



Wavelengths



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Chapter

Executive Committee Column

Fall Conference Features Dr. Andrew Brown of Delphi

By Maurice Snyder, Past IEEE/SEM Chair

Dr. Andrew Brown of Delphi will be the keynote speaker at our Fall Section Conference, which will take place on Wednesday, Nov 10, 2004 at 6:00 p.m. The location is the bps Training and Conference Center, 31301 Evergreen Road (near 13 Mile Road), Beverly Hills, MI. He will speak on automotive electronics



Dr. Andrew Brown, Jr., currently serves as Executive Director of Engineering Competency, DTI/Research Labs, and Product Government Affairs & Partnerships. His position includes responsibility for engineering competency, product leadership & innovation, research labs, and I&CIM. In addition, Andy also serves as President of Delphi Technologies, Inc. and oversees all product regulatory affairs with the EPA and NHTSA in the U.S., the European Commission, and other similar regulatory bodies around the world. He also oversees cooperative R&D partnerships with the U.S. Departments of Commerce, Energy, Transportation, and Defense.

In addition to Dr. Brown's talk, several chapters are sponsoring talks by IEEE distinguished speakers. See the website for more details.

Volunteers Needed for 2005 Future City Competition

by Don C. Bramlett, PE, IEEE/SEM Section Advisor

IEEE/SEM Section members are invited to participate in the Twelfth Annual National Engineers Week (NEW) Michigan Regional Future City Competition. For this competition, a team of middle school students, with a teacher and an engineer as mentors, will take part in a hands-on educational design experience as they design a "future city" by computer. The regional competition is open to all middle schools in Michigan.

You can be a part of the exciting Michigan Regional Competition, one of the most stimulating and rewarding pre-college educational programs with which I have had a privilege to become involved. Volunteer engineers are needed to help teams of seventh and eighth grade students and their teachers to use a computer to design and model a city of tomorrow. As a volunteer engineering mentor, you will share practical engineering skills such as teamwork, problem-solving, Computer Aided Design (CAD) and applied math and science.

A volunteer engineer will typically spend a total of 18 to 24 hours, as an advisor or counselor to a team of students, from mid-October 2004 through the date of the Michigan Regional Future City Competition. Judging for the 2005 Michigan Regional Future City

Competition will be on Thursday, January 27, 2005 at the Burton Manor banquet/conference facility at 27777 Schoolcraft Road (Jeffries Freeway service drive), west of Inkster Road in Livonia. The volunteer engineering mentor for the winning team of the Michigan Regional Competition will also accompany the three member student team and the teacher advisor on a free trip to the national competition in Washington DC during NEW, February 19-26, 2005.

If you should not be able to devote the time to be a volunteer engineering mentor, engineers are also needed as judges on the day of the Michigan Regional Future City Competition. You may serve on one of the overall general judging teams or on the IEEE/SEM Section Special Professional Award judging team (see the accompanying article in this issue of the Wavelengths).

The project each team of students works on consists of five phases:

1. Design a future city using SimCity 3000 software by Maxis.
2. Build a scale model of a section of the city.
3. Write a 500-word essay on a specified subject related to city planning.
4. Give oral presentations at the Michigan Regional Competition.
5. Work as a team.

The role of the volunteer engineer is to serve as a

mentor to the students. The engineer may be involved in all phases of the project as an advisor to provide input and technical assistance. It is important to tie in real life engineering experiences as the students work on the project. However, the students are to do all of the actual work, such as the computer design of the future city, building the table-top model, writing the essay and giving oral presentations.

ESD-The Engineering Society will serve as the primary coordinator of the 2005 Michigan Regional Future City Competition. The sponsoring company is DTE Energy. As a member organization of the ESD Affiliate Council, composed of representatives of the local sections or chapters of some 40 engineering, technical and professional societies, the IEEE/SEM Section strongly encourages members to participate in this worthwhile endeavor.

A comprehensive Teacher/Engineer Volunteer Handbook is available, detailing contest specifics and providing answers to the types of questions that you as a volunteer engineer may have. To receive this free handbook or to register as a volunteer engineer, contact Nancy Strodl at ESD-The Engineering Society at (248) 353-0735 ext. 4152 or by email at nstrodl@esd.org. Additional info is available at www.futurecity.org.

