



# THE POCKET SCOPE



The Institute of Electrical and Electronics Engineers, Inc.

Volume 53, Number 12

August 2003

## SCOPE NOTES

### August

#### Houston Section News

**Where:**  
HESS (Houston Engineering and Scientific Society)  
5430 Westheimer @ Yorktown

**When:** Thursday, September 18, 2003

6:00 - 6:30 p.m. Social  
6:30 - 7:30 p.m. Dinner  
7:30 - 8:30 p.m. Speaker

**Cost:**  
\$10.00 - IEEE Members with 48-hour advance reservations.  
\$20.00 - non-members  
\$5.00 - students  
Call (713) 207-IEEE to make your reservations.

See Page 2 for the Continuing Education Schedule!

IEEE WEB ADDRESS

[http://  
\(www.ieee-houston.org\)](http://www.ieee-houston.org)

IEEE Houston Section  
P.O. Box 460014  
Houston, Texas  
77056-8014

## The Chairman's Message

### Dwayne Lowry



For most of us summer vacations are over, school is getting back in session and, hopefully, jobs will become more plentiful and the stock market will continue to rise. Good forecast for the coming fall. And, with the coming fall will be our Fall meeting.

September 18 will feature **Don Shafer** who is a co-founder, corporate director and Chief Technology Officer of Athens Group, Inc. Incorporated. The Athens Group is an employee-owned consulting firm, integrating technology strategy and software solutions. Don will talk about software simulation and this proves to be a very interesting and informative evening.

Just another reminder to set aside October 17 to participate in our 2nd annual IEEE-Houston Golf Tournament. Proceeds from the event will go to providing \$1,000 scholarships to Section member sons, daughters, grandchildren, etc. We were able to award 3 scholarships this year and look forward to increasing the number in 2004.

Our three scholarship awards this year went to Haley Overton Wilson - Sr. Computer Science Major, Texas A&M; Allen Wan - Sr. EE Major, Rice University; and Li Qi - PhD Student EE, Texas A&M. Congratulations to all of you. And, we hope to have many more applicants for the awards next year so consider who would be viable candidates now.

Have you looked at all the benefits available to IEEE members on <http://www.ieeeusa.org/>. Of special interest might be the "[IEEE Financial Advantage](http://www.ieee.org/memberbenefits)". A full list of member benefits can be found at <http://www.ieee.org/memberbenefits>.

We have two calls for papers. The first is for students to participate in the annual Region 5 Technical Conference and Leadership Workshop to be held April 2-4 in Oklahoma City, OK. See details elsewhere on the website. The other "Call" is for the PCIC Technical Conference in San Francisco September 13-16, 2004. Details are included in [this PDF flyer](#).

[Click Here](#) for an announcement and class schedule for University of Houston's Fundamentals of Engineering (FE) Review Course. Classes start 8/26 and run through October; times are 7:15-9:15 PM. This course is offered before the next Texas state boards for engineers who wish to obtain the Professional Engineering license. The FE is the first test and must be passed before the actual Professional Engineering state boards can be taken. The next FE/EIT test is Saturday, Oct. 25.

The IEEE International Symposium on Intelligent Control will hold it's workshop in Houston at the Westin Galleria October 5-8, 2003. Check out their excellent [Tutorial](#)

CONTINUED ON PAGE 2

## Chair Message-CONT

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[Workshops.](#)

