



# THE POCKET SCOPE



The Institute of Electrical and Electronics Engineers, Inc.

Volume 53, Number 9

May 2003

## SCOPE NOTES

### May Houston Section News

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

**When:** Thursday, September 25, 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



The Region 5 Technical and Leadership Conference was held in New Orleans April 11 – 13 and provided a great opportunity to network with the Section Leadership from most of the other 23 Sections in the Region, as well as the full Region 5 leadership team. These conferences have always proven beneficial in providing ideas for new programs as well as different and innovative ways of administering current programs. Two common

themes of these meetings has been 1) attracting and keeping good volunteers (more about this later), and 2) creating programs that provide more benefit to our members. We picked up some ideas in New Orleans but would welcome suggestions from any of you.

Houston Section won the 2002 Section Sustained Membership Growth Award given by the Regional Activities Board "for Outstanding Leadership and Results in IEEE Membership Development Activities for REGION 5". This was in recognition of our overall membership growth in 2002 of almost 10%, which placed us tops in the world, when many Sections are suffering membership declines.

Regional Director, Jean Eason, acknowledged that this year celebrates Houston's 75<sup>th</sup> anniversary as an IEEE Section. Our Section is one of the oldest Sections in the world and has always been leader in many areas. We pay tribute to all of our members over the years and, particularly, for all of those volunteers who have dedicated a good portion of their time and talents to bringing more value to these members. We are planning an anniversary party for sometime later this year so watch the website and the PocketScope for more details.

History was made in the Section on April 23 when the first meeting of the Houston Section GOLD Affinity Group met for dinner and networking at Papisitos near the Astrodome. Over 20 new GOLD members attended along with several Section Executive Committee members. Many of the attendees were Student members from the award winning University of Houston Student Branch who are graduating soon and are looking to continue their IEEE membership as they transition from student life into the world of commerce. The historic event was organized by co-chairs Kristin Morrow and Rumana Chowdhury. If you are a "Graduate Of the Last Decade" you are eligible to participate in this new and exciting Affinity group. You can find Kristin's and Rumana's contact information here on the website.

Our second annual Golf Tournament, which raises money for college scholarships for deserving members' students, has been moved from the Spring to the early Fall. We will have more details on this over the summer.

We spoke of volunteers in our opening comments, above. The primary success of any "volunteer" organization is getting the volunteers. As my 14-year old daughter would respond to that comment, "Well, duhhh, dad!" OK, so what holds people back from volunteering? Many things, I'm sure, but in my many years of serving in

CONTINUED PAGE 3



## Chair Message-CONT

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volunteer organizations and talking to dozens, if not hundreds, of potential new volunteers, one of the main things was the fear of not knowing what their responsibilities were and/or where they can get the information to help them. New volunteers can find the IEEE's complexity overwhelming. I learned this from firsthand experience. But now there are web sites that can help in understanding almost every position in IEEE, from being a Section Chair to being a committee member. And, if you're not yet sure about volunteering, there are sites that can help you get better acquainted with the organization. Find them at

[http://www.theinstitute.ieee.org/inst\\_art.jsp?isno=03031&arnumber=03031\\_3w.featurevoltsites&section=4](http://www.theinstitute.ieee.org/inst_art.jsp?isno=03031&arnumber=03031_3w.featurevoltsites&section=4) We have lots of opportunities to get involved, so give one of the ExCom members a call. We'll invite you to attend one of our ExCom meetings to see where you would like to use your talents.

Following are some items of interest to our members gleaned from IEEE Corporate emails.

### **IEEE FOUNDATION'S LATEST GRANTS TO IMPACT PRE-COLLEGE EDUCATION**

At its March 2003 Board of Directors Meeting, the IEEE Foundation authorized just over US\$60,000 in new grants to support projects that encourage collaborations between engineers and local school districts; cultivate the next generation of engineers; and increase the understanding of the complex interactions between science, technology, and society. To view a full list of the grants awarded to date in 2003 please visit us on the web at <http://www.ieee.org/organizations/foundation/html/2003grants.html>. For additional information contact Glenys Gotthardt, IEEE Foundation, telephone +1 732 981 3435; email [foundation-office@ieee.org](mailto:foundation-office@ieee.org). Maybe your school district is on the list.

