Vol. 40, No. 1

September 2000

Southeastern Michigan Section, IEEE/SEM

IEEE/SEM Fall '00 Section Meeting

by Kimball Williams, IEEE/SEM Vice Chair

The IEEE/SEM Fall 00 Section meeting will be held the evening of October 25, 2000 at the Yazaki North America, Inc. located at 6801 Haggerty Road, 2896W in Canton. Parking is available in the parking lot immediately in front of the building. We are planning several technical sessions plus a student tract session for this meeting. Further details will appear in the registration form since some chapter chairs are still working on arrangements for speakers. The October issue of Wavelengths will contain the final program for this meeting. Advance registration is highly encouraged and to make this process easier for our membership we offer registration by major credit card. See the registration form on page 7 for details.

For many of our members a visit to the Yazaki facility will be a unique opportunity to visit this landmark architectural building. Staff from Yazaki have volunteered to conduct tours of the facility before the chapter presentations. Please contact me for details and to sign up for a tour of the facility.

Following the concurrent technical sessions, attendees will have an opportunity to visit several vendor displays and student branch exhibits. All displays and exhibits will be set up in the central building gathering area. This is adjacent to the social gathering and registration desk. A social break is planned and this year we will offer Hor D'oeuvres (fruit and cheese) and cash bar (your choice, but tickets must be purchased in the registration area).

capacity. Let us all look forward in anticipation of what

should prove to be a very exciting and eventful year. We

are now filling out our slate of speakers for the Fall section

meeting and we are glad to have as keynote speaker the

past president of IEEE. The section will also co-sponsor

several conferences this year that will be nearby so I invite

all to attend and use these opportunities to keep abreast

of developments in your respective specialties. The 43rd

Midwest Symposium on Circuits and Systems will be held

August 8-11, 2000 at Michigan State University, East

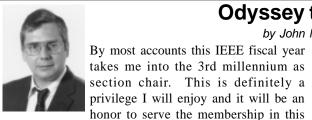
Lansing and the 6'th Workshop on Power Electronics in

Please register to obtain entrance to the dinning room for dinner and the keynote speaker presentation. Registration will close immediately after the social break.



The featured speaker this year is Dr. Ken Laker, 1999 IEEE President. Dr. Laker will celebrate and reflect on the accomplishments of IEEE during 1999. He will also give an IEEE Past President's view of the challenges and opportunities that lie ahead.

Dr. Laker received his B.E. degree in Electrical Engineering from Manhattan College, and his M.S. and Ph.D. degrees from New York University. In 1999 he received the Honorary Doctorate of Electronics and Computer Engineering from the Technical University of Crete, Chania - Greece. From 1973 to 1977 he served as a USAF officer at the Air Force Cambridge Research Labs. In 1977 he joined AT&T Bell Labs, where he conducted and managed R&D. He was appointed to the University of Pennsylvania faculty in 1984, as Professor and Chair of the Electrical Engineering Department. He served as Department Chair until the end of the 1992 academic year. In 1990 he was appointed the Alfred Fitler Moore Professor of Electrical Engineering. From 1997 -2000 Dr. Laker was a member of the founding Board of Continued on page 2



Odyssey to a New Millenium

by John M. Miller, IEEE/SEM Chair

Transportation –WPET2000- will be held October 19-20, 2000 at the University of Michigan-Dearborn Campus. The spring section meeting in March 2001 is also being planned as this is written. Mr. Leo Haskill of GM's legal department is the tentative keynote speaker for that event, plus as many of you are aware, the spring section meeting is our largest event featuring awards presentations for IEEE accomplishments by the members, concurrent technical sessions and keynote address. Our planning in fact reaches out to 2005. Let me take this opportunity to again thank all the volunteers who give so much of their time willingly to make these events so successful, especially the student branch volunteers who make organizing and running our section meetings go so smoothly.

