

October 2001  
(VOL 49, NO. 2)



# *The IEEE* **MONITOR**

PUBLISHED BY THE NEW YORK SECTION OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS



Visit our web page at  
[http://www.ewh.ieee.org/r1/new\\_york/](http://www.ewh.ieee.org/r1/new_york/)

**PERIODICAL**  
TIME SENSITIVE MATERIAL

# Chairman's Column



**September 11,  
2001**

As I write these words, it has been several days since the terrorist attack on the World Trade Center in New York City. Mixed feelings of unreality, shock and disbelief underlie New Yorkers' outward mien of calm. We speak of carrying on with business as usual, but this is not usual. This has been a heinous crime against humanity and an unprecedented attack on the U.S.

In the past, many different groups used to claim responsibility for any terrorist attack. This attack has been so inhumane that no one or no group would like to be known as the culprit. I fear that most such acts are carried out in the name of God. It would be mind boggling to think that God would condone such atrocities.

Each of us wishes to do something useful to aid the cause of recovery. The American Engineer is one of the most diverse in the world in ethnicity, religion and culture. American Engineers are all united in a single purpose: to put to use their various skills to aid in the rebuilding effort.

As Americans, we stand firmly behind our principles of democratic government. We may not know what the future brings. We will do what we can. I pray that we do not succumb to ignorance and

violence, hatred and fanaticism, to become the bearers of evil as those who perpetrated the attack.

I would like to close by sharing the sentiments of our Region 1 Director, Irving Engelson, who writes:

Attack on America

We'll overcome evil and maintain our humanity

On a sunny Tuesday morning, a few hour after dawn

Fanatics attacked two towers, in IEEE's Region one.

They also struck the pentagon in friendly Region two

These enemies of freedom hate everyone like you.

These haters of democracy will never take us down

We'll fight them and their supporters until they all are gone.

It is a war that they declared because of hate they bear

Our response with force and strength should be beyond compare.

America the beautiful you're wounded but alive

From sea to shining sea forever you'll survive.

With malice toward none who love freedom for all,

To protect our nation must be our primary goal.

God Bless America!

## OFFICERS

SECTION CHAIRMAN - Jalal Gohari  
VICE CHAIRMAN, OPERATIONS - Ralph Tapino  
VICE CHAIRMAN, ACTIVITIES - Ralph Tapino  
TREASURER - Robert Pellegrino  
SECRETARY - Benjamin Schall  
AWARDS CHAIRMAN - Peter Mauzey  
P.A.C.E. CHAIRMAN - Peter J. Greco  
PUBLICATIONS CHAIRMAN - Frank E. Schink

## STAFF

EDITOR - Harold Ruchelman  
ASSISTANT EDITOR - Leon Katz  
HISTORIAN - Vincent McDonough

Postmaster: Send Address change and returns to the IEEE MONITOR, c/o Membership Services, IEEE Service Center, PO Box 1331, Piscataway, NJ 08855 (ISSN 0164-9205)

Published monthly, except for June, July and August, by the New York Section of the Institute of Electrical and Electronics Engineers, Inc., 24 Chamber Lane, Englishtown, NJ 07726.

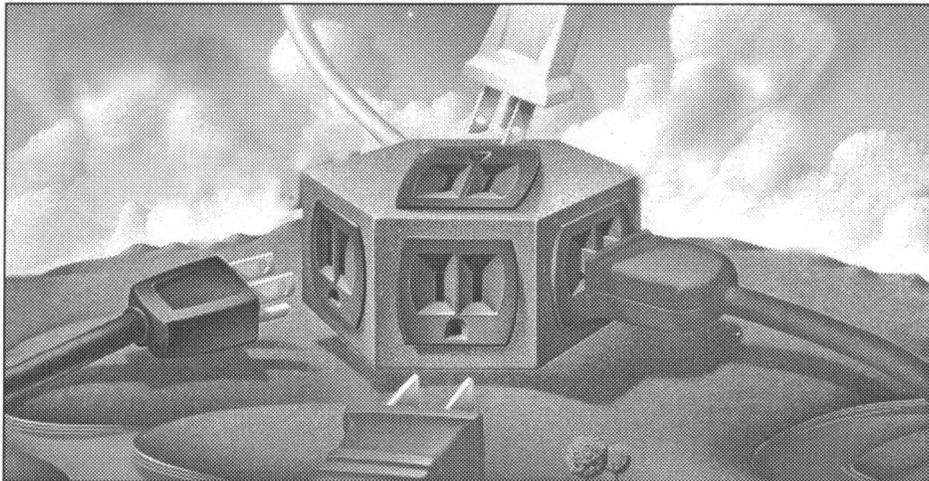
Phone (212) 460-6363, Fax (212) 529-0463. IEEE Corporate Office, 3 Park Avenue, 17th Floor, New York, NY 10016-5997

