



# THE POCKET SCOPE



The Institute of Electrical and Electronics Engineers, Inc.

Volume 53, Number 2

October 2002

## SCOPE NOTES

### September Houston Section News

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

**When: DATE CHANGE**  
Thursday, October 8, 2002  
6:00 - 6:30 p.m. Social  
6:30 - 7:30 p.m. Dinner  
7:30 - 8:30 p.m. Speaker

**Cost:**  
\$FREE - 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

Donald Dunn

The first section meeting of the year was held on October 8, 2002. Thomas P. O'Brien, P.E. gave an excellent presentation on "Bell Telephone Patents, 1874-1884". Our next section meeting will be held on December 5, 2002. Rick Petersen a Senior Business Development Consultant for Intergraph Corporation will give a presentation on "Enter a New Era in Electrical Engineering".

The Houston Section CED programs have again started with several courses that cover new and exciting topics. In addition, our employment section on the IEEE Houston Section website is growing. Take the time to visit the site and forward the information on to individuals within your companies that are seeking IEEE engineers <http://www.ieee-houston.org/>. These features, training and other activities are services that the Houston Section provides to the IEEE members within the Greater Houston Area.

We have submitted a number of members for the November A&A Senior Member review meeting. Stay tuned for the Houston Section members that were upgraded. If you are interested in becoming a Senior Member in the IEEE contact one of the Houston Section Excom members.

I wanted to not the following statistics again this month - Over the past year and a half the Houston Section has continued to have positive membership growth. In the August 2002 report that compared membership statistics from August 2001, the Houston Section had a 7.6% growth in members. Few sections in Regions 1-6 (US) have had sustained positive membership growth. The Executive Committee and I feel that the programs we have implemented are fostering positive growth in our membership base. If you have feedback and comments contact one of the Excom members. Our goal is to add value to your IEEE membership. Thanks for taking the time to forward your feedback.

## IEEE CONTINUING EDUCATION ON DEMAND

## 2002-2003 REGISTRATION FORM

Name:

Company:

Mailing Address: (where certificate will be delivered)

City/State:

Zip:

Email:

Telephone Voice:

Telephone Fax:

IEEE Membership Number:

Mail a copy of your completed registration form along with your check payable to **IEEE CED SEMINARS** at the following address:

IEEE CED SEMINARS  
SANDY CROCKER  
ABB Power T&D Company  
P.O. BOX #42802  
HOUSTON, TX. 77242

Registration receipts will be distributed **at the seminar**.

For a cancellation refund, telephone by the Friday before the seminar:  
Contact Sandy Crocker at (713) 821-4020

IEEE Continuing Education On Demand Completion Certificate with Continuing Education Units (CEUs) is provided after receipt of both nightly questionnaires.

Please check the IEEE Houston Section website for the latest schedule and course information.

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

## IEEE CONTINUING EDUCATION ON DEMAND

The purpose of IEEE Houston Section Continuing Education On Demand is to provide a two-year repeating program sequence of practical industrial power application topics that supplement the daily work activities of the practicing graduate electrical engineer.

The seminars are intended to stimulate further study and discussion for learning continuance throughout the working career. Topics apply to heavy industries: oil and gas, petro-chem, cogen, pulp and paper, etc.

Instructors are application engineers, manufacturing specialists and expert consultants who provide a blend of diverse engineering perspectives.

The cost of each seminar is \$120.00 for IEEE members. "Early Signup" is \$60.00 and the **check must be received the Friday before** the seminar start date. The cost for non-IEEE members is \$200.00. Signup the week of the seminar does not guarantee seminar presentation documents or meals. For IEEE membership application information, contact Sandy Crocker at (713) 821-4020.

The following 2002-2003 seminar schedule defines the topics, dates and times. A course syllabus is available on request. Minimum class size is twenty for each seminar. Seating is limited and filled on an as received basis. Presentation documents are provided. A buffet is served from 5:00PM-6:00PM.