We should get to know each other better during this coming continued on page 8

Fall Section Meeting 1,2	Ye
Odyssey to a New Millenium . 1,8	Fu
Chapter 2 Update 2	A
Calendar of Events 3	V

TABLE OF CONTENTS

g 1,2	Yearbook 4,5	Fall Meeting Registration Form 7
Millenium . 1,8	Future City Competition	Chapter X Update 7,8
2	Award Judges Needed 6	
s 3	Volunteers Needed 6	

IEEE/SEM Fall Meeting

Continued from page 1

Directors of AANetcom, Allentown, PA until its sale to PMC Sierra. Dr. Laker is also an External Examiner for the Electrical Engineering graduate programs at the National University of Singapore and a member of the Advisory Board of the Communications Group for Safeguard Scientifics, Inc., Wayne, PA.

Dr. Laker's work in microelectronic filters has contributed four textbooks, over ninety scientific articles, and six patents. He was elected to Fellow of the IEEE and received an IEEE Centennial Medal in 1984. In 1994 Dr. Laker received the AT&T Clinton Davisson Trophy for his patent in switched capacitor circuits. In 1998 he was co-recipient of the IEEE Circuits and Systems Darlington Award for the paper "Integrated Circuit Testing for Quality Assurance in Manufacturing: History, Current Status, and Future Trends," IEEE Trans. on Circuits and Systems, Part II, vol. 44, pp. 610-633, August 1997. This year he has received the IEEE Pinnacle Award for his service as 1999 IEEE President, and he is designated to receive IEEE CAS Society Golden Jubilee and IEEE Millennium Medals.

Dr. Laker was President of IEEE Circuits and Systems Society in 1983 and Chair of IEEE Philadelphia Section in 1994. He served on the IEEE Board of Directors from 1992-95 and from 1998-2000, as Director of Division I, Circuits and Devices, (1992 and 93), Vice President of Educational Activities (1994-95), President-Elect (1998), President (1999), and currently as IEEE Past President.

Please help us manage this meeting effectively by registering early. Contact Kimball Williams at k.williams@ieee.org, 248-354-2845 for information, to volunteer, or to offer suggestions.

Automotive EMC Component Test Laboratory

- European Standards 95/54/EC and 72/245/EEC
- DaimlerChrysler Certified for PF-9326
- Ford Certified for ES-WX7T1-A278-AA and -AB
- General Motors GM9100, GMW 3097GS, GMW 3100GS
- SAE J1113, J1725, J1455
- CISPR, IEC, ISO and EN Testing
- A2LA and NVLAP ISO Guide 25 Certified Laboratory
- MIL-STD 461
- NARTE Certified Engineers and Technicians



Eaton Innovation Center EMC Test Laboratory 26201 Northwestern Highway Southfield, Michigan 48076 800-341-4892 Toll Free 248 354-5245 ScottRLytle@Eaton.com

Visit our web page at http://www.eaton.com/EMC



CHAPTER 2 - VEHICLE TECHNOLOGY

By Rich Tengler, Vice Chair

On Feb. 17th we were given a presentation by Dr. William Fleming who is a wellregarded lecturer in Sensor and Actuator technology for the automotive industry having given talks to numerous SAE symposiums and private commercial interests. He is a senior editor of IEEE



Vehicular Technology the formal publication of the international society. William Fleming earned his Ph.D. and MSE degrees in Electrical Engineering from the University of Michigan in 1971 and 1966. He is currently a senior staff technologist at TRW Vehicle Safety Systems in Washington, Michigan where he is developing new safety-restraint products and doing related risk-analysis, statistics-based, research.

