



1998 IEEE/SEM Section Awards Presentations

by Dave Horvath, Nominations Committee Chair

The Executive Committee is proud to honor several section members with our sixth annual presentation of Section Awards. The awards are presented each year at the IEEE/SEM Spring Section Meeting, which this year is at the Ford Fairlane Club in Dearborn on Thursday, April 2.

This year's IEEE/SEM awards include Outstanding Engineer: Dr. William F. Powers, Outstanding Section Involvement: Donald C. Bramlett, Outstanding Chapter Involvement: Dr. Nizar Al-Holou and Outstanding Branch Involvement: University of Michigan Student Branch.

See page 4 for a full description of the award recipients.

Chapter V: Computer

Computer Chapter Update

by Nizar Al-Holou, Chair

The newly elected IEEE Computer Society president reported that 1997 was a great year for the society. The society has added many products and services for their members world wide such as building an unparalleled digital library, offering electronic subscription options for members, providing a free e-mail alias, and launching *IEEE Internet Computing*. You can join four technical committees in 32 different specialty areas at <http://computer.org/tcsignup>. The society needs your opinion and participation in any of the 212 working groups for standards where you can enhance the future direction of the computer industry. The society home page at <http://computer.org>, has useful information and updates such as employment opportunities, an online publication catalog, plus links to other computing resources, and periodicals.

<http://www.egr.msu.edu/ieeesem/chapv/>. We have very ambitious plans for 1998. We have already had a number of meetings this year. Other upcoming meetings are listed in each new *Wavelengths*' Calendar on page 2 and on the chapter and section home pages.

We need your input, active participation, and support. We love to hear from each and every member, and we welcome your suggestions, comments, and participation. We were very excited to have many activities last year. We are very interested in your ideas, suggestions, and input to improve the quality of our activities. Please contact us with your suggestions and ideas. The chapter has eight active officers from industry and academia. Please contact any of our chapter officers:

Chair	Nizar Al-Holou,	313-993-3384
Vice Chair	Sylvia Karmanoff,	248-753-7691
Publicity	Charles Severance	517-353-2268
Technical	Subramanian Ganesan	248-370-2206
Professional	Syed Mahmud	313-577-3855
Operation	Vipin Chaudhary	313-577-0605
Membership	Nabil Hachem	248-204-2509
Administration	Paul Nelson	313-213-6555x607

The Computer Chapter in Southeastern Michigan also had a great year in 1997. The Computer Chapter has been one of the most active chapters in the world. As a result, the chapter received the IEEE Outstanding Chapter Award in 1995. In 1996, we had over 12 meetings and tours, which set an IEEE/SEM Section record. Also, in 1997 we had over 10 meetings. You can access our web page at

Chapter IX: Power & Ind. Electronics

Trends in Automotive Electronics & Mechatronics

by Ka C Cheok, Chair

Chapter IX proudly presents a three-hour seminar on automotive electronics and mechatronics trends. The event will be held on Friday, April 24, 1 to 4 p.m. at Oakland University in Rochester. The location is tentatively set for room 116 in the Science & Engineering Building. The program for the seminar is:

1:00 - 1:30	Methods in Automotive Electronics	John Miller
1:30 - 2:00	Virtual Prototyping of Automotive Mechatronics	Ka C Cheok
2:00 - 2:30	Trends of Future Cars	John Miller, Ka C Cheok,
2:30 - 2:45	Coffee & Snack Break	Gamze Erten, and others
2:45 - 4:00	Open Discussion	

The objective is to cover trends seen by automotive manufacturers, automotive suppliers, and military agencies. Participants will exchange ideas on techniques and approaches. Bring relevant articles for distribution. Working engineers and students are welcome. Admission and parking are free. Contact Ka C Cheok for more information by phone: 248-370-2232, fax: 248-370-4633 or e-mail: cheok@oakland.edu.