Seminar location:

ABB Power T&D Company  
P.O. BOX #42802  
HOUSTON, TX. 77242  
Contact Sandy Crocker  
(713) 821-4020

Seminar Title	Code	Date	Amount
Residual Bus Auto Transfer System	111	Oct. 1/2	\$
Symmetrical Components	202	Oct. 15/16	\$
Elect. Safety In Ind. Workplace	921	Oct. 29/30	\$
Harmonics Theory And Applications	502	Nov. 12/13	\$
Harmonic Filters	503	Jan. 28/29	\$
CT/PT Application	308	Feb. 11/12	\$
Directional Power Current Relaying	307	Feb. 25/26	\$
Solid-State Starters	504	Mar. 11/12	\$
Relays and Meters Com. Sys. Integration	112	Mar. 25/26	\$
51V Gen Relay, Standby Gen. & UPS	316	Apr. 8/9	\$
Substation Design Appl. And Fund.	312	Apr. 22 /23	\$
Total Paid:			\$

Enter amount for each seminar:

IEEE member registration:	\$120.00
IEEE member early signup:	\$ 60.00
Non-member registration:	\$200.00

## Fall of 2002 IEEE Seminar Schedule

**Residual Bus Automatic Transfer System (111)**

**James Bowen / Roy Cossé, Powell Elect. Mfg. Co.**

Oct. 1/2, 2002 6:00-8:50PM

Reviews fundamentals of a traditional transfer scheme. A modern transfer approach provides guidance for enhanced residual transfer scheme applications. [0.5 CEU]

**Symmetrical Components (202)**

**William Nichols, Siemens Westinghouse Technical Services**

Oct. 15/16, 2002 6:00-8:50PM

Reviews basic theory and provides application examples for LL, LG, and LGL faults. Unbalanced voltage concerns are also discussed. [0.5 CEU]

**Electrical Safety in Industrial Workplaces (921)**

**James Bowen, Powell Electrical Mfg. Co.**

Oct. 29/30, 2002 6:00-8:50PM

Modern industrial facility safety concerns and NFPA70E are discussed. [0.5 CEU]

**Harmonic Theory and Applications (502)**

**David Rice, GE Engineering Services**

Nov. 12/13, 2002 6:00-8:50PM

Introduces basic harmonic concepts and typical industrial applications. [0.5 CEU]

## Spring of 2003 IEEE Seminar Schedule

**Harmonic Filters (503)**

**David Rice, GE Engineering Services, and Richard Harlow, Phaseco, Inc.**

Jan. 28/29, 2003 6:00-8:50PM

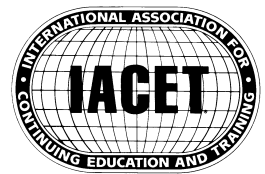
Discusses filter design, implementation, and typical application example concerns. [0.5 CEU]



**IEEE  
Houston  
Section**

**2002-2003**

**Continuing  
Education  
On Demand**

**CT / PT Application Seminar (308)**

**Tony Zhao, Powell Electrical Mfg. Co.**

Feb. 11/12, 2003 6:00-8:50PM

Discusses CT and PT ratings, selection criteria, ANSI Std. Ref. and typ. appl. considerations. [0.5 CEU]

**Directional Power/Current Relaying & Meters (307)**

**William Nichols, Siemens Westinghouse Technical Services**

Feb. 25/26, 2003 6:00-8:50PM

Reviews typical industrial directional power and directional current relaying applications. Directional metering topics are also included. [0.5 CEU]

**Solid-State Starters (504)**

**Harold Haggarty, Benshaw Inc.**

Mar. 11/12, 2003 6:00-8:50PM

Discusses traditional mtr. starting appl. and modern "soft-start" theory, appl. and selection. [0.5 CEU]

**Relays and Meters****Communication Systems Integration (112)**

**Martin Hildreth / Roy Cossé, Powell Elect. Mfg. Co.**

Mar. 25/26, 2003 6:00-8:50PM

Reviews modern concepts and reasons for integrating diff. mfg. meters and relays into one communicating system. [0.5 CEU]

**Generator 51V Relaying, Standby Generator and UPS Selectivity (316)**

**Roy Cossé, Powell Electrical Mfg. Co.**

Apr. 8/9, 2003 6:00-8:50PM

Reviews MV/LV gen. 51V and stdb. gen. concerns. UPS dist. sys. selectivity is discussed. [0.5 CEU]

