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Vol. 15, No. 7 Serving IEEE Members of South Central Wisconsin

August 2012

# Why does my design fail EMC? ... and How to fix it!

Date: Thursday, August 16, 2012

Time: 12:00pm - 1:00pm

Speaker: Jerry Meyerhoffof JDM LABS LLC

Agenda: Informal networking will begin at 11:30am.

Presentation will begin at 12:00pm.

Location: Promega BioPharmaceutical Technology Center

5445 E Cheryl Pkwy, Room Number: 122

Madison, WI 53711

Menu: Pizza buffet provided: \$5 for IEEE members, \$10 for non-members, free for students.

RSVP: Deadline: Aug 13. Go to <a href="https://meetings.vtools.ieee.org/meeting-view/list-meeting/13523">https://meetings.vtools.ieee.org/meeting-view/list-meeting/13523</a>

to register. Please send questions or difficulties to Mark Vincent at <a href="mvincent@ecw.org">mvincent@ecw.org</a>.

Non-member guests are always welcome!

#### **Abstract**

Overall EMC principles are introduced - 4 quadrants of mechanisms 3 elements of the actors 4 types of coupling Case studies drawn from 6 designs are used to demonstrate the underlying EMC physics across the 4 quadrants for causes and cures. Analysis, measurement and creativity methods are highlighted. Narratives also present soft skills of teamwork & consulting persuasion. Solutions are generalized for applicability to multiple future designs.

### **Biography**

Jerry Meyerhoff, EMC Consultant at JDM Labs, received his BSEE from University or Illinois (Chicago) and post-graduate studies at IIT. Previously he was Staff Engineer with Motorola Communications Division and Distinguished Member of the Technical Staff of the Motorola Automotive Business, then Distinguished Member of the Technical Staff, EMC Engineer, ElectroMagnetic Compatibility specialist, with Continental Automotive Systems. IEEE/EMC Distinguished Lecturer, Secretary of the Chicago IEEE/EMC chapter, Programs Chair of the UIC Engineering Alumni Association (EAA), UIC Constituent Leadership Award, Six US Patents, Amateur operator WA9FIY.

# IEEE Entrepreneurs & Consultants Network, Madison Networking Meeting

Date: Thursday, August 2, 2012
Time: 12:00pm to 1:00pm
Purpose: Presentation, topic TBD.

Location: TBD Parking: TBD

Process: Members are encouraged to make introductions, describe endeavors, and make request

for: contacts in target companies, needs, resources. Bring your elevator speech and rolodex!

RSVP: Tim Chapman (PrettyGoodGUIs@TrueNym.NET)





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## **SECTION Meetings**

The third Thursday of Jan.-May and Sep.-Dec. is reserved for a meeting to provide recent research, developments, trends and/or innovations in one of our membership's technical areas.

### **NETWORKING Meetings**

The first Thursday of even numbered months is reserved for a meeting to provide networking opportunities for members who are consultants or entrepreneurs. Bring your elevator speech and rolodex!

# Section Meeting Schedule for 2012 (schedule subject to change)



January 19, EU e-Freight Software Initiative February 16, Patent Law March 15, Reverse Electrowetting April 27, Signal Processing May 17, Electricity Nanogenerators May 22, Annual Wind Farm Tour

August 16, Why does my Design fail EMC? by Jerry Meyerhoff

September 20, Identifying Optimal EMC Solutions with Inductors by Kurt Smith

October 18, International Trademarks by Richard Abegglen

November 15, Unraveling Tornadoes with Mobile Doppler Radar by Robin Tanamachi

December 20, TBD

**Networking Meeting Schedule for 2012** (schedule subject to change)

February 2, TBD April 5, TBD June 7, TBD

August 2, TBD October 4, TBD December 6, TBD





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At the December monthly meeting, the IEEE Madison Section conducted its annual officer elections prior to the presentation:

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# EMC by Your Design

An EMC Practical Applications Seminar and Workshop
Tues. Oct. 23 – Thurs. Oct 25, 2012
Hilton Hotel, Northbrook, IL
847-537-6400

www.dlsemc.com/emcseminar

Learn how to design your product so that it complies with EMC regulations can save you from having a finished product that fails during its regulatory compliance testing. Re-designing or adding fixes to a failed product can be expensive and time consuming. By taking the EMC by Your Design seminar, you will learn the fundamentals of electro-magnetic compatibility, including understanding the many EMC regulatory requirements such as FCC, CE, US Military, RTCA-DO-160 and those of most foreign countries. You will learn the methodology of how to minimize EMC problems, starting with the design process through final testing and approval, all of which will be brought to life through hands-on practical application to real life products. Also included will be a guided tour of the largest independent EMC and Product Safety facility in North America.











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### **IEEE Membership Level Upgrades**

Those interested in upgrading their IEEE membership level should send their resumes or other information showing five years of significant performance in an IEEE-designated field to Charles J Gervasi (ci@cgervasi.com). Madison Section Board will attempt to find Senior IEEE members knowledgeable in the applicant's area of practice who may be able to provide references. You are invited to attend the informal networking portion of the monthly Section meetings (starting at 11:30am) to meet the Section Board members and discuss intentions.

#### 2012 Section Board Members

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Our members have professional interests in computers, power engineering, signal processing, communications, industry applications and a number of other technical fields

For more information, contact Mitch Bradt at 608-263-1085 or <a href="mailto:bradt@wisc.edu">bradt@wisc.edu</a>.

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