

# OCEANIC ENGINEERING SOCIETY

*Newsletter*



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NUMBER 2

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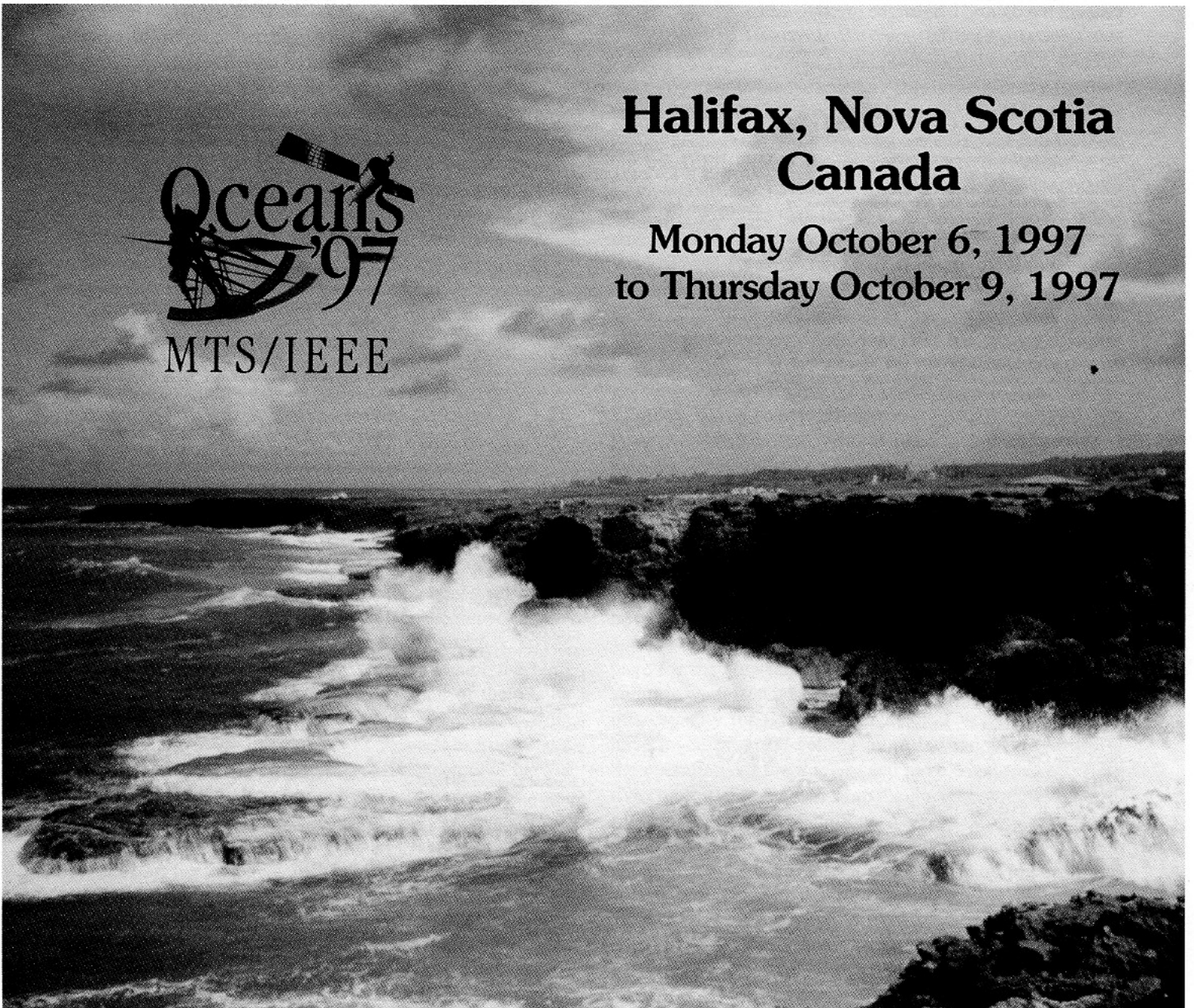
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## Halifax, Nova Scotia Canada

Monday October 6, 1997  
to Thursday October 9, 1997





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**ROBERT W. FARWELL**  
**Reviews**

**ROGER F. DWYER**  
**Sonar Signal Processing:** Underwater signals: Detection, Tracking, Classification; Nonlinear Sonar Processing, Sonar Performance and Statistics, Sonar Technology and Oceanic Effects

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**Seismo-Acoustic and Geophysics:** Oceanic Seismology, Wave Generation, Propagation and Scattering of Interface Waves, Sediment Shear Waves, Sea Floor Sensors, Geotechnical Inversions, Ocean-Seismic Signal Processing

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## OES PROFESSIONAL ACTIVITIES

On June 7, 1997 the Executive Committee of OES held a meeting to review the status of the Society. As Vice President of Professional Activities, I reported to the ExCom on the various activities that were in my area of responsibility. In many ways these activities are a barometer on the progress of the Society and a review of my report would be a good way of informing you on what our Society is doing.

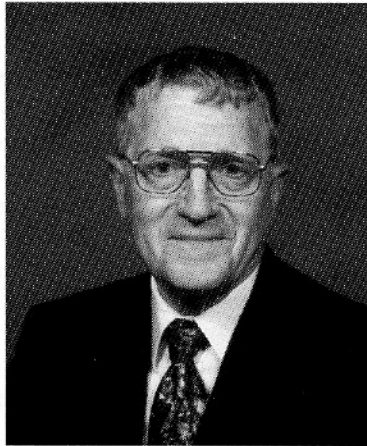
Membership - Our Membership Chairman, Jim Barbera, is active at both the Society level and at the National level. He is a member of the Membership Development Committee and is active on two subcommittees of the MDC. Our Society membership now stands at 1651 members. We lost 109 members in the past year for non-payment of dues. This year a letter has gone out to each lapsed member, signed by the IEEE president, to encourage them to renew their membership and to find out why they are dropping out of IEEE. We expect that many of the terminated members will respond and become active members once again.

Another area where Jim is active is in the recruitment of nonmembers attending our conferences and workshops. As an inducement to join the IEEE, a portion of the non-member conference registration fee can be applied to the payment of membership dues in IEEE for non-members filling out the application and turning it in at the conference. Jim is also searching the Technical Interest Profile (TIP) list of IEEE members and contacting those who are not OES members but whose TIP indicates they should be OES members.

This year, thanks to the Membership Chairman, we will be publishing a new Membership Directory. Our last Directory was published in 1990 and so a new one is definitely in order. Watch for it later this summer.

Chapters - I am pleased to announce the appointment of a new Chapters Coordinator. Paula Lau has been appointed to this position and succeeds Edward Early who has served faithfully for many years. Paula is a member of the OES AdCom and is currently serving as the Chair of the Seattle Section. The activity level in our chapters varies widely from very active to no activity. Our newer chapters in Europe and Japan are quite active for their size. Our chapters in the US and Canada are less active in comparison. One of the challenges for Paula will be to bring up the activity level of our domestic chapters and to help them in developing effective programs for the membership. There are several areas where there is a concentration of OES members, but no chapter exists. We hope to institute action to develop new chapters in these regions.

Awards and Recognition - Each year OES has the oppor-



tunity to recognize individuals who have made significant contributions in nominations forms were included. This is a reminder to submit nominations before the August 1, 1997 deadline. Joe Czika chairs the Awards Committee and is anxious to receive new nominations for the 1997 awards.

PACE - The Professional Activities Committee for Engineers (PACE) is an active group within the US Activities Board that promotes the non-technical aspects of the working engineer. Throughout the past several years you have seen articles that pertain to the professional side of your career appearing in the Newsletter. This is the primary function of the Society PACE Coordinator to see that information is promulgated to the members. PACE is very active in supporting the IEEE GOLD program. GOLD is the acronym for Graduates of the Last Decade and is a program to recruit engineers with less than ten years in the field into the active ranks of IEEE Volunteers. At the 1996 PACE Conference and Workshop in Phoenix about half of the those attending were from the GOLD ranks. We need to encourage similar participation of the younger engineers in the OES activities.

