

LENDMAN

IEEE/SEM Honors Outstanding Engineer at Gold Award Banquet

by D. Bramlett, IEEE/SEM Section Advisor and ESD Affiliate Council Representative

The Engineering Society of Detroit (ESD) is the most active of only three community-based engineering societies in the United States. The ESD Affiliate Council, a committee of ESD, is composed of representatives from the local sections or chapters of over 40 engineering, scientific, and professional societies, including IEEE, in the metropolitan Detroit area. The mission of the Affiliate Council is to foster communication and cooperation among the various societies to promote the success of those societies, to enable intersociety activities, and to further the engineering and scientific professions.



Dr. Joseph W. Burns
1997 IEEE
Section Outstanding
Engineer

Each year during National Engineers Week, the Affiliate Council hosts the Gold Award Banquet to honor a distinguished individual who exemplifies excellence and professionalism in the local engineering and scientific community. This year the Gold Award recipient is Fred Beaufait, Ph.D., P.E. Dr. Beaufait is Director of the Greenfield Coalition for New Manufacturing Education with Focus:HOPE. Prior to that, he was Dean of the College of Engineering at Wayne State University for ten years. He has had an outstanding professional career in engineering education and has an outstanding reputation in the engineering community.

The Gold Award Banquet also affords an opportunity for each society to honor a distinguished member of their local section or chapter before the broad engineering and scientific community of metropolitan Detroit. The IEEE/SEM Section will honor the 1997 IEEE Section Outstanding Engineer, Dr. Joseph W. Burns, at the Gold Award Banquet as well as at the IEEE/SEM Spring Section in April. Dr. Burns is a Research Engineer with the Environmental Research Institute of Michigan (ERIM) in Ann Arbor. He has demonstrated outstanding capabilities as an innovative researcher in electromagnetic theory, scattering phenomena, and radar system and signal processing concepts.

IEEE/SEM members are invited to attend the Gold Award Banquet during National Engineers Week to honor Dr. Burns and socialize with the other distinguished professionals who will be in attendance. This year marks the 25th anniversary of the Gold Award Banquet. The Gold Award Banquet will be held on Wednesday, February 19, 1997, at the Dearborn Inn. The evening schedule includes cocktails (cash bar) at 6 p.m., dinner at 7 p.m. and the awards program at 8 p.m. The ticket price is \$40 per person, which includes dinner with dessert and wine at the table. Reservations may be made by contacting Don Bramlett, P.E. at 313-586-1774.

Professional Activities Report

by Donald J. Silversmith, Director of Professional Activities



The focus of professional activities in the Southeastern Michigan Section continues to be on IEEE member employment support and career development. The section has renewed its contractual arrangement with the Lendman Group to provide support for their three Technical Career Fairs each year in Livonia and Troy. In return for providing IEEE co-sponsorship

for these two-day fairs, IEEE representatives are able to meet with current and prospective members to reinforce a sense of professional affiliation and recruit new members. For 1997, Lendman fairs will be held on Mondays and Tuesdays. The dates are March 24 and 25,

July 21 and 22, and October 27 and 28. In addition to Lendman, the section has been negotiating with the National Career Center for a similar co-sponsorship arrangement for their Detroit engineering job fairs.

At the Fall Section Meeting, the section initiated a new program to promote job opportunities for student branch members. Local firms were solicited to provide sponsorship for student members attending this meeting, and fourteen student attendees had the opportunity to meet with a company technical recruiter during their meal. This activity can provide an important offset to the subsidy provided by the section to encourage attendance by student branch members, and it is also a win-win arrangement for prospective BSEE recipients and local technical firms.

(Continued on page 4)

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Did you graduate in the last decade? If so, then check out the G.O.L.D program page 5!



IEEE Southeastern Michigan Section Executive Committee

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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-16)
- X Engineering Management:** Eng. Management (EM-14)

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COPY DEADLINE: News items are due the first day of the month for an issue which is published the following month, e.g. April 1 is the deadline for the May issue.

