



### IEEE EMC Society Chapter Meeting Announcement

The Austria, Central Texas, Central New England, Huntsville, Los Angeles, Orange County, San Diego, Santa Clara Valley, SE Michigan, and Twin Cities EMC Chapters,  
Together with ASC C63®, Announce a LIVE Webinar:

### ***EMC Antenna Calibrations: Maximizing your Calibration Experience Now and in the Future***

**Date:** Thursday, February 25, 2021

<b>Time:</b> 8:00 am PST	Welcome and Announcements – <i>Mr. Dan Hoolihan, Chair, ASC C63®</i>
8:05 am	<b>Antenna Calibrations for Electromagnetic Compatibility (EMC) Testing: SAE ARP 958D, ANSI C63.5-2017, CISPR 16-1-6:2017, and YOU!</b> <i>By Doug Kramer, Director, Lab Services, ETS-Lindgren, Cedar Park, Texas</i>
8:40 am	<b>Loop Antenna Calibration within the CISPR 16 Series</b> <i>By Alexander Kriz, Seibersdorf Laboratories, Seibersdorf, Austria</i>
9:10 am	Q&A with the speakers, moderated by Dan Hoolihan <b><u><i>(See presentation abstracts and speaker bios below.)</i></u></b>
9:30 am	Wrap Up/Final Comments

**Register:** [Click here](https://register.gotowebinar.com/register/7930409447695168014) to register now on line or enter the following on your browser:  
<https://register.gotowebinar.com/register/7930409447695168014>

**Questions:** Janet O’Neil, ETS-Lindgren, cell (425) 443-8106, email [j.n.oneil@ieee.org](mailto:j.n.oneil@ieee.org)

### **TECHNICAL PROGRAM**

#### **Antenna Calibrations for Electromagnetic Compatibility (EMC) Testing: SAE ARP 958D, ANSI C63.5-2017, CISPR 16-1-6:2017, and YOU!**

*By Doug Kramer, Director, Lab Services, ETS-Lindgren, Cedar Park, Texas*

**Abstract:** The landscape of EMC testing provides a wide variety of different requirements and test methods. Calibration is the process used to provide the traceability on measurement to the International System of Units (SI). Depending on the product testing method and writing body, the three most commonly referenced documents for antenna calibration are CISPR 16-1-6, ANSI C63.5, and SAE ARP 958. This is a presentation of the three documents most commonly used by EMC testing standards for the calibration of an antenna, how to specify those services as you need them, and when to know the difference.

#### **Loop Antenna Calibration within the CISPR 16 Series**

*By Alexander Kriz, Seibersdorf Laboratories, Seibersdorf, Austria*

**Abstract:** Several standards of the CISPR 16 series are currently under maintenance by CISPR/A. Radiated emission measurement methods (CISPR 16-2-3), antenna specification and test site validation techniques (CISPR 16-1-4), and antenna calibration methods (CISPR 16-1-6) are updated for the frequency range below 30 MHz. This presentation provides a summary of the most important changes and the corresponding impact on EMC test labs. The focus will be on loop antenna calibration.

## SPEAKER BIOGRAPHIES



**Doug Kramer** is the Director, Lab Services (Acoustic/Calibration/EMC/Wireless Labs) for ETS-Lindgren in Cedar Park, Texas. He has 18 years of experience in managing commercial laboratories and providing test solutions to a variety of customers. He holds BSEE and MSEE degrees in Electrical Engineering from the University of Nebraska-Lincoln. He is the current chair of the ANSI C63.5 working group as well as the SAE ARP 958 revision working group. Doug supports the technical staff at ETS-Lindgren, many of whom are active contributors to the leading wireless industry organizations, including the WiMAX Forum®, CTIA Certification™, 3GPP, and the Wi-Fi Alliance®. Prior to joining ETS-Lindgren in 2011, Doug was the General Manager for the Nebraska Center for Excellence in Electronics (NCEE), the only full service EMC, environmental, and safety product testing facility in Nebraska.



**Alexander Kriz** works in the RF/EMC area for Seibersdorf Laboratories in Seibersdorf, Austria. He has more than 20 years of experience in the design and evaluation of calibration/measurement methods and in product design. He holds a “Diplom Ingenieur” and a doctor degree from the Vienna University of Technology, Vienna, Austria. He is the current chairman of Ad Hoc Group One within CISPR/A which is responsible for updating CISPR 16-1-4 and CISPR 16-1-6 and a member of CISPR/A Working Group 1 and 2. At Seibersdorf Laboratories, Alexander is responsible for the design and implementation of novel calibration and measurement methods including measurement uncertainty calculation. He is also responsible for R&D of products, including antennas and reference sources, to name a few, and holds several patents. In 2009, he received the IEC 1906 Award for exceptional achievements.

## HOST AND MODERATOR



**Daniel D. Hoolihan** is currently President of Hoolihan EMC Consulting. His 50 years of experience in the EMC engineering profession began at Control Data Corporation. Since January 2000, he has been consulting in EMC engineering. He is presently Chair of the Accredited Standards Committee (ASC) C63® on EMC. Mr. Hoolihan has been a member of the IEEE since 1983 and is currently a Life Senior Member. From 1998-1999 he was President of the IEEE EMC Society and has served on its Board of Directors for many years since 1987. He has held numerous leadership positions within the EMC Society and currently serves as Chair of the History Committee. Mr. Hoolihan received his MS degree in Physics from Louisiana State University in 1969 and his MBA from the University of Minnesota in 1975.