



# Wavelengths



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Chapter

## 2003 Fall Section Meeting

Wednesday, October 29, 2003

bps Training and Conference Center  
31301 Evergreen Road (near 13 Mile Road)  
Beverly Hills, MI 48025

### Schedule of Events

5:00 pm - Registration  
 5:45-6:45 - Chapter Technical Sessions  
 7 Technical sessions running concurrently  
 (see schedule)  
 6:45-7:15 - Student and Vendor Exhibits  
 University Showcases  
 Cash Bar  
 7:15-8:00 - Dinner  
 8:15-9:00 - Keynote Address

### Registration

You can register online at <http://www.emcsociety.org/sectionregistration.html> or by fax or e-mail.

### Technical Presentations

Technical presentations include a keynote address by Paul Duffy, Manager, EE CAE Department, Ford Motor Co. on CAE tools and methods for automotive electrical system design. Each of the sections eleven chapters are also sponsoring a technical presentation. See the complete schedule for more information.

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vote in the 2004 Elections!**  
Ballots must be postmarked by October 22, 2003.

On Frequency

## Training is Not a Luxury

Dan Romanchik, Wavelengths Editor

When I first got my degree, a senior engineer once told me, "The only thing that degree qualifies you to do is to keep learning." He was absolutely right. There's no way that a four-year college degree can teach an engineer all he or she needs to know during the course of his or her career. Not only must engineers keep on top of the technology, they must also learn ancillary skills, such as writing and project management.



Professional societies are often the source of this training. In addition to being an IEEE member, I'm also a member of the SAE. The SAE takes a much more proactive approach to training than the IEEE. Every week, I receive several flyers from the SAE promoting one course or another. While I tend to think that the SAE goes overboard with their promotions, they seem to have a successful formula for keeping their members up to date on technology and for helping them improve their skills.

The IEEE Southeastern Michigan section is now considering offering similar training programs. The first step is to figure out what kinds of training our members need. To do this, we've set up a poll on our website at <http://www.ieee-sem.org/trainingpoll.html>. Participating in this poll, will help us determine if we can provide the training our member need and develop programs that best suit our members.

Remember, training is not a luxury. Keeping up with technology is vital for engineers on technical tracks, and gaining ancillary skills is necessary for those pursuing management careers or for those using their engineering degrees in non-traditional ways. Take the poll and help us help you.

## Embedded Systems Workshop A Success

A free Embedded Systems Workshop was hosted by the IEEE SEM - Computer Chapter on September 20, 2003 at Oakland University. The event was co-hosted by HTC Global Services and Oakland University, attracting over 150 participants, and almost all stayed for the whole duration of the workshop. Dr. Subra Ganesan, Chair IEEE SEM, Computer chapter welcomed the gathering and also gave a talk on "Embedded System- present and future".

Mr. Madhava Reddy, President & CEO of HTC Global Services kicked off the event, which lasted from 8:30 AM to 4:00 PM. Nine speakers from industry presented on various embedded systems technology related topics. Lunch for the workshop participants was sponsored by HTC Global Services. Three students from local area high/middle schools also made presentations at this workshop, envisioning embedded systems applications of the future. A Palm Zire PDA was presented to a lucky workshop participant, through a drawing. The prize was won by a long time IEEE SEM member Walter Schilling.

The copy of all the presentations will be available soon at: [www.secs.oakland.edu/~ganesan](http://www.secs.oakland.edu/~ganesan). Look for ES workshop Sept 20, 2003 folder.

IEEE SEM - Computer Chapter plans to host further workshops in embedded systems, on different in-depth topics, in the near future. Do send in your comments to: [ganesan@oakland.edu](mailto:ganesan@oakland.edu).

## EVENTS

Friday, October 24, 2003

11:30 am - 1:30 pm

Electromagnetic Simulation in Power Devices

Dr. Haran Karmaker of GE Power Systems

University of Michigan - Dearborn

4901 Evergreen Rd, Dearborn, MI 48128, 1440 PEC Building

Contact: Chris MI, 313-583-6434, [chrismi@umich.edu](mailto:chrismi@umich.edu)

Wednesday, Oct 29, 2003

5:00 - 7:15 pm

IEEE-SEM Fall 2003 Section Meeting

bps Training and Conference Center (Evergreen & 13-Mile Rd)

31301 Evergreen Rd., Beverly Hills, MI 48025

Contact: Suleiman Barada, 248-3711700 x8692, [sbarada@ieee.org](mailto:sbarada@ieee.org)

org

## Archembeault Addresses EMC Society

Scott Lytle, Chapter VIII Chair

On September 17, 2003 IEEE EMC Society distinguished lecturer Dr. Bruce Archambeault presented "Reducing Emissions through PCB Layout and Effective Power / Ground Plane Decoupling". There were 44 attendees at the University of Michigan - Dearborn Campus which included several people who had attended the SAE EMI standards committee meeting at U/M-D just prior to our chapter meeting. Mark Steffka, Adjunct Lecturer of Electrical and Computer Engineering at U/M-D, was our host for the meeting held at the Professional Education Center. Don Yordy, local representative from CMP, provided the pizza, chips and refreshments for the attendees. Chapter Chair Scott Lytle was the presiding officer at the meeting.

Dr. Archambeault discussed real-world examples of measurements, as well as computer simulations are used to demonstrate the optimal decoupling strategy. Successful routing of all these signals often require some of the standard EMC "rules" to be violated. However, not all of these EMC rules are equal, that is, some are more important than others. Many graphs were presented summarizing the various experiments conducted to illustrate the effects of decoupling capacitors on multi layer printed circuit boards. A copy of the presentation slides may be viewed at [http://www.ewh.ieee.org/r4/se\\_michigan/emcs/bruce.htm](http://www.ewh.ieee.org/r4/se_michigan/emcs/bruce.htm).

Dr. Archambeault is a Senior Technical Staff Member at IBM in Research Triangle Park, NC. He received his B.S.E.E degree from the University of New Hampshire in 1977 and his M.S.E.E degree from Northeastern University in 1981. He received his Ph. D. from the University of New Hampshire in 1997. His doctoral research was in the area of computational electromagnetics applied to real-world EMC problems.



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Chapter III - Communications and Aerospace Electronics  
Chapter IV - Trident  
Chapter V - Computer  
Chapter VI - Geoscience and Remote Sensing  
Chapter VII - Power Engineering and Industrial Applications  
Chapter VIII - EMC  
Chapter IX - Power Engineering and Industrial Electronics  
Chapter X - Engineering Management

## Advertising in Wavelengths

Wavelengths is published eight times a year and sent to more than 3,500 members. These readers are responsible for specifying and purchasing a wide range of electronics components, equipment, and services.

There is no extra charge for color. Special placements can be requested, and will be accommodated if possible. Payment must accompany insertion order.

For more information, contact Dan Romanchik, Wavelengths Editor, phone 734-930-6564, e-mail: danr@ieee-sem.org.

### RATES

Equivalent Print Ad	Size in Pixels (max)	Annual Rate (8 issues)	Single Issue Rate
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<b>Half Page</b>	270W x 720H	\$2000	\$325
	540W x 360H	\$2000	\$325
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