Dr. Fleming's Advances in Powertrain Sensors included the following topics:

- Driving factors causing the increased use of automotive sensors
- Drive-by-wire contactless angular-position sensors
- Micromachined mass air-flow sensor
- Spark plug ion-current sensors (detect four different combustion conditions)
- Common-rail DFI (Direct Fuel Injection) pressure sensors
- Automatic engine oil-change indicators capacitive and predictive
- Present and future sensor cost/performance trends

On Mar. 29, 2000 our speaker was Allan Gale who oined Ford Motor Co. in 1988 and is currently a Technical Specialist in the Vehicle Electronic Systems department of Ford-Research. He has worked in the automotive field for 20 years. His past design and development experience includes projects in electric steering, dc electric vehicles, ac electric vehicles, new traction motor/electrical drive development, and electro-mechanical transmission controls.

Mr. Gale is now leading the Ford-DOE hybrid electric vehicle drives effort. He spoke to us regarding his involvement in the Partnership for New Generation Vehicles (PNGV) which is a federal consortium of automotive companies and his work with the starter/alternator subcommittee developing new topologies.

We are presently planning future events far beyond what we are used to. This is an attempt to "raise the bar" and give our members more content, participation, and awareness. Particularly, we need to make better contact with you and better notification of up-coming events. Our administrative meetings are busy working on email member files, promoting volunteers, and one-on-one discussions to be more reachable to you.

Future sessions will include Anatomy of an Automotive Recall and On-Board-Diagnostics For Light/ Medium Duty Trucks Using the Scan Tool. You will hear from us about the dates when they are firm. Please send us your interests in future presentations by emailing me at rtengler@Visteon.com.



IEEE Southeastern Michigan

PRINTER

Progressive Printing 1326 Goldsmith Plymouth, Michigan 48170 734-459-2960



Visit

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.

ADVERTI	SING RATES CIRC	CULATION OVER 4000
Ad	Annual Rate	Single Issue
Size	(8 issues)	Rate
1/8 page	\$525	\$85
1/4 page	\$1000	\$160
1/2 page	\$1900	\$300
1 page	\$4000	\$650
(Second color, o	other sizes & special placement quo	tes available upon request)

POSTMASTER Send address changes to:

IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854 Phone:732-981-0060x150. 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.

IEEE Members Can Save Money

With This Membership Benefit

Citizens Insurance Company, headquartered in Howell, Michigan, is providing special group discounts for auto and homeowners insurance to IEEE members through a special affiliation with ESD The Engineering Society of Detroit. Since the inception of this member benefit program in 1971, over 19,000 policies have been written, which clearly shows the great success of the program!

Here is a summary of some of the special discounts that are available:

IEEE Group Discounts Auto discount - 10% Homeowners Discount - 20% Multi-Policy Discount take an additional 10% discount off both policies New Home Discount save up to 30%!

If certain qualifications are met as much as an additional 25% may be available!

For IEEE members who own engineering/architectural businesses where the governing workers' compensation classification is #8601, Engineers and Architects, Citizens offers a dividend paying program where the dividend history has averaged 38% over the past 4 years. We also have access to special programs for business owners insurance and professional liability insurance.

This program is administered by Hartland Insurance Group of Auburn Hills. Call Hartland Insurance Group at 1-800-682-6881, or call your local Citizens agent, for a free, no-obligation quote. When calling, be sure to mention that you are a member of IEEE so that your quotes will reflect the special offerings available through these programs.