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WAVELENGTHS



IEEE Southeastern Michigan Section Executive Committee

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Treasurer	John Miller	313-322-7486

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Section Advisor	Don Bramlett	313-235-7549
Student Activities	Mohamed Zohdy	248-370-2234
Professional Activities	Donald Silversmith	313-577-3861
Technical Activities	Diane Rover	517-353-7735
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Volunteer Coordinator	Satyendra Basu	313-235-6523

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- I Circuits & Signal Processing:** Acoustics, Speech & Signal Processing (ASSP-01), Circuits & Systems (CAS-04), Information Theory (IT-12) and Control Systems (CS-23)
- II Vehicular Technology:** Vehicular Technology (VT-06)
- III Comm. & Aero. Electronics:** Aerospace & Electronics Systems (AES-10) and Communications (COM-19)
- IV Trident:** Electron Devices (ED-15), Microwave Theory & Techniques (MTT-17) and Antennas & Propagation (AP-03)
- V Computer:** Computer (C-16)
- VI Geoscience & Remote Sensing:** Geoscience & Remote Sensing (GRS-29)
- VII Power Eng. & Ind. Apps.:** Power Engineering (PE-31) and Industrial Applications (IA-34)
- VIII EMC:** Electromagnetic Compatibility (EMC-27)
- IX Power & Ind. Electronics:** Power Electronics (PEL-35) and Industrial Electronics (IE-13)
- X Engineering Management:** Eng. Management (EM-14)

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Computer Chapter: www.egr.msu.edu/ieeesem/chapv/
IEEE: www.ieee.org
IEEE Region 4: www.ieee.org/regional/r4/



Calendar of Events

- | | | |
|---|--|---|
| Wednesday
April 1 | Event:
Location:
Time:
Contact:
Comment: | Science Fair
Cobo Hall, Detroit
8-11 a.m.
Don Bramlett, 313-235-7549,
d.bramlett@ieee.org
Volunteer judges are needed. |
| Thursday
April 2 | Event:
Contact:
Comment: | IEEE/SEM Spring Section Meeting
George Peters, 519-966-1656 x 4447#
Mark your calendar. |
| Thursday-Saturday
April 2-4 | Event:
Location:
Sponsor:
Contact:
Comment: | ASEE North Central Conference
Holiday Inn-Dearborn and the Univ. of Detroit Mercy
American Society of Engineering Education,
Ford Motor Co., General Motors, SDRC
Dr. Nizar Al-Holou, 313-993-3384,
alholoun@udmercy.edu
More information at http://www.udmercy.edu/htmls/personal/ncs/ncs.htm |
| Monday
April 6 | Meeting:
Time:
Location:
Sponsor:
Contact:
Comment: | Executive Committee
Dinner at 6:00 p.m., meeting 6:30 p.m.
Eaton Corp., 26201 Northwestern Highway, Southfield
IEEE/SEM
Kimball Williams, 248-354-2845
Note that the meeting will be held on Monday. |
| Friday
April 24 | Event:
Location:
Time:
Sponsor:
Contact:
Comment: | Trends in Automotive Electronics & Mechatronics Seminar
Oakland University, in Rochester. The tentative room is 116 in the Science & Engineering Bldg.
1-4 p.m.
Chapter IX: Power & Ind. Electronics
Ka C. Cheok, phone 248-370-2232, fax 248-370-4633, or e-mail cheok@oakland.edu .
See article on page 1. |
| Monday
May 4 | Meeting:
Time:
Location:
Sponsor:
Contact:
Comment: | Executive Committee
Dinner at 6:00 p.m., meeting 6:30 p.m.
Eaton Corp., 26201 Northwestern Highway, Southfield
IEEE/SEM
Kimball Williams, 248-354-2845
Note that the meeting will be held on Monday. |
| Saturday - Monday
May 30, 31, & June 1 | Event:
Location:
Sponsor:
Contact:
Comment: | Unmanned Ground Robotics Competition
Oakland University, in Rochester.
Association of Unmanned Vehicle Systems International, Oakland University, SAE, Fanuc Robotics, Ernst & Young, NAHSC and the US Army.
Ka C. Cheok, phone 248-370-2232, fax 248-370-4633, or e-mail cheok@oakland.edu .
See article on page 8. |

Volunteers Needed for Wavelengths

Make a visible difference to your local IEEE section. Develop skills you aren't using on your regular job. Have 4000 people see your work. Volunteer to work with *Wavelengths* and become more active in the local section.

The task of creating *Wavelengths* requires at least 1 person and would work well as a team of volunteers. Responsibilities include: Planning & Management; Editing and Layout; Customer & Supplier Relations.