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Ad Size	Annual Rate (8 issues)	Single Issue Rate
1/8 page	\$400	\$65
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1 page	\$3200	\$500

POSTMASTER Send address changes to:

IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854.
Phone: 201-981-0060 x150. USPS 878-660

POSTAL INFORMATION NOTICE

The newsletter of the Southeastern Michigan Section of IEEE, "Wavelengths", (USPS 878-660), is published monthly 8 times per year except June, July, August & December by the Institute of Electrical and Electronics Engineers, Inc. Headquarters: 345 East 47th Street, New York, NY 10017-2394. \$1.00 per member, per year (included in annual dues) is designated for each member of the Southeastern Michigan Section.


Periodicals Postage Paid at New York, NY and at additional mailing offices.

Visit the following IEEE World Wide Web sites:

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



Calendar of Events

- | | | |
|-----------------------|--|---|
| Monday
February 3 | Meeting:
Time:
Location: | Executive Committee
Dinner at 6 p.m., meeting 6:30 p.m.
Eaton Corporation,
26201 Northwestern Highway, Southfield |
| | Sponsor:
Contact: | IEEE/SEM
Kimball Williams at 810-354-2845 |
| February 16-22 | Event:
Comment: | National Engineers Week
See web site www.eweek.org and the January Wavelength's articles. |
| | |  |
| Monday
February 24 | Meeting:
Topics: | Society of Automotive Engineers (SAE)
International Congress and Exposition Seminars
"Intelligent Transport Systems: Vehicle Navigation Systems" and "Engine Management and Drive Line Controls" |
| | Time:
Location:
Sponsor:
Contact:
Comment: | 9 a.m. to 4 p.m. with lunch from noon to 1 p.m.
Cobo Hall, Detroit
Society of Automotive Engineers
Ken Rao, office 810-619-8714; home 810-952-1628
See article on page 5. |
| Late
February | Meeting:
Speaker:
Sponsor:
Contact: | Computer Chapter Presentation
not available at publication deadline
Chapter V
Philip McKinley, office 517-353-4396,
mckinley@cps.msu.edu |
| | Comment: | Watch the IEEE/SEM and Computer Chapter web sites for details. |
| Monday
March 3 | Meeting:
Time:
Location: | Executive Committee
Dinner at 6 p.m., meeting 6:30 p.m.
Eaton Corporation,
26201 Northwestern Highway, Southfield |
| | Sponsor:
Contact: | IEEE/SEM
Kimball Williams at 810-354-2845 |
| Saturday
March 22 | Event:
Time: | IEEE/SEM GOLD Tour, Meeting, & Pizza
3 p.m. tour of dinosaur exhibit,
4 p.m. organizational meeting, 5 p.m. dinner |
| | Location:
Sponsor:
Contact: | Domino Farms
IEEE/SEM Graduates of the Last Decade (G.O.L.D.)
Mark Hunter, home 810-588-0355,
m.hunter@ieee.org |
| | Comment: | See article on page 5. |
| Wednesday
March 26 | Meeting:
Time:
Location:
Sponsor:
Contact: | Engineering Management Chapter Meeting
6 p.m.
Conference Room 9, GM Management Center
Chapter X
Prakash Shrivastava, 810-986-2206,
LNUSTC1.LZ1NYJ@GMEDS.COM |

Volunteering at IEEE/SEM

by Sat Basu, Volunteer Coordinator, and Sandy Hunter, Wavelengths Editor

Volunteering your time to the Southeastern Michigan Section has become easier. The Executive Committee tapped Sat Basu, one of the past section chairs, to help potential volunteers find rewarding assignments that match their interests. Sat understands the responsibilities of the myriad volunteer positions needed to serve the section's members.

Professional societies such as IEEE are run by volunteers. The organization depends on volunteers for energy and fresh ideas to serve members. As always, the IEEE/SEM is looking for volunteers. If you have some time to devote, there are lots of opportunities. No special experience is needed. There are opportunities for college students, working professionals, and retired members. Volunteer assignments range from organizing a meeting once or twice a year to continuous help in the areas of membership, educational activities, newsletter, web site, and many other activities.

