



Wavelengths



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CONTENTS

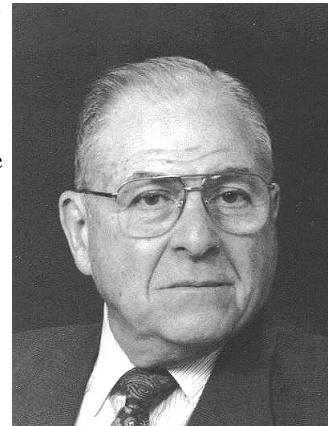
Fall Conf. Keynote
Call for Nominations
UDM Branch
Back in Business
New Senior
Members Named
UW Students Put
On Conference
Siemiet Addresses
Chapter X
Events Calendar
Executive
Committee
Chapter Info
Advertising Info

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Chapter

Fall Conference to Feature Talk on 2003 Blackout

We are pleased to announce that Mr. John A. (Jack) Casazza will be our keynote speaker at our Fall Section Conference. He will speak on "IMPACT OF POWER INDUSTRY RESTRUCTURING ON POWER SYSTEM PLANNING, OPERATION AND ECONOMICS". He will discuss the blackout of August 14, 2003, based on the investigations of the US and Canadian governments taking place this summer in which Mr. Casazza is participating. He will emphasize the role of engineers in determining the reliability and cost of electricity, and will include his recommendations for the future. Jack is an IEEE Life Fellow and has received many awards for his contributions to the development of electric power systems. He is the author of more than 80 publications. His most recent book "Understanding Electric Power Systems – An Overview of the Technology and the Market place" has just been published by Wiley/IEEE Press.



The Fall Conference will take place on Wednesday, Nov 9, 2004 at 5:30 p.m. at the Fairlane Center, University of Michigan-Dearborn, 19000 Hubbard Road, Dearborn, MI.

In addition to Mr. Casazza's talk, several chapters are sponsoring talks by IEEE distinguished speakers. Event registration begins October 3, 2005. See the website and next month's Wavelengths for more details.

Consider Serving as an IEEE SEM Section or Chapter Officer

By Dr. Maurice Snyder, IEEE/SEM Junior Past Chair

Every fall, we look ahead to our leadership for the 2006 calendar year. The IEEE/SEM Executive Committee (XCOM) invites you to consider serving as an officer at either the section or chapter level. Serving as an IEEE/SEM officer is a great way to meet and work with enthusiastic and proactive section members. It's a way to network with local professionals, meet internationally known technical experts, utilize planning and organizational skills, and have fun while growing professionally.



It is also a way to be involved in our Spring and Fall Section Meetings where international experts are invited to give keynote addresses.

Terms of office begin Jan. 1, 2006 and last for one year, except for Section Directors who are elected to two-year terms. There are five Directors and the terms are staggered (two elected one year, three the next year) so not all directors change each year.

Also, consider becoming active with a chapter serving your technical interests. Serving as a chapter officer is a good way to meet others in your field, keep current on the technology, and become familiar with other IEEE activities. If you have interest in the section activities, consider an office at the Section level. Both Chapter and Section activities are excellent experiences to have when applying for Senior Member or Fellow of IEEE.

(Continued on page 2)

(Continued from page 1)

All of you are invited to any of our Xcom meetings on either the first Monday or first Tuesday of each month, except July. Check our web site for the exact dates, <http://www.ieee-sem.org/>. You will be our guest for dinner. Contact me at mfsnyder@ieee.org for a dinner invitation or further information.

Call for Nominations

The schedule for elections for next year, Jan. 1 to Dec. 31, 2006 is as follows:

- September 2005: Nominations begin
- October, 2005: Ballot published Wavelengths and via email
- October, 2005: Voting by members via web site or mail in
- November 1, 2005: Voting closed
- November 9, 2005: Fall Section Meeting, results announced
- December, 2005 or January 2006: Training for new officers

Offices to be elected include:

1. Section Officers: **Chair, Vice-Chair, Secretary, Treasurer** (1-year term)
2. Section Directors of **Membership, Professional Activities, Technical Activities** (2-year terms). (Section Directors of **Educational Activities** and **Student Activities** are not up for election since these are two-year terms that end Dec. 31 2006)
3. Chapter **Chairs, Vice-Chairs, Secretaries** and **Treasurers** for all the chapters, which include:
 - Chapter 1—Circuits and Signal Processing
 - Chapter 2—Vehicular Technology
 - Chapter 3—Communication and Aero. Technology
 - Chapter 4—Trident
 - Chapter 5—Computers
 - Chapter 6—Geoscience & Remote Sensing
 - Chapter 7—Power Engrg. & Industrial Applications
 - Chapter 8—EMC (Electromagnetic Compatibility)
 - Chapter 9—Power & Industrial Electronics
 - Chapter 10—Engineering Management
 - Chapter 11—Engineering in Medicine and Biology
 - Chapter 12—Control Systems