Student Activities - Each year OES has supported a program for students at the annual OCEANS Conference. This year there will be a student program at OCEANS 97 in Halifax. While it will be conducted differently than the past Student Poster Session it will still bring students to the Conference and help them get a view on life after graduation. One area in which the OES needs to focus is in the development of student OES chapters. We have a number of schools that have regularly provided students for our OCEANS student poster competitions where a student OES Chapter could develop. This is a good recruiting tool for future OES membership and area ripe for development.

This will be my last opportunity to write an editorial page for the Newsletter. My tenure as Vice President will end this year. It has been a pleasure to serve the Society in this capacity for the past four years. During this time we have made progress getting more individuals involved in the operations of the Society and have developed an effective committee system to keep the Society moving forward. Like all volunteer operations, we can always use more volunteers. If you would like to be a part of the management team, please let me know as we have many opportunities still open for volunteer service!

**Norman D. Miller, P.E.**  
**Vice President Professional Activities**



## WHO'S WHO IN OES

**HISAAKI MAEDA** (MJ93) is Professor of the Institute of Industrial Science of the University of Tokyo since 1969. He is a Fellow of the Society of Naval Architects of Japan (SNAJ) since 1994. He is a member of the Board of Directors of SNAJ since 1989. He is Editor of the *International Journal of Marine Science and Technology* of SNAJ since 1994, and Editor of the *International Journal of Offshore and Polar Engineering* since 1991. He is Chairman of the Technical Committee of Marine Dynamics of SNAJ since 1994, and Senior Member of the Ocean Engineering Committee of SNAJ since 1992. He has served as a member of the ad hoc committees of the ministry of Transport, the Ministry of Education, and the Science and Technology Agency of Japan. He has been the Adviser of the Japan Panel of the Marine Facilities Panel of the US-Japan Cooperative Program in Natural Resources (UJNR/MFP) since 1989. He is a member of the International Committee of the Practical Design of Ship and Offshore Structures (PRADS) since 1989. He is a member of the International Advisory Committee of the Offshore, mechanics and Arctic Engineering (OMAE) of the American Society of Mechanical Engineers (ASME) since 1985. He was Chairman of the underwater Technology Committee from 1989 to 1991, and Chairman of the Marine Hydrodynamics Committee from 1988 to 1992. He served as a member of the Ocean Engineering Committee of the International Towing Tank Conference (ITTC) from 1986 to 1992.

After graduating from a doctoral course at the University of Tokyo, he was an Associate Professor of the Institute of Industrial Science of the University of Tokyo from 1969 to 1981. He was a Visiting Research Scientist at the University of Michigan from 1977 to 1978. Since 1981, he has been a Full Professor of the Institute of

Industrial Science of the University of Tokyo. His specialties are marine hydrodynamics, dynamics of floating structures, wave energy utilization, dynamics and control of underwater vehicles, safety engineering for marine facilities, and development of aquaculture facilities. He has four patents. These include wave energy devices, floating type wave breakers, control devices for underwater vehicles. He has published more than 200 technical papers.

Dr. Maeda received his B.S. degree in 1964 in naval architecture from the University of Tokyo, his M.S. degree in 1966, and his Ph.D. degree in 1969 in ocean engineering from the University of Tokyo. He received the Best Paper from SNAJ in 1982, the OMAE Achievement Award from ASME in 1986, and awards from the Sasakawa Foundation and the Shipbuilding Industries Association. He also received an award from the US Panel for the contribution to the UJNR/MFP activities in 1994.

Dr. Maeda has attended the OCEANS Conferences since 1989. He attended OCEANS in Seattle, Honolulu, New Port, Victoria, Brest, and Washington, DC. He organized the workshop for underwater vehicles with Mr. Talkington at the Honolulu OCEANS, and he was invited as a panelist for the workshop of underwater vehicles at the Victoria OCEANS. He was elected Director for Foreign Affairs in the newly established Tokyo Chapter of the IEEE/OES in 1995.

Dr. Maeda is a Fellow of SNAJ, a member of IEEE, MTS (Marine Technology Society), SNAME (Society of Naval Architects and Marine Engineers), the Society of Architects of Japan, the Society of Energy and Resources of Japan and the Society of Coastal Development of Japan. He is now one of the most active and important professors in the field of ocean engineering in Japan.

Dr. Maeda is a member of the OES AdCom.

### The Tutorials that will be offered by OCEANS'97 this year are planned as follows:

Monday - October 6, 1997 - 8:30 am. - 12:00 noon

- 1- Active and Passive Sonar Information Processing.  
by "DAVE KIL", Advanced Concepts & Development, Lockheed Martin, Glendale, AZ.
- 2- Consulting - A Career Path for the 21st. Century  
by "NORM MILLER", Consultant, Seattle, WA.
- 3- Nonlinear Ocean Waves and Hydrodynamic Loading  
by "MATIUR RAHMAN", Prof. Math. Dept. DALTECH, Halifax, N.S., Canada
- 4- Fiber Optics Applications in Underwater Communica-
- tions, Sensing, and Control by "FRANK CAIMI", Harbor Branch Oceanographic Institute and "BARRY Grossman" Florida Institute Of Technology, Melbourne, Florida
- 5- Focus on RADARSAT- A New Source of Data & Information for Marine Applications by "DIRK WERLE", AERDE Environmental Research, Halifax, N.S., Canada
- 6- Impulsive Acoustic Sources by "RAY SHAEFER", Phoenix Science & Technology, Inc. Arlington, MA., USA



Monday - October 6, 1997 - 1:30 pm. - 5:00 pm.

- 7- Fundamentals and Applications of Offshore Acoustical Geophysics by "RICHARD SYLWESTER", Golder Associates Inc.
- 8- Onboard Acoustic Sensors by "FRED MALTZ", Consultant, Los Altos, California.
- 9- Internet Workshop by "DAVE JONES", Public Works & Government Services Canada. Ottawa, Ontario, Canada.
- 10- Shallow Water Acoustic Propagation, Coherence, and Reverberation by "BILL CAREY", Ocean Engineering Dept. MIT, MA.
- 11- Autonomous Underwater Vehicle (AUV) by "DON

BRUTZMAN", Naval Postgraduate School, Monterey, California.

- 12- Underwater Optical Imaging by "JULES JAFFE", Research Scientist Scripps Institute of Oceanography, La Jolla, California

For more information and registration, as well as for information about two days Short Courses Scheduled on October 3-4/97, please contact:

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## CALL FOR MANUSCRIPTS

### Solicitation of manuscripts for IEEE Potentials magazine

The IEEE Potentials Magazine is soliciting manuscripts for all aspects of electrical/electronic/computer engineering and computer science

The IEEE Potentials Magazine goes to all student members of the IEEE (USA and Canada), presently about 40,000.

The level of the article is addressed to the undergraduate student and has several objectives: interesting the student in a topic for further study, explaining technological advances in an area, a forum for technical ideas, articles of interest technically.

It should be stressed that the article should not try to mystify the student but to enable the student to learn more about technical material that he/she may/may not become acquainted with in their formal course work.

Length of article can be no more than 10 manuscript pages (8 1/2 x 11) reduced by number of figures—shorter papers also acceptable

The manuscripts are reviewed by: students, faculty, researchers in area and then a decision is made as to whether to publish or not.

If interested, contact:

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## Message from the Internet:

IEEE Periodicals is pleased to announce the launch of the Magazines/Newsletters Department home page on the World Wide Web. The site is designed to be a one-stop information source for authors, editors, advertisers, and others who seek information regarding IEEE Magazines and Newsletters.

In addition to a complete list of magazines and newsletters produced by the department, submission guidelines, copyright information, and a list of department staff, the site lists the name, address, phone and fax numbers, and a "clickable" e-mail link for both the volunteer editor-in-chief and the IEEE staff editor of each publication, as well as a brief description of content and advertising rates and information.

Beyond this, the site serves as a launch point to explore the broader world of IEEE and its periodicals. It includes links to the main IEEE home page; IEEE Society & Technical Committee pages; a preview of tables of contents of coming issues of the IEEE Transactions, Journals, and Letters; the new OPeRA (On-line Periodicals and Research Area) project; IEEE Bibliographies On-Line; and a comprehensive "quick guide" to help at the IEEE.