Wavelengths is distributed to 8 times per year. New editor(s) will have leeway to decide how work is divided. The section provides a computer, scanner and software for the production of *Wavelengths*. The current editors will be available to answer questions and provide guidance.

Recommended 2 year commitment. Sign up by June 1!

Full details are on the section's web pages.

Contact Mark Hunter, 313-453-0800, m.hunter@ieee.org, or Sandy Hunter, 248-588-0355, s.e.hunter@ieee.org, for more information.

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Student Branch

Univ. of Windsor Student Branch: Building for the Future

by Boguslaw Kiezun, Secretary

The IEEE Student Branch at the University of Windsor has made quite a lot of progress over the last few years. Since 1996, the student awareness of the IEEE has grown considerably and in 1997, we formed our first Engineering Design Group. We've revised our student membership constitution and adapted to the university's policies on student organizations. We've successfully enlightened students about the IEEE and continue improving our goals of increasing our membership.

Currently, our executive committee consists of:

Counselor:	Dr. Tarek Lahdhiri
Chair:	Czeslaw Szubert
Co-Chair:	Sotarios Diamantis
Secretary:	Boguslaw Kiezun
Treasurer:	Eric Giernarczyk
Student Organizers:	Carrie Martin, Orion Bruckman, Vanessa Ellul, Omid Kharazi, and Mike Mastromattei

We would like to welcome our new Counselor, Dr. Tarek Lahdhiri, who is currently a Research Engineer within the Intelligent Manufacturing Systems Center and was just elected to the position of 1998-2000 IEEE/SEM Director of Professional Activities.

As highlighted above, we've made great strides throughout last year.



The Design Group was a first for us with positive results. We've involved about 20 students in designing a phone sentinel. This is a user-friendly electronic device, which is used to avoid interruptions of phone calls and modem sessions. From the designs, we've chosen the most efficient and built a prototype. This group has promise, and we would like to see the group become competitive in design competitions. We will participate in the electronic car

student competition held on March 21 at Oakland University.

Also, we've managed to organize a summer BBQ festival despite our very limited budget. This event turned out to be great for our student membership. We invited all students across all levels and celebrated the summer night over a warm roasting fire. This event allowed students to establish some networking on the local scene as well as enjoy well-toasted hot dogs.

We would like to take this opportunity to thank Mr. George Peters, the IEEE/SEM Chair, for his presentation, which took place at the Ambassador Room at the University of Windsor on March 5. Mr. Peters provided the audience with an excellent overview of IEEE activities and the benefits of being an IEEE member. The seminar was a great success, and we are looking forward to organizing more of these seminars.

The future is in our sights now! We've established a firm executive committee for our student branch and will be holding elections for next year's committee. With the growing awareness of our student branch, we're sure that next year our goals will be surpassed. We're building our future now!!

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1998 IEEE/SEM Section Awards

The Executive Committee is proud to honor the following section members with our sixth annual presentation of Section Awards.

IEEE/SEM Outstanding Engineer Award

Dr. William F. Powers is the recipient of the IEEE/SEM Outstanding Engineer Award. This award is presented annually in recognition of the recipient's outstanding engineering achievement, dedication, and leadership in the field of Electrical, Electronics, or Computer Engineering. The award is presented and honored at both the ESD Affiliate Council sponsored Gold Award banquet and at the IEEE/SEM Spring Section Meeting. This award was originally announced in the February issue of *Wavelengths* and the original award article is available on the section's web page.



IEEE/SEM Outstanding Section Involvement Award

Donald C. Bramlett, PE, is the recipient of the IEEE/SEM Outstanding Section Involvement Award. This award is presented annually in recognition of the recipient's outstanding contribution to the operation, growth, promotion, and success of the section.



Don Bramlett is a senior member of IEEE and a registered professional engineer in Michigan. He received this award in recognition of his development and administration of programs for middle and high school students of Southeastern Michigan that foster an interest in science and engineering, and for recognition of his overall leadership in professional activities.

Don has served the IEEE Southeastern Michigan Section admirably in several capacities over the past fifteen years and developed initiatives that have become the hallmark of the section. Among his most notable activities have been his contributions to National Engineers Week (NEW), the Future City Competition, and the Science Fair IEEE Awards Judging. As one of many examples, during National Engineers' Week, Don is a frequent speaker at local middle and high schools where he promotes careers in science and engineering among the students. Don has nurtured, developed, and led the Section's participation in these important community activities almost single-handedly over the past eight years.

