THE INSTITUTE OF ELECTRICAL & ELECTRONICS ENGINEERS

Vol. 39, No. 3

Nov / Dec 1999

Southeastern Michigan Section, IEEE/SEM

Award Nominations Needed

"It is time for us all to stand and cheer for the doer, the achiever - the one who recognizes the challenge and does something about it." Vince Lombardi

Nominate someone you know for one of the section's or accomplishments related to the operations and program awards to recognize their achievements or local IEEE service. The Awards Committee is seeking nominations for the Outstanding Engineer, Outstanding Section Involvement, Outstanding Chapter Involvement, and Outstanding Student Branch awards. The awards will be presented at the Spring Section Meeting in the eighth annual awards ceremony. Nominations are solicited for the following awards:

Outstanding Engineer: This award is presented to a member who has demonstrated outstanding activity or accomplishment in the electrical, electronic, or computer engineering profession. This award is used to recognize long-term achievement in business, academia, patents, inventions, papers, developing standards, encouraging student interest in engineering, and other professional endeavors.

Outstanding Section Involvement: This award recognizes a member who has been actively involved in the section and is deserving of special recognition for leadership, participation, and accomplishments at the section level.

Outstanding Chapter Involvement: This award acknowledges a member who has been actively involved in one of the section's technical society chapters and is deserving of special recognition for leadership, participation, and accomplishments in chapter activities and programs.

Outstanding Student Branch Involvement: This award is presented to a student branch, student branch member(s), section member(s), or a student branch counselor to recognize leadership, participation, support, of a student branch and for promoting the engineering profession among students.

There are a few rules for nominations. All nominees and nominators must be members or student members of the IEEE Southeastern Michigan Section. Nominations must be in written form (preferably electronic) and provide sufficient information to be a sound basis for nomination. Specific accomplishments, dates, locations, etc. should be included in the nomination. All nominations must be received by the deadline for the applicable award.

Award nomination forms can be downloaded from the section's web site in Microsoft® Word format. The forms are designed to solicit relevant information about the nominees' accomplishments, which should help nominators in writing nominations. The forms will also help the Awards Committee in evaluating the nominations. Completed nomination forms should be e-mailed to Sandy Hunter, s.e.hunter@ieee.org, by the following deadlines:

Outstanding Engineer	Nov. 22, 1999
Outstanding Section, Chapter Involvement	Dec. 3, 1999
Outstanding Student Branch	Jan. 31, 2000

The Awards Committee members are Kimball Williams, Mark Krage, and Sandy Hunter. We look forward to recognizing deserving section members with awards, thanks to your nominations. If you have any questions about award qualifications or procedures, contact Sandy Hunter, Awards Committee Chair, at 248-524-0645.

Nomination forms are available at:

ewh.ieee.org/r4/se_michigan/ieeesem/

The EMC Society Presents James Muccioli

"Techniques for DC Automotive Motor Noise Suppression and Filtering of Common Mode and Differential Mode Noise."

This lecture features techniques for DC Automotive Motor noise Suppression and filtering of common mode and differential mode noise. A live Demonstration will follow the Lecture.

Wednesday, November 17, 1999 at 6:00 PM Eaton Corporation - Innovation Center B Conference Rooms - 2nd Floor 26201 Northwestern Highway Southfield, Michigan 48076

Go to EMC.eaton.com for maps to Eaton.

Look for more information at section's website: ewh.ieee.org/r4/se_michigan/ieeesem/ Use the Civic Center West Entrance. Look for the white IEEE sign at the door. Take the elevator to the 2nd floor B Conference rooms.

This is a free event. Snacks and refreshments will be provided at 5:45 PM.

Please RSVP to ScottRLytle@eaton.com if you plan to attend to.



IEEE Professional Development Conference Trip Report

by Randy Nunez

It was my priviledge to attend the IEEE Professional Development Conference held in Dallas, September 3rd-6th, as the section's GOLD (Graduates of Last Decade) representative. As the title indicates, the conference focused not on the technical skills of engineers, but the career development and lifelong planning required by engineers to reach their goals. The theme "Entering the New Millennium" was prevalent throughout the conference. Engineers of the future will have to develop a broader skill set in order to compete.