**Substation Design and Application Fundamentals (312)**

**Donald Sevcik, Reliant Energy HL&P**

April 22/23, 2003 6:00-8:50PM

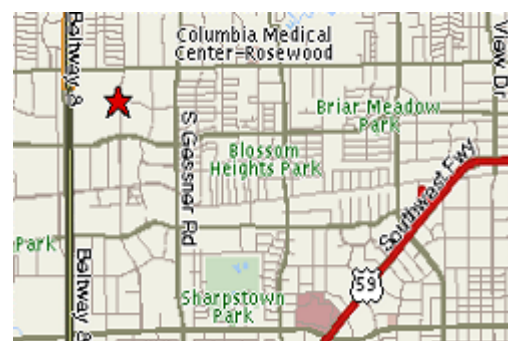
Reviews theory and appl. design basics. [0.5 CEU]

**Guidelines for Applying IEC Standards to Electrical Distribution Systems (801)**

**Terence Hazel, Schneider Electric France**

April 30/ May 1, 2002 6:00-8:50PM

[0.5 CEU]



## November 14 COMSOC MEETING

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The next meeting of the IEEE Communications Society, Houston Chapter will be held Thursday, November 14th, 2002.

**Please RSVP via e-mail to [Lee Gaspard](#) by 12:00 Noon Wednesday, November 13th. (Please include your company name.)**

**Time and date:** 11:30 AM to 1:00 PM on Thursday, November 14th, 2002.

**Program:** "Space Shuttle Cockpit Avionics Upgrade"

**Speaker:** Todd Smithgall, United Space Alliance

**Abstract:** The Cockpit Avionics Upgrade (CAU) project addresses these needs with a comprehensive suite of data collection and processing hardware, extensive new access to the vehicle's instrumentation data streams, and new software to recognize, analyze and display vehicle and subsystem performance in such a way as to reduce crew workload during all flight phases and mission scenarios, especially during emergency situations.

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

**Lunch:** Lunch may be purchased at the Shell Information Center cafeteria. We'll plan to eat from 11:30 to 12:00 and enjoy the presentation from 12:00 to 12:45.

***PLEASE CHECK THE NEW DRIVING DIRECTIONS!***

[\(click here for driving directions\)](#)

Please send e-mail to [Lee Gaspard](#) for more information (including driving and parking directions), or to reserve a seat at the meeting.

## Date Changed October 8 SECTION MEETING

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*See the Houston Section web site to conform your reservation.*

**Title:** Bell Telephone Patents, 1874-1884

**Abstract:** An informal study of some key patents that shaped the telephone system. The presentation is illustrated with drawings from the patents, and enhanced with background information on the outstanding people who invented the foundations of our modern telephone system.

**Speaker: Thomas P. O'Brien, P.E.**

Since graduating from Texas A&M, Tom O'Brien has worked in aircraft design and manufacturing, data processing, airline reservation systems, business software development, simulator development, electronic commerce, and spacecraft software. He is currently developing software requirements specifications for the Space Shuttle Upgrades project.

Tom earned a BS in EE from Texas A&M in 1966 and an MS in Telecommunications from SMU in 2000. He has been an IEEE member for 41 years, and has been a licensed Professional Engineer in Texas since 1971. He serves as Vice Chairman (and Webmaster) of the Houston Chapter of the IEEE Communications Society (ComSoc).

Tom and his wife Susanne have lived in Taylor Lake Village since 1976. They have two children: Amy Bowles, MD, of Houston, and Paul O'Brien, PhD, of Carson, CA.