Don has also been our section's most prolific contributor to

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by Dave Horvath, Nominations Committee Chair

Wavelengths, going beyond the call of duty to keep the membership informed of professional development opportunities and ways to represent the engineering profession in support of community events.

Examples of Mr. Bramlett's leadership and performance in professional activities are too numerous to list comprehensively but include the following highlights:

1. Eight positions on the IEEE/SEM Section ExCom including Chapter Chair and Section Chair during the past 14 years. Responsible for initiation of the IEEE/SEM Section's Awards Program seven years ago and nomination of several section members for awards. Finance Chair for the 1991 IEEE Industrial Applications Conference in Dearborn.
2. Section representative to Region 4 and current officer (East Area Chair). Coordinated Section Officer Workshop in 1997.
3. During past nine years, held nine officer positions in National Society of Professional Engineers (NSPE) / Michigan Society of Professional Engineers (MSPE) including local Chapter President and MSPE Division President.
4. During past nine years, held four ESD Affiliate Council officer positions in addition to acting as IEEE/SEM's representative.
5. A presenter at the American Nuclear Society's sponsored Teacher's Workshop in 1992 as well as elected to its Michigan Section Director position 1992-1997.

IEEE/SEM Outstanding Chapter Involvement Award

Dr. Nizar Al-Holou is recipient of the IEEE/SEM Outstanding Chapter Involvement Award. This award is presented annually in recognition of the recipient's outstanding contributions to the operation, growth, promotion, and success of an IEEE technical society chapter within the Southeastern Michigan Section.

Dr. Al-Holou is a professor of electrical and computer engineering at University of Detroit Mercy. He received this award in recognition of his significant contributions to the professional development of the members of the Computer Society local chapter. He has been active in the Computer Society since 1992 when he first coordinated a speaker for a chapter meeting. Subsequently, thanks to his efforts, the Computer Chapter has consistently been one of the section's most active chapters and received IEEE's (national level) Outstanding Chapter Award.



Dr. Al-Holou served as Computer Chapter Vice Chair in 1994-1995 and has been Chapter Chair since 1995. During the past five years, he scheduled or otherwise coordinated and was responsible for speakers at 33 chapter meetings. He was also responsible for scheduling the Section's Spring 1997 Meeting keynote speaker.

IEEE/SEM Outstanding Student Branch Award

The University of Michigan (U of M) Student Branch is the recipient of the IEEE/SEM Outstanding Branch Involvement Award. The student branch is located in Ann Arbor, Michigan. During 1997 the branch chairs were Michelle Lifshitz (first half of 1997) and Bob Jacoby (second half of 1997 and present chair) and the faculty advisor is Professor Emad Ebbini. This award is presented annually in recognition of an IEEE/SEM student branch for the volunteerism and initiative involved in producing a successful technical,

Continued on Page 5

April 1998 Wavelengths

1998 IEEE/SEM Section Awards

professional, and social program for its members and for its involvement with the section.

The officers of the U of M Student Branch have provided an exemplary program for the benefit of their members. Their activities have been numerous, resourceful, and productive. The branch ExCom meets once a week on Monday to plan activities and prepares meeting minutes, which are distributed, to all members by e-mail. E-mail is also used to announce upcoming meetings as well as provide relevant information on Student Council activities where the IEEE officers are represented. A technical or professional meeting is held each Thursday for branch members at lunchtime. The branch also has a web site to promote its presence.

In the professional area, the U of M student branch has laid the foundation for an Industrial Relations Committee to tighten the bond with industry and provide industry contacts for branch members. They have also set up Informational Meetings for companies to come in and give presentations as well as meet with students. At least one field trip per semester is scheduled and in the past year, such trips have included Chicago and Toronto to visit the Museums of Science and Technology. Visits to various labs within the U of M ECE Department were also arranged. The branch is also active during National Engineers Week, where members work with other professional society student branches to celebrate the occasion. The IEEE U of M Student Branch was responsible in 1997 for organizing a successful semi-formal dance during National Engineers Week.

On the social and community activity scene, the branch has worked with over a 100 local merchants to sponsor a carnival consisting of six events at the University's Springfest as well as sponsoring numerous social events (picnics, movie get-togethers, and other nights out) throughout the school year.