Calendar of Events (continued)

Monday	Meeting:	IEEE/SEM Spring Section Meeting
April 14	Time:	5:45-9:00 p.m.
	Location:	Fairlane Club, Dearborn
	Sponsor:	IEEE/SEM
	Comment:	Mark your calendar! Details will be published in the March and April <i>Wavelengths</i> .
TBD	Meeting:	Early Career Financial Planning
April	Speaker:	Financial planner from American Express Financial Planners
	Sponsor:	IEEE/SEM Graduates of the Last Decade (G.O.L.D.)
	Contact:	Mark Hunter, home 810-588-0355, m.hunter@ieee.org
	Comment:	This will be an informative talk with no sales pitch. Call Mark Hunter if you have suggestions for specific financial planning topics. Date, time, and location will be published in next month's <i>Wavelengths</i> and on the section web page. Friends and spouses are welcome.
Saturday -Monday	Event:	1997 International Ground Robotics Competition
May 31 - June 2	Location:	Oakland University, Rochester, MI.
	Sponsor:	Association for Unmanned Vehicle Systems International (AUVSI)
	Contact:	Candy McLellan, 810-370-2233, mclellan@oakland.edu
	Comment:	This is a student competition. Details may be found at: www.secs.oakland.edu/SECS_prof_orgs/PROF_AUVSI/index.html

Some examples of current and future volunteer opportunities are:

- hang signs at the Spring Section Meeting
- take pictures at the Spring Section Meeting
- organize a GOLD program event
- judge Detroit Science Fair entries
- plan a chapter tour, lecture, or tutorial
- speak at a chapter event
- help plan the "Bucket O' Parts" competition
- hand out IEEE information at an area job fair
- hold a chapter or section officer position

Volunteering is more than just a way to spend time. Volunteers get a sense of accomplishment from their work. They develop friendships with other professionals. They can improve business skills like planning, time management, facilitation, and running meetings. Volunteering for a professional society shows your dedication to life long learning and can be an effective way to increase your company's image in the community. Most importantly, volunteering can be fun!

If you would like to become more involved in the section, but do not know how to start, get in touch with Sat for assistance. The following information will help Sat match your interests with the section's needs:

- Name
- Geographic preference
- Phone number(s)
- Convenient time for phone call
- E-mail address
- How many hours you can volunteer in a month (or year)
- Your interests and hobbies

Sat Basu can be contacted at:
IEEE/SEM Volunteering
PO Box 4928
Troy, MI 48099-4928
Office: 313-235-6523
Home: 810-524-0058
E-mail: basus@detroitdison.com



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Trident Chapter Activities

Over the past year, I have been pleased to again serve as Chair of the IEEE/SEM Trident Chapter. The chapter combines the local chapters of the Antennas and Propagation Society (AP-03), the Microwave Theory and Techniques Society (MTT-17) & the Electron Devices Society (ED-15). Professor Timothy Grotjohn of Michigan State University is serving as Vice Chair. The Secretary/Treasurer position is currently open.

Since the last Wavelength's article describing Trident Chapter activities roughly a year ago, we have sponsored four technical meetings.

The Trident Chapter held a technical meeting in conjunction with the IEEE/SEM Spring Meeting held at the University of Michigan on April 15, 1996. Dr. Nikola S. Subotic of the Environmental Research Institute of Michigan (ERIM) presented a talk entitled "Time-Frequency and Time-Scale Methods for Scattering Characterization." In this talk, Dr. Subotic discussed the application of time-frequency and time-scale methods for characterizing scattering centers in radar data. These techniques can be used to examine both range profile data and synthetic aperture radar (SAR) imagery. The talk summarized the area of time-frequency and time-scale methods of signal processing and explored which time-frequency and time-scale methods are most suited for characterizing various scattering mechanisms.

