

WATT'S NEW

In

The Baltimore Section

WINTER 2000



Chairman's Corner

Welcome to the new century, the new millenium...at least in the conventional sense. Also, welcome to members of the former Eastern Shore Section. They are joining us this year and will be part of the Annapolis Subsection.

As previous Chairs have noted in their initial columns, I too am thankful that I have been handed a section that is vibrant, active and growing in not only section activities but also in what is being accomplished by the Society Chapters. Thank you to Bill Dixon for a job well done. Bill will be serving as PACE Chair during the coming year.

It is to the Society Chapters that I am looking this year, especially to the Power Engineering (PES) and Industrial Applications (IAS) Society Chapters. They are not only well run and organized; they also have very active schedules for meetings, speakers, seminars and courses. It is our fundamental goal this year to help the other Society Chapters achieve greater levels of activity.

We, the Executive Committee (Excom), have started the ball rolling by ensuring that each Chapter has been budgeted operating funds for their needs. Under outgoing Chair Bill Dixon's direction, we have started a budgeting process - something new - at least in recent memory. This should keep the Section on a sound financial footing for years to come.

The Baltimore Section Web Site (www.ewh.ieee.org/r2/baltimore) is becoming more useful all the time. As we transition from a paper notification method to a Web-based system, please look to this site for your information. All of the Section's

activities including business/Excom related information would be increasingly available. It is our goal to make this year the last year in which we will publish two hard-copy issues of *WATT'S NEW*. In coming years only an abbreviated paper copy will be mailed out in the Fall, containing the slate of officers for the coming year and fulfilling Institute and Section Bylaws concerning elections.

As we move to an all-electronic newsletter, we understand that this may have a negative impact on some members and thus we are making this transition more slowly than other Sections have. Therefore, we are asking you, the membership, for input as to how this will impact you. Please send your reply to me either by e-mail or by regular mail.

The Robot Challenge continues to be very active. Neville Jacobs is once again commended for his superb efforts on this project. We are still in need of volunteers for mentoring and helping with the actual competition. This is due in part because the April 22nd competition date occurs the day before Easter Sunday. Additional dates for mini-competitions are being considered, necessitating more volunteer help. See inside for more details.

The Instrumentation and Measurement Society's annual conference (IMTC 2000), being held May 1-4 at the Hilton in Baltimore is coming along under the able oversight of its Chair, Chris Nemarich. As this conference is co-sponsored by the Section, we are still in need of some help to make the effort run smoothly. Contact Chris if you are available.

Once again, the PES Chapter and Section will be hosting a dinner for high school students during the National Engineers Week. Sponsorship of the students, either individual or corporate, is greatly encouraged. Check inside for further details.

Have a great Winter, Spring, and Summer. See you in the Fall - Ralph W. Bruce

Election Results Are In

The following people have been elected to serve the Baltimore Section and Annapolis Subsection of IEEE in 2000:

Baltimore Section

Chair: Ralph W. Bruce
Vice Chair: Carole C. Carey
Secretary: Virgilio Arafiles
Treasurer: Bob Berkovits

Annapolis Subsection

Chair: David C. Boyd
Vice Chair: Noel Castiglia

Newsletter Now Available Electronically

WATT'S NEW is now available electronically in PDF format on Baltimore Section's Web Site. You can view/print the newsletter directly from the Web Site using Adobe Acrobat Reader.



WATT'S NEW

IN THE BALTIMORE SECTION

"WATT'S NEW" in Baltimore Section is the biannual newsletter of the Baltimore Section of the Institute of Electrical and Electronics Engineers (IEEE). As a medium for both news and opinions, the editorial objectives of WATT'S NEW are to inform its readers in a timely and objective manner of newsworthy IEEE activities taking place in and around the Baltimore area, to publish officially scheduled events, to report on IEEE activities of national and international scope, and to serve as a forum for comment on areas of concern to the engineering community.

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1/4 Page: 8 x 2.5 or 5 x 3.75	\$240
1/6 Page: 4 x 3 or 2.25 x 5	\$175
Back Cover: Not Available	

1/8 Page (Business card: 3.5 x 2.25 or 2.5 x 3.25) ads will be placed at a promotional rate of \$125 per issue for a minimum of two consecutive issues.

The Baltimore Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisements in WATT'S NEW. Revenue from advertisements will help fund the Baltimore Section's Scholarship Fund.

