


# Spectral Lines



**www.scvemc.org** Santa Clara Valley Chapter of IEEE Electromagnetic Compatibility Society

November 2000 issue

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**Nominating:**  
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## SCV EMC Society Meeting

### "Impulse Bandwidth Specifications of EMI Receivers"

Tuesday, November 14, 2000

The November Santa Clara Valley EMC Society meeting will be held at HP in Cupertino, 19091 Pruneridge Ave, Oak Room in building 48S, starting at 7:30 PM. Please join us for dinner at Chili's, 20060 Stevens Creek Blvd. in Cupertino, from 5:00 to 7:00.

Werner Schaeffer of Cisco Systems will give us a presentation on impulse bandwidth specification of EMI receivers. When measuring emissions with an EMI receiver or spectrum analyzer, different signal types may be encountered. Their classification as narrowband or broadband is dependent on the signal's spectral distribution relative to the receiver's resolution bandwidth used for the measurement. It is essential to know which type of signal is being measured to avoid erroneous test results and the wrong interpretation of data. In this context, the knowledge of the instrument's impulse bandwidth is necessary to correctly determine the absolute amplitude value of an emission. The determination of the receiver's impulse bandwidth can be done with a series of measurements, but not simply by multiplication of its 3dB or 6dB bandwidth with a constant factor. Only the accurate knowledge of this parameter allows a meaningful comparison of the measured emission levels to a limit line and verification of a product's compliance with an EMI standard.

Werner Schaefer is currently a senior compliance engineer with Cisco Systems in San Jose, California. He joined Hewlett-Packard (HP) Company in Frankfurt, Germany in 1983. He has worked at HP and Agilent Technologies, Inc. as an EMC business development manager, EMC Product Marketing Engineer, EMI Software Design Engineer and Technical Contributor for EMC applications. As of May 2000 he is responsible for EMC standards work and EMC test development at Cisco Systems, Inc. He has 15 years of EMC experience involving conducted and radiated emissions measurement practices, OATS qualification, antenna calibration, measurement equipment calibration, semi-anechoic chamber verification, measurements of shielded effectiveness, EMI troubleshooting, development of EMI SW, development of conformity modules and check lists for emissions measurement assessments of EMC laboratories, assessments of EMC laboratories and development and teaching of EMC classes at universities.

Mr. Schaefer is an active member of CISPR/A, CISPR/H, ANSI C63, SC1, SC3, SC6, TC 77B, SAE-AE4, ASQ, the IEEE EMC society and the VDE in Germany. He was appointed as a Distinguished Lecturer of the EMC Society for the years 2000-2001. He is a NARTE certified EMC engineer and an assessor for EMC laboratories for A2LA. He has published many papers on EMI and microwave measurements and has co-authored a book on microwave measurement techniques.

Anyone interested in presenting an outline of EMC-related topics should contact Tom Cokenias (trephonc@macconnect.com) at 650-726-1263.

For more information about the newsletter and its distribution, please contact the editor Neven Pischl (npischl@cisco.com) at 408-527-7874.

**BULLETIN BOARD**

Every Second Tuesday of the Month: IEEE SCV EMC Society Meeting; Hans Mellberg 408-391-9694  
 Every Third Tuesday of the Month: EOS/ESD Society Meeting; Dr. Leo G. Henry 510-249-6318  
 Every Fourth Tuesday of the Month: Product Safety Society Meeting; Mark Montrose 408-247-5715

**“Spectral Lines” is available to download from our chapter web site [www.scvemc.org](http://www.scvemc.org).**

If you wish to subscribe to the EMC-Product Safety e-mail list, you can do so by sending a mail to “majordomo@majordomo.ieee.org”, with the text “**subscribe emc-pstc**” in the body of the message. This Forum is operated by the Product Safety Technical Committee of the IEEE EMC Society, and was founded to discuss product safety, EMC, and other product regulatory issues.

And for those who have interest in Signal Integrity, here is how you can subscribe to the Signal Integrity List, an email list that discusses topics related to this important aspect of hardware design. To subscribe to the si-list, send the text “**subscribe si-list**” in the body (not the subject line) of an email message to “majordomo@silab.eng.sun.com”.

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Santa Clara EMC Society provides for a limited scholarship to a qualified student majoring in EMC related studies at SF State University. A selection committee will determine eligibility. For details, please contact Zorica Pantic-Tanner at SFSU (415-338-7739 or [zpt@sfsu.edu](mailto:zpt@sfsu.edu)).

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Dated Material - Meeting Notice  
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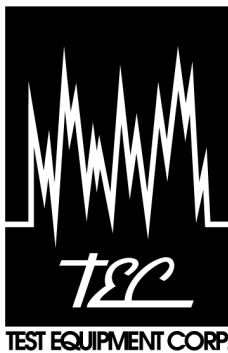
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