	ection: www apter: www IEEE: www	E World Wide Web sites: w.ieee.org/regional/section/se_michigan w.egr.msu.edu/ieeesem/chapv/ w.ieee.org w.ieee.org/regional/r4/
		Calendar of Events
Friday - Mon Sept. 1 – 4 th		IEEE-USA Slates Professional Development Conference Marriott's Camelback Inn Golf Resort and Spa in Scottsdale, Arizona http://www.ieeeusa.org/prodevcon/ index.html Pender M. McCarter at 202-785-0017, ext. 8353 or email: p.mccarter@ieee.org Linda S. Hall at 202-785-0017 ext. 8325 (voice), or 202-785-0835 (fax) or email: l.hall@ieee.org
Wednesday - Friday Sept. 6-8 th	Event: Location: Sponsors: Cosponsors: Contact:	PCM' 2000 - the Sixth Annual International Pacific Conference on Manufacturing The Westin, 1500 Town Center, Southfield Pacific Congress on Manufacturing and Management PCMM and Lawrence Technological University. Institute of Industrial Engineers, Japan Industrial Management Association, American Society for Metals, Society of Manufacturing Engineers Lisa A. Anneberg ; LTU; or email at ANNEBERG@ltu.edu
Monday Sept. 11 th	Event: Time: Location: Contact:	SEM Executive Committee Meeting Dinner at 6:00 pm, Meeting 6:30 pm Eaton Corporation, 26201 Northwestern Hwy, Southfield Kimball Williams, k.Williams@ieee.org, 248-354-2845
Tuesday Sept. 12 th	Event: Time: Location: Speaker: Contacts:	EMC Society Meeting 1-"Visteon/Ford Specifications" 5:30 - 6:00pm refreshments 6:00 pm - 8:00 pm Eaton Innovation Center, 26201 Northwestern Hwy, Southfield Mr. Mike Bosley of Ford/Visteon EMC Laboratory Graeme Rogerson, GraemeRogerson@Defiance-Inc.com, 734-455-6352 or Kimball Williams, k.Williams@ieee.org, 248-354-2845
Tuesday Sept. 19 th	Event: Time: Location: Speakers: Cotacts:	EMC Society Meeting 2 – "EMC Requirements at Daimler Chrysler North America and EMC Test Requirements" 5:30 – 6:00pm refreshments 6:00 pm – 8:00 pm Eaton Innovation Ctr, 26201 Northwestern Hwy, Southfield Mr. Paul Anderson and Mr. Terry North of Daimler Chrsyler Corporation. Graeme Rogerson, GraemeRogerson@Defiance-Inc.com, 734-455-6352 or Kimball Williams, k.Williams@ieee.org, 248-354-2845
Tuesday Sept. 26 th	Event: Time: Location: Speakers: Contacts:	EMC Society Meeting 3 -"GM Specifications" 5:30 – 6:00pm refreshments 6:00 pm – 8:00 pm Eaton Innovation Center, 26201 Northwestern Highway, Southfield, Michigan Mr. Victor Lau, Mr. Donald R. Seyerle and Mr. Mark Steffika of GM EMC Department, Milford, Michigan. Graeme Rogerson, GraemeRogerson@Defiance-Inc.com,

734-455-6352 Kimball Williams,

k.Williams@ieee.org, 248-354-2845

SOUTHEASTERN MICHIGAN SECTION 2000 - 01 YEARBOOK

Section Officers

Secretary

Treasurer



John M. Miller Ford Motor Co. O: 313-322-7486 H: 313-429-2877 Fax: 313-323-8239 jmille24@ford.com



Vice Chair

Kimball Williams Eaton Corp. O: 248-354-2845 H: 313-563-4733 Fax: 248-208-2018 k.williams@ieee.org

Walter Schilling Visteon O: 313-390-9981 H: 734-542-0557 Fax:313-322-1122 wschill1@visteon.com

Technical

Directors



Mohamed Zohdy Oakland Univ. O: 248-370-2234 H: 248-375-9159 Fax: 248-370-4261 zohdyma@vela.acs.oakland.edu

Past Chair



James Woodvard Wayne State Univ. O: 313-577-3758 H: 313-563-3186 Fax: 313-577-1101 woodyard@eng.wayne.edu

Professional



Tarek Lahdhiri General Motors O: 810-947-2398 H: 519-250-5757 Fax: 810-986-4019 tarek.lahdhiri@gm.com



Membership

Section

Maurice Snyder Applied Dynamics Int., Inc. O: 734-973-1300 H: 734-741-1241 Fax: 734-741-0383 snyder@adi.com



Suleiman Barada Visteon O: 313-323-7996 H: 313-561-5747 Fax: 313-390-2841 sbarada@visteon.com