The U of M Student Branch was particularly aggressive in promoting increased IEEE awareness and membership through use of recruiting booths at both the main campus and north campus during appropriate

Continued from Page 4

university festivals, mass meetings on both campuses at the beginning of each term, design and use of a computerized "Local Application" to better track member interests, and establishment of a new officer position (Chair of Projects) to better involve members and potential new members in branch activities. The branch has also actively promoted engineering as a career by meeting with high school seniors and parents during Tech Day. During the past year, the branch received the "Coolest Tech Day Display Award" for its presentation of virtual reality equipment and holograms.

In order to focus its activities better, the branch developed a mission statement. They have interfaced with the section through inviting the Section Chair to weekly branch meetings, submitted an article to *Wavelengths* on their activities, and sent representatives to section meetings. They have also aggressively involved and utilized their faculty advisor in branch activities.

Wayne State University (WSU) also submitted an exemplary nomination for this award, making the choice for the Student Branch Award this year particularly challenging. Notable among this branch's many achievements were monthly technical meetings, major support to a Branch Leadership Training Workshop, sponsoring of a display table at the Fall 1997 Section Meeting, heavy support to three Lendman Career Fairs, publishing of a branch newsletter, sponsoring a tour at the EDS Client Server Technology Center in Troy, organizing a charity drive and collecting seven boxes of clothes for the needy and homeless in cooperation with the St. Vincent DePaul Society just before Christmas 1997, organizing and hosting the downlink of the NSF-sponsored Young Engineers Forum II during 1997's National Engineers Week, testing and use a new on-line IEEE Student Member Application System, sponsoring of an end of semester social event for branch members, and winning the Region 4 Award for Best Student Branch Web Site. Because of these many worthy, stellar, and honorable activities, the IEEE/SEM ExCom voted to award WSU an Honorable Mention for 1997 Outstanding Student Branch Activity.

Junior Past Section Chair, An Awesome Responsibility But Someone's Got To Do It!

by Dave Horvath, PE

As most of you know I am currently the Junior Past Section Chair or as Dave McKendry so affectionately alluded to in his article last year I'm well on my way to "Pasture"! However, although one may think that the past chairmanship is a lackluster responsibility after an exciting year as Section Chair, such a belief is far from the truth. As Junior Past Chair, I have major input to and responsibility for coming up with next year's slate of officers and for the awards program. This first responsibility is almost like being President and having an opportunity to nominate Supreme Court Justices and, thereby, put in place policy for many years to come! Well, almost! I did enjoy coming up with a list of over 40 officer nominees and am quite pleased with the result and the potential in store for our section for the future! It has also been exciting reviewing the many excellent nominations and credentials submitted for our four award categories. The winners are detailed in this *Wavelengths* and will be awarded at the Section Spring meeting.

One last topic I would like to discuss. Many of you may have noticed upon examining the recent officer ballot that our current (1997-1998) Section Vice Chair KC Liu did not follow the normal officer rotation routine and run for the Section Chair position. As I understand from talking to KC, this decision (which was made for personal

reasons) was difficult for him. Many of us on the Executive Committee were sad to see this turn of events after observing and benefiting from KC's energy and enthusiasm for many years. In recognition of his many contributions, the Executive Committee this past February voted to formally recognize KC at the 1998 Spring Section Meeting with a Special Award of Appreciation. I hope that all of you join us in applauding KC and the other awardees.

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Region 4 Meeting Report

The 1998 IEEE Region 4 meeting took place February 20 and 21 in Chicago, Illinois. Like all region level entities of the IEEE, Region 4's main focus is to serve the needs of its constituent sections. One of the greatest assets in attending such a meeting is the ability to share ideas with other section officers. One of the meeting's activities involved the formation of area caucus groups. (The Southeastern Michigan Section is part of the East Area.) In these area discussion groups, representatives exchanged ideas regarding ways to maximize the efficiency of section operations.