Among the information that I felt was most valuable:

The importance of career planning

Engineers are usually very thorough at planning their technical assignments, yet do not give their careers a second thought. Your career should be approached using the same planning and tools that you use in your everyday work. Understand that failing to plan is planning to fail.

Achieve balance in your life

While career planning is important, it must be integrated and prioritized along with your personal goals. In one class exercise we listed our three most important personal and professional goals. I came to realize that although I was spending time developing my career, I wasn't spending time developing what I considered the most important goals, which were family-related. It helped me to prioritize the things that I think are most important to me as a person, not just as an employee.

Document your goals

Most of the successful people have written goals that they have



47523 Clipper Street Plymouth MI 48170 Tel: 734-455-8200

Our latest EMC test laboratory offers the following automotive engineering services:

- European road vehicle type approval 'e' and 'E' marking
- European EMC Directive certification 'CE' marking
- Component and system testing to Ford, GM, and Daimler-Chrysler requirements.
- EMC testing for suppliers of components and systems to car, truck, bus, agricultural, forestry, construction, industrial vehicles and related industries.
- Radio interference suppression (audio systems development).
- World-wide radio approval testing and certification.

Backed up by over 200 man years of automotive electrical engineering experience and EMC expertise. If you sell your products into Europe we have the specialist knowledge you need. Visit our Web Page:

www.MIRANorthAmerica.com

Contact: Tim Droege, Account Manager, MIRA North America.

developed over the years. Developing personal and work mission statements help us to reaffirm and reflect on what is really important in our lives. Also, realize that your mission statements are living documents that should be changed as your goals and objectives change.

Develop non-technical skills

(communications, leadership, negotiating, business acumen)

Today's managers want people who can relate with customers, understand their requirements, and effectively communicate with upper management. Development of non-technical skills is paramount for success in today's service-based world.

An important part of the conference for me was networking with new people. For first-time attendees, the conference offered a mentoring program which assigned veteran attendees with "newbies". I had a wonderful mentor named Eremita Miranda, who had attended this conference over ten times. She introduced me to other mentors and pointed out classes that she though would be of interest to me. I also met one of the conference vice-chairs, Joe Lillie. Joe and I have a lot in common, as we both grew up in Louisiana and graduated from the same college (University of Southwestern Louisiana). I was also able to meet with a "legend" in the area of computer security, Dr. Whitfield Diffie. Dr. Diffie is know for his discovery of public key cryptography and the development of the Diffie-Hellman algorithm, both of which are critical and widely-used components in network security today.

Overall, I thought that the conference was well worth giving up Labor Day weekend, and I encourage everyone who has an opportunity to attend the IEEE Professional Development Conference.

Electromagnetic Test, Analysis & Consulting

The Eaton Detroit Center provides OEMs and suppliers worldwide with full-service test and analysis capability in more than 50 vehicle technologies, including the following electromagnetic test, analysis and consulting services:

- New Product Test, Evaluation, Problem Resolution, Validation, and Standards Certification
- Evaluation of Materials Shielding
- Customer-Site Problem Analysis and Resolution
- In-Plant Power Quality Analysis
- NVLAP/NARTE Certified
- Consulting on EMC and Power Quality Issues
 - New Product Concepts
 - Existing ProductSpecifications
- Revisions
 Test Plans
- Re-Designs

Eaton has earned more customer quality awards than any peer, and the first-ever *SAE Henry Ford II Distinguished Award For Excellence In Engineering* ... Find out why! For more information on laboratory hours and how we can support your test and developments programs, **call Scott Lytle at 800-341-4892**.

Eaton Corporation Corporate Research & Development 26201 Northwestern Highway Southfield, MI 48037