Educational

Ece Yaprak Wayne State Univ. O: 313-577-0875 H: 313-994-0550 Fax: 313-577-1781 yaprak@ozric.eng.wayne.edu



Student

Edzko Smid Oakland Univ. O: 248-370-2082 H: 248-853-7587 Fax: 248-370-4633 smid@oakland.edu

Graphics

Administrative **Senior Past**



Sandra Hunter EDS O: 248-524-0645 H: 248-588-0355 Fax: 248-524-8950 s.e.hunter@ieee.org



Section

Don Bramlett Detroit Edison O: 313-235-7549 H: 734-525-5422 Fax: 313-235-5180



Section

Satyendra Basu Detroit Edison 0:313-235-6523 H: 248-524-0058 Fax: 313-235-8597 d.bramlett@ieee.org basus@detroitedison.com

Lubna Khaled Oakland University O: 248-370-2056 H: 248-340-8629 lkhaled@oakland.edu



Wavelengths Assitant Editor



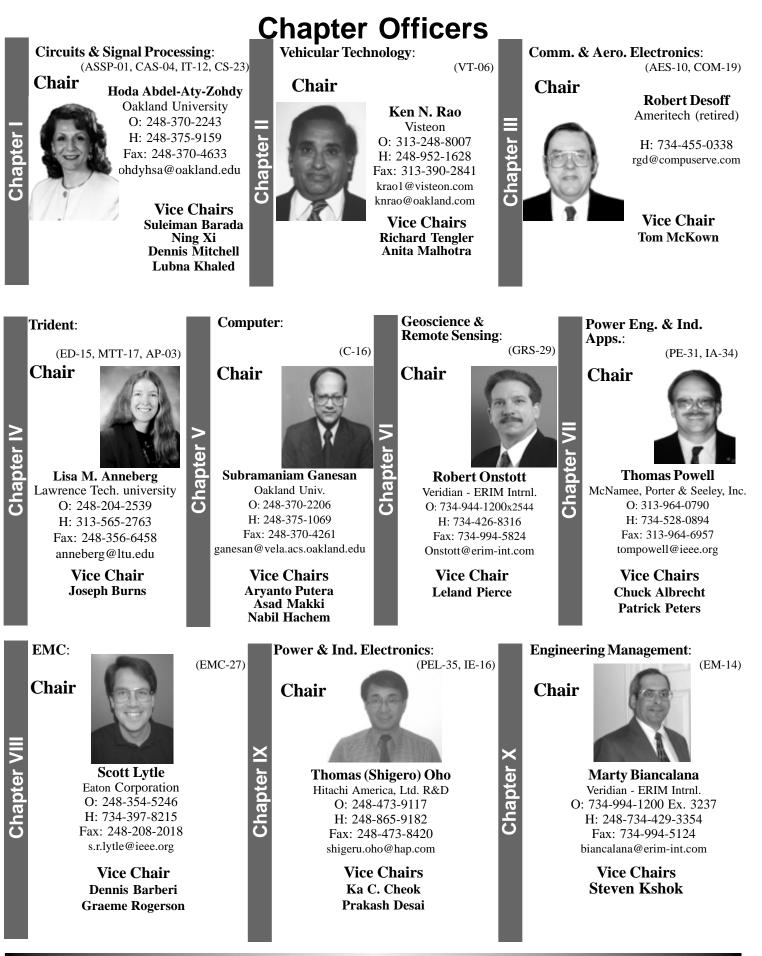
Jason Richmond VI Engineering O: 651-484-1332 x 23 H: 810-240-6440 Fax: 651-483-4488