The most notable idea I observed came from the Chicago section. The section chair decided to outsource the newsletter operation. The emphasis is to trade off the cost of a professionally run publication with a dramatic increase in advertising revenue. Having published only three issues (January, February, and March 1998), the Chicago section has already realized a lower overall cost in generating the newsletter. Their goal is to add more advertisers such that the endeavor will result in a sizable asset rather than a liability. The Chicago Section's success in launching this project gives rise to the idea of implementing the same process in our section. However, it should be noted that the Chicago section has approximately twice the membership as the Southeastern Michigan Section. There is an

by George Peters, IEEE/SEM Chair

obvious advantage when the membership numbers are high: the greater the number of newsletters in circulation, the greater the interest for advertisers. If this idea is to be implemented in the Southeastern Michigan Section, an aggressive campaign to recruit advertisers must be in place.

Another unique idea came from the Toledo section. Their current chair wishes to pursue a joint section meeting or mini-conference, consisting of workshops, which reflect the educational, technical, and professional themes of the two sections.

It was also evident that the sections shared many of the same challenges involving financial planning, membership involvement, services for the student branches, etc.

Other meeting highlights included a presentation by IEEE President Joe Bordogna, who discussed the new focus of the IEEE in providing a seamless connection to IEEE services to members worldwide.

Overall, the 1998 Region 4 meeting proved to be a valuable opportunity for section representatives to key in on the many benefits the region has to offer. As well, the section officers took back with them a wealth of knowledge after investigating both the challenges and successes of other Region 4 sections.

Chapter VIII: EMC

Reverberation Chamber Testing Meeting Report

by Kimball Williams, Secretary/Treasurer

On Monday, February 9, the IEEE Southeastern Michigan EMC Chapter featured John D. M. Osborn discussing "State-of-the-Art of Reverberation Chamber Testing." The meeting took place at the Eaton Corporation Innovation Center in Southfield, Michigan. Twenty-seven of the chapter's members assembled to hear John's talk, and renew acquaintances.

Reverberation chamber testing technology is a radical departure from traditional EMC testing approaches. As with any test approach, there are advantages and disadvantages. John began with his own definition of a reverberation chamber and then proceeded to the theory of a reverberant enclosure to show how reverberation chambers work. John then:

- Reviewed reverberation chamber test applications as they currently appear in domestic and international standards,
- Discussed reverberant operation performance validation requirements, for domestic and international specifications,
- Described the conduct of reverberation chamber testing, specifically taking into account the special characteristics of reverberation chambers, and
- Discussed potential pitfalls of reverberation chamber testing.

John closed with a prediction of the future of reverberation chamber testing and a question and answer period. The discussion after the talk lasted forty five minutes with many probing and introspective questions.

John Osborn has more than 30 years experience as a working EMC engineer. He has a Bachelor of Science in Electrical Engineering (B.S.E.E.) from the University of Texas at Austin, conferred in 1964, and a Master of Science in Systems Management (M.S.S.M.) from the University of Southern California, conferred in 1985. He has direct EMC test experience on systems and equipment operating as

low as 3000 s/cycle and as high as 34 GHz, ranging in physical size from a single, small box to a complete, complex missile system.

He is a National Association of Radio and Telecommunications Engineers Certified EMC Engineer, and a former Certified TEMPEST Tester. He is a voting member of the IEEE EMC Society Standards Committee, the Society of Automotive Engineers Electromagnetic Radiation and Electromagnetic Interference Standards Committees, and the American National Standards Institute's Accredited Standards Committee C63.

John holds three patents in EMC measurement technology. He is also the author of numerous published technical articles and books. John was the General Chair of the 1997 IEEE International Symposium on Electromagnetic Compatibility in Austin, Texas, and has survived to tell the tale. When not addressing EMC chapters, John's secret identity is the Principal EMC Scientist at the EMC Test Systems in Austin, Texas.

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1998 - 1999 Official Election Results

by Dave Horvath, Election Committee Chair

The IEEE/SEM 1998-99 officer election ballots have been tallied. I would like to thank those who participated in the election process and congratulate the elected officers. With all candidates running unopposed, there were no real surprises. Even though all candidates were unopposed, voting is important to show your support for what these volunteers are doing with your section and chapters. As you read through the list of officers, consider how you can contribute in the upcoming year and decide you will send in your vote next year.

Section Officers

CHAIR: Sandra Hunter (EDS)
VICE CHAIR: James R. Woodyard (Wayne State Univ.)
SECRETARY: John M. Miller (Ford)
TREASURER: Don Silversmith (Wayne State Univ.)

