

EMC Society



Central Texas Section

Chapter Meeting
January 19, 2011
Austin, TX

IEEE

Agenda

- Chapter Meeting
 - Introduction
 - Program
 - Chapter calendar
 - eBooks on IEEE Xplore
 - There's a new lab in town
 - Future events
- Technical Presentation

Introductions

- Name
- Company or school
- Your connection to or interest in EMC

Introductions

- Chapter Leadership Team
 - Chair - Ross Carlton
National Instruments, ross.carlton@ni.com
 - Vice Chair - Jason Anderson
Professional Testing, janderson@ptitest.com
 - Secretary/Treasurer - Mark Prchlik
ETS-Lindgren, mark.prchlik@ets-lindgren.com

Introductions

- Chapter Coordinators
 - Technical Program
 - Mike Royer
Foxconn, mike.royer@foxconn.com

Other possible volunteer positions include Arrangements, Membership, Student Liaison, and Conferences. Please contact an officer for more information.



Program

- 2011 Technical Program

* EMCS Distinguished Lecturer

Month	Topic
→ January *	<i>Conducted emissions, power supplies, and LISNs; Mark Steffka; GM, Milford, MI</i>
February *	<i>What causes radiation?; Omar Ramahi; University of Waterloo, Waterloo, Canada</i>
March	<i>EMI/EMC Simulation and Modeling; David Johns; CST</i>
April	<i>Open</i>
May	<i>Open</i>
June	<i>Open</i>
July	<i>Open</i>
August	<i>Open</i>
September *	<i>EMC Testing of Substation Products or Green Power & the Modern Grid; Jerry Ramie; ARC Technical Resources, San Jose, CA</i>
October	<i>Open</i>
November	<i>Open</i>
December	<i>Open</i>



Program

- **EMC Society Video DL Program Titles**

"Effective Power/Ground Plane Decoupling for PCB" by Bruce Archambeault

"The 'Ground' Myth" by Bruce Archambeault

"The Three Most Confusing Principles In Signal Integrity And How Not To Be Confused" by Eric Bogatin

"The Ten Habits of Highly Successful Board Designers" by Eric Bogatin

"Signal integrity and EMI in high speed electronics" by Erping Li.

"Advanced electromagnetic simulation techniques for analysis of signal and power integrity in multilayered electronic packaging" by Erping Li.

"Power integrity design for high speed circuit packages" by Tzong-lin Wu.

"Signal integrity simulation and equivalent circuit modeling" by Tzong-lin Wu.

"Metamaterials and metafilms: overview and applications" by Chris Holloway.

"Reverberation chambers for EM applications" by Chris Holloway.

"Signal integrity of TSV-based 3D IC" by Joung-ho Kim.

"Power integrity of SiP (system in Package)" by Joung-ho Kim.

Chapter Calendar

- 2010 Administrative Activities
 - January
 - Install new officers
 - Chapter planning meeting
 - Receive budget from Section
 - Attend Section planning meeting
 - January 29, 2011 at TSU from 9:30am – 3pm
 - February
 - Chapter planning meeting

Chapter Calendar

- 2011 Technical Program
 - Definition is in progress
 - Scheduled filled through March
 - Call for Presentations
 - New resource
 - EMCS DL Video Program
 - Videos of EMCS DLs giving presentations.
 - Available in DVD, mpeg or wmv formats.
 - Available for Chapter meetings or member use.

eBook Classics on IEEE Xplore

- eBook Classics
 - IEEE members now have access to more than 240 eBooks from the IEEE Press collection through IEEE *Xplore*, at no additional cost.
 - The collection spans 5 different content areas, and includes: practical handbooks, introductory and advanced texts, reference works, and professional books.



eBook Classics on IEEE Xplore

The screenshot shows the IEEE Xplore Digital Library interface. The browser address bar displays the URL: http://www.ieeexplore.ieee.org/xpl/freeEbookClassics.jsp?bsf_t=electromagnetic&bsf_rpp=null&bsf_pn=null&bsf_scid=null&bsf_sc=null. The page features a search bar with the text "SEARCH" and a "BROWSE" button. Below the search bar, there are navigation options: "BROWSE", "MY SETTINGS", "CART", "SIGN OUT", "Terms of Use", "Feedback", and "Help".

The main content area is titled "Browse Books" and includes tabs for "By Title", "By Subject", and "Classics". Under "BROWSE ALPHABETICALLY:", there are buttons for letters A through Z. A "BROWSE BY KEYWORDS:" section contains a search input field with the text "electromagnetic" and a "BROWSE" button. Below this, it states "16 Results Returned for 'electromagnetic'".

The search results list the following books:

- [Architectural Electromagnetic Shielding Handbook : A Design and Specification Guide](#) by Hemming, L. [View Details](#)
- [Complex Electromagnetic Problems and Numerical Simulation Approaches](#) by Sevglı, L. [View Details](#)
- [Computational Methods for Electromagnetics](#) by Peterson, A. Ray, S. Mitra, R. [View Details](#)

On the right side, there is a "WELCOME" section for "Ross Carlton" (Member #02783066) with links for "What can I access?", "Visit myIEEE for members-only benefits and volunteer resources.", and "Terms of Use". Below this is a promotional box for "IEEE eBook Classics" stating "Free member access to over 200 classic eBook titles from Wiley-IEEE Press" with a "LEARN MORE" button. At the bottom right, there is a "RECENTLY PUBLISHED" section.

There's a new lab in town

- MET Labs - Austin
 - MET Labs has acquired Dell's EMC Test facility and will be performing EMC and Product Safety Testing for local clients.
 - On January 5, 2011, the facility began operations as MET Austin.
 - Contact Steve Pitta, General Manager.



Future Events

- **E-Week Austin, 22-26 February 2011**
 - The IEEE Central Texas Section is organizing this event for Austin's Engineers to acknowledge and congratulate our engineering contributions to the community. The event is organized at several company locations in the city of Austin. Each event will feature high level speaker from major company located in Austin to show case the company technologies and products and including time for social function before and after the talk, and snacks and beverage.
 - Watch the CTS Website and the February Analog for more info on the event list and how to register.
 - Contact the Section Vice Chair for Austin (Thuy Dao, thuybdao@ieee.org) if your company is interested in hosting an event.

Future Events

- **Magnetics 2011**



- March 1-2, 2011
- San Antonio, TX
- Grand Hyatt Hotel
- Focused on the latest advancements in magnetic applications, technology and materials.
- www.magneticsmagazine.com

Future Events

- 2011 IEEE EMC Symposium
 - August 14-19, 2011
 - Long Beach, CA
 - Venue: Long Beach Convention & Entertainment Center
 - Host hotel: Hyatt Regency Long Beach
 - www.emc2011.org



Technical Presentation

Conducted Emissions, Power Supplies and LISNs

by Mark Steffka

EMC Technical Specialist

GM-Powertrain

Wrap-Up

See You Next Time?

Wednesday, February 23, 2011

This meeting will be the second of two in our Emissions Series. Omar Ramahi, from the University of Waterloo, will explore the fundamental question of "what causes radiation" from a purely practical and engineering-relevant perspective. He will show that powerful numerical schemes, circuit models, and analytical techniques that, while potentially providing elegant and full solution to the radiating problem, fail to highlight the physical phenomenon of interest to EMI/EMC engineers in the first place unless careful attention is paid to... the fundamental sources of radiation!