**Where:** HESS Building, 5430 Westheimer at Yorktown

**Time:** 6:00 - 6:30 PM Social - 6:30 - 7:30 PM Dinner - 7:30 - 8:30 PM Presentations

**Cost:** Dinner Free for members who register 48 hours prior to the event, \$20.00 for members who do not register 48 hours prior to the event and for non-members; \$5.00 for students **(see the website for more information)**

## IEEE-USA NEWS

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NEWS from IEEE-USA

1828 L Street, N.W., Suite 1202, Washington, D.C. 20036-5104

Contact: Greg Hill

Member & Electronic Communications Coordinator

Phone: + 1 202 785 0017, ext. 8335

E-Mail: [g.hill@ieee.org](mailto:g.hill@ieee.org)

### ENGINEERS SEEK SUPPORT FROM CONGRESS TO COMBAT UNEMPLOYMENT, TAKE MESSAGE TO CAPITOL HILL

WASHINGTON (25 October 2002) -- On 21 October, IEEE-USA President LeEarl Bryant and U.S. IEEE Member Stephen Morton distributed more than 500 leaflets, titled "American Engineers at Risk," on Capitol Hill in Washington, D.C. According to Bryant, the purpose of the distribution was "to raise awareness and gain support for IEEE-USA efforts to reduce joblessness among engineers."

IEEE-USA's recommendations on how the U.S. Congress can help solve the growing unemployment problem include: reducing the annual H-1B visa quota; redirecting H-1B visa funded skills training programs to aid displaced engineers; and jump-starting the economy.

The leaflet also identified key factors contributing to the engineering employment crisis, including include: increasing dependence by employers on temporary guest-workers; perma-temping (or substitution of part-time contract workers with few benefits for full-time employees with health and retirement benefits); and outsourcing of engineering jobs to low cost, offshore locations.

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>.

On 21 October, IEEE-USA President LeEarl Bryant and U.S. IEEE Member Stephen Morton distributed more than 500 leaflets, titled "American Engineers at Risk," on Capitol Hill in Washington, D.C. (See attached file: [leafleting2.jpg](#)) (See [page 5 for a copy of the leaflet](#))

## IEEE Education Partners Program

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Canadian company, Omniz Global Knowledge Corporation, has joined the IEEE Education Partners Program.

Available at a 10% discount to IEEE members are six technical courses, referred to as multimedia books, which are presented in a combination of CDROM and print. All six courses were developed by IEEE members Drs Michel Nakhla and Ram Achar, who are faculty in Electrical Engineering at Carleton University.

The current course list centers on signal integrity, with difficulty levels ranging from introductory to highly technical. The multimedia books cover such topics as macromodeling, principles of SPICE based simulation, transient analysis, and Krylov-Subspace Techniques. Each comes with exams to measure learning. The exams are graded and solutions are provided. The CD ROM format allows students to proceed at their own pace.

IEEE Fellow, Professor Nakhla, is one of the leading researchers in the world in the area of high-speed interconnect analysis. IEEE member Dr. Achar has received awards on his work on high-speed circuit and interconnect analysis, including the highly regarded Natural Science & Engineering Research Council doctoral award. They have both been published widely.

To receive the member discount and to read the course syllabi, go to [www.ieee.org/EduPartners](http://www.ieee.org/EduPartners), look under corporate partners. For further information on this program, contact Sasha Eydlin, [s.eydlin@ieee.org](mailto:s.eydlin@ieee.org).

Lynn Murison

Outreach Coordinator, IEEE Educational Activities

[www.ieee.org/organizations/eab/](http://www.ieee.org/organizations/eab/)

## IEEE-USA NEWS-Leaflet

### AMERICAN ENGINEERS AT RISK

- **INCREASING UNEMPLOYMENT:** In the past 18 months, joblessness among America's engineers and computer scientists has reached historically high levels. At present, 68,000 engineers and 84,000 computer scientists are looking for work. Unemployment among electrical and electronics engineers hit an all-time high of 4.8% earlier this year.
- **JOB SHRINKAGE:** According to the Bureau of Labor Statistics, the U.S. economy lost over 100,000 engineering jobs in the 3rd quarter of 2002.
- **FLAT COMPENSATION:** Overall engineering compensation has been essentially flat (when adjusted for inflation) for the past 35 years.
- **OUTSOURCING:** Thousands of engineering and other technical jobs are being exported to lower-cost, offshore locations in Eastern Europe, the former Soviet Union and even China.
- **GUEST-WORKERS:** In spite of increasing unemployment among U.S. engineers and computer science professionals, more than 147,600 H-1B visas for skilled foreign guest-workers were issued or renewed in Fiscal Year 2002.
- **ABSENCE OF SAFEGUARDS:** Contrary to popular perceptions, there is little in current law to prevent guest-workers from displacing U.S. workers or driving down prevailing wages.
- **LACK OF FINANCIAL SUPPORT FOR TRAINING:** Most employers are unwilling or unable to help technical professionals develop new knowledge and skills. Individuals have to maintain their competence "on their own time and on their own dime." Public funds are used primarily to train unemployed workers for entry-level positions. Such training is of little value to more experienced engineers and scientists, and is not helping to prepare U.S. workers for professional, H-1B level positions as Congress originally intended.