CHAPTER I: Circuits & Signal Processing

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ADMINISTRATIVE: Rob Cadema (Oakland Univ.)
MEMBERSHIP: Robert Nowak (Mich. State Univ.)
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CHAPTER II: Vehicular Technology

CHAIR: Ken N. Rao (Raytheon)
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Ford and General Motors help defray part of the expenses for section meetings held at their facilities. This generous support helps the section provide space for chapter technical sessions and subsidizes programs that encourage student involvement.

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1998 International Ground Robotics Competition

by Ka C Cheok, Oakland University

On May 30, 31, and June 1, Oakland University will host the 1998 International Ground Robotics Competition. Twenty universities from the US, Canada and Japan will travel to Oakland's campus to compete in the event. They will race their unmanned and autonomous mobile vehicle robots in an obstacle course that challenges capabilities such as lane following (solid and dashed line lane markers), obstacle avoidance (construction drums and road debris), bridge crossing (inclines), and sand trap navigation. Students will also present their approach and team effort in designing and fabricating their mobile robots. The technologies used include computer vision, proximity distance sensors, smart decision and control. The competition's objective is to stimulate students' interest and build an intellectual

foundation in the area of intelligent vehicle systems.

The competition is sponsored by the Association of Unmanned Vehicle Systems International, Oakland University, SAE, Fanuc Robotics, Ernst & Young, NAHSC and the US Army. May 30 is the preparation and practice day; May 31 is the Design Competition Event and Bonus Competition Event; and June 1 is the main Performance Competition Event.

The public is welcome. Attendance and parking are free. For further information, contact Candy McLellan or Professor Ka C Cheok at 248-370-2233, or visit <http://www.secs.oakland.edu/>, and click on Unmanned Ground Robotics Competition.

Student Branch

University of Detroit Mercy Student Branch

by Tony Hansen, Chair

This year the University of Detroit Mercy Branch has improved with the membership of freshmen and sophomore students. We have had trouble in the past recruiting first and second year students, but I am happy to say that we have three second year student officers for the 1997-98 school year. This is a great time to get new blood in the officer positions in this branch. I am continuing as Chair until the end of this year with Robert Combs (junior) as Vice Chair, Ryan McGilvrey (sophomore) as Treasurer, Josh Belanger (sophomore) as Secretary, and Randy LaGrou (sophomore) as Sergeant at Arms.

Last year's activities for the chapter included Safety Street, Engineering and Science Technology Day, Quake and other such things. We participated in the university's Safety Street in which different organizations build scenes for Halloween and give out candy to inner city kids. We also participated in the Engineering College's Technology Day with our screaming contest. In this contest, we measured the decibel level of people's screams, and the person with the loudest scream was awarded a plaque and a T-shirt.

Activities that the chapter has sponsored varied from educational to social activities. We first held a web page seminar in which students learned the basics of making their own web page. We also held a showing of "The Making of Jurassic Park." This was a good educational video of all engineering disciplines. It shows all the different technologies and people that were involved in making the movie. We also held a Quake Tournament following the tradition of last year's Doom Tournament. We held an Electrical Engineering Open House so that underclassmen would be able to speak to professors that they will have in the future, to upperclassmen who

are going through the major courses, and see the Senior Projects, which are in the process of being built. Finally, in June we held our annual IEEE/HKN Summer Party, which was a smashing success.

This year we will again be holding another Quake Tournament and IEEE/HKN Summer Party. We are very much looking forward to participating in the Bucket of Parts competition sponsored by Oakland University's Student Branch. We had attempted to have an Internet Scavenger Hunt with the help of other branches in the Region, but had low interest. This would have included searching through the participating chapters' web pages looking for different things such as benefits of IEEE, number of members in a particular chapter, and so on. Once participants found what they were looking for, by clicking on the word, they would be taken to a page with a picture of a device used in electrical engineering. In order for the person to get a point for their student branch, they would have to name the device and possibly give its function. I thought that this would be a good educational opportunity for underclassmen, but we simply did not get enough response from other branches.

Our student branch is looking forward to the next school year and looking forward to again increasing our membership. Our second year officers will be a big help in increasing our membership since we didn't previously have a way to consistently be in contact with the underclassmen. We are also looking forward to joint ventures with other colleges similar to Oakland University's Bucket of Parts Competition. We would be more than happy to help any student branch in possible joint activities. If interested, contact us at ieee@udmercy.edu.