Layout

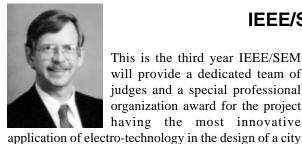


Cindy Wiktor Advent Engineering O: 734-930-7500 H: 734-513-7390 Fax:734-327-7501

jrichmond@ieee.org cjw@adventengineering.com



January 2001 Michigan Regional Future City Competition



IEEE/SEM Special Award Judges Needed

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

I encourage anyone who has an interest in the science and math education of This is the third year IEEE/SEM will provide a dedicated team of our youth or an interest in pre-college education programs to consider being a judges and a special professional judge at the Michigan Regional Future City Competition. As a judge myself in organization award for the project previous years, I have found the experience of talking with the students, finding out their interests and observing their projects/presentations to be very rewarding. having the most innovative So come out and spend the morning with us as we meet with some of the potential in the future. Judging for the 2001 Michigan Regional engineers, scientists and city planners of the future.

> If you are interested in more informationbout being a judge for the Michigan Regional Future City Competition, contact Don Bramlett at 313-235-7549 during normal business hours, home at 313-525-5422 or email at d.bramlett@ieee.org or bramlettd@dteenergy.com.

> **Point of Information!** I am happy to say that because of the example the IEEE/SEM Section and a few other US IEEE Sections have set, IEEE-USA is planning to award a special professional organization award at the National Future City Competition in Washington DC during National Engineers Week (NEW) in February 2001.

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

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

Future City Competition will be conducted in January

2001, probably again at the Spirit of Ford Museum in

Dearborn. Judging will be from 8:00 a.m. to 11:00

a.m., followed by lunch. Free parking, coffee, juice,

sweet rolls, and lunch are available for the judges. This pleasurable and fulfilling task only takes half a day.

team of IEEE/SEM special award judges.

Please volunteer to be among those to comprise the

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

A volunteer will typically spend 18 to 24 hours, as an advisor to a team of students, from mid-October 2000 through the date of the Michigan Regional Future City Competition, during the third week of January 2001 at a location to be announced. The volunteer engineering advisor for the winning team of the Michigan Regional Competition will also accompany the three member student team and the teacher advisor on a free trip to the national competition in Washington DC during NEW, February 18-24, 2001.

If you should not be able to devote the time to be a volunteer engineering mentor, engineers are also needed as judges on the day of the Michigan Regional Competition in late January 2001. You may serve on one of the overall general judging teams or on the IEEE/SEM Section Special Professional Award judging team.

The volunteer's role is to serve as a mentor to the students. The engineer may be involved in all phases of the project as an advisor to provide input and technical assistance. It is important to tie in real life engineering experiences as students on the project. However, the students are to do all of the actual work. The project each team of students works on consists of five phases:

1. Design a future city using SimCity 2000 software by Maxis.

- 2. Produce a color CAD aerial view drawing presentation of the future city using Urban Renewal Kit, add-on software.
- 3. Build a scale model of one section of the city; 30"(w) X 60" (1) X 24" (h) maximum.
- 4. A 500-word essay on a subject related to city planning.
- 5. Give an oral presentation at the Detroit Regional Competition.

ESD-The Engineering Society will serve as the primary sponsor of the 2001 Michigan Regional Future City Competition. As a member organization of the ESD Affiliate Council, composed of representatives of the local sections or chapters of some 40 engineering, technical and professional societies, the IEEE/SEM Section strongly encourages members to participate in this worthwhile endeavor.

A comprehensive Teacher/Engineer Volunteer Handbook is available, detailing contest specifics and providing answers to the types of questions that you as a volunteer engineer may have. To receive this free handbook or to register as a volunteer engineer, call ESD-The Engineering Society at 248-355-2910.



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: C&D Stationary Batteries, DELTA-UNIBUS Isophase Bus, DOBLE Test Equipment, ELECTRIMOLD Box Pads & Utility Boxes, 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, STERLING STEEL STRUCTURES Steel Structures, UNIBUS Bus Duct Systems.