Annual subscription: \$4.00 per member per year (included in annual dues) for each member of the New York Section: \$10.00 per year for non-IEEE members

All communications concerning The IEEE MONITOR should be addressed to: The IEEE MONITOR, 24 Chamber Lane, Englishtown, NJ 07726 or e-mail: [monitor-editor@ieee.org](mailto:monitor-editor@ieee.org).

Responsibility for contents of articles, papers, abstracts, etc. published herein rests entirely with the authors, not the editor, Publication committee, IEEE or its members.

Periodicals Postage Paid at New York, NY and additional mailing offices.



## The more slots you have to fill, the more ways we can help.

DeVry. It's your one source resource.

Our Institutes of Technology turn out graduates who are highly skilled in a variety of fields: computers, business, telecommunications, electronics and accounting.

Our Becker Conviser CPA Review prepares individuals for certification in public and managerial accounting. Since 1957, over a quarter-million accountants have come from Becker's review course.

For more information, visit our Web site at [www.devry.edu](http://www.devry.edu) or call the number that fits your needs.

**DeVRY**  
A higher degree of success.®

DeVry/Long Island City  
1-888-713-3879

Becker Conviser CPA Review  
1-800-868-3900 ext. 94

# **New York Section Distinguished Service Award Nominations Due October 31, 2001**

The IEEE gives many awards, some to people, some to organizations. For many awards, section people support other people who make the final decision.

However, the New York Section has a Special Awards Committee that selects, every year, without needing approval from others, the person who receives the Section's Distinguished Service Award.

**IEEE members – you? – submit information to the Committee about candidates you nominate.**

The physical token of the Award is a plaque, typically presented at the Section's annual Awards Dinner, at which the recipient and a friend are guests of the Section.

## **Purpose and Qualifications**

The purpose of the Award is to honor a Section member who has made contributions of exceptional distinction. The contributions may include "service to the Section, industry, profession, or community" and must be "visible, definable, significant, and sustained."

Any IEEE New York Section member of Member Grade or above is eligible to receive the Award.

## **Recipients**

2001 William N. Coyne  
2000 George E. Gilmore  
1999 Jalal Gohari  
1998 Frank P. Farinella  
1997 Frank E. Shink  
1996 Roger K. Sullivan  
1995 Amos E. Joel  
1994 Philip M. Paterno  
1993 William Terry  
1992 Robert W. Gillette  
1991 Anthony B. Giordano  
1990 Jack L. Jatlow

## **Nominations**

Nomination forms for 2002 are due on Wednesday, October 31, 2001.

Instructions and a form to fill out are available at  
[http://www.ewh.ieee.org/r1/new\\_york/](http://www.ewh.ieee.org/r1/new_york/)  
to help you nominate a candidate.

A completed form, or a request for instructions and a form, can be sent by surface mail or, preferably, by email to:

Mr. Peter Mauzey  
Lucent Technologies, Room 2L-519  
101 Crawfords Corner Road  
Holmdel, NJ 07733-3030  
[p.mauzey@ieee.org](mailto:p.mauzey@ieee.org)

# Professional Activities Information Page

## This page dedicated to member professional activities information

New York Section PACE Calendar of Upcoming Events. The following are proposed Section activities. Dates and locations will be announced in future issues when they become available. Please plan to attend at a meeting or seminar.

September 12: General Meeting  
October 10: General Meeting  
November 14: General Meeting  
December 12: General Meeting

If you have suggestions on areas of professional activities that interest you please contact me.