On April 17, 1996, the Trident Chapter sponsored a presentation at the University of Michigan by Lt. Col. Randy L. Haupt, USAF, who is a Professor of Electrical Engineering at the U.S. Air Force Academy. Dr. Haupt's talk, "Genetic Algorithm Applications in Electromagnetics," explained that genetic algorithms are "global" numerical optimization methods based on genetic recombination and evolution in nature. These algorithms have been applied to many complex problems. They have recently been applied to electromagnetic problems, such as antenna and radar cross section design. Some advantages of genetic algorithms over conventional optimization techniques include the ability to optimize with discrete parameters, the ability to optimize well with a large number of parameters, and the ability to explore a vast portion of the cost surface. In addition, genetic algorithms do not require

by Joseph W. Burns, Chair

derivative information, and are ideal for parallel processing. Specifically, a variety of recent applications were presented including antenna array design, adaptive nulling, and low radar cross section design.

The Trident Chapter sponsored a talk at the University of Michigan on April 18, 1996, by IEEE Distinguished Lecturer Dr. Sashi Sanzgiri from Texas Instruments. Dr. Sanzgiri described recent developments in phased array antenna design, fabrication and application.

The Trident Chapter sponsored a talk at the University of Michigan on August 1, 1996, by IEEE Distinguished Lecturer Dr. Antoine Roederer from the European Space Agency. Dr. Roederer discussed recent European satellite antenna development and described emerging satellite antenna technologies and requirements.

The technical meetings held over the past year covered very interesting subjects, even though the time and geographic distribution of the meetings was somewhat limited due to scheduling constraints. Professor Grotjohn and I are in the process of organizing additional technical meetings for the new year, and we will strive to develop a technically interesting, but more diverse, meeting schedule.

I hope the topics presented at the meetings will be of interest to all and provide a forum for interaction between industrial and academic members of the chapter. I would appreciate any suggestions on speakers and/or meeting locations and format that would promote greater chapter participation and better service of members' interests. If specific topics or lecturers are of interest, please contact me.

I will be stepping down as chairman in the coming year to spend more time on personal research activities (and keeping track of three children under age six), but I will still help coordinate meetings and keep the chapter active. Please contact me with your suggestions, as well as with your questions and concerns. I may be contacted at:

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Environmental Research Institute of Mi.
PO Box 134001, Ann Arbor, MI 48113-4001
Office: 313-994-1200 ext. 2382
Fax: 313-994-3516
E-mail: burns@erim.org

Automatic Parallelization Report

by Syed Mahmud

On December 12, 1996, Dr. Vipin Chaudhary gave a talk on automatic parallelization at Wayne State University. A number of people attended the talk, which was sponsored by the IEEE/SEM Computer Chapter. Dr. Chaudhary, in his talk, covered the following aspects of automatic parallelization:

At the beginning of Dr. Chaudhary's presentation, he explained the current state and potential of parallel processing and showed that it is omnipresent and here to stay. Then he talked about the current state of parallelizing compilers which make the use of parallel machines much easier. He also mentioned the drawbacks of the existing parallelizing compilers, and then he discussed his own Automatic Parallelization Environment (APE), which integrates compile time and run time parallelization. APE allows for non-uniform dependencies to be parallelized which are not dealt with current compilers. Results on the Cray machine showed dramatic improvements. I briefly mentioned about dealing with the dynamic dependencies using run-time parallelization. Finally, he talked about the current state of APE. It is being implemented for a network of symmetric multiprocessors (the future computing environment).

Professional Activities Report

(Continued from page 1)

Students have the opportunity to learn about employment opportunities in our area, and firms can develop relationships with well qualified prospects.

In conjunction with IEEE's Educational Activities Department, the section set up an exhibit at the Fall Meeting to highlight the new Career Asset Manager (CAM) program. CAM is a set of written materials which serves as a self-assessment tool to evaluate and enhance an electrical engineer's career. CAM materials help identify career goals, benchmark career advancement functions, maintain a record of professional achievements, and help with the development of a personal career "roadmap." Individual copies of the package cost \$35 plus shipping, but 20% discounts are available on group orders through the section. If you are interested in learning how to treat your career as if it is a business through these materials, please contact me at:

silversm@ece.eng.wayne.edu.