### WHAT'S AT RISK FOR THE NATION

- **AMERICA'S ENGINEERING WORKFORCE:** Year in and year out, in good times and bad, industry uses spurious claims of critical skills shortages to justify Congressional support for the H-1B and other "temporary" guest-worker programs. These claims will become a self-fulfilling prophecy if American students are dissuaded from entering engineering because of high unemployment, poor career prospects and flat or declining compensation.
- **ECONOMIC GROWTH AND COMPETITIVENESS:** Technological innovation drives economic growth and helps to raise living standards for all Americans. More than half of the recent growth in productivity and per capita income is attributable to technological progress.
- **NATIONAL SECURITY:** America's national security is jeopardized by policies that increase our dependence on foreign sources of technical expertise to maintain critical energy, financial and telecommunications infrastructures, not to mention national defense systems. The GAO recently found that over 16,000 programmers with access to critical software systems haven't been subjected to basic security clearance procedures as required by law.

### HOW CONGRESS CAN HELP

- **REDUCE THE ANNUAL H-1B VISA QUOTA** to the 65,000 level originally set by statute and require all employers (not just "H-1B dependent" companies) to recruit American workers and pay foreign workers prevailing wages,
- **REDIRECT H-1B VISA-BASED TRAINING PROGRAMS** so that they benefit out of work engineers and computer scientists who need to develop or update mission-critical knowledge and skills, and
- **JUMP-START THE ECONOMY** by restoring balance to the federal R&D investment portfolio; stimulating private sector spending on the physical sciences and engineering; and promoting better management and utilization of essential human resources, including engineers and scientists.

The Institute of Electrical and Electronics Engineers - United States of America  
 1828 L Street, N.W., Suite 1202, Washington, DC 20036-5104  
 Phone: 202-785-0017 • Fax: 202-785-0835 • E-mail: [ieeusa@ieee.org](mailto:ieeusa@ieee.org)  
 WWW: <http://www.ieeeusa.org>

## IEEE USA CAREER ALERT

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*IEEE CAREER ALERT for 2 October 2002  
Your weekly report on jobs, education, management, and the  
engineering workplace, from the editors of IEEE Spectrum*

### **IN THIS ISSUE:**

1. **NEW FEATURE:** *IEEE Spectrum Careers Site to Trade Content with Science's Next Wave*
2. *Your Job Is Out There*
3. *More on EE Unemployment*
4. *And MoreS*
5. **WEB SPECIAL:** *Skipping the Pink-Slip Parade*
6. *Job of the Month: Networks and Messaging Senior Architect, UBS Warburg*

1. **NEW FEATURE:** *IEEE Spectrum Careers Site to Trade Content with Science's Next Wave*  
*Beginning this month, the IEEE Spectrum Careers site is pleased to feature articles from Science's Next Wave, the award-winning career development site of the American Association for the Advancement of Science. Ordinarily, you'd need to be a Science subscriber to access Next Wave articles, but through this special arrangement, Spectrum and Next Wave will be exchanging several articles each month. So check the IEEE Spectrum Careers site often to see the latest from Next Wave!*

#### 2. *Your Job Is Out There*

*If you favor mirrored shades and late-model American sedans, the FBI may have a job for you. Congress has authorized the Bureau to hire hundreds of new Special Agents with technical and scientific expertise. To learn just what it takes to be a G-Man or G-Woman, read the article, from Science's Next Wave, at*  
<<http://www.spectrum.ieee.org/careers/careerstemplate.jsp?ArticleId=p100602>>