### **SOFTWARE CERTIFICATION TESTS BEGIN 1 APRIL**

For mid-level software professionals, passing the IEEE Computer Society Certified Software Development Professional (CSDP) exam could give them the edge on the competition. The test is being given from 1 April to 30 June at Prometric Testing Centers in various cities in the United States and Canada. Candidates also can take the test at centers in Brazil, China, Hungary, India, Ireland, Japan and Russia. Members can even take a pencil-and-paper version on 2 May at the Software Technology Conference in Salt Lake City, Utah, USA. To apply for the exam, visit

[http://www.theinstitute.ieee.org/inst\\_art.jsp?isno=03031&arnumber=03031\\_3w.deadlinescs&section=2](http://www.theinstitute.ieee.org/inst_art.jsp?isno=03031&arnumber=03031_3w.deadlinescs&section=2)

### **PRESCRIPTION CARD OFFERS HALF OFF ON GENERICS**

If the cost of your medication is soaring, try the free prescription discount card from RxAmerica being offered to U.S. members. You can save up to 50 percent on generic drugs and 20 percent off the retail price of brand-name medications. Find out how to get the card at [http://www.theinstitute.ieee.org/inst\\_art.jsp?isno=03031&arnumber=03031\\_3w.fap&section=7](http://www.theinstitute.ieee.org/inst_art.jsp?isno=03031&arnumber=03031_3w.fap&section=7)

## Senior Membership

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**Congratulations to the recently elected Senior Members from the Houston Section. For a complete list of the new Senior Members see the attached link. [www.ieee.org/organizations/rab/md/smupdates.html](http://www.ieee.org/organizations/rab/md/smupdates.html)**

### April Elevations

**Harendra V. Bhatt**

**Vincent G. Palughi**

### May Elevations

**Won-Jong Kim**

**Kevin Leigh**

**Michael L. Walker**

**Erich W. Wolz**

### 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 your are retired and have met the criteria at one time lets 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. The is an achievement award lets honor our deserving members.

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Donald Dunn, Past Chair, receives the IEEE Regional Activities Board (RAB) Award for "Outstanding Leadership and Results in IEEE Membership Development Activities" for the Houston Section from Cleon Anderson Vice President of IEEE RAB at the recent R5 Conference.



## IEEE Houston Section Scholarships 2003

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### IEEE - Houston Section

#### 2003 Scholarship Selection Criteria

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 2003, due to the success of the 2002 IEEE - Houston Section Annual Scholarship Golf Tournament, up to three (3) \$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:

- Is a 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 / 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

To apply, please complete the attached form and mail to:

IEEE - Houston Section  
Attention: Scholarship Committee  
P.O. Box 460014  
Houston, Texas 77056-8014

Deadline for submitting application form and all supporting data is July 3, 2003. Scholarships will be presented by July 31, 2003 and winner(s) will be honored at one of the IEEE - Houston Section Annual Meetings.

# IEEE Houston Section Scholarships 2003



## IEEE - HOUSTON SECTION SCHOLARSHIP APPLICATION

Applicant's Full Name: \_\_\_\_\_ Phone No.: \_\_\_\_\_

Home Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

IEEE - Houston Section Member (Sponsor's Name): \_\_\_\_\_ Member No: \_\_\_\_\_

Student Status for \_\_\_\_\_ High School Sr. \_\_\_\_\_ Jr. \_\_\_\_\_ Soph. \_\_\_\_\_ Fr. \_\_\_\_\_  
\_\_\_\_\_ College or University

Cumulative Collegiate GPA (Based on 4.0 max.) substantiated by copy of transcript(s) \_\_\_\_\_

High School GPA - for applicant entering college as freshman: \_\_\_\_\_  
- If High School Student - please provide SAT / ACT Score: \_\_\_\_\_

College or University: \_\_\_\_\_ Location: \_\_\_\_\_

Major or anticipated major: \_\_\_\_\_

IEEE Student Chapter Member: \_\_\_\_\_ Yes \_\_\_\_\_ No

Attach one (1) page essay by student covering

1. Employment Experience
2. Activities/Elected Positions
3. Personal Information
4. Honors/Awards
5. Career Goals
6. Reasons for seeking this scholarship

Attach up to three (3) letters of endorsement from former teachers, employers, family and friends.

The information provided herewith is correct to the best of my knowledge.

\_\_\_\_\_  
Student's Signature

\_\_\_\_\_  
Date

## Recent IEEE GOLD Social

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### **GOLD MEMBERS have first Houston Meeting**

22 IEEE members (many graduating seniors) met April 24 at Pappasitos Cantina at the Astrodome in a first ever Houston GOLD kickoff meeting.