Peter Greco PACE Chairman  
Tel.: 212-614-3357 Fax: 212-529 5237  
email: [p.j.greco@ieee.org](mailto:p.j.greco@ieee.org)

### IEEE-USA's and IEEE Job Site:

This highly rated job listing service was replaced by a new internet-based job site, and is sponsored by IEEE-USA and IEEE Spectrum. The site allows the active and passive job seeker more control over the recruiting process. For more details go to [www.ieee.org/jobs](http://www.ieee.org/jobs).

**IEEE EMPLOYMENT  
ASSISTANCE  
WEB SITE: <[www.ieeeusa.org](http://www.ieeeusa.org)>**

The Employment Assistance Web Site brings together dozens of job-search resources in a single location. The site includes the following:

### Entry-Level Employment Assistance Site:

If you are an engineering graduate, recent graduate, of IEEE Student Member looking for the first job this is one of the best places

to begin your career. Special entry-level employment services include job listings, links to company sites and job-search tips and techniques:

[www.ieeeusa.org/EMPLOYMENT/entry.html](http://www.ieeeusa.org/EMPLOYMENT/entry.html)  
>

### IEEE-USA's New Resume Referral Service:

Put your resume for maximum exposure! IEEE-USA in cooperation with Resume-Link has established a members-only Resume Referral Service which IEEE members may register, FREE of charge via web registration or by hard copy. Your resume will stay on file for six months (with an option to renew the listing up to a year). Make sure you check out this great new service to promote your credentials! For hard copy registration forms, contact Resume-Link at 614-923-0600 or [socmember@resume-link.com](mailto:socmember@resume-link.com)

## **EMPLOYMENT AND CAREER ENHANCEMENT PUBLICATIONS**

### The Engineers Guide to Lifelong Employability

This is a practical complete resource book on locating and obtaining good jobs throughout your career. Features over 200 pages of in-depth text that will allow you to master the engineering job search.

**IEEE Members: \$19.95**

### Engineering Careers into the 21<sup>st</sup> Century

Offers strategies and insights for engineers working in today's dynamic professional environment.

**IEEE Members: \$20.00**

# News from IEEE-USA

## IEEE-USA Files Brief before U.S. Supreme Court in Festo Patent Case

WASHINGTON (5 September 2001) - The Institute of Electrical and Electronics Engineers - United States of America (IEEE-USA) filed an amicus curiae brief last Friday, 31 August, before the U.S. Supreme Court in the Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki Co., LTD patent case. A copy of the brief and other relevant resources are available at <http://www.ieeeusa.org/forum/policy/01aug31festo.html>.

In Festo, the Court will be considering to what extent the holder of an amended patent is barred from asserting patent rights against another inventor whose design is substantially the same as the patented invention. As an alternative to the "flexible bar" and "absolute bar" standards advocated by the opposing sides in Festo, IEEE-USA is asking the Court to consider a "foreseeable bar," where holders of an amended patent give up protection for only those things that were foreseeable by persons familiar with the associated technology.

"This is a landmark case that will redefine intellectual property rights," IEEE-USA President Ned Sauthoff said. "IEEE-USA believes it's critical the Court understands how these legal doctrines affect engineers and the process of innovation in the real world."

According to Lee Hollaar, chair of IEEE-USA's Intellectual Property Committee, "the foreseeability standard strikes a reasonable balance by providing notice to those developing improvements to a patented invention, while not constraining a patent to current technologies when a new technology performs the same function." He added that IEEE-USA's proposal would "encourage innovation by protecting the interests of inventors, while setting clear and comprehensible guidelines for the next generation of technological improvement."

Carlton Fields, P.A. of Tampa ([www.carltonfields.com](http://www.carltonfields.com)) prepared the brief pro bono. Andrew Greenberg served as counsel of record and headed a team of 10 lawyers and legal assistants.