#### 3. *More on EE Unemployment*

*Older U.S. electrical and electronics engineers are out of work longer than their younger peers and cite age as a barrier to re-employment, the 2002 IEEE-USA Unemployment Survey reveals. For each additional year of age, joblessness rose an average of three weeks. To download the full report, by Laura Langbein, a professor of public affairs at American University in Washington, D.C., go to*  
<<http://www.ieeeusa.org/careers/survey/2002results.pdf>>

#### 4. *And MoreS*

*IEEE-USA President LeEarl A. Bryant recently sent a letter to IEEE-USA members addressing the continuing problems many of them are facing in the job market. While acknowledging that the IEEE and IEEE-USA could do more for their out-of-work members, she also points to a number of existing resources available to the unemployed engineer. Read her letter at*  
<<http://www.ieeeusa.org/newspubs/presidentscolumn/bryantsep02.html>>  
*The resources Bryant mentions can be accessed here:* <<http://www.ieeeusa.org/careers/help/>>

#### 5. *Skipping the Pink-Slip Parade \* WEB SPECIAL \**

*Amidst the seemingly endless waves of mass layoffs, some firms have resisted joining the pink-slip parade and are tenaciously hanging onto their workers. Rebuilding a trained workforce takes time, they reason, and the cost of doing so is immense. Among the methods companies are trying are temporary leave programs, pay cuts in exchange for stock options, and employee-initiated cost reduction programs. Read on at* <<http://www.spectrum.ieee.org/careers/careerstemplate.jsp?ArticleId=w100702>>

#### 6. *Job of the Month: Networks and Messaging Senior Architect, UBS Warburg*

*Investment bank UBS Warburg's global network spans six continents with nearly 150 offices. The network is designed and supported by an internal 25-person department called 3 Keys Networks (3KN). The Networks and Messaging Senior Architect will be responsible for coalescing the strategies and designs for 3KN into a cohesive and comprehensive architecture. The position requires 5-10 years service/product management experience in an international IP based telecom service provider or ISP, as well as a good understanding of various IP-related services and concepts. For further information, see*

<<http://www.spectrum.ieee.org/careers/jobmonth.html>>

*And for other openings, visit the IEEE Job site:* <<http://www.ieee.org/jobs>>

## IEEE USA CAREER ALERT

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### IEEE CAREER ALERT for 9 October 2002

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

#### IN THIS ISSUE:

1. *Teaching in the Inner City*
2. *Teaching the Teacher*
3. *New Research Grants for Pre-college Teachers*
4. *On-Line Courses for Engineers*

#### 1. *Teaching in the Inner City*

While still an EE grad student at MIT, Gregory Huang made the bold and unusual decision to join Teach for America, a program that recruits and trains college graduates to teach in low-income public schools. Huang's first-hand account, from Science's Next Wave, of why he did it and what he learned can be read at

<<http://www.spectrum.ieee.org/careers/careerstemplate.jsp?ArticleId=p100602>>

And for further information about applying to Teach for America, see <<http://www.teachforamerica.org/>>

#### 2. *Teaching the Teacher*

Many engineers would like to see greater technological literacy among their local school teachers but they aren't quite sure where to begin. A recent initiative by the IEEE Educational Activities division offers the instructions and tools they need. The Teacher In-Service Program trains working engineers to develop and conduct hands-on demonstrations for precollege teachers. To learn more, see

<<http://www.ieee.org/organizations/eab/precollege/>>

and

<<http://www.spectrum.ieee.org/INST/jul02/fteach.html>>

#### 3. *New Research Grants for Pre-College Teachers*

Do you know a primary or secondary school teacher who likes to work with lasers? If so, that person may be eligible for a new grant program created by the IEEE Lasers and Electro-Optics Society. Designed to encourage precollege teachers to do research and education projects in any field involving lasers and electro-optics, it provides a stipend plus the cost of materials and administration. For further information, see <[http://www.ieee.org/updates/research\\_opportunities.asp](http://www.ieee.org/updates/research_opportunities.asp)>

#### 4. *On-line Courses for Engineers*

The IEEE has launched a new program that allows its members to take on-line courses at a discount. Currently, the Education Partners Program is offering some 2000 courses available at 7 accredited universities and 10 corporate training centers, including MIT, Drexel, and Harvard Business School. To check out the searchable course catalog, go to <<http://www.ieee.org/EduPartners>>

