chambers for Regular, Electric and Hybrid Electric Vehicles, focusing on combination anechoic chambers, reverberation chambers, GTEM cells, EMP protection applications and wireless device test systems. Mr. D'Abreu is a member of the IEEE EMC Society and active participant in standards development, including the SAE, ISO and CISPR D automotive EMC standards, with over 25 years of experience in the RF industry. He holds a BSc degree in Electronics & Communications Engineering, from North London University, UK.

Robert Kado is the Sr. Manager and Sr. Technical Fellow of EMC for Fiat Chrysler Automobiles (FCA). Robert joined FCA in 2005 and has since been providing and developing technical expertise globally for the science; overall Robert has over 18 years of experience in the field of Automotive EMC. Robert represents FCA on various national and international committees for EMC and is the Chairman of the SAE EMC Committee as well as being a United States Delegate within the field. Robert has been an active member of the IEEE EMC Society his entire career and has published multiple papers presented at various symposiums. Robert obtained his BSEE and MSEE from Oakland University.

Keith Frazier received his BS in electrical engineering from Purdue University in 1976. He has been a practicing EMC engineer for over 40 years with experience in automotive, military, aerospace and commercial electronics with emphasis on system design and testing with respect to EMI and TEMPEST disciplines. Keith joined Ford Motor Company in 1990 and serves as Ford's technical leader responsible for oversite of core EMC systems design for Ford automotive products worldwide, in addition to the development of global corporate EMC requirements and test methods. He is also an active member of the US Technical Advisory Group supporting ISO and CISPR automotive standards development. Keith has been a member of IEEE EMC Society since 1983 and has authored or co-authored multiple papers presented at past EMC symposia.

Don Seyerle is the Technical Fellow of EMC for General Motors Company. He joined GM in 1979 as a Co-Op engineering student working at one of its allied divisions, Packard Electric. Following his graduation in 1984, he transferred to the GM Milford Proving Ground EMC facility. During his 38+ year career in EMC at GM, he has been responsible for all aspects of EMC for the automobile, including vehicle EMC test automation and troubleshooting, component EMC methods and requirements development, and circuit board EMC design reviews and troubleshooting. Additionally, he represents General Motors on the various SAE EMC committees and its sub-committees, as well as serving as both a Lead US Delegate and US Expert to the international automotive EMC standardization activities (ISO TC22/SC32/WG3 and IEC CISPR/D). Donald obtained his BSEE from General Motors Institute (now known as Kettering University) and MSEE from University of Michigan.