**Chairperson  
& Membership  
Committee**

Jim Boyd  
(973) 584-0329

**Vice Chairperson**

Dan Kamdar  
(973) 744-0061

**Secretary**

Larry Nagel  
(973) 895-4375

**Treasurer, Referrals  
Coordinator &  
Newsletter Editor**

Robert Walker  
(973) 728-0344

**Publicity  
Committee**

Bob James  
(973) 889-0917

**Program  
Committee**

George Hacken  
(973) 633-1840

**Ethics Committee**

Laurie Cox  
(973) 663-5778

**Member-At-Large**

Eric Holme  
(201) 568-5717

**Past Chairperson  
& Webmaster**

Pat Banker  
(201) 307-9212

## IEEE CONSULTANTS' NETWORK OF NORTHERN NJ

99 Conklintown Road  
Wanaque, NJ 07465

<http://www.TechnologyOnTap.org>

Free Consultant Referrals Line: (973) 728-4500

**MEETING ANNOUNCEMENT for Thursday, October 25, 2001**

### ***Engineering Opportunities at Fort Monmouth and Picatinny Arsenal***

*On Thursday, October 25, 2001, the IEEE Consultants' Network of Northern NJ (CNNNJ) will present an outstanding seminar on "Engineering Opportunities at Fort Monmouth and Picatinny Arsenal"*

#### **ABOUT THE TOPIC**

There are various engineering opportunities at Fort Monmouth and Picatinny Arsenal. Knowing what and where they are, engineering consultants, small engineering companies and engineers, in general, can capitalize on those opportunities. Two eminently qualified speakers will discuss a variety of current and future programs/projects resident at their facilities. They will also provide helpful information, such as web sites, organization chart and points of contacts to facilitate exploring Engineering Opportunities.

#### **ABOUT THE SPEAKERS**

1. Joseph P. Brady is the chief of Small and Disadvantaged Business Utilization Office at Fort Monmouth. He has an extensive background in Procurement, Contracts, Technical Services and helping small businesses.

Mr. Brady is the recipient of the Secretary of the Army's award for Outstanding Achievement in Material Acquisition and has been awarded both the CECOM and AVCOM Commanders award for Civilian Service. Recently, he was awarded the Achievement Medal for Civilian Service for CECOM/Tinker AFB Rapid Response Program.

Mr. Brady has an MSA in Business Management from Central Michigan University, MI, and also BSBA in Business Management from Shippensburg State College, PA.

2. Philip D. Villella, is the Business & Industrial Management Team Leader supporting R&D and Supply Acquisition at Picatinny Arsenal. He is also the Small Business Advocate for Picatinny Arsenal. He has many years of experience in Procurement, Production, Quality Control and assisting small businesses of various kinds.

Mr. Villella is the recipient of the 1996 Tank Automotive-Armaments Command, Army Research and Development Engineering Center, Small Business Award and the 2000 Army Materiel Command Small Business Award.

Mr. Villella has a BA degree from Jersey City State College and has attended numerous Production, Quality, and Management courses sponsored by the federal government.

#### **ABOUT THE CONSULTANTS' NETWORK**

The IEEE Consultants' Network of Northern NJ was founded in 1992 to encourage and promote the use of independent technical consultants by business and industry.

#### **ALL WELCOME!**

You do not have to be a member of the Consultants' Network to attend.

**Time:** 7:30 PM. Thursday, October 25, 2001

**Place:** KDI Triangle, 60 S. Jefferson Road, Whippany, NJ.

**Information:** For directions and up-to-date meeting status, call Robert Walker, (973) 728-0344 or visit our website at [www.TechnologyOnTap.org](http://www.TechnologyOnTap.org)

**Attendance:** Free admission.

# Calendar of Upcoming Events

**October 30, 2001** (Tuesday) 6:00 PM - 8:00 PM

The IEEE NYC Section Vehicular and Communication Society Chapters

"Rail Communications Innovation Forum"

Nortel Networks, 320 Park Avenue (50th Street), NYC.

For additional information contact: Mr. David Horn at (212) 947-7110 or

e-mail david.horn@fluor.com

**November 15, 2001** (Thursday) 9:00 AM - 4:45 PM

The IEEE NYC Section Communications Society Chapter

"Building a High Volume Scalable Web Site"

Con Edison, Management Meeting Room, 19th Floor, 4 Irving Place, Manhattan, NY

---

## **Help Wanted – New York Section – Positions Available**

**Assistant Editor, Instrumentation & Measurement Chair,**

**And Engineering Management Committee Chair**

### **Assistant Editor Wanted**

The New York Section seeks an Assistant Editor. This person will provide support to and learn all necessary functions in the production of the Section Newsletter – The Monitor, including layout, production scheduling, composition, editing, advertisements, writing, correspondence, etc. The responsibilities included assisting the editor in:

- Selecting articles.
- Obtaining advertisements.
- Reviewing and approving and layouts.
- Scheduling issues.
- Attending executive board meetings.