### Other Items of Interest:

- **Ask the Right Questions When Financing a Home - a very timely topic**  
Many people often fail to ask the right questions when they shop for a mortgage. Understanding your options, especially now with interest rates in the United States at their lowest levels in 40 years, helps you get terms that can save you thousands of dollars during the life of the loan. Here's how: · [http://www.theinstitute.ieee.org/inst\\_art.jsp?isno=07031&arnumber=07031\\_7w.fapmortgage&section=7](http://www.theinstitute.ieee.org/inst_art.jsp?isno=07031&arnumber=07031_7w.fapmortgage&section=7)
- **IEEE JOURNALS RANK HIGH IN ANNUAL CITATION STUDY**  
Access to the latest technology is one of the benefits of IEEE membership. IEEE publishes the top eight journals in electrical and electronics engineering and the top seven journals in telecommunications, according to recently released results from the Institute for Scientific Information's annual Journal Citation Reports (2002 edition). The ISI study ranks journals by their impact factor — the number of times their papers are quoted or cited by other scientific publications in their initial year of issue publication. You can view the report in more detail at · <http://www.ieee.org/citations>.
- **Election Ballots Coming in September**  
Ballots for the annual election of an IEEE President-Elect and other officers will arrive in the mail in September. Find out more details at · [http://www.theinstitute.ieee.org/inst\\_art.jsp?isno=07031&arnumber=07031\\_7w.newselections&ion=41](http://www.theinstitute.ieee.org/inst_art.jsp?isno=07031&arnumber=07031_7w.newselections&ion=41)
- **HIGH TECH "BABBLE"? TEST YOURSELF!**  
An interesting article regarding the results of a survey done on technical jargon can be found at · <http://news.bbc.co.uk/2/hi/technology/3054210.stm>. You can take the jargon quiz at · <http://www2.amd.com/us-en/gcab/lt/exam/1,,00.html>. We suspect that IEEE members would do better than the general population (3% of the 1500 people surveyed in the US, UK, China and Japan got a perfect score)

Dwayne Lowry  
Houston IEEE Section Chair

## IAS Chapter Meeting

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**Meeting Date:** August 26, 2003  
**Time:** 5:30 PM to 7:00 PM  
(Refreshment will be provided)  
**Place:** Bechtel Building  
3000, Post Oak Blvd  
Houston, TX 77252  
Conference Room 4A

**Reservations:**

**Contact - Sunita Kulkarni**

**Tele: 713 235 2833**

**Email: [skulkarn@bechtel.com](mailto:skulkarn@bechtel.com)**

**Mr. Bill Brooks of Power Battery Co. will present seminar on Battery Failures, Battery Monitoring, and battery Manufacturer's Warranty. This seminar will discuss in detail:**

1. 20-year VRLA batteries – Why do they fail “early” and what can be done about it?
2. Battery monitoring – What are the value, functions, and warranty benefit?
3. Warranty – The importance thereof and the end user's responsibility.

*Currently, Mr. Brooks is a director of Regional and Latin American sales for Power Battery Company. He was on the engineering team at GNB that developed VRLA technology for 10-year and 20-year design products. He is also active in IEEE - Battery Council International.*

**There is no charge for this seminar, but it is sure to provide valuable information.**

## IAS/PCIC Annual Conference



### Welcome to PCIC 2003 / Houston, Texas (from Mr. Kirk Armintor, Local PCIC Committee Chairman)

Welcome to Houston!

The Petroleum and Chemical Industry Committee of the Industry Applications Society of IEEE Invites you to the 50<sup>th</sup> Annual PCIC Conference in Houston, Texas USA. This PCIC Conference is the Industry Application Society's premier meeting for the practicing electrical engineer seeking practical information directly applicable to his or her work.

The Conference will be held September 15 – 17, 2003 at the Westin Galleria Hotel, located in The Galleria set beneath spectacular glass atriums. Between the Westin Galleria and the Westin Oaks, most or all of the conference attendees will be accommodated. The Galleria complex features 300 fine stores, restaurants and an impressive ice rink. This world-class shopping complex showcases the best names in retailing including Neiman Marcus, Cartier, Gucci, Macy's, Tiffany & Co., Saks Fifth Avenue, The Sharper Image, Ralph Lauren Collection, Lord & Taylor and St. John. A 700,000 square-foot expansion added 70 stores, including Foley's and Houston's first Nordstrom.

With the expansion, The Galleria has become the fifth largest mall in the nation highlighted by nine types of stone, suspended glass balconies, three types of wood, glass skylights, and plush leather seating. With three office towers, two hotels, 1.7 million square feet of retail space, and a variety of restaurants, The Galleria is a city within a city.

Houston is one of the most diversified city's on the Gulf Coast, if not the nation, with a \$15-billion petrochemical complex. Houston is a major U.S. gateway for international trade, and ranks number one in the nation in foreign tonnage and second in total tonnage. There are 77 countries represented in the area with consulates.

The renowned Texas Medical Center is home to 42 non profit institutions on 675 acres, ranking it as the largest medical center in the world. The Texas Medical Center has an estimated economic impact of \$11.5 billion a year on Houston's economy.

Houston's NASA/Johnson Space Center trains America's astronauts and coordinates operations development and design work for the space missions, Space Shuttle and the International Space Station.