Kristin Morrow and Rumana Chowdhury, co-chairs of the newly formed GOLD Affinity group arranged the event. Dwayne Lowry, Section Chair, welcomed the members to the group and detailed the many benefits of continued IEEE membership.



## COMSOC Meeting May 8th

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**The next meeting of the IEEE Communications Society, Houston Chapter will be held Thursday, May 8th, 2003 beginning with lunch at 11:30 am.**

Time and date: 11:30 AM to 1:00 PM on Thursday, May 8th, 2003.

Location: Shell Information Center; 1500 Old Spanish Trail, Houston, TX 77054

Program: " Human Space flight and Amateur Radio: the Past, Present, and Future of SAREX "  
(Matthew G. Bordelon, JSC-NASA)

**Abstract:** With the help of Amateur Radio clubs and ham radio operators, space shuttle astronauts have been speaking over the ham airwaves while in orbit. They are talking directly with large groups of the general public, showing teachers, students, parents and communities how Amateur Radio energizes youngsters about science, technology, and learning. The program was called SAREX, the Space Amateur Radio Experiment and is now called ARISS, Amateur Radio on the International Space Station. Speaking with astronauts and other crewmembers is a unique educational experience. ARISS would like to take this opportunity to involve large numbers of individuals, particularly youth, in technology and the International space program with the help of Amateur Radio.

ARISS, (Amateur Radio on the International Space Station) is a program that offers an opportunity for students to experience the excitement of Amateur Radio by talking directly with crewmembers of the ISS (International Space Station). Hundreds of Amateur Radio operators, including those from NASA Amateur Radio clubs at Johnson Space Center, Goddard Space Flight Center, and Marshall Space Flight Center, work behind the scenes to make these educational experiences possible

For the "ARISS system" to work - there are earth based equipment and space based equipment, a few hand-shaking procedures, suite of protocols, and good system designs to enable the exchange of information. Mr. Bordelon will share his experience over the greatest portion of that Space Experiment.

**Speaker:** Matthew G. Bordelon has been an Electrical Engineer at the NASA Johnson Space Center for over 14 years. He has served as a past Project Manager and Principal Investigator of the Space Amateur Radio Experiment (SAREX.). Mr. Bordelon currently serves as the Technical Assistant to the manager of the International Space Station Avionics and Software Office.

Please RSVP via e-mail to Lee Gaspard <<mailto:lee.gaspard@ieee.org>> by 12:00 Noon Wednesday, May 12th. (Please include your name and your company's name.)

See our Web site for additional ComSoc information: [www.comsoc.org/~houston/](http://www.comsoc.org/~houston/)

Time: Lunch: 11:30AM (may be purchased in Shell's cafeteria)

Program: 12:00 - 12:45 PM

Location: Shell Information Center  
Room 3Q18-19  
1500 Old Spanish Trail  
Houston, Texas 77054

**Directions:** From South Loop 610 exit Main Street, go North and veer/turn right on Old Spanish Trail (OST) {Target Superstore on left & Texans' practice field on right}; from OST turn right on Stadium Drive; from Stadium Drive turn into the first entrance on the left; stop at the guard house and identify yourself as attending the IEEE meeting. KIRBY AND FANNIN STREETS ARE UNDER CONSTRUCTION - AVOID THESE TWO STREETS.

**Parking:** Security will direct you to visitor parking near the building.

**Access to the building:** Building security will have a list of attendees, and will issue a visitor's badge to you. An escort will meet you in the lobby.

I look forward to seeing you at the meeting. Please call Lee Gaspard 713-245-1487 or Tom O'Brien (281 282-5881) if you need further information.

## IEEE Career Alert

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IEEE CAREER ALERT for 30 April 2003

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

### IN THIS ISSUE:

1. Job Market Woes: Tell Congress What You Think
2. Job Market Woes: Tell Spectrum What You Think
3. NASA Struggles with a Brain Drain
4. Man Meets Transistor: A Love Story

Northrop Grumman Electronic Systems wants Engineers! Interview at their Open House on April 30, 2-7pm at the Columbia Hilton, Columbia, Maryland. Active Clearance is required. For details, job openings, and resume submission, visit <[http://www.techexpousa.com/show\\_info.cfm?show\\_id=102](http://www.techexpousa.com/show_info.cfm?show_id=102)>

