

EMC Society



Central Texas Section

Chapter Meeting

November 17, 2010

Austin, TX

IEEE

Agenda

- Chapter Meeting
 - Introduction
 - Chapter calendar
 - Video Distinguished Lecturer Program
 - Future events
- Officer Elections
- 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 - Mike Royer
Foxconn, mroyer@mikeroyer.com
 - Secretary/Treasurer - Mark Prchlik
Panashield, mark@prchlik.com

Chapter Calendar

● 2010 Technical Program

* EMCS Distinguished Lecturer
** EMCS Respected Speaker

Month	Topic
January	Design of a Medium Power RF Absorber by Mechanical Approach, Dr. Vince Rodriguez, ETS-Lindgren
February *	EMC/EMI Issues in Biomedical Engineering, Dr. Ji Chen, University of Houston
March	Standards Development: CISPR 32 and CISPR 35, Richard Worley, Dell
April	IEC 61000-4-2, -4, -5, -11 Standards Revisions , Tom Revesz, HV Technologies
May	<i>No meeting.</i>
June	<i>No meeting.</i>
July	<i>No meeting.</i> 2010 IEEE EMC Symposium, Ft. Lauderdale, FL
August	EMC for Space Applications, Bob Scully, NASA
September *	The Ground Myth, Bruce Archambeault, Distinguished Engr, IBM (DL Video)
October	<i>No meeting.</i>
→ November	Lightning – The Science, Miek Noth, LCRA
December	Party?

Chapter Calendar

- 2010 Administrative Activities
 - November
 - Hold elections at Chapter meeting
 - Report election results
 - Submit budget for 2011
 - December
 - Report yearly activity to IEEE and EMCS.
 - Report Chapter officer changes.

Chapter Calendar

- 2011 Technical Program
 - Definition is in progress.
 - Scheduled filled through March.
 - Call for Presentations this month.
 - 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.

Chapter Calendar

- 2011 Technical Program

* EMCS Distinguished Lecturer
** EMCS Respected Speaker

Month	Topic
January *	Conducted emissions, power supplies, and LISNs; Mark Steffka; GM, Milford, MI
February *	What causes radiation?; Omar Ramahi; University of Waterloo, Waterloo, Canada
March	EMI/EMC Simulation and Modeling; David Johns; CST
April	<i>Open</i>
May	<i>Open</i>
June	<i>Open</i>
July	<i>Open</i>
August	<i>Open</i>
September	<i>Open</i>
October	<i>Open</i>
November	<i>Open</i>
December	<i>Open</i>

Chapter Calendar

- Emissions Series
 - The Cen-Tex Chapter will be holding a two part series in January and February 2011.
 - Both parts of the series are being delivered by Distinguished Lecturers of the EMCS
 - The series will focus on both Conducted Emissions and Radiated Emissions.
 - This series will provide an introduction to EMI sources, measurements, and diagnostic methods.

EMC Society Video DL Program

- Existing 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.

Future Events

- EMCS Video DL Webinar
 - Friday, November 19th, 9am - Noon
 - Two presentations
 - 9:00am – 10:30am
 - “Inductance and partial inductance – What’s it all mean?” by Dr. Bruce Archambeault, Distinguished Fellow, IBM.
 - 10:30am – Noon
 - “How to give effective presentations” by Dr. Bruce Archambeault, Distinguished Fellow, IBM.
 - Details posted on the Chapter web site.

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



Future Events

- EMC Compo 2011
 - November 6-9, 2011
 - Dubrovnik, Croatia
 - Center for Advanced Academic Studies
 - Focused on EMC of Integrated Circuits
 - www.emccompo.org



Program

Saturday 5th, Nov '11	Sunday 6th, Nov '11	Monday 7th, Nov '11	Tuesday 8th, Nov '11	Wednesday 9th, Nov '11
	Tutorials	Keynote	Keynote	Optional Day 3
	PhD Seminar	Day 1 Morning	Day 2 Morning	Optional R&I projects workshops
		Day 1 Afternoon	Day 2 Afternoon	
		Banquet	Sc Comitee	

Officer Elections

- Candidates
 - Chairman
 - Ross Carlton, Sr. EMC Engineer, National Instruments (incumbent)
 - Vice-chairman
 - Jason Anderson, EMC Engineer, Professional Testing, Inc.
 - Secretary/Treasurer
 - Mark Prchlik, Director of Sales, Panashield (incumbent)

Technical Presentation

Lightning - The Science

by Mike Noth, P.E.

Sr. Electrical Engineer

LCRA

Wrap-Up

See You Next Time?

Wednesday, January 19, 2010

This meeting will be the first of two in our Emissions Series. Mark Steffka, from General Motors, will discuss the physics involved in conducted emissions, how to measure those emissions, the trade-offs in power supply issues versus EMC, and effective filtering methods. Diagnostic methods to identify the nature and source of conducted emissions are presented as well as corrective actions to solve those problems.