### **Engineering Management, Instrumentation and Measurement Chairs Wanted**

The New York Section seeks new chairs for these committees. These people will provide an agenda and activities appropriate to enhancing and providing activities for our members. The responsibilities of each committee Chair, which should be delegated among its members, include the following:

- Selecting speakers and other activities for meetings.
- Recruiting members.
- Reviewing and approving an agenda.
- Scheduling activities.
- Attending executive board meetings.

**The Executive Committee of the New York Section, endorses and recommends that you vote for Art Winston for President-elect, IEEE and Roger Sullivan for Director-elect, Region 1**



**Arthur Winston**  
candidate for  
**President-elect, IEEE**



**Roger K. Sullivan**  
candidate for  
**Director-elect, Region 1**

---

**Nominations for Officers and Elected Committee Chairs  
For the IEEE New York Section Executive Committee 2002**

The Nominations Committee of the IEEE New York Section proposes the following slate for election as officers and elected committee chairs of the Executive Committee for the period January 1, 2002 to December 31, 2002.

Officers

Chairman - Ralph Tapino  
Vice Chair - Operations - Robert M. Pellegrino  
Vice Chair - Activities - Kenneth E. Vought  
Treasurer - Benjamin Schall  
Secretary - Robert Noberini

Elected Committee Chairs

By Laws – William N. Coyne  
Managing Editor – Harold Ruchelman  
Long Range Planning – William L. Perlman  
Special Events – Len Rubenstein

Chapter Organization – Philip M. Paterno  
Historian – Vince McDonough  
Publications – Frank E. Schink  
Web Master – Harold Ruchelman

Additional nominations should be postmarked no later than Friday, October 26, 2001 and mailed to:

Michael Miller  
Chairman, Nominations Committee  
Con Edison  
4 Irving Place Room 1214  
New York, NY 10003  
Telephone (W) (212) 460-4911 or Fax (212) 533-8763

**THE NEW YORK CHAPTER**  
of  
**THE IEEE COMMUNICATIONS SOCIETY**  
sponsors a full-day conference on  
**Building A High Volume Scalable Web Site**  
**Thursday, November 15, 2001, 9:00 AM to 4:45 PM**

**The Management Meeting Room at Consolidated Edison, 4 Irving Place, 19<sup>th</sup> Fl., New York, New York**

This full-day seminar will explore the key technical issues surrounding the building of a High Volume Scalable Web Site. Presentation topics include Building A High Volume Scalable Web Site, Building Scalable High Volume Ramp to the Internet, Building a Scalable Telecommunication Infrastructure, Caching Solutions for High Volume Web Site Scaling, Building Scalability into Web Site Personalization, Building Scalability into a Web Site Security Infrastructure, Managing a High Volume Web Site, and Measuring Your Web Sites Performance. For additional information see our web site at <http://www.comsoc.org/socstr/chptrs/nyc/>

Topic	Speaker/Position	Company	Time
Registration			8:30 - 9:00 am
Keynote Address: Building a High Volume Scalable Web Site	Dr. Willy Chiu, Vice President Software Division's Volume Web Sites	IBM	9:00 - 10:00 am
Application Server Performance Issues	Mr. Lewis Cirne, Founder and CEO	Wily Technology	10:00 - 10:45 am
Building a Scalable Telecommunications Infrastructure	<a href="#">Mark Stuart Day</a> , Senior Scientist, Content Networking Engineering Group	Cisco	11:00 - 11:45 am
Caching Solutions for High Volume Web Site Scaling		Akamai	11:45 - 12:30 pm
Lunch			12:30 - 1:30 pm
Building Scalability into Web Site Personalization	Dr. Jefferson Kommers, Principal Architect; Jeffrey Montgomery, Sr. Product Marketing Manager	Vignette	1:30 - 2:15 pm
Testing & Tuning Websites to Ensure Scalability	David Gehringer, Senior Product Manager, E-Services	Mercury Interactive	2:15 - 3:00 pm
Measuring Your Web Site Performance	Stephen Bice, Senior Systems Engineer	Candle	3:15 - 4:00 pm
Scaling Web Server Applications	Tom Hirschfield, Systems Engineer	BEA Systems	4:00 - 4:45 PM

Register on our web site: <http://www.comsoc.org/socstr/chptrs/nyc/>

Early registration is encouraged.