The IEEE PCIC 2003 Houston Local Committee welcomes you to Houston with open arms. Great quest tours are planned. Ya'll come, stay a while and you will wonder why you went back home. We look forward to a fantastic Golden Anniversary with a very large quest attendance. After all, where else can you learn so much about your professional calling and have such a good time along the way. [http://www.ieee-pcic.org/Conferences/2003\\_Houston/index.html](http://www.ieee-pcic.org/Conferences/2003_Houston/index.html)



**Kirk Armintor**  
Local 2003 PCIC Committee Chairman  
Houston, Texas

## IAS/PCIC Annual Conference Call for Papers

### Petroleum and Chemical Industry Committee

[www.ieee-pcic.org](http://www.ieee-pcic.org)

### Call for Papers

51<sup>st</sup> Annual

IEEE IAS Petroleum and Chemical Industry Committee

Technical Conference

September 13 - 16, 2004

San Francisco Marriott, San Francisco, California

This is a premier conference for practicing electrical engineers, and selected papers are noted for high quality and practical application. Papers are requested on topics related to practical application of electrical technology, standards, equipment and systems of interest in the petroleum and chemical industries. All papers presented will be published in the conference record and subjected to a thorough peer review & evaluated for subsequent publication in either the IEEE Transactions on Industry Applications or Industry Applications Magazine. Authors must be in attendance to present their papers. The proposals will be reviewed and selected during the 2003 PCIC Technical Conference, September 15-17, 2003 in Houston, Texas.

#### Submission Calendar Deadlines:

Submittal of abstracts to General Program Chair Sept. 1, 2003

Notification of acceptance of submitted abstracts Oct. 1, 2003

Submittal of working drafts for Technical Review Nov. 30, 2003

Submittal of finished manuscripts May 1, 2004

#### To Submit a Proposal:

The following information must be included with the paper proposal. Submission by email or file attachment is preferred and will facilitate the review of your proposal:

1. Title of proposed paper
2. Author(s) name, company affiliation, e-mail address, business address, phone, fax (all of the information for each author), with the lead or corresponding author identified.
3. A 100-300 word abstract
4. If you have a preference, indicate if you wish to direct the paper to a specific subcommittee by noting the name of the subcommittee: Chemical, Electrochemical, International, Marine Industry, Production, Refining, Safety, or Transportation.

#### Submit your paper proposals to:

H. Landis Floyd, PE

PCIC 2003-2004 Vice Chair and General Program Chair

DuPont

101 Beech Street

Wilmington, Delaware 19880 USA

Phone: 302-695-0146 Fax: 302-695-0734:

[email: h.l.floyd@ieee.org](mailto:h.l.floyd@ieee.org)

## Senior Membership

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### Looking for Senior Member Nominations

READ THIS SECTION TO BECOME A SENIOR MEMBER IN THE IEEE.

A goal of our Region is to sponsor as many Senior Members as possible and I am asking your help. The IEEE criteria for Senior Member status is ten years of professional practice including five years of significant performance, and references. (See the nominator letter and application form for clarification on the IEEE website.) If you know an IEEE member who qualifies for Senior Membership, I would like you to nominate him or her by forwarding their nomination to one of the Houston Section Excom members. If you qualify and are not a senior member please reply to one of the Section Excom members. If you are retired and have met the criteria at one time let's get you nominated. Section meetings are the best networking tool to achieve Senior membership. As an alternative process, you can direct the prospective Senior Member to one of the Houston Section Excom Members. We have a list of several Fellows and Senior Members which we can use for references. The Section will nominate all those qualified who provide a resume and significant performance vita.

Senior Membership in IEEE promotes the value of membership and enhances the status of the member. This is an achievement award that honors our deserving members.

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## IEEE CED Program Relocates for 2003-2004

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### 2003-2004 CED seminar program will be hosted by Jacobs Engineering

#### IEEE CED Seminars Move to New Location for 2003-2004

The IEEE CED technical seminars for 2003-2004 will be held at the Jacobs Engineering facility located at 5995 Rogerdale Road (west side of Sam Houston Tollway between Bellaire and Harwin). The first seminar, Power Factor and Acceptance Testing is scheduled for Oct 7-8 and will be held at Jacobs Engineering. The complete schedule of CED seminars and registration details for 2003-2004 are being finalized and will appear in the next Pocket Scope.