Officer's duties can be found at:

<http://www.ieee-sem.org/admin/misc/sectionofficerduties.pdf>

Please submit your nominations in one of two ways,

1. Email the nominations to me, Maurice Snyder at mfsnyder@ieee.org. You can nominate yourself or have someone nominate you. Include the IEEE membership of the person being nominated
2. Or you can nominate on-line at: <http://www.ieee-sem.org/admin.html#Forms>. Click on -> "Officer Nomination Form, On-Line Form"

Future City Mentors Needed

ESD is looking for engineers and architects to mentor school teams for the Future City Competition. Mentoring a Future City team is an immensely rewarding experience. The Future City Competition helps prepare 7th and 8th grade students for life in the real world and has a positive impact on the future of engineering as a profession.

The Future City Competition is a team-based program consisting of students, a teacher and an engineer mentor. The engineer mentor is a key part of this program. The program will require at least 40 hours of your time between September and January.

The Future City Competition challenges students to design a fully functioning city located in a time and place in the future - and have fun doing so. Each team designs their city using SimCity software, writes an essay and an abstract, builds a scale model of the city and makes a presentation to a panel of judges at the Michigan Regional Competition in January 2006. The winning team goes to Washington, D.C., to compete in the National Competition.

Visit the ESD website at www.esd.org or e-mail Nancy Strodl, nstrodl@esd.org.

UD-M Student Branch Re-Activated

Aisha Yousouf reports that the University of Detroit—Mercy student branch has just been reactivated! The contact for the student branch is Kevin Barry: barryke@students.udmercy.edu. She is hoping to get all the other inactive student branches in SEM section activated this year too.

Congratulations to our New Senior Members

- **Liang Xi Downey**, *Communications Society*
- **Abbas A. Fardoun**, *Industry Applications Society, Power Electronics Society*
- **Robert J. Gustin**, *Industry Applications Society*
- **Anna Stefanopoulou**, *Control Systems Society*

Congratulations!

Reprinted from the online version of *The Institute*, June 6, 2005

Budding Engineers Put On Leading-Edge Conference

BY LINDSAY ELKINS

Many people assume that college students spend their free time at late-night parties or sleeping until noon. That has not been the case for members of the IEEE student branch at the University of Windsor, in Ontario, Canada, at least not lately. They gave up much of their free time to spend nearly six months planning the International Conference for Upcoming Engineers, held 20 to 21 May. The conference was geared to undergraduates, graduate students, and faculty researchers interested in automotive electronics and wireless technology.

Choosing the topics for ICUE 2005 was a no-brainer for the student organizers, according to conference chair and Student Member Apurva Jain. "Windsor is an automotive town, just 16 kilometers from Detroit, the U.S. car-manufacturing capital, so we decided to focus on automotive aspects of engineering," Jain says. "Wireless communication, on the other hand, is currently a hot topic within engineering. So we divided the conference into two parts; the first day focused on automotive, and the second on wireless."

Planning ICUE was a rigorous task, says Jain. First the students had to write a proposal to convince the conference steering committee at Ryerson University in Toronto, why Windsor should host the conference. Ryerson had organized the first three such conferences but decided to bow out this year because it wanted to move the meeting from Toronto to benefit students in other areas.

"The goal of ICUE 2005 was to create an event where students and faculty can work together, exchange ideas, and promote learning and participation among all levels of engineers, from undergraduates to researchers," Jain says. The Windsor students submitted their proposal in October 2004; in December the Ryerson committee gave its approval and the planning began. The first task was to find sponsors to help pay conference expenses. Many organizations came through with financial support, including the 3-E Student Activities Fund of DaimlerChrysler Canada, the IEEE Canadian Foundation, IEEE Region 4, and Ryerson University's electrical and computer engineering department.

Almost immediately, the 11 IEEE student members on the organizing committee realized they needed help, so they sought volunteers from the rest of the Windsor student body. The resulting total of 21 volunteers were divided into subcommittees, including one to plan the technical sessions and tutorials on wireless and automotive electronics. Another committee handled finances, and a sponsorship committee hit the streets in search of donations from local businesses.