#### 1. Job Market Woes: Tell Congress What You Think

IEEE members living in the U.S. who are concerned about their careers, and the effects of globalization and outsourcing on the engineering workforce, will have the chance to share their concerns with member of Congress during IEEE-USA's engineering Careers Congressional Visits Day, scheduled for June 10-11, in Washington, D.C. For more information, visit <<http://www.ieeeusa.org/forum/H1Bcvd/index.html>>

#### 2. Job Market Woes: Tell Spectrum What You Think

Last week, we noted that the EE unemployment rate recently surpassed the U.S. national rate, a possibly historic and certainly troubling event. Now we'd like to hear from you: What is your take on the current engineering job market -- better, worse, or the same as other downturns? Which companies, fields and geographic areas are hiring, and which are dead? If you're currently unemployed or underemployed, how long have you been looking and what have you been finding? Send your tales to

<mailto:spectrumcareerseditor@ieee.org>

All correspondence will be kept confidential; we may, however, follow up with additional questions.

#### 3. NASA Struggles with a Brain Drain

One place that can't seem to find enough skilled scientists and engineers is NASA. Back in March, the space agency's chief, Sean O'Keefe, asked Congress to grant him broad powers to recruit and retain top scientists and engineers, to replace its increasingly aging workforce. The problem stems from a lack of skilled workers in the aerospace industry and a decline in science and engineering graduates, according to a recent story in the Wall Street Journal. Read on at

<<http://www.careerjournal.com/salaries/industries/engineers/20030205-dunham.html>>

#### 4. Man Meets Transistor: A Love Story

Fifty years ago, a Raytheon engineer named Norman Krim gave thousands of engineers their first transistor. The CK722, prized by generations of electronic hobbyists, continues to live on through their devoted (we hesitate to call obsessive) efforts. Read more at

<<http://www.spectrum.ieee.org/careers/careerstemplate.jsp?ArticleId=p030103>>

Don't miss the huge job fair May 6 & 7 in Washington, D.C. for Security-Cleared Pros within AFCEA's TechNet. TECHEXPO Top Secret features 100+ employers and countless engineering jobs. Submit your resume at <<http://www.TechExpoUSA.com>>

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>>

SUBSCRIBE at: <<http://www.spectrum.ieee.org/careers/signup.html>>

## 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)

### Unemployment Rate for Electrical Engineers Skyrockets to Record Level

WASHINGTON (28 April 2003) ? The unemployment rate for electrical engineers (EEs) rose to an unprecedented 7.0 percent in the first quarter of 2003, according to the U.S. Department of Labor. The rate stood at 3.9 percent in the previous quarter, and is a full percentage point above the quarterly figure for all workers.

The previous high quarterly EE jobless rate was 4.8 percent (second quarter, 2002). It's difficult to compare the figures, however, because the Bureau of Labor Statistics (BLS) has revamped its occupational classifications and reporting conventions to produce more detailed and accurate reports.

"Despite the change in the bureau's accounting and reporting methods, these unemployment figures are alarming," IEEE-USA President-Elect John Steadman said. "We knew anecdotally that things were bad for many in engineering and computer fields, and these statistics confirm our concerns for engineering employment."

The BLS report showed an unemployment rate for computer software engineers at 7.5 percent, and at 6.5 percent for computer hardware engineers, two of the bureau's new occupational categories. Computer scientists, including systems analysts, showed a slight improvement in joblessness, dropping from 5.1 percent at the end of 2002 to 4.9 percent. Computer programmers recorded a first-quarter rate of 6.7 percent.

When the number of unemployed EEs is added to each of the above computer categories, 172,000 high-tech professionals are out of work. Computer software engineers led the way with 62,000.

To help mitigate unemployment for U.S. high-tech professionals, IEEE-USA is calling on Congress to return the H-1B visa quota to its historical level of 65,000. The current cap is 195,000. IEEE-USA is also concerned about potential abuses in the L-1 intracompany visa transfer program. Business Week magazine reported in March that 329,000 people were working in the United States on L-1 visas in 2001, many in high-tech sectors.

"While we realize the sluggish U.S. economy is responsible for much of the unemployment," Steadman said, "we can't discount the role played by the continuing influx of foreign workers on temporary work visas, and the dramatic increase in offshore outsourcing. Congress needs to create incentives that help to spur the growth and retention of high-value, high-tech jobs here in the United States."