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Chapter II: Vehicular Technology

Vehicular Technology Sessions at SAE Show

by Ken Rao, Chair

Greetings and Happy New Year to you IEEE/SEM members! I thank you for your cooperation and support during 1996. I request that you give the Vehicular Technology chapter your continued support and suggestions for a successful 1997. I also invite you to an exciting year of activities that highlight advances in vehicular technology. I request that you participate in chapter meetings and technical sessions and give your ideas for improving the quality of these sessions. I hope you will find the chapter activities satisfying and useful in your professional activities.

I especially invite you to the Society of Automotive Engineers (SAE) International Congress and Exposition in Cobo Hall during February 24-28. I have the privilege to be the organizer of two technical sessions: "Intelligent Transport Systems: Vehicle Navigation Systems" and "Engine Management and Drive Line Controls." Your participation in these sessions is highly appreciated as well as your comments for improvements.

The technical sessions are sponsored by SAE. The date of the technical sessions, which will be conducted in parallel, is Monday, February 24, 1997. "Engine Management and Drive Line Controls" will be held in room W2-63. "Intelligent Transportation Systems: Vehicle Navigation Systems" will be held in room D2-15. Both sessions run from 9 a.m. to 4 p.m. with lunch from noon to 1 p.m. The registration fee varies. The seminar is free for students with student ID. Parking will involve extra expense. If you are interested in attending, please contact me at my office, 810-619-8714, or home, 810-952-1628. I look forward to talking to you.

GOLD Gets Going!

*by Mark Hunter, Director of Membership Activities,
and Sandy Hunter, Editor*

Are you a graduate of the last decade (GOLD)? Do you want to get more than magazines and technical meetings out of your IEEE membership? IEEE/SEM is starting a Graduates of the Last Decade (GOLD) program. The goal is to provide activities of interest to professionals in the first ten or so years of their careers. GOLD is for you if you:

- Just moved to the area and want to meet people.
- Want to improve professional skills like negotiating, time management, or creativity.
- Enjoy ball games, picnics, exhibits, or frequenting eating and drinking establishments.
- Need to learn how to budget or plan for a secure financial future.
- Are single, married, or have a family.

There is no set formula for the GOLD program. The activities will reflect the interests of local members. Other IEEE sections have had success by alternating between professional topics and social events and meeting once a month. They have met at bars, gone to baseball games, surfed the Internet at Cybercafes, had pizza parties, held picnics, had presentations on mentoring, learned the basics of financial planning, and even volunteered in their community. The GOLD program is only about a year old in IEEE and is brand new to IEEE/SEM. Our members can mold the program into whatever best suits their needs.

We have begun planning two activities to get the GOLD program started in this area. The first will be a tour of a dinosaur exhibit and pizza dinner at Domino Farms, near Ann Arbor, on Saturday, March 22. The "Raptors to Rex: The Predatory Dinosaurs" exhibit features over 100 dinosaur skeletons, sculptures, graphics, and fossils covering 7,000 square feet. The March issue of *Wavelengths* and the section's web site will have details about the tour and dinner. We are also planning to have a personal financial planning seminar sometime in April, probably in the Royal Oak area. Both of these initial activities are likely to be free of charge or minimal expense.

From these first two events, we hope to learn what your interests are and what locations are convenient. If you would like to participate in or help organize GOLD activities, contact Mark Hunter at 810-588-0355 or at m.hunter@ieee.org. We are looking forward to seeing you at upcoming GOLD activities!



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Executive Committee Meeting Report

by K. C. Liu, IEEE/SEM Secretary

The sixth IEEE/SEM Executive Committee meeting for the year of 1996-1997 was held on Monday, January 6, 1997, at the Eaton Corporate Research and Development facility in Southfield, Michigan. Twelve people attended the meeting, presided over by Section Chair David Horvath.