The conference included "An Overview of Terrestrial Wireless Research and Development at Communications Research Centre" (a Canadian government program) given by the center's vice president. Also part of the wireless program were talks on optical and high-speed communication systems and networks and signal

processing for communications, multimedia, and biomedical systems.

For the automotive portion, a vehicle software integration engineer from General Motors of Canada, based in Oshawa, Ont., discussed "Engineering the Automobile of the Future." Other talks included ones on electric noise control in engines and on combustion in a homogeneous charge compression ignition engine, a relatively new combustion technology that is a hybrid of the traditional spark-ignition and compression-ignition, or Diesel, engines. A panel discussion followed that covered other subjects in the field. Other topics included embedded systems design and designing mobile robots that can help people perform certain tasks filled out the program.

In addition to the technical talks, keynote speaker Jim Watson, president of Watson Associates, in Mansfield, Ohio, discussed engineering careers and getting ahead in engineering in a presentation called "In Search of Diamonds." And adding a historical perspective, Jim Rautio, president of Sonnet Software, in Syracuse N.Y., spoke on the life of James Clerk Maxwell, a Scottish physicist who did pioneering work in electromagnetism and the kinetic theory of gases.

CONSTRUCTION PROJECTS Design demonstrations were added to the conference to appeal to students and encourage their attendance. Teams of students and researchers displayed projects they had built. These included a robot vehicle outfitted with a laser-assisted camera to detect and avoid obstacles, an autonomous rover, and an automated passport reader. Each team gave a 20-minute presentation and demonstration. A panel of judges evaluated the projects on how well they were presented and demonstrated and just how innovative each one was. Adrian Tang and Charles Prosper from Ryerson University were chosen to have had the best project. Their integrated radio electric guidance package that generated navigational information beat out about eight other entries.

There was also a competition for the best papers. The top three of the 25 technical papers at the conference received awards based on criteria such as how innovative their topic was and on how the material was presented.

All work and no play can make for a dull conference so organizers offered two social events. One was a wine and cheese social where attendees could meet and exchange ideas with one another. The other event was an awards dinner where winners of the design and technical-paper competitions were recognized. More information about ICUE 2005, which attracted 110 attendees, is available at www.icue.ca.

Siemiet Talks to Chapter X on Personal and Company Values

By Mark Ciechanowski, Chapter X Chair

Our June 28th meeting welcomed back Dennis Siemiet presenting "Personal Values and Company Values, Part II". Mr. Siemiet lead chapter members and guests through an informative discuss. We saw examples of how people make decisions based on their personal values, and explored what can happen when jobs conflict with those values.

The conflict is usually not obvious, but warning signs of conflict are felt as stress. One can create a better awareness of conflicts by gaining a better understanding of oneself -- "know thyself". Citations from the books "Emotional Intelligence" and "Now Discover Your Strengths" emphasize this principle.

Mr. Siemiet cautioned that we not label values as "good" or "bad". Instead, it is easier to understand and analyze the compatibility if we ignore our judgments and simply compare other's values to our own. The compatibility of the employee's core values with the company core values is critical to the performance of the company and the well-being of the employee.



There is, however, frequently an underlying personality and core values that are frequently not discussed and are different from what is in the mission statement. Mr. Siemiet proposed that company values are often dictated solely by the person that

terminates the spending budgets. This presentation surfaced many comments and questions from the attendees, and everyone was engaged in the discussion. We are looking forward to many more presentations like this one.

Our upcoming events include another seminar on Tuesday, August 30th 6pm at the West Bloomfield Township Public Library. On Wednesday, November 9, 2005 5:30pm we will host a speaker at our Fall Section

Conference and Dinner at Fairlane Center, University of Michigan-Dearborn.

Dennis Siemiet is an engineering manager with over 30 years of experience in automotive and defense industries. He currently holds the volunteer position of Chapter Secretary/Treasurer.

Eliminate the Guesswork!

- *Gain knowledge in all EMC design aspects.
- *Put what you learn to immediate use.



Don Sweeney & Roger Swanberg
leading a workshop

To register call Carol at
847-537-6400 or email her
at cgorowski@dlsemc.com.
For more information click
on www.dlsemc.com.

Tired of taking classes that don't give you real world applications and hands-on opportunities to use what you learn?

Here's what students have said about DLS's new EMC seminar/workshop:

"Best program I've seen. Software provided is worth the price of the seminar." Scott D.