WATT'S NEW is published in January and August. Subscriptions are included in the annual membership dues. Mail contributions to L & T Services, c/o Leonard Bathgate, 9 First Avenue West, Ferndale, Maryland 21061.

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Engineering Society of Baltimore, Vacant

Maryland Board for Licensing of Professional Engineers,

Melvin Hotz

Other News

Robot Challenge Getting Geared Up

This year's Robot Challenge is scheduled for Saturday, April 22nd at the Museum of Industry. The team of judges is already in place, and they are as follows:

Dave Boyd - Judge, Track Event
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Ralph Bruce - IEEE Section Chair
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John Dentler - Registration and Administration
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Bill Dixon - Judge, Written Reports
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Mitch Hobish - Written Reports Structure
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Volunteers are still needed for mentoring high school students and judging the Challenge. If you are interested in helping out with this event, please contact Dave Boyd, Brian Sequeira, Bill Dixon or Neville Jacobs. Thank you!

2000 National Engineers Week Dinner

The Power Engineering Society is once again proudly sponsoring the annual Engineers Week Dinner, to take place on February 22, 2000 at the BWI Marriott Hotel, 1743 West Nursery Road. Area high school juniors and seniors will be guests for this event. The guest speaker will be Gail Hendrickson, Associate Director of the Electric Vehicle Association of the Americas, who will make a presentation on electric vehicles.

The evening's agenda is as follows:

5:00 to 6:00 PM - Social Hour with Exhibits

6:00 to 7:15 PM - Dinner

7:15 to 8:30 PM - Program

This year, the event is free to all IEEE members, courtesy of PES. Please consider sponsoring one or more students at \$20 each. Reservation deadline is February 14, 2000. To make reservations, contact Robert D. Biagiotti - Vice Chair, PES Baltimore Chapter at 410-859-9340.

Laser and Electro-Optics Society Conference

The conference, entitled "2001 Conference on Lasers & Electro-Optics/Quantum Electronics Lasers Science CLEO/QELS 2001", will be held May 6-11 in Baltimore, MD.

For further information, please contact Meetings Dept., Optical Society of America, 2010 Massachusetts Ave., NW, Washington, DC 20036-1023, Phone No. 1-202-416-1907, Fax: 1-202-416-6100, e-mail: custserv@osa.org, or Conference Services Dept., at IEEE Operations Center at 732-562-3878.

Personalized IEEE License Plates Available

Let others know that you are proud to be a member of the IEEE in Maryland. The IEEE Organizational license plates may be displayed on passenger cars, multipurpose vehicles (SUV's, motor homes, etc.) and trucks up to 10,000 lbs gross vehicle weight. One time cost = \$30.00. To order, make a check out to IEEE Baltimore Section. Fill out order form (a copy can be found on the Baltimore Section Web Site or by contacting the Section Chair, Randy Bruce).



Chapter Information

Annapolis Subsection Crab-Line



Meeting Schedule and Information

Annapolis Area and Eastern Shore Members:
The Annapolis Subsection meets on the 2nd Tuesday of the month at the U.S. Naval Academy in room 103 of Michelson Hall, located between the Nimitz Library and Chauvenet Hall. Enter through Gate 1 and park along Holloway Road & Ingram Field or near Rickover Hall. Meetings are held jointly with the IEEE Student Activities Section and consist of a networking session at 7:00 PM, followed by the presentation at 7:30 PM. IF YOU DON'T RECEIVE E-MAIL ANNOUNCEMENTS, PLEASE SEND YOUR E-MAIL ADDRESS TO JIM CUMMINS AT jcummins@acm.org

For more information on meeting dates in the fall, contact the section chair or visit the web site link at www.ewh.ieee.org/r2/baltimore/Subsection/crab-line.html.

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Secretary, OPEN

Student Chapters

Are you a student at Johns Hopkins, Loyola, UMBC, Morgan State, or the U.S. Naval Academy?

WE NEED TO HEAR FROM YOU!

We would like to print information regarding your meetings and events. Please contact the Chapter or Section Chair with your chapter information.

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Southern Maryland

Meeting Schedule and Information

IEEE Southern Maryland Communications, Computers, and Electromagnetic Compatibility (EMC) Chapter holds meetings regularly on the last Monday of every month, with dinner meetings held at the Roost Restaurant on the 1st month of each quarter and brown bag lunch meetings held at Veda Incorporated on the 2nd and 3rd months of each quarter. Each meeting has a special guest speaker presenting technical information.