#### IEEE CED Committee Looking for Electrical Engineering "War Stories"

Do you have an interesting or unique electrical engineering story to share? The IEEE CED Committee extends an invitation for you to share your experience as part of their "lessons learned" program. Selected guest speakers will be allowed to share their real life experiences in a 20-30 minute time slot at the end of a regular CED seminar presentation. For example, if you have an experience relating to synchronous motors you would share your story as a "Trailer" at the end of the CED synchronous motor seminar. The objective is educational. Sharing real life experiences from the field with other electrical engineers in an educational forum. If you have a story to share and would like to participate in the "lessons learned" program contact Paul Barrett cell (713) 598-0790 office (713) 290-1151 or by e-mail paulbarrett@doulble-e-engineering.com

## IEEE Houston Section Scholarships 2003

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### IEEE - Houston Section 2003 Scholarship Winners!

Our three scholarship awards this year went to Haley Overton Wilson - Sr. Computer Science Major, Texas A&M; Allen Wan - Sr. EE Major, Rice University; and Li Qi - PhD Student EE, Texas A&M. Congratulations to all of you. And, we hope to have many more applicants for the awards next year so consider who would be viable candidates now.

Just another reminder to set aside October 17 to participate in our 2nd annual IEEE-Houston Golf Tournament. Proceeds from the event will go to providing \$1,000 scholarships to Section member sons, daughters, grandchildren, etc. We were able to award 3 scholarships this year and look forward to increasing the number in 2004

#### Selection Criteria for 2004 Listed Below:

In order to promote the interests of the Institute of Electrical & Electronics Engineers (IEEE) - Houston Section, and in support of its dedication to Engineering and Science, scholarship(s) will be awarded annually to selected applicant(s). For 2004, based on the success of the 2003 IEE - Houston Section Annual Scholarship Golf Tournament, (the number of scholarships contingent on golf tournament proceeds) \$1,000 scholarships each will be awarded to both incoming freshman and full time college students who meet the following criteria:

**ELIGIBILITY:** Limited to a full time student enrolled in an accredited college or university who (graduating high school senior are eligible):

- Is an IEEE - Houston Section member's child or grandchild  
\*\*\*\*OR\*\*\*\*
- Is a member of IEEE (Student Branch or other)

**DISCUSSION:** By restricting eligibility as above, scholarships are made available to those full time students who have an association with IEEE. This places applicants on a "level playing field" before selection criteria are applied to determine the scholarship recipients. All scholarships will be awarded on merit.

#### SELECTION CRITERIA:

##### Merit

- Candidate is enrolled, or is planning to enroll, in an Engineering or Science Curriculum
- His/her cumulative GPA (High School GPA for entering college freshman), SAT or ACT scores
- Discussion paper

##### DISCUSSION PAPER:

This document will be a key element in the scholarship selection criteria. Topics should include, but not be limited to, the following:

- Employment experience
- Activities/elected positions
- Career goals
- Honors/Awards
- Personal information
- Why are you seeking this scholarship

*IEEE Houston Section*  
*2<sup>nd</sup> Annual Scholarship Golf Tournament*

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**Tournament Details**

**Date:** Friday, October 17, 2003

**Time:** 8:00 AM Shotgun Start

**Place:** Newport Golf Club

**Type:** Fourman Best-ball, shotgun start

**Entry Fees:** \$110/person or \$400/team  
 (registered at the same time as a foursome)

**Tournament limited to first 36 teams (144 players)**

Fair market value for an individual entry is \$80.00 (for tax purposes)

➤➤➤➤➤ **Sponsorships A available** ⚡⚡⚡⚡⚡

**Includes:** 18 holes of golf, range balls, cart, lunch, participation in all of the "club sponsored" awards and prizes, refreshments on and off the course, sleeve of balls, tees

**Prizes A warded:** 1st, 2nd & 3rd Gross & Net, Longest Drive, Closest to the Pin & Door Prizes

Special Events

Door Prize/Mulligan tickets (\$5.00 per)

(No limit on the number purchased for door prizes. Only two can be used per person during the round of golf.)