#### Seminar Fees

The seminar fee includes Lunch and Refreshments – Payment is Final, You may send a substitute.

For IEEE Members:

- \$150 for Members or, \$135 for new (2001) Members (Consider joining today!)
- \$35 for Students

For Non-IEEE Members

- \$175

**Seminar Registration Form**  
**November 15, 2001 seminar** sponsored by the  
**New York Chapter of the IEEE Communications Society**  
**Building A High Volume Scalable Web Site**

**Registration fee:**

- IEEE Member \$150
- Student \$35
- New IEEE Member \$135
- Others \$175

First Name: \_\_\_\_\_ Title: \_\_\_\_\_

Last Name: \_\_\_\_\_

IEEE Membership No.: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone \_\_\_\_\_

Fax \_\_\_\_\_

Email \_\_\_\_\_

Amount \_\_\_\_\_ US dollars.  
Due:

**Billing Information**

**FAX:** MasterCard, American Express, Discover, and Diner's Club are accepted. FAX this completed form with your signature to **Dimitar Georgievski.(530-706-6798)**

**Charge fee to:** \_\_\_\_\_

**Credit Card Number:** \_\_\_\_\_

**Expiration Date:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**MAIL:** Mail a check payable to the NY IEEE ComSoc and send it to:

**Karl Wummer**  
**39 Beechwood Avenue**  
**Manhasset, NY 11030**

**P.O.:** Bill my company. FAX (530-706-6798) this completed form with signature to Dimitar Georgievski.)

Purchase Order: \_\_\_\_\_

Billing Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

For additional information contact Dimitar Georgievski at [dimitarg@websyn.com](mailto:dimitarg@websyn.com)

# IEEE NEWS

## **IEEE MERCHANDISE**

Looking for great gifts for your guest speakers, local unit officers or conference colleagues? Check out the new IEEE merchandise items for use at work, home, on the golf course or when traveling. Select women's clothing and new items for students and young professionals. Visit the IEEE online Catalog and Store at <http://shop.ieee.org/store/>.

## **ONLINE STUDENT POLL**

In June, the first IEEE online student poll was implemented on the Student Concourse web site <http://www.ieee.org/students>. The objective of the program is to encourage students to visit the web site frequently. Mission accomplished so far with 3,141 students casting their vote in the first month of the poll. Visit the site for updates and current voting. Please contact Laura Durrett, Regional Activities, [l.durrett@ieee.org](mailto:l.durrett@ieee.org) or Adrienne Hahn, [a.hahn@ieee.org](mailto:a.hahn@ieee.org) for further information.

## **CALL FOR SECTIONS CONGRESS 2002 SPEAKERS**

We have begun to receive responses to our first call for speakers for IEEE Sections Congress 2002! SC'02 will take place 18-21 October 2002 at the JW Marriott Hotel in Washington, DC. The SC'02 Program Committee is particularly interested in presenters with experience in the identified subject areas, particularly at the grassroots level of the IEEE. Self-nominations will be accepted. Please note that sponsors or funding support should also be identified at the time the speaker is nominated. If no funding support is immediately identifiable for a particular speaker, the nomination may still be submitted, as sponsorship may be identified at a later time.

The online response form includes a drop down menu with a list of the subjects for which speakers are needed, and a space for funding support to be identified. Don't forget to complete the form by 15 September 2001 at

<http://www.ieee.org/organizations/rab/sc/2002/program/suggestions.html>.

For additional information, contact Cathy Downer, [c.downer@ieee.org](mailto:c.downer@ieee.org) or 1 732 562-5506.

## **BE AN AMBASSADOR FOR ENGINEERING, 2002 IEE FARADAY LECTURE SCHEDULED**

Is your local, pre-college school carrying the 2002 IEE Faraday Lecture? Do they know about it? It's not too early to act as an ambassador for engineering. Schools need a lot of lead-time in order to add events to their schedules.