IEEE Southeaste Section Executive Officers Chair James Woodya Vice Chair John Miller Secretary Donald Silver Treasurer Mohamed Zo	e Committee and 313-577-3758 313-322-7486 smith 313-577-0248	Section: ewh.ieee.org/r4/se_michigan/ieeesem IEEE: www.ieee.org IEEE Region 4: ewh.ieee.org/reg/r4/ Please note that these addresses have been updated.		
	Calendar of Events			
Administrative ActivitiesPast ChairSandy HunterSection AdvisorDon BramlettStudent ActivitiesEdzko SmidProfessional ActivitiesTarek LahdhirTechnical ActivitiesAnthony WillEducational ActivitiesEce YaprakMembershipMaurice Snyde	248-370-2082 i 248-685-5634 810-986-9557 313-577-8075	Wednesday November 17	Event: Time: Sponsor: Comment: Contact:	DC Automotive Motor Noise Suppression Refreshments at 5:45 p.m., meeting 6:00 p.m. Chapter VIII: EMC See article on Page 1 Scott Lytle, ScottRLytle@eaton.com
IEEE/SEM Chapters I Circuits & Signal Processin Signal Processing (ASSP-01), Circuits & S	g : Acoustics, Speech & ystems (CAS-04),	Monday November 22	Event: Sponsor: Contact:	Outstanding Engineer Award Nominations Deadline IEEE/SEM Sandy Hunter, 248-524-0645 work, s.e.hunter@ieee.org
Information Theory (IT-12) and Control Sy II Vehicular Technology: Vehicul III Comm. & Aero. Electronics Systems (AES-10) and Communications (ar Technology (VT-06) CAerospace & Electronics COM-19)	Friday December 3	Event: Sponsor: Contact:	Award Nominations Deadline IEEE/SEM Sandy Hunter, 248-524-0645 work, s.e.hunter@ieee.org
 IV Trident: Electron Devices (ED-15), Mi Techniques (MTT-17) and Antennas & Pro V Computer: Computer (C-16) VI Geoscience & Remote Sens Remote Sensing (GRS-29) VII Power Eng. & Ind. Apps.: Power Eng. 	pagation (AP-03) ing: Geoscience &	Tuesday December 7	Event: Time: Location: Sponsor: Contact:	Executive Committee Meeting Dinner at 6 p.m., meeting 6:30 p.m. EATON Corp., 26201 Northwestern Highway, Southfield IEEE/SEM Kimball Williams, 248-354-2845
н: 810-268-0249 Н: 734	ower Electronics (PEL-35) Eng. Management (EM-14) tkor -930-7500 -513-7390 iventengineering.com	Wednesday December 8	Sponsor:	Chapter X Meeting Veridian ERIM International Chapter X: Engineering Management We will revisit our bold predictions on effects of the Damler Chrysler merger and perhaps pick some equally visible event to analyze and predict the impact on the engineering managers and their departments. Martin Biancalana, 734 994-1200 x 3237, biancalana@erim-int.com
 PRINTER Progressive Printing 1326 Goldsmith Plymouth, Michigan 48170 734-459-2960 COPY DEADLINE: News item of the month for the following mon is the deadline for the May issue. ADVERTISING RATES CI 	th's issue, e.g. April 1	Wednesday December 15		Deadline for 2000-2001 Officer Nominations IEEE/SEM Nominations for section and chapter officers for the 2000-2001 program year are due. Elections will be held in February. If you would like information about officer responsibilities, contact a current officer or Sandy Hunter. Sandy Hunter, 248-524-0645 work, s.e.hunter@ieee.org
Ad Annual Rate Size (8 issues) 1/8 page \$525	Single Issue Rate \$85	January TBD	Event: Time:	Executive Committee Meeting Date will be posted on section web calendar
1/4 page \$1000 1/2 page \$1900 1 page \$4000 (Second color, other sizes & special placement of		Monday January 31	Event: Sponsor:	Outstanding Student Branch Involvement Award Nominations Deadline IEEE/SEM
POSTMASTER Send addres IEEE Service Center, 445 Hoes Lane, F Phone:732-981-0060x150. USPS 878- POSTAL INFORMATION NO The newsletter of the Southeastern Micl "Wavelengths", (USPS 878-660), is pub per year except June, July, August & Dee of Electrical and Electronics Engineers, East 47 th Street, New York, NY 100 member, per year (included in annual c each member of the Southeastern Mich Periodicals Postage Paid at New York, mailing offices.	Viscataway, NJ 08854. 660 FICE higan Section of IEEE, lished monthly 8 times cember by the Institute Inc. Headquarters: 345 017-2394. \$1.00 per lues) is designated for igan Section.	Wednesday February 9	Sponsor:	Sandy Hunter, 248-524-0645 work, s.e.hunter@ieee.org Chapter X Meeting Veridian ERIM International Chapter X: Engineering Management Discussion of motivators and demotivators for engineers today. Martin Biancalana, 734 994-1200 x 3237, biancalana@erim-int.com Page 3

IEEE

Southeastern **Michigan Section**

Wavelengths Newsletter

Serve as a Section or Chapter Officer!