- The Nov. 1996 EXCOM meeting minutes were approved, and the Dec. 1996 EXCOM meeting minutes were approved with amendments.
- The treasurer's report was deferred to the February EXCOM meeting due to illness of J. Woodyard.
- M. Hunter reported no change in *Wavelengths*' budget for the month and the final budget for the year of 1996 will be presented at the February meeting. He reviewed the deadline for the February issue of *Wavelengths*. He also discussed the issues of distributing *Wavelengths* electronically. He is in the process of getting tax exemption information to the printer and mailer. He reported the section must purchase postal address database updates every two months to comply with new postal regulations.
- G. Peters presented the expense estimate for the Spring Section meeting, scheduled for April 14, 1997. D. Silversmith expressed his concern of space limitations at the Ford Fairlane Club for vendor and corporation sponsorship tables. Discussion of subsidy and space for vendor tables and corporation sponsorship followed.
- D. Silversmith reported that videos from IEEE-USA highlighting the recent National Technology Symposium are available for loan to members. He also reported that Lendman Group has signed the contract and plans to have a Job Fair on March 24 (Monday) and 25 (Tuesday). He also mentioned that National Career Center based in Colorado requested permission to put a link on their home page to the section's web site. Some discussion regarding linking of web pages and our contract relationship with Lendman Group ensued.
- M. Hunter updated the Executive Committee on the status of the IEEE/SEM web site. Finally, he outlined the activities for the GOLD program in the coming year.
- M. Zohdy reported that ABET (Accreditation Board for Engineering and Technology) is showing interest in student-professional activities at universities, which could potentially boost IEEE membership. He also mentioned the plan for the Region 4 Leadership conference at Wayne State University. He reiterated interest in holding "Bucket O' Parts" competition in southeastern Michigan and sought the possibility of paying for a consultant from Western Michigan University by IEEE/SEM Section. He also reported that Oakland University had financial contributions to NEW (National Engineers Week) activities and the "Neuro-Fuzzy Computing Applications Workshop" had \$300 surplus.
- D. Bramlett reported that the ESD Gold Award Banquet will take place on February 19 at the Dearborn Inn, where the recipient of the Section's Outstanding Engineer Award, Joe Burns, will be honored. He is looking for more volunteers to serve as judges and mentors for Science Fair on

April 16, 1997. He also reported that Region 4 meeting will take place from January 24 to 26 in Chicago. He encouraged anyone with issues concerning Region 4 and IEEE at large to attend the meeting.

- F. Salam submitted a written report that Chapter I has invited Prof. R-W Liu of University of Notre Dame, and Prof. Steve Yurkovish of Ohio State University and plans to invite Prof. M. Zohdy of Oakland University to speak at meetings scheduled for spring 1997.
- K. Rao reported that Professor Elias Strangas of MSU was nominated as the candidate for Vice Chair of Chapter II (Vehicular Technology Chapter) and Kyle Williams for Secretary/Treasurer.
- R. Desoff submitted a written report that Bruce Block was nominated as the candidate for the Vice Chair of Chapter III.
- N. Al-Holou reported that Chapter V (Computer Chapter) will have a tour at Driver Training Virtual Reality Center in Ann Arbor on January 27, 1997. Two more activities, one technical meeting and one tour at MSU, have been scheduled. He also confirmed that the chapter is eligible for an additional \$150 rebate from the IEEE Computer Society.
- D. Barberi reported that Chapter VIII (EMC) plans to have a concurrent technical meeting in Spring Section Meeting. He also reported that he took out an advertisement for membership and got some inquiries and he is making all the membership application materials available to the interested persons.
- P. Shrivastava submitted a written report that Engineering Management Chapter (Chap. X) had a technical meeting on December 10, 1996. Six people attended the meeting. The chapter also has lined up a series of activities for 1997: A technical meeting on March 26 1997 in GM Management Center, a tour at TACOM in June 1997, and another technical meeting in September 1997 in Ann Arbor.

The next Executive Committee meeting will be held on
Monday, February 3, 1997 at Eaton.

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**1997-98 OFFICIAL BALLOT
INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
SOUTHEASTERN MICHIGAN SECTION**

DIRECTIONS: The ballot contains two parts. **PART 1** is for the election of section officers; **PART 2** is for the election of chapter officers. Please read the voting eligibility requirements and instructions for each part.