In addition, the site also provides a Guide to all Magazines produced by the IEEE including a link to magazines produced outside IEEE Periodicals.

Future plans call for adding article reprint rates and information, subscription rates and tables of contents of both past and upcoming issues of the IEEE magazines produced by the department.

Visitors can access the site at: <http://www.ieee.org/magazines> or you may access the homepage via the main IEEE Home Page under Publications "IEEE Magazines/Newsletters."

## CONTINUING EDUCATION COMMITTEE SEEKS MEMBER INPUT

The Continuing Education Committee of the IEEE Educational Activities Board constantly strives to provide the latest and most effective programs to help IEEE members stay technically competent. The committee selects the best topics, format and media, based on the collective judgment of its members, IEEE staffers and outside experts. There is one crucial ingredient that is missing, however: MEMBER INPUT. The committee RELIES on sustained feedback from members to know how well it is meeting member needs.

Have you used any of the IEEE's educational products? Did you even know they existed? Do the products cover the technical areas that are of interest to you? Are there other topics, technical or non-technical, that you would like to see presented? Is the level of presentation too theoretical, too applied, just right? Would educational materials be more useful to you if they were organized in a different way, shorter blocks, longer blocks?

How about the costs and availability? Are the educational materials too expensive? Wrong format or medium? Too hard to identify the specific material you need, or can't find anything suitable?

### !! ALL THESE PROBLEMS CAN BE SOLVED !!

Your Continuing Education Committee would be most interested in hearing from you on any aspect of member education. Member feedback is essential to the effectiveness of any IEEE activity. Remember, your dues are paying for the committee's activities. Maximize the effectiveness of your dues by passing along YOUR suggestions to the Continuing Education Committee. Just slide over to your keyboard and dash off a message NOW, to Gale Latzko (Educational Outreach Coordinator at HQ) at [g.latzko@ieee.org](mailto:g.latzko@ieee.org), or Ted Moody, Chairman of the Continuing Education Committee, at [t.moody@ieee.org](mailto:t.moody@ieee.org). Let them know what YOU need from YOUR IEEE to keep technically current.

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## The SCOOP

May, 1997

*Published for Section Chairs by Section/Chapter Support*

*Carol Coffey, Editor*

*Cecelia Jankowski, Managing Director, Regional Activities*

### PRACTICE, PRACTICE, PRACTICE!

As promised back in the March issue, the Section/Chapter Support Committee and staff have been in hot pursuit of Best Practices which can be shared with all Sections and Chapters. Successful organizations find successful programs which can be replicated throughout, and the IEEE is no different.

Thus far, the Committee has received some creative and practical ideas, two of which follow.

#### Study Groups (Twin Cities Section)

##### Benefits: continuing education, networking

Study groups are started when an IEEE member contacts the Section Educational Activities Chair (if the Section has one) with an idea for self study. The Section representative helps the member find a meeting place and publicizes the meetings; the study group members determine the most appropriate material to work on. Many study groups find speakers who have expertise in the field to address the group. Most groups work through an initial text and then go on to other material or related topics. In 1993, study group members created a one-day Section technical conference based on the work one group was doing. These events allow in-depth work in an area (as opposed to the brief overview offered by lunch seminars), and have been conducted on

chaotic systems, modeling and simulation (stochastic through VHDL), digital signal processing, communications technology, wireless networking, and fuzzy logic. Most groups have a 2-3 year life time.

#### IEEE License Plates (Baltimore Section) Benefits:

##### Section revenue, promotes IEEE image

The Section worked with the Maryland Motor Vehicle Administration and IEEE for the issuance of customized Maryland license plates with the IEEE logo on them. Maryland residents who are IEEE members can purchase these plates.

The important issue here is the sharing of ideas and the initiation of a dialogue on what works within the IEEE Sections and Chapters. Some of the best practices you will see over the next few months might be easier to implement than others, but use these as guides to develop your own program.

You may think the successful practices of your Section are "nothing to write home about", but we're willing to bet that your peers want to know about them. So, send in your best practices to [sec.chap.support@ieee.org](mailto:sec.chap.support@ieee.org), or fax them to 908-463-9359. Be sure to include:

Name of project  
Brief description  
Date project initiated  
Benefits to Section/Chapter membership  
Contact information (for finding out more)

## **KUDOS!**

The IEEE Publicity Guide, produced by Sonny Barber and Marsha Longshore, Corporate Communications, recently received an Award of Distinction in the Communicator Awards 1996 Print Media Competition. The Guide was developed to help Sections, Chapters and Branches enhance the visibility of the organization, and to ensure the IEEE maintains a positive image in the local community or area. Request one now!

## **TERMINATOR 2**

In the April issue of SCOOP there appeared an article describing the effects of the IEEE Terminator - the program which terminates the memberships of those who have not sent in their renewals. The Terminator was run on 23 February on Region 1-7 records terminating 45,868 records; Terminator 2 was run on 26 April on Regions 8-10. Those terminations by Region were as follows:

8 = 6018  
9 = 4170  
10 = 7663  
Total = 17851  
Grand Total = 63719

As mentioned last month, historically, half of these members will renew by September. Your May version of Section Access to Membership Information (SAMIEEE) diskette "pinks" captured this termination information. You might want to reach out to those from your Section/Chapter who have not renewed.

Interesting data: Customer service industry surveys show that most people cease to do business with a company or organization as a result of its indifference.

## **STAR COUNSEL**

Regional Activities Student Services is pleased to announce that the 1996-97 Outstanding Branch Counselor Award recipients were selected on 7 April 1997. This year's judging committee members - Gerald Karam (SAC Chair), Juan Carlos Miguez (RAB Awards and Recognition Committee Chair), and Richard Nichols (TAB Awards and Recognition Committee Chair) - made their selections from sixteen nominations.

Award recipients receive a personalized certificate and a \$500 cash award.

Letters of congratulations are sent to the recipient, the Branch Chair who submitted the nomination, and the President of the university, with copies to the Dean of Engineering and the Department Chair.

Region and Section officers also receive copies of all the letters. Those who were not selected receive a certificate, and a letter goes to the nominee and the nominator thanking them

for their participation and encouraging them to participate again next year.

Student Services staff moved quickly to ensure that announcements and presentations could be made at the Regions 3 & 5 meetings. Staff will work with Regional Student Activities Chairs (RSACs), Regional Student Representatives (RSRs), the respective Branch Chairs and Sections to arrange for presentation of the awards in the remaining Regions.

1996-97 Outstanding Branch Counselor and Advisor Award Recipients:

### *Region 2*

Eugenio F. Villaseca  
Cleveland State University

### *Region 3*

David G. Green  
University of Alabama - Birmingham

### *Region 4*

Alfred S. Andrawis  
South Dakota State University

### *Region 5*

Michael Parten  
Texas Technological University  
Ronald DeLyser  
University of Denver

### *Region 9*

Gustavo Adolfo Bernal  
Univ. Tecnológico de Panama  
Carlos S. Cardenas  
Pontificia Univ. Católica del Peru

### *Region 10*

S. Salivahanan  
Mepco Schlenk Engineering College  
A. K. Aggarwal  
Gujarat University

Studies are showing that those members who come from a strong Student Branch are more likely to remain with the IEEE; those who were volunteer leaders at the Student Branch level remain active volunteers when they join the Section.

If you know someone who should be nominated for the 1998 Student Branch Counselor Awards, please contact Student Services.

## **STUDENTS GETTING STUDENTS**

March marked the completion of the 1997 Student-Get-a-Student (SGS) member recruitment program, and the results are impressive. A total of 736 Student recruiters enrolled 2,909 new Student members! Of the 736 recruiters, 457 enrolled up to 2 new members, 105 recruited 3-4 members, and 174 recruited 5 or more new Student members.