IEEE-USA is an organizational unit of The Institute of Electrical and Electronics Engineers created in 1973 to promote 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 WHAT'S NEW

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<http://www.ieee.org/theinstitute>

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### IN THIS ISSUE:

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6. Marketplace of Ideas: Should We Risk Human Lives for Space Exploration?
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8. Managing Your Subscription to The Institute Online Alert

#### 1. Job Market for Graduates: It Could Be Worse

Job prospects for recent graduates aren't as good as they were three years ago, but in the United States the job market for engineers is not as bad as it seems. Read on at [http://www.theinstitute.ieee.org/inst\\_art.jsp?isno=04031&arnumber=04031\\_4w.featurejobs&section=4](http://www.theinstitute.ieee.org/inst_art.jsp?isno=04031&arnumber=04031_4w.featurejobs&section=4).

An accompanying article at [http://www.theinstitute.ieee.org/inst\\_art.jsp?isno=04031&arnumber=04031\\_4w.featurejobssb&section=4](http://www.theinstitute.ieee.org/inst_art.jsp?isno=04031&arnumber=04031_4w.featurejobssb&section=4) gives some online job-hunting tactics to help you land your next job.

#### 2. Closing In on the Next President-Elect

To become better acquainted with the candidates nominated by the IEEE Board of Directors, The Institute editors polled W. Cleon Anderson of Salt Lake City, Utah, USA; Vijay Bhargava of Victoria, British Columbia, Canada; and Michael Lightner of Boulder, Colo., USA, on a range of topics.

Learn what inspired them to become engineers, the most important issue at the IEEE, and why they worry about the engineering profession at

[http://www.theinstitute.ieee.org/inst\\_art.jsp?isno=04031&arnumber=04031\\_4w.featurepreselect&section=4](http://www.theinstitute.ieee.org/inst_art.jsp?isno=04031&arnumber=04031_4w.featurepreselect&section=4)

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Axceleon, developers of EnFuzion, the leading high-performance clustering software for engineers and IT professionals, offers the most robust grid computing engine for design and simulation applications. EnFuzion automates and speedsup applications dramatically, and works on all operating systems. For a free evaluation of EnFuzion, call +1 408 739 9000 or visit: <http://www.axceleon.com/products.html>

#### 3. More Now Eligible for Recent Grads' Dues Discount

The dues reduction for recent graduates has been extended to all graduating Student Members, not just those receiving their bachelor's degree or its equivalent. The IEEE Board of Directors approved this and other changes at its February meeting. For more details about these changes, visit

[http://www.theinstitute.ieee.org/inst\\_art.jsp?isno=04031&arnumber=04031\\_4w.newsfebbod&section=5](http://www.theinstitute.ieee.org/inst_art.jsp?isno=04031&arnumber=04031_4w.newsfebbod&section=5).

#### 4. Munich Meeting Focuses on Optics and Lasers

Faster and smaller lasers and electro-optics are making great strides in areas as different as data storage and genomics. Breakthroughs in speed, innovative materials, and small- and large-scale solutions will be presented by experts from around the world at the European Conference on Lasers and Electro-Optics better known as CLEO/Europe, and the European Quantum Electronics Conference, co-sponsored by the IEEE Lasers and Electro-Optics Society. The conference is hosted in Munich on 23-27 June. Read more about some of the new advances at

[http://www.theinstitute.ieee.org/inst\\_art.jsp?isno=04031&arnumber=04031\\_4w.conferencceleo&section=42](http://www.theinstitute.ieee.org/inst_art.jsp?isno=04031&arnumber=04031_4w.conferencceleo&section=42).

#### 5. Tech Alert Keeps Tabs on Discoveries

Where can you find an analysis of high-tech weaponry, learn about the lessons chess-playing computers and Gary Kasparov teach us about intelligence, or how a cough simulator foils in-flight outbreaks of disease? These topics have all appeared in the IEEE Tech Alert, an e-mail newsletter recently launched by the editors of IEEE Spectrum. Read about what else you can find in the publication at

## IEEE WHAT'S NEW-CONT

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[http://www.theinstitute.ieee.org/inst\\_arch.jsp?isno=04031&section=11](http://www.theinstitute.ieee.org/inst_arch.jsp?isno=04031&section=11).

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### 6. Marketplace of Ideas: Should Human Lives be Risked on Space Exploration?