Inform your local school that on 6 February 2002, 1:00 PM Eastern Standard Time, free downlinking of the 'Smart Living @ home with technology' simulcast will be available from IEEE Educational Activities (EA). Teachers' materials will be posted on the Internet in September. Then, consider volunteering at the school to answer questions about being an engineer on the day of the broadcast.

The annual acclaimed Lecture is a one-hour, PBS quality production featuring lively participation from the onsite London audience. Read more about it at <http://www.ieee.org/eab/precollege/faraday/index.htm>. For more information contact Celeste Torres at [c.torres@ieee.org](mailto:c.torres@ieee.org).

## **GROWTH OF ELECTRONIC SERVICES DRIVES 2002 DUES INCREASE**

For the first time since 1996, the IEEE Board of Directors has approved an increase in membership dues. The Board voted at its July meeting to increase base member dues for the 2002 membership year by \$15

to \$101. The Board also approved a \$4 increase to the IEEE-USA assessment and a new Region 1 assessment of \$2.

According to IEEE President Joel Snyder, during the past five years the IEEE has experienced increased demand for electronic delivery of technical information and member services. The dues increase reflects the costs associated with significant investments in Internet and Web applications.

Among the electronic services the IEEE has launched in recent years are IEEE Xplore; the IEEE Job Site featuring IEEE e-Recruiter; the Personal Email Alias Service; the Online Catalog & Store; IEEE Spectrum Online; the What's New @ IEEE series of e-mail newsletters; and online membership renewal.

### **2001 IEEE ANNUAL ELECTION IS UNDERWAY**

Members began receiving their ballots the first week in September. The balloting period is from 1 September until 12:00 noon on 1 November. Only signed ballots that are received in sealed envelopes will be valid and counted in the election.

Questions with regard to ballots or the election process may be referred to either Fern Katronetsky (f.katronetsky@ieee.org) at 1 732 562 3932 or Angela Wyckoff (a.wyckoff@ieee.org) at 1 732 562 3934.

### **2002 IEEE APPLICATIONS ARE IN THE MAIL**

The 2002 IEEE membership applications are now in stock. A supply of 2002 applications is currently in the mail to every Student Branch Counselor, every Section MD officer and Section Chair and to all IEEE offices. Only those officers registered with IEEE and listed in the IEEE rosters will receive these materials. Adobe Acrobat "PDF" versions of the 2002 membership applications are now available on the following sites: Member application is at [http://www.ieee.org/membership/mem\\_serv/genapp.pdf](http://www.ieee.org/membership/mem_serv/genapp.pdf)

Student Application is at

[http://www.ieee.org/membership/mem\\_serv/studapp.pdf](http://www.ieee.org/membership/mem_serv/studapp.pdf)

### **IEEE GLOBAL TRAVEL SERVICE NEWS**

**TRAVEL FEES:** Effective 10 September, IEEE Global Travel Services will implement a US\$15 transaction fee on all air and rail tickets. This has become necessary as major airlines have drastically reduced their travel agency base commissions, which were the primary source of income for the travel department.

In addition, the department will charge \$5 for domestic ticket delivery (within the 48 U.S. contiguous states) and \$15 for international ticket delivery to cover Airborne delivery charges. These fees will be automatically billed to the individual's credit card and will appear on the invoice as a separate charge.

**NEW FORMS:** To provide more efficient customer service and expedite the resolution of issues, Global Travel Services has made several forms available on its Web site. These include requests for ticket copies, itinerary copies, direct bills, transportation (limousine) itineraries, and forms for service provider complaints.

The forms are located on a drop-down menu in the bottom right corner of the site, titled "Customer Assistance." They are the preferred method of communication regarding any customer service issues.

For more information, visit the Global Travel Services Web site at  
<http://www.ieeetravelonline.org>

or call +1 732 562 5387.

# *The IEEE MONITOR*

Why not advertise where 6,000 high-income enlightened New Yorkers will view your message? Consider our low rates and unique distribution. Extend your reach; put your company image where the payback is immediate and rewarding.



*The IEEE MONITOR is published monthly, except for June, July, and August and is distributed throughout the Metropolitan Area*

Mr. Advertising Executive  
Any Company  
1 Main Street  
Any City, USA

Dear Mr. Executive,

Re: Your Ad in *The IEEE MONITOR*

Send in your copy to either of the following. Indicate the number of issues you would like you ad to appear in and its size. Where better to place your ad.