Regular meeting notices are issued by postal mailings, e-mail, and newspaper articles.

For more information on meeting dates in the fall, contact the section chair or visit the web site link at www.ewh.ieee.org/r2/baltimore/Sections/SoMD/Southern_MD.html.

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Reliability (R-07)



Reliability of electrical, electronic and related products, and scientific, technical, industrial or other activities that contribute to this field, or utilize the techniques or products of this field.

We would like to make the Baltimore Section Reliability Society a useful forum to foster the Reliability Engineering profession in this area and to provide you, the members of IEEE, with important information and resources. Anyone interested in getting involved in our society's activities, please contact the chair.

Meeting Schedule and Information

Generally, all meetings are held at Northrup Grumman Corporation, Central Building, Linthicum, MD, starting at 11:30 AM. A light lunch is served. For dates and times of meetings and other events, contact the chair or visit our Baltimore Section web site link at www.ewh.ieee.org/r2/baltimore/Chapter/Rel/Reliability.html.

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Chapter Information

Engineering in Medicine and Biology (EMB-18)



EMB-18 is a society of people who apply the concepts and methods of physical and engineering sciences to the problems of biology and medicine. This covers a very broad spectrum, ranging from formalized mathematical theory through experimental science and technological development to practical clinical applications. It includes support of scientific, technological, and educational activities. The aim of the Baltimore Chapter, together with the Washington and Northern Virginia Chapters, is to be a catalyst for EMBS activity in the Baltimore-Washington area.

Meeting Schedule and Information

Meetings are held at Johns Hopkins University, Homewood Campus, Krieger Room 205. Parking: \$2.50 in the visitor's lot, free on Wyman Avenue. For more information on meeting dates in the fall, contact the section chair or visit our web site at www.loyola.edu/ieec/.

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Power Engineering Society (PE-31)



The scope of the society embraces planning, research, development, design, application, construction, installation, and operation of apparatus, equipment, structures, materials, and systems for the safe, reliable, and economic generation, transmission, distribution, conservation, measurement, and control of electrical energy. The society develops standards, provides instruction, and advances the electric power discipline and techniques.

Meeting Schedule and Information

Meetings are held at BGE Marketing and Energy Services Building Main Conference Center located in Woodlawn. For more information on meeting dates and times in the fall, call Richard Moore at 410-281-3518 or visit our Baltimore Section web site link at www.ewh.ieee.org/r2/baltimore/baltimorepes/

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Antenna Propagation/Microwave Theory Techniques (AP-03/MTTS-17)

Antennas and Propagation. Experimental and theoretical advances in antennas including design and development, and in the propagation of electromagnetic waves including scattering, diffraction, and interaction with continuous media; and application, pertinent to antennas and propagation, such as remote sensing, applied optics, and millimeter and submillimeter wave techniques.

Meeting Schedule and Information

Meetings are held at Northrup Grumman's facilities at BWI during lunchtime. Please contact Hyo-Kun Hahn at 410-765-5931 for meeting dates, locations, and times. You may also visit our Baltimore Section web site link at www.ewh.ieee.org/r2/baltimore/Chapter/ApMTT/AntennaMicrowave.html

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Chapter Information

Electron Devices (ED-15)/Solid State Circuits (SSC-037)



The EDS field of interest spans all aspects of the physics, theory, and phenomenon of electron and ion devices such as elemental and compound semiconductor devices, quantum effect devices, optical display and imaging devices, high frequency devices, micromechanics, tubes, and vacuum devices. The society is concerned with the research, development, design, manufacturing, processing technology, and applications of these devices.

Meeting Schedule and Information

Meetings are held on a quarterly basis at the Historical Electronics Museum, located on Nursery Road near BWI Airport. For more information on meeting dates and times in the fall, contact the section chair or visit our Baltimore Section web site link at www.ewh.ieee.org/r2/baltimore/edss/

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Aerospace and Electronic Systems (AES-10)



Organization, design, development, integration, and operation of functional systems for space, air, ocean, or ground environments. These systems include, but are not limited to, navigation, avionics, spacecraft, aerospace power, radar, sonar, telemetry, defense, transportation, and command and control. A functional system is hereby construed to mean a complex interacting assembly of major components designed to accomplish specific functions.

The Baltimore Chapter of AESS is soliciting volunteers who are interested in participating as an officer of the chapter. Your participation requires only a few hours of time per month. Please contact the chapter chair if you are interested. Thank you!