Letters have been sent to all of the "SGS" recruiters congratulating them on their great success - directly due to their having reached out to encourage and recruit their fellow students who had not yet understood the value of IEEE membership. Each



## CONTINUING EDUCATION COMMITTEE SEEKS MEMBER INPUT

The Continuing Education Committee of the IEEE Educational Activities Board constantly strives to provide the latest and most effective programs to help IEEE members stay technically competent. The committee selects the best topics, format and media, based on the collective judgment of its members, IEEE staffers and outside experts. There is one crucial ingredient that is missing, however: MEMBER INPUT. The committee RELIES on sustained feedback from members to know how well it is meeting member needs.

Have you used any of the IEEE's educational products? Did you even know they existed? Do the products cover the technical areas that are of interest to you? Are there other topics, technical or non-technical, that you would like to see presented? Is the level of presentation too theoretical, too applied, just right? Would educational materials be more useful to you if they were organized in a different way, shorter blocks, longer blocks?

How about the costs and availability? Are the educational materials too expensive? Wrong format or medium? Too hard to identify the specific material you need, or can't find anything suitable?

### !! ALL THESE PROBLEMS CAN BE SOLVED !!

Your Continuing Education Committee would be most interested in hearing from you on any aspect of member education. Member feedback is essential to the effectiveness of any IEEE activity. Remember, your dues are paying for the committee's activities. Maximize the effectiveness of your dues by passing along YOUR suggestions to the Continuing Education Committee. Just slide over to your keyboard and dash off a message NOW, to Gale Latzko (Educational Outreach Coordinator at HQ) at [g.latzko@ieee.org](mailto:g.latzko@ieee.org), or Ted Moody, Chairman of the Continuing Education Committee, at [t.moody@ieee.org](mailto:t.moody@ieee.org). Let them know what YOU need from YOUR IEEE to keep technically current.

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## The SCOOP

May, 1997

*Published for Section Chairs by Section/Chapter Support*

*Carol Coffey, Editor*

*Cecelia Jankowski, Managing Director, Regional Activities*

### **PRACTICE, PRACTICE, PRACTICE!**

As promised back in the March issue, the Section/Chapter Support Committee and staff have been in hot pursuit of Best Practices which can be shared with all Sections and Chapters. Successful organizations find successful programs which can be replicated throughout, and the IEEE is no different.

Thus far, the Committee has received some creative and practical ideas, two of which follow.

#### **Study Groups (Twin Cities Section)**

##### **Benefits: continuing education, networking**

Study groups are started when an IEEE member contacts the Section Educational Activities Chair (if the Section has one) with an idea for self study. The Section representative helps the member find a meeting place and publicizes the meetings; the study group members determine the most appropriate material to work on. Many study groups find speakers who have expertise in the field to address the group. Most groups work through an initial text and then go on to other material or related topics. In 1993, study group members created a one-day Section technical conference based on the work one group was doing. These events allow in-depth work in an area (as opposed to the brief overview offered by lunch seminars), and have been conducted on

chaotic systems, modeling and simulation (stochastic through VHDL), digital signal processing, communications technology, wireless networking, and fuzzy logic. Most groups have a 2-3 year life time.

#### **IEEE License Plates (Baltimore Section) Benefits:**

##### **Section revenue, promotes IEEE image**

The Section worked with the Maryland Motor Vehicle Administration and IEEE for the issuance of customized Maryland license plates with the IEEE logo on them. Maryland residents who are IEEE members can purchase these plates.

The important issue here is the sharing of ideas and the initiation of a dialogue on what works within the IEEE's Sections and Chapters. Some of the best practices you will see over the next few months might be easier to implement than others, but use these as guides to develop your own program.

You may think the successful practices of your Section are "nothing to write home about", but we're willing to bet that your peers want to know about them. So, send in your best practices to [sec.chap.support@ieee.org](mailto:sec.chap.support@ieee.org), or fax them to 908-463-9359. Be sure to include:

Name of project  
Brief description  
Date project initiated  
Benefits to Section/Chapter membership  
Contact information (for finding out more)

## **KUDOS!**

The IEEE Publicity Guide, produced by Sonny Barber and Marsha Longshore, Corporate Communications, recently received an Award of Distinction in the Communicator Awards 1996 Print Media Competition. The Guide was developed to help Sections, Chapters and Branches enhance the visibility of the organization, and to ensure the IEEE maintains a positive image in the local community or area. Request one now!

## **TERMINATOR 2**

In the April issue of SCOOP there appeared an article describing the effects of the IEEE Terminator - the program which terminates the memberships of those who have not sent in their renewals. The Terminator was run on 23 February on Region 1-7 records terminating 45,868 records; Terminator 2 was run on 26 April on Regions 8-10. Those terminations by Region were as follows:

8 = 6018  
9 = 4170  
10 = 7663  
Total = 17851  
Grand Total = 63719

As mentioned last month, historically, half of these members will renew by September. Your May version of Section Access to Membership Information (SAMIEEE) diskette "pinks" captured this termination information. You might want to reach out to those from your Section/Chapter who have not renewed.

Interesting data: Customer service industry surveys show that most people cease to do business with a company or organization as a result of its indifference.

## **STAR COUNSEL**

Regional Activities Student Services is pleased to announce that the 1996-97 Outstanding Branch Counselor Award recipients were selected on 7 April 1997. This year's judging committee members - Gerald Karam (SAC Chair), Juan Carlos Miguez (RAB Awards and Recognition Committee Chair), and Richard Nichols (TAB Awards and Recognition Committee Chair) - made their selections from sixteen nominations.

Award recipients receive a personalized certificate and a \$500 cash award.

Letters of congratulations are sent to the recipient, the Branch Chair who submitted the nomination, and the President of the university, with copies to the Dean of Engineering and the Department Chair.

Region and Section officers also receive copies of all the letters. Those who were not selected receive a certificate, and a letter goes to the nominee and the nominator thanking them

for their participation and encouraging them to participate again next year.

Student Services staff moved quickly to ensure that announcements and presentations could be made at the Regions 3 & 5 meetings. Staff will work with Regional Student Activities Chairs (RSACs), Regional Student Representatives (RSRs), the respective Branch Chairs and Sections to arrange for presentation of the awards in the remaining Regions.

1996-97 Outstanding Branch Counselor and Advisor Award Recipients:

### *Region 2*

Eugenio F. Villaseca  
Cleveland State University

### *Region 3*

David G. Green  
University of Alabama - Birmingham

### *Region 4*

Alfred S. Andrawis  
South Dakota State University

### *Region 5*

Michael Parten  
Texas Technological University  
Ronald DeLyser  
University of Denver

### *Region 9*

Gustavo Adolfo Bernal  
Univ. Tecnologico de Panama  
Carlos S. Cardenas  
Pontificia Univ. Catolica del Peru

### *Region 10*

S. Salivahanan  
Mepco Schlenk Engineering College  
A. K. Aggarwal  
Gujarat University

Studies are showing that those members who come from a strong Student Branch are more likely to remain with the IEEE; those who were volunteer leaders at the Student Branch level remain active volunteers when they join the Section.

If you know someone who should be nominated for the 1998 Student Branch Counselor Awards, please contact Student Services.

## **STUDENTS GETTING STUDENTS**

March marked the completion of the 1997 Student-Get-a-Student (SGS) member recruitment program, and the results are impressive. A total of 736 Student recruiters enrolled 2,909 new Student members! Of the 736 recruiters, 457 enrolled up to 2 new members, 105 recruited 3-4 members, and 174 recruited 5 or more new Student members.

Letters have been sent to all of the "SGS" recruiters congratulating them on their great success - directly due to their having reached out to encourage and recruit their fellow students who had not yet understood the value of IEEE membership. Each

recruiter received one of three thank you gifts, depending on the number of Student members each recruited. Whenever possible, Sections should encourage their Student Branch on an ongoing basis to think recruitment all year long. Many students simply are not aware that the IEEE is meant for them.

The Member-Get-a-Member program is still going strong

- with 10,070 new members recruited as of the end of March. Recruiters in this program will also be sent thank you gifts and letters of appreciation for their efforts.

The program ends on 31 August, so don't miss out on any opportunity to help someone you know enjoy the benefits of IEEE membership!