Judges Needed, Too!

This is the seventh year that IEEE-SEM will provide a dedicated team of judges and a special professional organization award for the project having the most innovative application of electro-technology in the design of a city in the future. Judging for the 2005 Michigan Regional Future City Competition will be on Thursday, January 27, 2005 at the Burton Manor banquet/conference facility at 27777 Schoolcraft Road (Jeffries Freeway service drive), west of Inkster Road in Livonia. Judging will be from 8:00 AM to 11:00 AM, followed by lunch. Free parking, continental breakfast and lunch are available that day for the judges. This pleasurable and fulfilling task only takes half a day.

Please volunteer to be among those to comprise the team of IEEE/SEM special award judges. More information on the Future City Competition and the need for mentors for middle schools can be found in the related article on that subject in this issue of the Wavelengths.

I encourage anyone who has an interest in the science and math education of our youth or an interest in pre-college education programs to consider being a judge at the Michigan Regional Future City Competition. IEEE Student Branch members as well as regular IEEE members have found this to be a fulfilling experience in past years. As a judge myself in previous years, I have found the experience of talking with the students, finding out their interests and observing their projects/presentations to be very rewarding. So come out and spend the morning with us as we meet with some of the potential engineers, scientists and city planners of the future.

If interested in more information concerning being a judge for the IEEE-SEM professional award at the Michigan Regional Future City Competition, contact Don Bramlett at (313) 235-7549 during normal weekday business hours, or at home at (313) 525-5422 or by email at d.bramlett@ieee.org.

On Frequency

Use Our Website to Keep Informed of IEEE News

By Dan Romanchik, Wavelengths Editor

Over the summer, I added a feature to our website to help keep you informed of IEEE news. Now, in the right-hand column, you'll find links to the latest news from the Institute Online and IEEE Spectrum.



You can also use our website to keep in touch with what's going on locally. The events page, for example, includes information on all IEEE SEM events, including chapter meetings and Executive Committee (XCOM) meetings. And speaking of XCOM, the administration page lists links to XCOM meeting agendas and meeting minutes.

If that's not enough information, send me an e-mail and tell me what you need. If I can, I'll add it to Wavelengths and to the website.

New Group Digs for GOLD

By Doreen Kephart, GOLD Affinity Group Leader

We are forming a Graduates of the Last Decade (GOLD) affinity group here in Southeastern Michigan. GOLD is an IEEE initiative created to address the needs and concerns of engineers from 0 to 10 years out of college. We promote professionalism, teamwork, communication skills, and many of the skills needed to maintain a life-long career in Engineering.

You are automatically considered a member when you graduate from college. You do not have to apply or pay extra for this membership. Other IEEE members may benefit from participating in GOLD events as well, sharing knowledge and information with less experienced engineers, and having fun!

GOLD events are usually social activities. Some of our ideas are a family picnic, a trip to Dave & Buster's, or a tour of the Rouge Plant or Ford Field.

Currently, I am looking for additional volunteers who could contribute an hour or two to help with our first event. If you are interested, please contact me at 810-765-1181 or dkephart@prausa.com. I would also like to hear from University sections who would be interested in promoting GOLD activities, or any other members with ideas for events.

Look for more information soon and watch as we set a new GOLD standard!

Chapter X News

Mark Ciechanowski, Chapter X Chair

At Chapter X's (Engineering Management) regular meeting in August, we were pleased to host Marc Malooley, Attorney at Brooks Kushman, P.C. in Southfield. Marc presented a talk on "Intellectual Property and the Engineering Manager". He presented a brief overview of various types of intellectual property and their legal bases, and discussed how intellectual property relates to the engineering manager: what to do, and what not to do, to protect your intellectual property. Marc covered the details of why patents are important and what to include in patent applications.

Marc F. Malooley is a Registered Patent Attorney and Licensed Professional Engineer. He has ten years of engineering experience and has held positions as Director of Engineering, and as Director of Quality Assurance for a tier-one automotive manufacturer and a medical device manufacturer.

For more information on Chapter X, and our activities, visit our web page at <http://www.ieee-sem.org/chapter10/index.html>.



Malooley addresses Chapter X on intellectual property.