Wanted: Energetic, enthusiastic, proactive section members to serve as IEEE/SEM section and chapter officers. Great opportunities to network with local professionals, meet internationally known technical experts, utilize planning and organizational skills, and have fun. Terms of office begin July 1, 2000. Terms last one year for all officers except section directors, who are elected to two year terms. Nominations needed by December 15, 1999.

If you fit the description above, nominate yourself for a section or chapter officer position. Serving as an officer is a way to meet other section members, speakers, and volunteer leaders in IEEE's technical societies and regional activities. These contacts can lead to new friendships and business opportunities. Being an officer is an effective way to learn and practice job-related skills. Officers use project management, teamwork, budgeting, oral and written communications, and motivational skills. You will have opportunities to meet new people and learn new things as a section or chapter officer. You will also gain a sense of satisfaction from serving colleagues.

Since IEEE is a volunteer-run organization, section and chapter officers are critical to the organization's success. Officers' efforts determine whether IEEE is recognized as a vibrant, valuable resource for professional development or whether it is merely seen as an organization that publishes technical materials.

The section is committed to supporting officers in order to achieve successful programs. The section provides an orientation session

JOMPET GE

Get on track with Lawrence Tech's graduate engineering programs! Lawrence Tech's Master of Automotive Engineering, Engineering in Manufacturing Systems, Civil Engineering and Computer Engineering programs emphasize the vital interplay between manufacturing, engineering, research, suppliers and management. Most feature crossdisciplinary programs, part of the University's commitment to enhance W NCK the growth of today's working professionals.

- Evening classes designed for practicing engineers
- Outstanding faculty with top academic credentials and professional experience
- Classes begin January, May and August
- Graduate in two years attending classes twice per week
- Full service campus



Periodical Postage Paid AT PLYMOUTH, MICHIGAN

by Sandy Hunter, Elections Committee Chair

for all officers, lists of resource materials, and opportunities for officers to network with each other to share ideas. New officers can tap the knowledge and experience of current and past officers through informal mentoring. IEEE also provides a number of contacts and ideas via its Section/Chapter Support page on the IEEE web site.

Section officer positions for the 2000-2001 year are: Chair, Vice Chair, Secretary, and Treasurer. The three section director positions being elected for the 2000-2002 term are: Professional Activities Director, Membership Activities Director, and Technical Activities Director. All officer positions for the section's ten chapters are open for one year terms. Chapters have at least a Chair and Vice Chair. Some chapters have several Vice Chair positions while other chapters also have Secretary positions.

Any IEEE member above student grade who resides in the Southeastern Michigan Section is eligible to hold section officer positions. Chapter officers must be members of at least one of the Technical Societies that comprise a Chapter at the time that they take office. For example, to be a Chapter IV officer, you must be a member of Electron Devices, Microwave Theory and Techniques, or Antennas and Propagation. If you would like further information about officer responsibilities or the election process, contact Sandy Hunter s.e.hunter@ieee.org or 248-524-0645. Nominations should be submitted before December 15, 1999, using the nomination form on the section's web site. This will increase the likelihood that the election committee will have correct contact information so that you can be notified of the election results. The URL is:

www.ewh.ieee.org/r4/se michigan/ieeesem/

32540 Schoolcraft Road, #130 Livonia, MI 48150

For Technical Information: (P) 734/513-0330 (F) 734/513-0335 e-mail: ekco@compuserve.com

Power Equipment Sales for the following Products: ADALET HV Cable Accessories, C&D Stationary Batteries, DELTA-UNIBUS Isophase Bus, DOBLE Test Equipment, FISHER-PIERCE Photo Electric Controls, MEHTA-TECH Fault Recorders, GE MULTILIN Protective Relays, JOSLYN HV Vacuum Switches, OLSUN Cast Coil & Dry Transformers, PAUWELS Liquid Filled Transformers, POWELL Switchgear, PRINGLE High Current Switches, SANTANA Insulators, SOLIDSTATE CONTROLS UPS Systems, SOUTHERN STATES HV Switches, UNIBUS Bus Duct Systems.

Page 4

November/December 1999 Wavelengths