

## Identifying Optimal EMC Solutions with Inductors

Date: **Thursday, September 20, 2012**

Time: 12:00pm - 1:00pm

Speaker: Kurt Smith, Coilcraft, Inc.

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: Sep. 17. Go to [https://meetings.vtools.ieee.org/meeting\\_view/list\\_meeting/13945](https://meetings.vtools.ieee.org/meeting_view/list_meeting/13945) to register. Please send questions or difficulties to CJ Gervasi at: [cj@cervasi.com](mailto:cj@cervasi.com)

*Non-member guests are always welcome!*

### Abstract

EMC challenges arise from a variety of sources, are transmitted by many different means, and affect a variety of susceptible devices. It follows then, that the solutions are also many. The list includes careful layout, conductor routing, and shielding as well as active and passive filters. The key to choosing not just an effective solution, but the appropriate combination of performance, size, and cost is to have the best possible understanding of the performance tradeoffs. While inductors as filtering elements are common enough, either as standalone elements or as part of L-C networks, modern electronic devices require high performance in high density configurations and achieving EMC compatibility quickly and efficiently requires sophisticated design tools. This presentation will focus on the latest generation of tools for the selection, analysis, and use of filter inductors.

### Biography

Kurt Smith is a long-time design engineer at Coilcraft, Inc. a privately held company founded in 1945 as a custom coil maker for the radio manufacturers clustered around the Chicago area. Over the last 11 years, Mr. Smith has participated in the production inductors for a long list of customers in telecommunications, computers, instrumentation and consumer electronics. He received BSEE, Electrical Engineering at University of Illinois at Urbana-Champaign in 2001.

## IEEE Entrepreneurs & Consultants Network, Madison Networking Meeting

Date: **Thursday, October 4, 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](mailto:PrettyGoodGUIs@TrueNym.NET))

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**September 2012**

## **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?

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

**October 18**, International Trademarks by Richard Abegglen

**November 16**, Unraveling Tornadoes with Mobile Doppler Radar by Robin Tanamachi

**December 20**, Why Reference Models are Crucial to e-Logistics by David Marca

## **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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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 ([cj@cgervasi.com](mailto:cj@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.

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For more information, contact Mitch Bradt at 608-263-1085 or [bradt@wisc.edu](mailto:bradt@wisc.edu).

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