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## IEEE-USA Perspectives (from the Web)

June 1997

### Contents:

1. IEEE-USA News Bytes
2. GOP Legislators Push Law To Ensure Private Sector Does Commercial Work
3. Bills Could Enable Small Businesses To Buy Affordable Health Insurance

The following are excerpts of IEEE-USA PERSPECTIVES Web edition and PERSPECTIVES WEB EXTRA, published each month. To access all the latest IEEE-USA news and information directly from the World Wide Web, set your browser to URL

[http://www.ieee.org/usab/DOCUMENTS/NEWS\\_PUBS/news\\_pubs.menu.html#perspectives](http://www.ieee.org/usab/DOCUMENTS/NEWS_PUBS/news_pubs.menu.html#perspectives).

### IEEE-USA News Bytes:

- On April 23, the House of Representatives passed the 21st Century Patent Improvement Act (H.R. 400), a major overhaul of the U.S. patent system that would transform the Patent and Trademark Office (PTO) into a quasi-private corporation and harmonize some aspects of the patent process with international practice. A key provision would require that the PTO publish patent applications after 18 months from the date of filing.

According to testimony submitted at the request of the Judiciary Committee by IEEE-USA Intellectual Property Committee Chair Daniel E. Fisher, "harmonization will lead to U.S. prosecution for worldwide patents, thereby reducing the cost of filing foreign patents for the U.S. innovator." IEEE-USA offered specific changes to improve H.R. 400 and similar legislation in the Senate (see IEEE-USA's statement on S. 507), one of which — an exemption of small businesses, universities, and individual inventors from patent publication requirements — was made to H.R. 507 in an amendment by Rep. Marcy Kaptur, D-Ohio.

- On April 28, IEEE-USA joined more than 20 other organizations in endorsing the Security and Freedom Through Encryption Act (H.R. 695) in a letter to members of the House Committee on the Judiciary and its Subcommittee on Courts & Intellectual Property. However, although the letter described the bill as a "positive framework for re-

forms," it did express concern with encryption crime, noting the potential for prosecutorial abuse and concluding that "the provision could also operate as a substantial disincentive to the widespread adoption of strong encryption techniques." The Judiciary Committee passed the bill on May 14.

### GOP Legislators Push Law To Ensure Private Sector Does Commercial Work

*by Edith Carper, Special to IEEE-USA Perspectives*

The Republican drive to require that the federal government divest itself entirely from activities that are commercial in nature has gotten off to a slow start as Congress approaches the mid-term. In February, two members of Congress introduced legislation to eliminate government "competition" with the private sector, but the bills have not moved to the hearing stage.

On Feb. 12, Sen. Craig Thomas, R-Wyo., and Rep. John Duncan, R-Tenn., introduced bills that codify the 40-year-old federal policy of using the private sector for commercial tasks. Six senators and seven representatives, all Republicans, are co-sponsoring the bills.

Thomas believes that government competition with the private sector is a growing problem. The intent of his bill, he said, is "to get agencies to focus on their core mission" and allow the private sector to carry out routine commercial tasks. The legislation, he said, "has the potential to open up a \$30 billion market for the nation's small and large businesses." The federal government's avowed policy of relying on the private sector, he said, "has not worked. The bureaucracy has not found ways and means to procure goods and services from the private sector."

The Thomas bill gives a lead role to the Office of Management and Budget in identifying functions to stay within the federal establishment and those that the private sector can do better. The bill also includes safeguards for displaced government employees, with a provision that "facilitates transition to the private sector."

The Senate has already explored the bill's concept by 1996 Senate Governmental Affairs Committee hearings. The U.S. Chamber of Commerce strongly endorses the bill, as does the National Federation of Independent Businesses, the Contract



Services Association, the Small Business Legislative Council and the American Consulting Engineers Council.

## **Bills Could Enable Small Businesses To Buy Affordable Health Insurance**

*by Edith Carper, Special to IEEE-USA Perspectives*

Recently introduced legislation in Congress could expand health insurance coverage to "millions of working families with children" by allowing workers and their families to buy insurance through pooling arrangements.

According to the principal House sponsor, Rep. Harris Fawell, R-Ill., the bill, H.R. 1515 "will help make insurance more affordable by expanding coverage and lowering costs; more accessible by removing barriers and increasing choice through association plans; and more secure by improving continuity of coverage and consumer protections." Legislators referred the bill, which has 112 co-sponsors, to the Committee on Education and the Workforce.

On May 9, Sens. Tim Hutchinson, R-Ariz., and Fritz Hollings, D-S.C., introduced identical legislation in the Senate. Hutchinson said expanded coverage is necessary now. "At the very time that we want to expand health insurance for millions of children, at the very time that we have a goal of providing universal health coverage to all Americans, we are finding that the percentage of people with health coverage is declining."

The legislation will give associations and franchise networks the opportunity to form multistate purchasing groups under a single set of national rules, through ERISA, the Retirement Income Security Act. Sponsors say the bill will lower administrative costs, provide greater bargaining power to smaller employers and do away with the need for small businesses to comply with costly state-mandated benefit requirements. The bill does not require small business groups to join the purchasing pools, but pre-empts those that do from state laws under ERISA.

Meanwhile, discussions of pension portability are taking place — not in Congressional committees, but in quasi-official gatherings sponsored by members of Congress with an interest in retirement security issues. On May 1, a bipartisan group of legislators (13 senators and 24 representatives) attended a session devoted to pension portability. "Witnesses" included attorneys from firms involved in retirement issues, representatives of the American Society of Pension Actuaries, an official of Fidelity Investments, and an IBM official who heads that company's retirement section.

The co-chairs of the meeting were Sens. Jim Jeffords, R-Vt., and Jeff Bingaman, D-N.M., and Reps. Nancy Johnson, R-Conn., and Earl Pomeroy, D-N.D.

NOTE TO RECIPIENTS: IEEE-USA PERSPECTIVES (from the Web) is published by The Institute of Electrical and Electronics Engineers - U.S. Activities (IEEE-USA), Washington, D.C. IEEE publication editors are encouraged to use all or portions of this information. To receive this publication by e-mail, contact Bernice Evans at [b.s.evans@ieee.org](mailto:b.s.evans@ieee.org) (please specify whether you are a Section/Society newsletter editor).

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## **Government Relations Info on the Internet**

IEEE-USA has established a Public Policy Forum on the World Wide Web.

Through the Forum, you can obtain copies of IEEE-USA position statements, public policy materials, information on government fellowships and internships, questions posed for member input and a host of other public policy resources and links. The IEEE-USA Legislative Report newsletter is also available on-line. To access the Forum, point your Web browser at IEEE-USA's Home Page at <http://www.ieee.org/usab>.

IEEE-USA government relations information is also available by electronic mail through the Internet. Information in-

cludes IEEE-USA's Public Policy Agenda for the 105th Congress ([info.ieeeusa.agenda@ieee.org](mailto:info.ieeeusa.agenda@ieee.org)), a list of current IEEE-USA position statements ([info.ieeeusa.pos@ieee.org](mailto:info.ieeeusa.pos@ieee.org)), a chronological log of IEEE-USA testimonies and communications with public policy-makers ([info.ieeeusa.policy@ieee.org](mailto:info.ieeeusa.policy@ieee.org)), and the IEEE-USA Legislative Report newsletter ([info.ieeeusa.legrpt@ieee.org](mailto:info.ieeeusa.legrpt@ieee.org)). To obtain these documents, send an e-mail request via Internet to the indicated address (no subject line or text message required). An autoreponse text file will be automatically returned to your e-mail address. IEEE-USA electronic information is also available through the IEEE gopher server ([gopher.ieee.org](http://gopher.ieee.org)) under IEEE

Products and Services, in the United States Activities Information subdirectory. For more information, contact Chris Brantley (c.brantley@ieee.org).