**Fees & donations benefit the IEEE Houston Section Scholarship Fund.**

**For information, please contact one of the individuals listed below or see our website at:**

**<http://www.ieee-houston.org>**

**Dwayne Lowry @ 281-565-2316**

**Donald Dunn @ 281-862-5533**

**Gil Dolor @ 713-309-2023**

**P.J. Donner @ 713-945-7771**

**Scott Ballew @ 713-309-7721**

**Charles Benard @ 713-978-3790**

## International Symposium on Intelligent Control



# 2004 IEEE Region 5 Technical Conference CALL FOR PAPERS

### Chair

Todd Hiemer  
METI Corp.  
[todd.hiemer.pe@ieee.org](mailto:todd.hiemer.pe@ieee.org)

### Conference Vice Chair

M. A. Ovase  
USPS Technical Support Center  
[ovase@ieee.org](mailto:ovase@ieee.org)

### Technical Conference Chair

Nita Patel  
RSIS  
[nita.patel@ieee.org](mailto:nita.patel@ieee.org)

### SPAC Activities Chair

LoPresti  
Tulsa University

### Design Contest Chair

David Waldo  
Oklahoma Christian University

### Paper Contest Chair

Peter Lo Peter  
George Scheets  
Oklahoma State University

### Robotics Contest Chair

Monty Tull  
University of Oklahoma

### Registration Chair

Ken Pigg  
UpTime  
[j.k.pigg@ieee.org](mailto:j.k.pigg@ieee.org)

We invite you to participate in the annual Region 5 Technical Conference and Leadership Workshop to be held **April 2-4 2004** in Oklahoma City, OK (<http://www.r5okc.org>).

The conference will provide a unique opportunity for the academic and industrial communities to discuss research interests in the areas of computers, biomedical engineering, and power applications. The conference will offer its attendees high quality technical sessions, tutorials and workshops.

Graduate student authors are invited to submit papers documenting original research in the following areas:

- Computer & Circuit Applications
- Biomedical Engineering
- Power & Industrial Applications

**Abstract submission:** Abstracts must clearly and concisely state the specific results, why they are important, and how they relate to prior work. Please limit abstracts to one page. The technical committee must receive abstracts electronically no later than **15 October 2003**.

**Paper submission:** The student must (1) be a member of IEEE, (2) be the first author and primary developer of the idea, (3) have performed the work as part of an academic degree program, (4) pre-register for the conference and (5) present the paper at the conference.

**Tutorials/Workshops:** Proposals for half-day tutorials and workshops may be submitted to the Technical Conference Chair no later than October 1, 2003. Proposals must include (1) statement of objective, (2) intended audience and (3) outline of the presentation. The technical committee will review received abstracts and notify authors of acceptance by **30 November 2003**.

Please submit abstracts to [nita.patel@ieee.org](mailto:nita.patel@ieee.org). All submissions will be acknowledged by e-mail within two weeks of receipt. If you do not receive acknowledgment of your submission or are not able to send your submission electronically, please contact the Technical Conference Chair. **Contact** 405.366.9243x3519 (day) 405.307.0479 (evening) [nita.patel@ieee.org](mailto:nita.patel@ieee.org) Nita Patel RS Information Systems 2227 W. Lindsey Ave Ste 1500 Norman, OK 73069

### Important Dates

Submission of abstracts	<b>15 October 2003</b>
Notification of acceptance	<b>30 November 2003</b>
Final camera-ready papers due for publication	<b>1 March 2003</b>
Pre-registration deadline	<b>1 March 2003</b>

## COMSOC Wins Award

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Houston Communications Society announces that they have won a "2003 Chapter Achievement Award" from the IEEE Communications Society. It comes with a certificate and a \$500 honorarium that the COMSOC group hopes to use for one or more awards at the Houston Science Engineering Fair.

The presentation of the award will be made in December at GlobeCom2003 in San Francisco.

Details are at [www.comsoc.org](http://www.comsoc.org), and the announcement is attached.

Winning this award is a great honor for our Chapter, and it is a recognition of the hard work that officers and members have put in over the last several years, developing Houston ComSoc from a faltering chapter to one that serves as an excellent small-chapter model for the Region.

Thomas P. O'Brien, P.E. COMSOC-Chair

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## International Symposium on Intelligent Control

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IEEE 2003 International Symposium on Intelligent Control (ISIC'03) will be held in Houston October 5-8 at the Westin Galleria.