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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>>

If this newsletter was forwarded to you, you can SUBSCRIBE at:

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

# IEEE USA CAREER ALERT

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## *IEEE CAREER ALERT for 23 October 2002*

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

### **IN THIS ISSUE:**

- 1. Test Your IPIQ**
- 2. Developing Those Soft Skills**
- 3. Embracing the Fear of Failure**
- 4. Living in the Limelight**

#### 1. Test Your IPIQ

How much do you know about patents, trademarks, and copyrights, collectively known as Intellectual Property? Take this quiz to determine your knowledge of current laws and regulations regarding inventions and creations: <<http://www.spectrum.ieee.org/careers/careerstemplate.jsp?ArticleId=i100402>>

#### 2. Developing Those Soft Skills

You've heard it before, we'll say it again: technical expertise is not enough. Today's companies place a premium on individuals who develop, practice, and continue to improve certain extra, or soft, skills. These include things like having a global perspective; being a team player; and having professional depth and versatility. Read on at <<http://www.todaysengineer.org/Sept02/skills3.htm>>

#### 3. Embracing the Fear of Failure

Going through engineering school, the drive to do well creates an aversion to failure. This aversion may motivate you in school, but it won't serve you well in business, where you must learn from your mistakes in order to succeed. Read on <<http://www.todaysengineer.org/Sept02/trends.htm>>

#### 4. Living in the Limelight

Napster may be dead, but Mark Gorton and his company, LimeWire, are making sure the file-sharing revolution it sparked lives on. Read how this electrical engineer became a crusader for peer-to-peer computing: <<http://www.spectrum.ieee.org/careers/careerstemplate.jsp?ArticleId=p090402>>

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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>>

If this newsletter was forwarded to you, you can SUBSCRIBE at:

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

You can UNSUBSCRIBE there, too. If you want to CHANGE the address at which you receive this e-mail alert, first unsubscribe and then re-subscribe with your new e-mail address.

If you have other problems or questions, or comments about this service, please send a message to:

<<mailto:spectrumcareerseditor@ieee.org>>

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## IEEE Education Activities E-Digest-Con't

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### COMING IN 2003: THE IEEE MEMBER DIGITAL LIBRARY

Coming in 2003, the new IEEE Member Digital Library will allow IEEE members to access individual online articles from IEEE-published journals, magazines and conference proceedings with one convenient subscription. Subscribers will pay a monthly fee to access up to 25 articles and papers a month from the current year and the last five years worth of publications. Access will be through the IEEE Xplore (R) online delivery platform.

"This new offering will greatly enhance the scientific and education goals of the IEEE," said Dr. Raymond D. Findlay, IEEE President. "In addition, IEEE publishes the most highly cited information in EE and Computer Science, and online access to a wider range of information will greatly enhance our members' careers."

The IEEE Member Digital Library provides IEEE members with direct online access to the articles and papers in IEEE journals and conference proceedings without requiring subscriptions to the individual publications.

"IEEE members tell us that the number one reason they join is to gain access to technical data," said Findlay. "The IEEE Member Digital Library will prove to be a marked addition to the information IEEE members already gain from individual journal subscriptions and technical society memberships."

IEEE members renewing or joining for the 2003 year will be eligible to subscribe to the IEEE Member Digital Library. Anyone subscribing by 31 December 2002 will receive their first month of the IEEE Member Digital Library for free. The service will be available in January 2003.

For more information on the IEEE Member Digital Library or the first-month free offer, visit [www.ieee.org/ieeemdl](http://www.ieee.org/ieeemdl)

John R. Platt

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## IEEE WHAT'S NEW FOR MEMBERS

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### WHAT'S NEW @ IEEE FOR MEMBERS

VOLUME 3 NUMBER 10 OCTOBER 2002

An HTML version of this newsletter can be viewed on our online archive at <http://www.ieee.org/products/whats-new/nmem1002.htm>

#### CONTENTS:

1. IEEE Membership Offers New Options for 2003
2. Search IEEE Conference Proceedings for Five Hottest Patent Technologies
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