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## Frontline Moves to the Web

*Frontline*, the IEEE-USA Employment Assistance Committee's bi-monthly report, is moving to the front of the line in modern publishing by moving permanently to the World Wide Web. *Frontline*, previously a print publication, will now appear solely on the Web through IEEE-USA's site at [www.ieee.org/usab](http://www.ieee.org/usab). To view the most recent report, click on the "Employment Services" or "News & Publications - Topical Newsletters" links. The current issue of *FRONTLINE* includes information on lifelong employability, networking, improved services for job keepers and job seekers, and the electrotechnology industry database.

## Coming Next Year: *Today's Engineer*

*Today's Engineer*, the first magazine to be devoted exclusively to the professional lives of engineers in all technical fields, will begin quarterly publication by IEEE-USA in January 1998. "In an era marked by rapid changes in technology, the world economy and corporate culture, there is a crying need for a publication that gives engineers the tools they need to build successful and rewarding careers," said Gus Gaynor, the new magazine's editor-in-chief. "*Today's Engineer* aims to provide them what they can't get from technical courses, conferences and publications — and present it with intelligence, sparkle and wit." Gaynor said he hopes *Today's Engineer* will help engineers "think outside the cubicle" in order to take control of their professional destinies.

IEEE-USA had considered publishing the magazine in the fall of 1997, but set the launch date to early 1998 in part to allow members the opportunity to subscribe when they renew their IEEE membership. For more information on *Today's Engineer*, call 202-785-0017 or send e-mail to [ieeusa-magazine@ieee.org](mailto:ieeusa-magazine@ieee.org). To subscribe, call 800-678-IEEE and ask for JP2969. Annual subscriptions are \$18.95 for individuals (\$12.95 for IEEE members), and \$6.95 each for group subscriptions of 50 or more.

## Student Member Survey

Here are some highlights from the 1996 IEEE Student Member Survey initiated by the Student Activities Committee and coordinated by Institutional Research and Strategic Planning.

A total of 1,000 surveys were mailed to randomly sampled IEEE student members in Regions 1-10. An impressive 594 graduates and undergraduates responded. The average age of respondents is 26.5 years.

The level of satisfaction with IEEE student membership and with IEEE products and services is 75 percent, but many students apparently are not aware of several products and services.

The top two reasons given by respondents for joining the IEEE were access to technical publications and the suggestion of a professor. Secondary reasons for joining included professional aspects such as the opportunity to network, resume enhancement and reduced conference registration fees. However, students in Regions 1-7 tend to value the professional aspects more, whereas in Regions 8-10, students valued the technical publications most. Of those responding and planning to renew their IEEE mem-

bership after graduating, the top reason is IEEE technical publications.

For those trying to define new services, the study concludes that graduate students want technical resources and undergraduate students want technical and professional resources. Undergraduates value professional resources more highly than graduates, since they are primarily concerned with launching their careers. However, undergraduate students overwhelmingly still join for, and value, technical information.

The Student Activities Committee will be evaluating the survey results to help identify ways to better meet student member needs, in particular the different needs of graduate and undergraduate students and Student Branch-Section interaction programs that should help provide greater professional value for undergraduate students.

The HTML version of the survey results is on the Web at <http://sandbox.ieee.org:9100/survey.html> and the MS Word version is at <http://sandbox.ieee.org:9100/survey.bin>. Printed copies are available from Laura Durrett - Student Services, IEEE Regional Activities - telephone 732-562-5523; fax 732-463-3657; email [l.durrett@ieee.org](mailto:l.durrett@ieee.org).

# *Today's Engineer*

## A Professional Magazine Published by IEEE-USA

As most of you are aware, IEEE-USA will publish a professional magazine dedicated to the non-technical needs of practicing engineers in all disciplines. The magazine will provide the necessary guidance at a time when new demands are being placed on all engineering disciplines. Technical competence is an excellent starting point, but it must be supplemented with non-technical knowledge and skills.

Global competition has imposed new demands on engineers because of:

- Shortened technology and product life-cycles;
- Business globalization - technology, markets and needs;
- Need for cycle-time reductions in all functions;
- Society's ever-increasing demands for more accountability;
- Potential of the virtual organization; and
- Emphasis on bottom-line performance for sustained performance.

These demands require a change in the way engineers view their job requirements.

Engineers need to understand their business environment and recognize the linkage of engineering and business performance. This change in Philosophy presents an opportunity for engineers to take a much broader view of their profession and not only make a substantially greater contribution to their organization, but also to enjoy greater satisfaction and benefits from their professional efforts.

The proposed magazine, published quarterly and expanded as the need arises, will be on a par with the best commercially and professionally produced magazines, both editorially and aesthetically.

The IEEE-USA Magazine can be the springboard that provides the information and the direction for making the transition to a new and expanded role for the engineer in an ever-increasing global economy.

### **Purpose/Mission:**

The magazine's purpose/mission is to provide engineers with the information that enhances their learning opportunities for career satisfaction and advancement, encourages a business perspective, prepares engineers for technical and general management, and raises the stature of the engineering profession in society.

### **Objectives:**

1. To develop the magazine so that it becomes the principal source of non-technical educational material for the practicing engineer by providing useful and validated information to guide engineers in their day-to-day activi-

ties from personal, organizational and societal perspectives.

2. To expand engineers learning horizons with emphasis on the lifetime approach to learning, the need for expanding the breadth of knowledge, and the integration of knowledge from allied professions.
3. To identify and discuss the issues related to the:
  - Unique knowledge that engineers bring to decision-making processes;
  - Role of engineers in and ever-increasing global technological world;
  - Engineer's capability to influence business strategy;
  - The role of engineers in innovation and entrepreneurship;
  - Continual changes in the engineers' working environment that often produce conflicts with engineering philosophy and accountability to self, the organization and society;
  - Opportunities for career growth and satisfaction; and
  - Contextual nature of engineering and business ethics.
4. To structure the magazine content so that it will be accepted by engineering managers as a primary source of educational material for the non-technical side of engineering
5. To be the "Magazine of Choice" on the issues facing all engineers, engineering students, and those making a transition from academia to industry.

### **The Product/Service Description:**

*Today's Engineer* is a quarterly professional magazine for the practicing engineer in all engineering disciplines. It provides information for practicing engineers about the non-technical competencies that allow engineers to expand their possibilities by linking the absolutely essential technical competence with the non-technical through emphasis on:

- Communications;
- Individual and organizational skills;
- Personal career choices;
- Career impact from changes in the economy, global competition, corporate reorganizations, government regulations, social demands, academia, and those self imposed;
- Technology and its relation to business needs;
- Technology-based aids to engineers' careers;
- The changing role of the engineering function;
- Technology-based issues that drive business performance; and
- Engineering and business ethics.



# Sharing Activity Letter

Welcome to the December 1996 sharing Letter. Here is your opportunity to shout about your accomplishments, lament in your disappointments, call for help from your peers around the world and read about the activities of IEEE in local and remote locations.

And we are now shouting in a new medium. The TAB home page is up on the Web and the Sharing Letter is included for everyone in IEEE and beyond to read and enjoy. Our web-site is (<http://www.ieee.org.tab>).

From Cairo, Soliman El Debeiky, Chairman of the PES Egypt Chapter informs us of a novel function. He writes that the Chapter is playing an effective role publicizing the activities of and interfacing with the Ministry of Electricity and Energy, the Electric Utilities and the Electrical Industry Factories, for the benefit of the electricity sector of the country. In following this concept the Chapter has sponsored several technical seminars and workshops at these authorities and factories. The meetings were open to all practicing engineers have been very well attended. Not only have they been successful meetings but Chapter membership has been growing as well. Perhaps some adaptation of this principle will help other Chapters.

Nelson George, Chairman of the Joint IAS/IES Chapter of the Kerala Section in India writes, first of all, to applaud the Sharing Letter for its information and inspiration to other Chapter volunteers. We thank you. His Chapter recently conducted a video tutorial on Protection of Synchronous Generators that drew an attendance of over 55. The program was followed a discussion session. The attendees were especially appreciative of the IEEE video program which they used. Its quality was excellent.

Did you know that 1997 marks the 500th anniversary of the discovery of Newfoundland by John Cabot? We learned this from Madan S. Rana, Chair of the Newfoundland and Labrador Section. The Section, in addition to organizing technical sessions during the year, also sponsors an annual conference, Newfoundland Electrical and Computer Engineering Conference (NECEC). NECEC'96, the 7th annual conference in May, attracted over 100 delegates.