INSTRUCTIONS FOR MAILING:

- (1) Cut this ballot sheet from Wavelengths.
- (2) Sign the ballot on the line at the bottom of page 8.
- (3) Fill in your membership number and return address if it is not printed in mailing address area on page 8.
- (3) Fold on dashed lines with the ballot names inside and the address below on the back.
- (4) Tape the flap to seal the ballot.
- (5) Place stamp, and mail before February 21, 1997 in order to be counted as valid.

**IEEE Nominations
C/O David G. McKendry
2585 Vhay Lane
Bloomfield Hills, MI 48304**

PART 1. SECTION OFFICERS BALLOT

ELIGIBILITY: All IEEE/SEM non-student members are eligible to vote for section officers listed in Part 1.

INSTRUCTIONS: Vote for a candidate listed by checking the box next to that candidate or write in a name on the blank line and check the box for that line. A write-in candidate must hold member or higher IEEE membership grade to be eligible. Print the write-in candidate's name and IEEE membership number on the line provided. Vote for only one candidate for each of the offices listed.

CHAIR: George Peters

TREASURER: John M. Miller

VICE CHAIR: K.C. Liu

DIRECTOR of EDUCATIONAL ACTIVITIES: Ece Yaprak

SECRETARY: James R. Woodyard

DIRECTOR of STUDENT ACTIVITIES: Mohamed Zohdy

PART 2. CHAPTER OFFICERS BALLOT

ELIGIBILITY: All IEEE/SEM non-student members who are also members of a technical society are eligible to vote for officers of the IEEE/SEM chapter listed in Part 2 for which they have technical society membership. (For example, if you are a member of the Control Systems society, you can vote for Chapter I officers.)

1997-98 OFFICIAL BALLOT
IEEE / SOUTHEASTERN MICHIGAN SECTION
PART 2. CHAPTER OFFICERS BALLOT - *Continued*

INSTRUCTIONS: Vote for a candidate listed by checking the box next to that candidate or write in a name on the blank line and check the box for that line. A write-in candidate must hold member or higher IEEE membership grade to be eligible. Print the write-in candidate's name and IEEE membership number on the line provided. Vote for only one candidate for each of the offices listed. **You must belong to a technical society to which a chapter belongs in order to vote for chapter officers.**

CHAPTER I: Acoustics, Speech, & Signal Processing (ASSP-01); Circuits & Systems (CAS-04); Info. Theory (IT-12); Control Systems (CS-23)

CHAIR: Fathi M. A. Salam **VICE CHAIR:** Hoda Abdel-Aty-Zohdy **SECRETARY/TREASURER:** Gregory M. Weirzba

CHAPTER II: Vehicular Technology (VT-06)

CHAIR: Ken N. Rao **VICE CHAIR:** Elias Strangas **SECRETARY/TREASURER:** Kyle Williams

CHAPTER III: Aerospace & Electronic Systems (AES-10); Communications (COM-19)

CHAIR: Robert Desoff **VICE CHAIR:** Bruce Block

CHAPTER IV: (Trident Group) Antennas & Propagation (AP-03); Electron Devices (ED-15); Microwave Theory & Techniques (MTT-17)

CHAIR: Timothy Grotjohn **VICE CHAIR:** Lisa Anneberg **SECRETARY/TREASURER:** Joseph Burns

CHAPTER V: Computers (C-16)

CHAIR: Nizar Al-Holou **VICE CHAIR:** Sylvia Karmanoff **VICE CHAIR PROFESSIONAL:** Syed Mahmud

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CHAPTER VI: Geoscience & Remote Sensing (GRS-29)

CHAIR: _____ **VICE CHAIR:** _____

CHAPTER VII: Power Engineering (PE-31); Industrial Applications (IA-34)

CHAIR: Brian Harrington **VICE CHAIR:** Bill Edwards **SECRETARY/TREASURER:** Tim Rowden

CHAPTER VIII: Electromagnetic Compatibility (EMC-27)

CHAIR: Dennis Barberi **VICE CHAIR:** Scott Lytle **SECRETARY/TREASURER:** Kimball Williams

CHAPTER IX: Power Electronics (PE-35); Industrial Electronics (IE-16)

CHAIR: Ka C. Cheok **VICE CHAIR:** Gamze Erten **SECRETARY:** John M. Miller

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