"This course would be helpful for any design engineer." Shane S.

"Good information, presented well, extremely relevant." Bryan P.

"It satisfied my requirements - practical application & problem solving." Jack R.

This seminar/workshop is taught by EMC engineers with 75 years combined experience in real world engineering. Spend three days learning EMC requirements and design techniques and a fourth day designing a real life product. Take home the computer program designed by the instructors. As an added extra value with no additional charge, apply what you have learned in an optional 45-minute design review of your own product following the workshop.

**EMC Practical Applications
Seminar/Workshop
Northbrook, Illinois
October 20-21 & 24-25, 2005**



Events

Tue, Sep 13th, 5:45 pm

Section Conference Planning Committee Meeting
UofM-Dearborn PEC Building
(date changed because of the labor day holiday)
All members interested in helping plan Fall Section Conference are welcome to attend.

Tue, Sep 13th

Executive Committee (XCOM) Meeting
6:00pm - Dinner, 6:30pm - Meeting
Univ. of Michigan, Dearborn Prof. Ed.Ctr. Bldg
All are invited to attend. Contact: Suleiman Barada, 313-565-8438, 313-550-0525, sbarada@ieee.org

Wed, Sep 21st, 5:00 pm

ESD Affiliate Council Meeting (dinner cruise)
Annual ESD AC networking meeting. All officers are invited. IEEE members can attend the dinner and boat cruise for \$50. See the ESD website for more info or email Mark Ciechanowski.

Wed, Sep 21st, 9:00 am

EMC Engineering Seminar
Yazaki North America, Rooms Pacific B & C,
6300 N. Haggerty Road, Canton, MI
Seminar presented by Henry W. Ott is President and Principal Consultant of Henry Ott Consultants. For more information visit the EMC Society website.

Thu, Sep 22nd, 5:30 pm

Intelligent Network Solutions for the Energy and Utility Industry
IBM Bldg., 18000 Nine Mile Road; Southfield, MI
Mr. Larry Tuttle of IBM Infrastructure Solutions Global Services will speak. Light Food (pita sandwiches, potato chips and soft drinks will be provided. Contact Kevin Taylor, 586-573-0713, k2356@aol.com, for more information.

Mon, Oct 3rd, 5:45 pm

Section Conference Planning Committee Meeting
UofM-Dearborn PEC Building
All members interested in helping plan Fall Section Conference are welcome to attend.

Executive Committee (XCOM) Meeting

6:00pm - Dinner, 6:30pm - Meeting
Univ. of Michigan, Dearborn Prof. Ed.Ctr. Bldg
All are invited to attend. Contact: Suleiman Barada, 313-565-8438, 313-550-0525, sbarada@ieee.org

Fri, Oct 14th, 8:00 am

IEEE 2005 Sections Congress
Tampa, FL
A "once every three year" event. IEEE Sections Congress is a triennial gathering of Section leadership sponsored by the Regional Activities Board. An event which includes four days of working sessions and networking. Sections Congress involves

hundreds of delegates from all ten Regions. At Congress they learn how to utilize the resources of the IEEE to maximize their effectiveness as IEEE volunteer leaders. Workshop, panel and tutorial sessions are held on topics of interest to the Sections.

More information can be found on their website. Contact: Kristi Brooks, Region4 Coordinator, kristi.brooks@ieee.org

Wed, Oct 19th, 5:30 pm

ESD Affiliate Council Meeting
ESD HQ, Southfield
Gold Award nominations due.

Wed, Oct 19th, 5:30 pm

Advances in EMI Gasketing Technology
Fairlane Center North, Room TBD, 19000 Hubbard Drive, Dearborn, MI
Joe Butler of Chomerics will discuss advances in EMI gaskets for electronics. For more information, visit the EMC Society website.

Fri, Oct 28th, 1:00 pm

PE Exam day. See <http://ww2.esd.org/EDUCATION/PE.htm>

Tue, Nov 1st, 5:45 pm

Section Conference Planning Committee Meeting
UofM-Dearborn PEC Building
All members interested in helping plan Fall Section Conference are welcome to attend.

Tue, Nov 1st, 6:00 pm

Executive Committee (XCOM) Meeting
6:00pm - Dinner, 6:30pm - Meeting
Univ. of Michigan, Dearborn Prof. Ed.Ctr. Bldg
All are invited to attend. Contact: Suleiman Barada, 313-565-8438, 313-550-0525, sbarada@ieee.org

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:

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734-786-8409

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