On behalf of the ISIC'03 General Chair, Gary Yen, I would like to invite IEEE members in Houston to our meeting and its associated tutorial sessions. We have made a deliberate effort to make the tutorial sessions attractive to working engineers and want to get the word out to as many people as possible.

For further information, our conference web site is at <http://vlab.ee.nus.edu.sg/~isic2003/>

Kevin L. Moore, Ph.D., P.E.  
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Logan, UT 84322-4120  
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email: moorek@ece.usu.edu

## IEEE-USA NEWS

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NEWS from IEEE-USA  
1828 L Street, N.W., Suite 1202, Washington, D.C. 20036-5104  
Contact: Chris McManes  
Senior Marketing Communications/Public Relations Coordinator  
Phone: + 1 202 785 0017, ext. 8356  
E-Mail: [c.mcmanes@ieee.org](mailto:c.mcmanes@ieee.org)

### IEEE-USA's Call for Reliability Legislation Underscored by Largest U.S. Power Outage

WASHINGTON (15 August 2003) - The latest major power blackout, affecting 50 million people in the northeastern United States and parts of the Midwest and Canada, underscores the urgent need for Congress to enact stronger electricity reliability standards for utilities.

"If left uncorrected, the decline in the quality and reliability of electric power will continue to imperil the lives of our citizens and seriously impact the nation's economy," IEEE-USA President Jim Leonard said. "Reliability of the electric grid needs to be the first and foremost consideration in any national energy policy. To restore reliability to its proper place at center stage in the market, Congress must pass legislation creating an organization empowered to develop mandatory and enforceable reliability standards."

IEEE-USA supports legislation empowering the Federal Energy Regulatory Commission to create a self-regulating reliability organization, the Electric Reliability Organization (ERO). The ERO will give the North American Electric Reliability Council (NERC) the necessary legislative authority to assure the reliability of the complete North American electric system, including elements in Canada and Mexico. NERC is a successful, voluntary, industry-created organization whose mission is to ensure that the bulk electric system in North America is reliable, adequate and secure.

Both the House of Representatives and the Senate have passed legislation that will help accomplish this as part of their respective comprehensive energy policy packages. IEEE-USA strongly urges both houses to act quickly to resolve remaining differences between the two bills and pass an energy bill with strong reliability provisions intact.

For more information on electricity reliability and communications from the IEEE-USA Energy Policy Committee, go to <http://www.ieeeusa.org/forum/blackout.asp>.

Electric power reliability problems have led to more blackouts in recent years than historically experienced in North America. Customers in 14 western states underwent scattered outages twice in the summer of 1996. Major outages occurred during the summer of 1999 in different regions of North America, including Chicago and New York. More recently, California experienced rotating blackouts, price spikes and near bankruptcy of several utilities starting in mid-2000 and continuing into 2001. For more background on major power disruptions, see <http://www.nerc.com/BlackoutTable.pdf>.

IEEE-USA is an organizational unit of The Institute of Electrical and Electronics Engineers, Inc., created in 1973 to advance the public good, while promoting the careers and public-policy interests of the more than 235,000 electrical, electronics, computer and software engineers who are U.S. members of the IEEE. The IEEE is the world's largest technical professional society. For more information, go to <http://www.ieeeusa.org>.

## IEEE-CAREER ALERT

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IEEE CAREER ALERT for 13 August 2003

Your weekly report on jobs, education, management, and the engineering workplace, from the editors of IEEE Spectrum

### IN THIS ISSUE:

1. Evaluating job offers — is this the one?
2. New on-line community on employment and career strategies
3. The photonics revolution
4. Workplace success through improved communication

#### 1. Evaluating Job Offers — Is This the One?

Congratulations on receiving that job offer! But is it the right one for you? Even in today's economy, it's important to evaluate everything about the offer you receive before you accept or decline it. Does the offer match the criteria you are looking for in a job — and in an employer? Read on at

<<http://www.todaysengineer.org/july03/evaluating.asp>>

#### 2. New on-line community for employment and career strategies

The IEEE-USA Employment and Careers Services Committee has launched a new online community through which members can network and collaborate on employment and career strategies. This virtual community provides discussion groups, chat rooms and resources, including information on resume writing, networking, interviewing skills, and consultants' fee setting. To become a member, go to

<<https://www.ieeecommunities.org/ecs>>

NOTE: Registration is free but requires the administrator's approval.