From May 25 to 28, 1997, the Section is hosting a national conference sponsored by EEEE Canada, the 10th Annual Canadian Conference of Electrical and Computer Engineering (CCECE). The conference theme will be "Engineering Innovations: Voyage of Discovery." Nadan suggests that attending CCECE'97 would be an excellent opportunity to witness the Newfoundland 500th anniversary celebrations.

The Information Theory Chapter of the Taipei Section was formed in April 1995 and constitutes a small, close knit group, writes Mao-Chao Lin, Chairman. They have held workshops on Information Theory and Communications, on Wireless Communications and Networks, and on Information Theory and Communications. These workshops generally accommodate 6 to 10 speakers and attract almost 50 attendees. We hope

this is only the beginning and that the scope and size of the workshops will continue to grow.

We have received our first letter from France, from Ferdy Mayer, Chairman of the French and Belgium Chapter of the Electromagnetic Compatibility Society and... angel' of the French, Belgium and German Chapters." Among the many activities that Ferdy presents are the completion of a cooperative agreement with the French Scientific Society, underwriting refreshments and other incentives to promote meeting attendance, new members during Chapter meetings and spearheading direction for the Chapter. Congratulations. This is the kind of leadership that young Chapters need. Ferdy also key-noted the 1995 EMC Wroclaw Symposium in which he set the direction for the role of local Societies and Chapters.

In the United States, Nirwan Ansari, Chairman of the North Jersey Communications Society Chapter proudly reports that his Chapter, along with the Toronto Chapter, has been awarded the Society Chapter of the Year citation. Congratulations to both Chapters. North Jersey had 15 technical meetings in 1995 and six so far this year including a series on Wireless Communications, which seems to be this year's hot topic. Nirwan reports that a successful format has been to co-sponsor meetings with other Chapters and with the Center for Communications and Signal Processing at the New Jersey Institute of Technology. Co-sponsoring with an academic institution is an idea that others may try.

Talking about co-sponsoring, Bob Camillone, chairman of the Chicago Section Systems, Man and Cybernetics Chapter reports on a successful talk on the Bayesian Reliability Method by Gene Lamberson, Dean of Engineering at Western Michigan University. This meeting was co-sponsored by the Section Reliability Chapter, the Fox Valley Subsection, Vehicular Technology Chapter, IAS and a group from the Illinois Section of ASCE. We hope it was a standing room only crowd.

Here is a brand new one. Monica Mallini, Chair of the Beaumont Section, Louisiana, tells of a Student Branch fund raising activity that should make all you Section and Student Activities Chairs take notice. The Branch at McNeese State University, led by Branch President Will Atherton, has developed a training course in popular computer software and Windows 95 for the public, working through the McNeese Leisure Learning program. The program does all the advertising, registration and fee collection. The students do the teaching and their arranged fee is for the benefit of the Branch. For the record, each course is 3 hours long and priced under \$60 per attendee including textbook. The Student Branch earns about \$600 per class and a \$45 honorarium goes to the student instructor, who also gains valuable presentation experience. The school collects an overhead fee for the use of the facilities. The textbook for this very popular course, written by the students, contains information about the IEEE and the

McNeese Student Branch. This sounds like an innovative productive program in which everyone wins. Great idea!

Harry Heflin Chairman of Boston Section EM Chapter has a new publicity slant. His Chapter collects email addresses from meeting attendees. He then emails notices a week before the meetings to all these people. Not only has it increased attendance but many recipients have thanked him for reminding them of the meeting. This could become a method of choice as the use of email keeps expanding.

Also from the Boston Section, we have received the 1996 schedule of meetings from the I&M Chapter Chair, James Becker. The Chapter plans eight technical meetings this year including lectures on Wavelet Video Compression, New Instrumentation from HP, Creation of 3D Sound, and visits to several local manufacturers. One unique program is to be a visit to the Harvard Museum of Scientific Instrumentation. This sounds like a great idea.

Finally from Dave Kemp, Chair of the Toronto Section Professional Communication Chapter, comes a suggestion that the Chapters could start recognizing their outstanding members by introducing awards programs within the Chapters themselves. Awards can be for a myriad of accomplishments — best paper, best attendance, most service, best technical success, etc. These should be passed through Jayne Cerone's office so that they can be recognized at headquarters. Properly

conducted award ceremonies could become vehicles for improved attendance at meetings.

Keep the letters pouring in. We're now pretty current with the mail so we look forward to your information. The Sharing Activity Letter can also be used as a vehicle for promoting conferences and meetings, now that we are on the Internet.

Send your information to Jayne Cerone at the Technical Activities Department office.

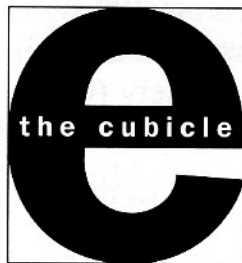
**That's it for now.  
Best Regards,  
Harold S. Goldberg  
Chair, TAB Public Relations Committee**

If you would like to provide information for the SHARING ACTIVITY LETTER, contact:

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email: j.cerone@ieee.org.

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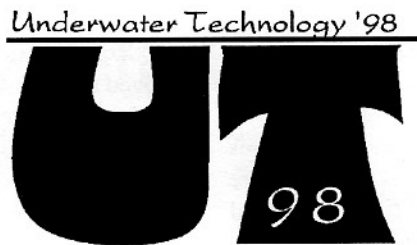
## Upcoming Conferences

**SIGNAL & IMAGE PROCESSING (SIP '97)**  
New Orleans, LA 4-6 December 1997  
Contact: Nader M. Namazi, Dept. of Electrical  
Engineering, The Catholic University of America,  
Washington, D.C. 20064

**OCEANS '97 MTS/IEEE**  
Halifax, Nova Scotia 6-10 October 1997  
Contact: Dr. Ferial El-Haway  
(902) 443-2400 Fax: (902) 445-5110

**OCEANS '98**  
Nice, France September 28-  
October 1, 1998  
Contact Pierre Sabathe  
Thompson Marconi Sonar, 52, Route des Dolines, BP  
157, 06903 Sophia-Antipolis, FRANCE,  
Phone: +33 492 96 44 69 Fax: +33 492 96 39 25  
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**UNDERWATER TECHNOLOGY '98**  
Kokyo, Japan 20-22 April 1998  
Contact: Prof. Tamaki Ura, [ura@iis.u-tokyo.ac.jp](mailto:ura@iis.u-tokyo.ac.jp),  
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# UNDERWATER TECHNOLOGY '98

## CALL FOR PAPERS

The First IEEE Oceanic Engineering Society  
Pacific Rim Symposium on Underwater Technology

**“Key Issues for the Global Underwater Environment”**  
20-22 April 1998

Institute of Industrial Science,  
University of Tokyo and United Nations University  
Tokyo, JAPAN

The beauty of Tokyo in April 1998, with its colorful cherry blossoms and azaleas, will greet international experts as they attend Underwater Technology '98. One of the most pleasant months in Japan will host this new symposium, which is organized by the Institute of Electrical and Electronics Engineers (IEEE) Oceanic Engineering Society (OES), its Tokyo Chapter, and the University of Tokyo's Institute of Industrial Science, along with host participating organizations from several countries as indicated herein. A primary goal of IEEE OES is to take its symposiums around the world, where emerging technology and applications can be synthesized into solutions for the future. “Key Issues for the Global Underwater Environment” will provide a thematic umbrella under which attendees will discuss the problems and potential long term solutions which concern not only the Pacific Rim countries, but the world in general.

The symposium venue will be the University of Tokyo or the United Nations University. Attendees will also have an opportunity to visit area attractions including the Japan Marine Science and Technology Center (JAMSTEC) and other historical and cultural attractions around the Tokyo area. Symposium details are provided throughout this Call for Papers including abstract submission guidelines, points of contact for additional information, and topics to be addressed.