Meeting Schedule and Information

Meetings are held at the Historical Electronics Museum, located on Nursery Road next to the Marriott Hotel near BWI Airport. For more information on meeting dates and times in the fall, contact the chapter chair or visit our Baltimore Section web site link at www.ewh.ieee.org/r2/baltimore/AES/AESShomepage.html

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Programs Director, Open

Chapter Information

Communications (COM-19)

Advancement of the science, engineering, technology, and application for transferring information between locations by the use of signals. This includes sources and destinations involving all types of terminals, computers, and information processors; all pertinent systems and operation to bring about this transfer; guided and unguided transmission media; switched and unswitched networks; and network layouts, protocols, architecture, and implementation.

Meeting Schedule and Information

Meetings are held the first Tuesday night of each month at UMBC, Catonsville in the student union Ballroom Lounge - 3rd Floor. A notice is sent via e-mail several weeks before each meeting. For more information on meeting dates and times in the fall, send your e-mail to Jeff Friedhoffer, jafried@ieee.org or visit our Baltimore Section web site link at www.ewh.ieee.org/r2/baltimore/Chapter/Comm/Communication.html

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Electromagnetic Compatibility (EMC-27)



Enhancement of Electromagnetic Compatibility (defined as the capability of systems or equipment to be operated in the intended operational environment at designed levels of efficiency without degradation due to electromagnetic interactions) including, but not limited to: 1) the generation of engineering standards; 2) measurement techniques and test procedures; 3) measuring instruments; 4) equipment and system characteristics, such as susceptibility (immunity), vulnerability, related propagation effects, and subjective effects, frequency allocation and assignment; 5) improved (interference reduction or control) techniques and components; 6) education in electromagnetic compatibility; 7) studies of the origins of interference, both man-made and natural, and their classification; 8) spectrum conversion; 9) spectrum utilization; 10) shielding techniques; 11) side effects of electromagnetic energy; 12) scientific, technical, industrial, professional or other activities that contribute to this field, or utilize the technique or products of this field.

Meeting Schedule and Information

For information on meeting dates and times in the fall, contact the chapter chair or visit our Baltimore Section web site link at www.ewh.ieee.org/r2/baltimore/Chapter/EMC/emc.html

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Education Society (E-25)

Chair, Vacant

Computer Society (C-16)

Chair, Vacant

Engineering Management Society (EM-14)

Chair, Vacant

Chapter Information

Industry Applications Society (IA-34)



Development and application of electrical systems, apparatus, devices, and controls to the processes and equipment of industry and commerce; the promotion of safe, reliable, and economic installations; the encouragement of energy conservation; and the creation of voluntary engineering standards and recommended practices.

Meeting Schedule and Information

Meetings are held from 6:00 PM to 10:00 PM at Overlea Hall, 6809 Belair Road, Baltimore, MD 21206. Cost for members is \$25 reserved, and \$30.00 at the door; nonmembers - \$30 reserved, \$35 at the door. For more information on meeting dates and times in the fall, contact:

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or visit our web site at glomar.com/ias.htm.

Tutorials

The topic for the winter is Overcurrent Protection, Fault Current Analysis, Coordination Study Fundamentals, offered on February 8, 15, 22, 29th, and on March 7 & 14th. For more information about our tutorials, contact:

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CALENDAR OF MEETINGS AND EVENTS

JANUARY

10 ExCom Meeting	19	IAS - Electric Utility Deregulation Update/ Aftermath to Y2K
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FEBRUARY

8 Annapolis Subsection - ARINC AIR TRAFFIC CONTROL FACILITY DEMONSTRATION	16	IAS - Electric Requirements for Fire Pumps
14 ExCom Meeting (Valentine's Day - may be rescheduled)	22	National Engineers Week Dinner

MARCH

13 ExCom Meeting	21	Annapolis Subsection - Regular and Stu- dent Members Topic: Media Storage
15 IAS - Professional Liabilities		

APRIL

10 ExCom Meeting	22	High School Robot Challenge
18 Annapolis Subsection - Regular & Student Members Topic: Cellular Communications	25	Annapolis Subsection Fall 2000 Planning Meeting
19 IAS - Basic Components of Telecommunications Systems		

MAY

1-4 IMTC 2000	10	Chapter Chair Awards Dinner
6-11 2001 Conference on Lasers & Electro-Optics/Quantum Electronics Lasers Science CLEO/QELS 2001	18	IAS - National Aquarium Tour

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