IEEE/SEM 2000 Fall Section Meeting Registration Form

Complete and mail form with an early registration fee of \$30 per person. The registration fee includes technical session attendance and dinner. If this form is for multiple people, you must provide full contact information for one person plus Name, Technical Session Preference, and Meal Selection for each additional registrant. *Please make check payable to IEEE/SEM* and forward along with a completed registration form to: **Dr Ece Yaprak**, **Wayne State Univ., College of Engineering, 4855 Fourth Street, Rm.1152 Detroit, MI. 48202**.

There will be express check in for pre-registered attendees.

Please type or print:

Name: _					
Company:		 			
Address: _		 			
City/State/	Zip: _				
Phone #: _	-		[]H	[]W	

Technical Session # _____ (* Select from list at right, 0 for none)

Meal Selection: [] None, [] Chicken, [] Vegetarian

Total amount enclosed: \$_____ Registration (\$30 per person)

[] Check enclosed in US dollars [] Visa [] Master Card

Credit Card Number

Expiration Date _____

Signature

Credit card registrations are non-refundable after Oct. 25

Fees:	Amount	Deadline		
Registration:	\$30 US	Received by mail before October 15		
Late registration:\$35 USReceived by 5:00pm October 25				
Contact: Ece Yaprak at (313)-577-8075 or yaprak@eng.wayne.edu				
Student branch:	\$15 US	Register and pay through student branch by October 15		
		branch by October 15		

Contact: Edzko Smid at 248-370-2082 or smid@oakland.edu

Technical Sessions: (Indicate selection by #):

1. Chapter I	Circuits & Signal Processing
	"AFRL/Rome
2. Chapter II	Vehicular Technology
	"Fuzzy Systems as Tools for Intelligent Control"
3. Chapter III	Comm. & Aero. Engineering
	TBD
4. Chapter IV	Trident
	"Electric Utility Deregulation from an Engineer's Viewpoint"
5. Chapter V	Computers
	"Optimizing Co-Design Process/Field Programmable Gate Arrays"
6. Chapter VI	Geoscience & Remote Sensing
	NO Technical session planned
7. Chapter VII	Power Eng & Ind. Appl.
8. Chapter VIII	EMC
	"New Techniques for Reducing Printed Circuit Board Common
	-Mode Radiation"
9. Chapter IX	Power & Ind. Electronics
	"IGBT Technology Review"
10. Chapter X	Engineering Management
	"Leveraging Product Development for Competitive Advantage"
11. Student Track	"Artifical Genetic Optimization"
	· · · · · · · · · · · · · · · · · · ·

Additional Registrants (Non-Students Only)	* Tech.	Meal Selection (one only)		Fee	
NameCompany	Session #	None	Chicken	Vegetarian	\$30

Chapter X Visits TACOM and Plans for 2000-2001

Chapter X sponsored a tour of TACOM on June 6th. This was a fascinating tour that pointed out the similarities between the work at this laboratory and in the automotive industry. Simulation, emphasis on fuel economy including hybrid vehicles, passenger safety including advanced restraints, and increasing reliance on software were



a few of the similarities. The differences were fewer than expected. While tanks get the most attention, the army runs more on trucks than armor. Software and sophisticated simulation to improve handling, safety, and life cycle were very impressive. Further, open opportunities to collaborate and share costs in these endeavors became apparent. We will plan another tour if there is interest which will takes place during business hours to allow interaction TACOM personnel.

The tour followed the IEEE/SEM Section planning event. The planning was to develop ideas for the chapter to better serve you. At the meeting and in subsequent correspondence, we developed an outstanding list of topics for meetings including:

• A virtual meeting on virtual meetings. The initial venue would be NetMeeting which is a free product that is easy to use.

• Good Software Processes versus busywork. What really works and adds value and what is merely ritual?

by Marty Biancalana, Chair

- Good project management processes: which add value; which only cost? Management fads. How to tell the wheat from the chaff?
- Project case study of a successful project. How did this miracle actually occur from proposal to final product?
- Tours of interesting places that have management challenges.
- How to use IEEE resources to find employees.
- Earned value management. What is it, how to set it up, how to manage with it?