Don't miss out on this premier international event. Come to Tokyo in April, and join your colleagues from around the world as they address “Key Issues for the Global Underwater Environment.” Internet via < <http://underwater.iis.u-tokyo.ac.jp/ut98/> >



## TOPICS

Sessions will cover various technologies and applications in the underwater environment. Topics may include, but are not limited to, the following areas:

### Underwater Acoustics

Global Acoustics, Tomography  
Acoustical Oceanography  
Sound Propagation & Scattering  
Transducers & Arrays

### Underwater Observation

Imaging Systems  
Sensors  
Instrumentation Systems  
GOOS-Coupled Systems

### Underwater Telemetry

Data Transmission Systems  
Video Transmission Systems  
Long Range Communication  
Submarine Cable Systems

### Underwater Positioning

Mapping & Guidance Systems  
GPS-Coupled Systems  
Navigation & Tracking Systems  
Geodetic Measurement Systems

### Underwater Vehicles & Robotics

ROVs & AUVs  
Manned Submersibles  
Underwater Robotics  
Underwater Platforms

### Signal & Information Processing

Detection & Estimation  
High Resolution Processing  
Image & Signal Compression  
Neural & Fuzzy Systems

### **INTERNATIONAL ACTIVITIES:**

Daily keynote papers will cover new underwater technology developments and applications by Pacific Rim Countries to give attendees a better understanding of the needs and important uses of this technology.

### Abstract Submission

Prospective authors are invited to submit proposed abstracts (limit to one page) by E-Mail, Fax, or regular mail. Please use the form for abstract submittal. If using E-mail, please include the same information within the E-Mail message, not as an E-Mail attachment. In the abstract, authors should define the topic/problem that is being addressed, indicate the importance and how it pertains to the advancement or understanding of underwater technology. Following review of abstracts by the symposium technical committee, accepted authors will be notified by mail, and an author's kit for paper preparation will be provided. The following deadlines will be adhered to:

**Abstract Deadline - October 15, 1997**

**Notification of Acceptance - November 15, 1997**

**Camera Ready Paper Due - February 1, 1998**

### Presentation of Papers

The Technical program committee will assign papers to the appropriate sessions. Since formal papers and supporting data will be published in the Symposium proceedings, presentations will be limited to 20 minutes, with 5 minutes for discussions. The official language of the symposium is English.

### Expenses Related to Papers

All papers are to follow the format provided in the author's kit. It is the responsibility of the authors to prepare camera-ready manuscripts, including halftone black & white photos for the symposium proceedings. Authors are responsible for all expenses incurred, including time spent, costs for preparation of manuscripts and illustrations, travel to the symposium and symposium registration fees. Presentations will only be allowed for those papers received in time for publication in the Proceedings. Accepted author's who fail to register at the symposium and present their paper will be billed for the cost of publishing the paper.

# ABSTRACT FORM

DEADLINE FOR SUBMISSION OCTOBER 15, 1997

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ABSTRACT (*please attach your abstract - limited to one page*)

PAPER TITLE \_\_\_\_\_

AUTHORS (NAMES IN ORDER DESIRED)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I AM WILLING TO ORGANIZE AND CHAIR A SESSION ON THE FOLLOWING TOPIC \_\_\_\_\_

CATEGORY MOST APPROPRIATE FOR THIS PAPER (see list on preceding page) \_\_\_\_\_

OTHER SUGGESTED CATEGORY: \_\_\_\_\_

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DEADLINE: OCTOBER 15, 1997

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Japan Deep Sea Technology Association  
Japan Marine Science and Technology Center  
Japan Society for Marine Surveys and Technology  
Kansai Society of Naval Architects, Japan  
Marine Acoustics Society of Japan  
Marine Acoustics Society

Marine Technology Society - Japan Section  
National Science Foundation  
NOAA Underwater Research Program  
Oceanographic Society of Japan  
Society of Naval Architects of Japan  
US - Japan Cooperative Program in Natural Resources  
West Japan Society of Naval Architects





IEEE



# OCEANS'98

“Engineering for Sustainable Use of the Oceans”

## Early Announcement

ACROPOLIS Conference Center

Nice, FRANCE

28 September - 1 October 1998

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Oceans'98 organized by the Oceanic Engineering Society (IEEE/OES) in Nice on the French Riviera celebrates the second venue of the conference in Europe. This ocean's conference will be set under the theme of engineering for a sustainable use of the oceans which is also the main theme for the European Union Marine and Science Technology (MAST) programme.

### TOPICS

#### 1-Underwater Acoustics

Detection  
Classification & Localization  
Tomography  
Transducers & Arrays  
Propagation

#### 5-Data Acquisition & Processing

Marine GIS  
Modeling & Simulation  
Data Compression & Data Bases  
World Wide Web

#### 2-Oceanographic Instrumentation

Water current measurements  
Optical & Chemical Instruments  
Buoys & Moorings  
Profilers  
Wave & Tidal Measurements

#### 6-Remote Sensing

Active Instruments  
Passive Instruments  
Air/Sea Interactions  
Physics of Remote Sensing

#### 3-Underwater Vehicles & Systems

AUV  
ROV  
Manned Submarine  
Towed Vehicles  
Benthic Stations  
Robotics

#### 7-Signal, Image, Information Processing

Non Acoustic & Acoustic Image Processing  
Sonar Signal Processing  
Neural Networks  
Localization & Tracking

#### 4-Positioning, Navigation & Control

Global Positioning  
Communication  
Mission Control  
Underwater Telemetry

#### 8-Coastal Management & Ocean Resources

Coastal Monitoring  
Coastal Circulation  
Sediment Transport  
Polar & Severe Environments  
Ocean Energy

The technical program will include **paper, poster** and **tutorial sessions**.

A large State of the Art **EXHIBITION** in the field of Marine Technology will be held in the Acropolis Conference Center.

### IMPORTANT DEADLINES

Abstract Deadline: February 6, 1998  
Notification of Acceptance: April 10, 1998  
Camera Ready Paper: June 19, 1998

In order to be sure to receive the Call for Papers, the Advance Program or all the information concerning the Exhibit, please fill in the requested information and send it back to one of the shown information addresses.

### INFORMATION

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I wish to present a paper

yes  no

Exhibition (see other side)





• **The Conference : Oceans'98**

- This will be the 32<sup>nd</sup> event of the yearly Oceans' series of conferences. The 1997 conference will take place in Halifax, Nova Scotia, Canada from 6 to 9 October 1997.
- The last three conferences were held respectively in :
  - Brest, Bretagne, France : Oceans'94
  - San Diego, Ca, USA : Oceans'95
  - Fort Lauderdale, Fl, USA : Oceans'96
- Each of them had an average of :
  - 350 papers and additional posters,
  - 800 delegates at the conference,
  - 40,000 square feet of Exhibition with 3,000 visitors
- And 150 Exhibitors displaying :
  - Oceanographic Instrumentation
  - Sonar Systems
  - Navigation / Position Fixing Systems
  - Autonomous Underwater Vehicles
  - Cables - Connectors - Winches
  - Computing - Software - Simulation

• **The Venue : Nice, France**

- Oceans'98 in Nice will take advantage of a wider European attendance. 300 millions people live less than 700 miles away from Nice International Airport. On the Mediterranean seaside, 30 miles south of 10,000 feet mountains, Nice and its close neighbours, Cannes and Monaco enjoy exceptional weather conditions and furthermore, the sunny French Riviera is a renowned technology center with 200 research labs and 11 universities.

• **The Sponsor : IEEE**

- The Oceans' series of conferences sponsor, the Institute of Electrical and Electronics Engineering, is the largest non-profit technical organization in the world with more than 300,000 members.

I wish to exhibit

yes  no

**EXHIBITION**

- The Exhibition will be held close to the session rooms and will cover approximately 35,000 square feet.
- Many firms involved in products or services related to Marine Technology will be present during the Conference.
- Booths will be proposed:
  - partly equipped as multiple of 80 square feet (9 sq. m.) area.
  - non-equipped with a minimum of 55 square feet (6 sq. m.) area.
- Exhibitor's Information Kits will be available starting from September 1997.



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