#### 3. The Photonics Revolution

The technological breakthrough created by the manufacture of optical fibers to process ever-increasing global communications demands has spawned a new discipline: photonics. Many experts think that photonics will drive communications innovation in the 21st century in much the same way that electronics dominated the 20th — which could mean more jobs for those involved in photonics research. Read on at

<<http://www.spectrum.ieee.org/careers/careerstemplate.jsp?ArticleId=c080503>>

#### 4. Workplace success through improved communication

Many gaps exist in the workplace, including gaps between expressed needs and their resolutions, and between problems and the resources necessary to solve them. For the individual, there may also be a gap between wanting to succeed and actually taking the steps necessary to achieve success. This gap widens for those who have not mastered the art of communication — the tool that facilitates success.

<<http://www.todaysengineer.org/July03/success.asp>>

The IEEE Job Site, available exclusively to IEEE members, can help you locate career opportunities easily and confidentially. Just complete a profile of your qualifications and requirements, and you'll be notified via email when a suitable job becomes available. Top employers know that IEEE members are the most qualified electrotechnology and information-technology professionals in the world. Take a few minutes to register with the IEEE Job Site and check out your career options today! <<http://www.ieee.org/jobs>>

IEEE Career Alert is prepared weekly by the editors of IEEE Spectrum, the flagship magazine of the Institute of Electrical and Electronics Engineers, read by more than 360,000 people worldwide. You'll find IEEE Spectrum's home page at: <<http://www.spectrum.ieee.org>>

IEEE Career Alert is part of the WHAT'S NEW@IEEE email news service. For more information on subscribing to other WHAT'S NEW newsletters, visit: <<http://whatsnew.ieee.org/>>

## IEEE-USA Needs You!

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The IEEE-USA has recently expanded its program of informing legislators and lawmakers on issues important to IEEE US members in the areas of technical policy and professional activities. As part of that program IEEE-USA is strengthening its grassroots lobbying program which will help individual IEEE-USA members interact more effectively with elected officials, thereby enhancing their role in the political process, and IEEE-USA itself.

One of the new components to the grassroots program will be a cultivated list of politically active members who would be willing to help contact local politicians regarding IEEE-USA's legislative priorities. The members should, ideally, be at least a little politically aware, but this is not essential. It is more important that they be interested in participating. We can always teach members politics if they already have the enthusiasm.

Once identified, these members will be organized, along with other interested members in their state, into a rapid-reaction force of political activists. IEEE-USA will provide the teams with training and materials to prepare them to promote IEEE-USA positions when the need arises. The teams will then be able to quickly respond to developments in their state and in Washington. They could, for example, be asked to place a letter to the editor in local papers, or speak on the behalf of IEEE-USA at a local town meeting. They will be asked to meet with their Congressional delegation in their local communities to present an IEEE-USA position on technology issues.

Opportunities arise every day to promote the legislative agenda, and these teams will give IEEE-USA the ability to respond far better than is done now. Accordingly, if you are interested in joining this grassroots effort, please let me know at [j.estey@ieee.org](mailto:j.estey@ieee.org) and I will pass your name along to IEEE-USA.

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## The 23rd IEEE International Real-Time Systems Symposium

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# RTSS-2002

The 23rd IEEE International Real-Time Systems Symposium

December 3-5

Austin, TX. (USA)

**Sponsored by the IEEE-TC on Real-Time Systems**

<http://www.cs.unc.edu/~baruah/Meetings/2002-RTSS/>

# EXECUTIVE COMMITTEE HOUSTON SECTION IEEE

**OFFICERS**

Dwayne C. Lowry, D.C. Lowry & Associates, Chairman.....	281-565-2316
Gil Dolor, Lyondell Chemicals, Vice-Chair.....	713-309-2023
Scott Ballew, Lyondell Chemicals, Secretary.....	713-309-7721
Charles Benard, Dow Chemicals, Treasurer.....	713-978-3790
Donald G. Dunn, Equistar Chemicals, Past-Chairman.....	281-452-8809
IEEE HOME PAGE.....	http://www.ieee-houston.org

**SOCIETY CHAIRS**

Thomas P. O'Brien, United Space Alliance, Communications.....	281-282-5881
Ernst Leiss, U of Houston, Computer.....	713-743-3359
Peri Klonas, U of Houston, Engr-Medicine & Biology.....	713-743-4429
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