Of the six U.S. space shuttles built since the early 1970s, two have been lost, taking 14 lives with them. As we witness replays on television of those tragedies, we ask ourselves if the program is worth the anguish felt by the world, NASA, and the astronauts' families. Although few can question the value of information gathered from more than 20 years of space shuttle missions, is it still really necessary to risk human lives on space exploration? Give us your opinion at [http://www.theinstitute.ieee.org/inst\\_art2.jsp?isno=04031&section=20](http://www.theinstitute.ieee.org/inst_art2.jsp?isno=04031&section=20).

### 7. FAA Director Toots Her Own Horn

What do the premier U.S. aviation research and development center and a musical ensemble have in common? More than you might think, says Anne Harlan, IEEE Member and the first woman director of the Federal Aviation Administration's William J. Hughes Technical Center. Read more about Harlan at [http://www.theinstitute.ieee.org/inst\\_arch.jsp?isno=04031&section=15](http://www.theinstitute.ieee.org/inst_arch.jsp?isno=04031&section=15).

### 8. Managing Your Subscription to The Institute Online Alert:

The Institute Online Alert is prepared monthly by the editors of The Institute, the news source for members of the Institute of Electrical and Electronics Engineers, read by more than 360,000 people worldwide. You'll find The Institute's home page at:

<http://www.ieee.org/theinstitute>

Members of the IEEE who have provided an e-mail address are automatically subscribed to the Alert as a member benefit.

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<mailto:member-services@ieee.org> or by telephone +1 800 678 IEEE (+1 800 678 4333) from within the U.S. or +1 732 981 0060 outside the U.S. or fax +1 732 562 5445.

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## IEEE FOUNDATION

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### Philanthropic Planning with Retirement Assets

By: Karen Galuchie, IEEE Development Office

Today's economic environment has made it more critical than ever to plan before and during retirement for your well-being and the well being of your loved ones. Millions of Americans have taken advantage of generous tax incentives and saved for retirement using qualified retirement plans. Many of these same people forget that the assets remaining in their qualified retirement plans will be included in the total value of their estate at their death. If left to beneficiaries other than a spouse, these assets are not only subject to estate tax, but also to income tax when withdrawn by your beneficiaries.

Because of this "double taxation", which in some cases may be as much as 70%, you may want to consider using these assets to provide for the future of your favorite charities. Both taxes are completely avoided if you name a charitable organization as the beneficiary of the assets remaining in your qualified retirement plan.

*Unlike making changes to your Will, to change the beneficiary of your qualified retirement plan is simple. In most cases, all you have to do is fill out and submit your retirement plan provider's beneficiary change form. You have the option of naming your favorite charities as the primary beneficiaries or as the contingent beneficiaries. Contingent beneficiaries receive the funds if the primary beneficiary predeceases you.*

Before you decide if leaving your qualified retirement plan to charity is right for you, please check with your financial advisor. This decision will not only affect how your assets are distributed at your death, but may impact how your mandatory lifetime distributions are calculated. If you do decide to use your qualified retirement plan to fulfill your philanthropic goals, please consider including the IEEE or the IEEE Foundation as one of the charities you select to honor with a gift.

By naming the IEEE or the IEEE Foundation as a beneficiary to your qualified retirement plan you will be providing the present and future financial energy needed to expand and improve educational and technological engineering programs. In addition, you will become a member of the deferred giving donor recognition group the **Goldsmith League**. To request additional information or to hold a confidential discussion of giving opportunities to the IEEE and the IEEE Foundation, please contact the IEEE Development Office by telephone at +1 732.562.3915 or by electronic mail at [supportieee@ieee.org](mailto:supportieee@ieee.org).

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The **Pocket Scope** is the newsletter of the Houston Section of the Institute of Electrical and Electronics Engineer (IEEE). The Houston Section address is: IEEE Houston Section, P.O. Box 460014, Houston, Texas 77056-8014.

The **Pocket Scope** is published eight times a year (monthly, September to May, except December). It is distributed to over 3000 professionals in the electrical engineering field in the greater Houston area.

**Advertising rates** are listed on the IEEE Houston Section website and include publishing in The Pocket Scope, ad on the website, and within the monthly e-mail update.

IEEE members make change of address notices via the IEEE website: [www.ieee.org](http://www.ieee.org).

## Newsletter Staff

Editors: Lisa Nichols-Dunn, 281-426-4784  
E-mail:

[lnicholsdunn@aol.com](mailto:lnicholsdunn@aol.com)

Advertising: 281-426-4784



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IEEE Houston Section  
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