Continued on page 8

- GRADUATE ENGINEERING PROGRAMS
- AUTOMOTIVE ENGINEERING
- CIVIL ENGINEERING
- ELECTRICAL/COMPUTER ENGINEERING • ENGINEERING IN MANUFACTURING SYSTEMS

Lawrence Tech's graduate Engineering Programs, offered in the evening, are designed for practising engineers. Most feature cross-disciplinary programs for mechanical, electrical, and civil engineers. Classes begin in May, August, and January. Graduate in two years attending classes twice a week.



GRADUATE ADMISSIONS 21000 West Ten Mile Road · Southfield MI 48075-1058 248 204-3160 · Fax 248 204-3188 · www.ltu.edu

September 2000 Wavelengths

Odyssey to a New Millenium

Continued from page 1

year so I'll start by introducing myself. I became interested in electrical systems in elementary school (called that up to eight grade back then) when I read of the exploits of G. Marconi and the early days of wireless. I actually built and operated a spark gap transmitter and "coherer" detector. By the time I was nineteen I had obtained a first class FCC license, later general class, which I held for some twenty years. I recall spending a great deal of time making vacuum tube oscillators and amplifiers for radio experiments and I still have some of the original 200 series triodes. It was only near the end of my military stint that transistorized radio and navigation systems were out and that led me into obtaining three university degrees. That was nearly twenty years ago and up to now I have had the opportunity to work in aerospace/ defense, consumer appliance and automotive systems. I look back with pride on having been on the development teams for some radar and laser systems used during desert storm, on getting to know some obstinate individuals at UL laboratories and in being involved in the early hybrid vehicle days. It has been an odyssey of sorts.

I'm very pleased to chair this international section of IEEE and I look forward to working with such a talented and spirited group of officers and my resolution is to meet their expectations in leadership. We have some issues to deal with during this year and I'll address those. Our budget, as we have pointed out for several years now, is somewhat precarious and we really need conference and workshop co-sponsorship to keep this section vital. Speaking of budget, our section meetings are major drains on the budget so we need to continue to solicit corporate co-sponsorship and meeting hosting to minimize these costs. I would like to make a resolution to use technology for communicating with the membership. A Wavelengths committee has been established and a great deal of information on section activities is on the web site so take advantage of it at www.ieee.org/regional/section/se_michigan.

Chapter X

Continued from page 7

- Managing project managers managing multiple projects
 - The wireless project manager (it can be done today!)
- Career development investments in staff a two edged sword?
- Motivation. What motivates and what doesn't.
 - Personality types and how to put the right person in the right job OR how to deal with the mess you just inherited.
 - Predict the fallout of some current event then revisit the prediction later. We did this for the DC merger and it was fun and enlightening.

We also seized the opportunity to have a joint meeting with the EMC chapter at the Fall Section Meeting. The speaker, Dan Hoolihan, will discuss his two years of planning and subsequent two years of running the EMC society. As the main speaker will be the former President of the IEEE, Dr. Ken Laker, this will be a stellar all management night. It will be a real opportunity to learn about hands-on managing of organizations where you are dealing with volunteers and therefore have less direct control, a real tough mission.

Join us at the Fall Section Meeting and check the web site for information on our meetings or contact biancalana@ieee.org.

 Defiance
 47523 Clipper Street

 Plymouth MI 48170
 Tel: 734-455 8200

 Web: http://www.Defiance-inc.com

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

 • Component and system testing to Ford and Toyota's requirements.

 • European road vehicle type approval - 'e' and 'E' marking

- European EMC Directive certification 'CE' marking
- 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 (FCC) and certification.
- Full vehicle development work.
- If you sell your products into Europe we have the specialist knowledge you need. Visit our Web Page: http://www.Defiance-inc.com

Contact: Tim Droege, Account Manager, Defiance