Introducing
**New EMC Practical Applications
 Seminar/Workshop**

(with take-home computer programs)

*by Donald L. Sweeney
 and Roger Swanberg*

October 14-15 and 18-19, 2004
Hilton Hotel, Northbrook, IL

During three days of class before the workshop, students will study EMC design techniques and the calculations required to design a product to meet compliance regulations.

In the Workshop:

Using an example of a real life product and following typical design principles, students will:

1. Develop a block diagram.
2. Determine the product's parameters.
3. Calculate the probable emissions and immunity of the:
 - a. Circuit boards
 - b. Power supply
 - c. I/O lines
 - d. Enclosure
4. Determine if there are EMC concerns.
5. Find cost effective mitigating steps while the product is still on paper.

When you leave this class, you should be ready to lead a design team with a high degree of confidence that your products will meet the EMC requirements.



Special Offer:

Students who have previously taken both D.L.S.'s "Introduction to EMC Design Practices" and "Design Techniques for Controlling Radiated Emissions" will receive a special discount on this workshop.

Seminar/workshop will also be held in April.

Call 847-537-6400 to register.
Click on www.dlsemc.com.

DLS
 ELECTRONIC SYSTEMS, INC.
 1250 Peterson Drive
 Wheeling, IL 60090

IEEE SEM Events

Tuesday, Sept 28, 2004, 5:30 pm

Predicting Radiated Emissions

The Southeastern Michigan Chapter of the IEEE EMC Society presents C.R. Suriano, PhD. - Suriano Solutions who will talk on predicting radiated emissions.

5:30 – 6:00 Pizza and Refreshments

6:00 – 7:00 Technical Presentation

Please pre-register for this free event online at: <http://www.emcsociety.org/eventregistration.html> then select "September" Registration. Deadline: Noon on the day of the event. For more information, see the IEEE Southeastern Michigan EMC website.

Location: DaimlerChrysler, Auburn Hills, MI

Contact: Scott Lytle, 734-983-6012, s.r.lytle@ieee.org

Monday, Oct 4, 2004

Executive Committee (XCOM) Meeting.

All are invited to attend.

6:00pm - Dinner

6:30pm - Meeting

Location: Univ. of Michigan, Dearborn Professional Education Center Bldg. [map](#)

Contact: Suleiman Barada, 248-371-1700 ext 8692, sbarada@ieee.org

Tuesday, Nov 2, 2004

Executive Committee (XCOM) Meeting.

All are invited to attend.

6:00pm - Dinner

6:30pm - Meeting

Location: Univ. of Michigan, Dearborn Professional Education Center Bldg. [map](#)

Contact: Suleiman Barada, 248-371-1700 ext 8692, sbarada@ieee.org

Wed, Nov 10, 2004, 6:00 pm

Fall Section Conference

Please join us for an evening of socializing and technical sessions.

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

Contact: Hassan Hassan, h.hassan@ieee.org.

Monday, Dec 6, 2004

Executive Committee (XCOM) Meeting.

All are invited to attend.

6:00pm - Dinner

6:30pm - Meeting

Location: Univ. of Michigan, Dearborn Professional Education Center Bldg. [map](#)

Contact: Suleiman Barada, 248-371-1700 ext 8692, sbarada@ieee.org

Tuesday, Dec 7, 2004, 6:00 pm

IEEE SEM Management Society Meeting

Topic tbd

6:00pm Socializing and networking, 6:30pm Presentation.

Location: Ford Sustainable Mobility Technologies Lab II (SMTL) building, conference room 16, 15000 Commerce Drive North, Dearborn.

Contact: Mark Ciechanowski, mark.ciechanowski@ieee.org

Want to have your event listed?

Fill out and submit the form at
<http://www.ieee-sem.org/eventform.html>

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:

Dr. Ramas Ramaswami, MDR

ramaswamis@comcast.net

734-971-5410

RATES

Equivalent Print Ad	Size in Pixels (max)	Annual Rate (8 issues)	Single Issue Rate
Full Page	540W x 720H	\$4000	\$650
Half Page	270W x 720H	\$2000	\$325
	540W x 360H	\$2000	\$325
Third Page	180W x 720H	\$1500	\$250
	540W x 240H	\$1500	\$250
Quarter Page	270W x 360H	\$1000	\$175
Eighth Page	270W x 180H	\$500	\$90

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