Thanks for your support and contribution.

Harold Ruchelman, Editor  
c/o Con Edison, room 1500-D  
4 Irving Place  
New York, New York 10003

Paul J. Sartori, Publicity Chair, IEEE  
c/o Con Edison, room 1500-D  
4 Irving Place  
New York, New York 10003

## PUBLISHER'S STATEMENT

The IEEE MONITOR is the official news publication of the New York Section of The Institute of Electrical and Electronics Engineers, Inc. The New York Section is comprised of the five boroughs of New York City (Brooklyn, Bronx, Manhattan, Queens and Staten Island) plus Rockland and Westchester Counties. The publication reports on events and activities of interest to the general membership composed of electrical and electronics engineers and computer scientists, presents topical feature material relevant to the engineering profession, and carries the monthly IEEE society chapter calendar of events as a service to its readers.

## CIRCULATION

The IEEE MONITOR is distributed to all IEEE members in the New York Section plus additional subscribers. Monthly circulation as of December, 1999 is 6,200.

## ISSUE AND CLOSING DATES

The IEEE MONITOR is published monthly except June, July and August. Advertising order deadline is the first of the month preceding issue date. Camera ready material is due on the 5th of the month preceding issue date.

## MAILING INSTRUCTIONS

Address all correspondence concerning advertising to:

IEEE Monitor  
24 Chamber Lane  
Englishtown, N. J. 07726

## DISPLAY ADVERTISING RATES

Display advertising space is available in full and fractional page sizes. To qualify for frequency discounts, advertiser must furnish publisher with a schedule of insertion dates. Schedule may be changed by notifying publisher prior to regular deadline date.

	1X	3X	5X	9X
Full Page	\$630	\$599	\$567	\$536
2/3 Page	490	470	441	417
1/2 Page	395	375	356	336
1/3 Page	280	266	252	238
1/4 Page	225	214	203	191
1/6 Page	165	157	149	140
Bus. Card	85	81	77	72
Col. Inch	35	33	32	30

## Covers

Back	755	717	680	642
Inside Back	695	660	626	591

## Preprinted Inserts

Four pages: \$1,070, no frequency discount.

## COMMISSIONS

15% commission allowed to all recognized ad agencies providing payment is received by due date. All ads invoiced on publication closing date. Full payment due 10 days after issue date. Rendering invoice to ad agency does not relieve advertiser in case agency default.

## MECHANICAL SPECIFICATIONS

### Size

Publication trim size 8 1/2" x 11"

Image size is 7 1/2" x 10"

Publication is black and white 3 column format. Each column is 14 picas wide.

Color is NOT available at this time.

Full Page	7 - 1/2" x 10"
2/3 Page	4 - 3/4" x 10"
1/2 Page (horizontal)	7 - 1/2" x 5"
1/2 Page (vertical)	4 - 3/4" x 7 - 1/2"
1/3 Page (square)	4 - 3/4" x 5"
1/3 Page (vertical)	2 - 1/4" x 10"
1/4 Page	4 - 3/4" x 3 - 3/4"
1/6 Page	2 - 3/4" x 5"
Bus. Card	2" x 3 - 1/2"
Col. Inch	1" x 2 - 1/3"

### Materials

Preferred material for black and white ads is right-reading emulsion side down negative. Halftone screen is 100 lines. Veloxes, other reproducible proofs and laser printed materials are acceptable. Photocopied material is not accepted. Original artwork accepted at advertiser's risk. Composition and assembly to advertiser's layout available at nominal charge. Submit copy and layout for quote.

## ADVERTISING POLICY

All advertising is subject to the publisher's approval. Advertisers and their advertising agencies assume all liability for all content including text, illustrations, sketches, labels, trademarks, etc., of all advertising submitted for publishing, and also assume responsibility for any claims arising therefrom made against the publisher.



# SOCIETY SENTINEL NEWS

2002 VOLUNTEER WORKSHOPS: Each year, the Technical Activities Board hosts two workshops for Society officers.

The 2002 IEEE Society Officers Workshop will be held:

Thursday, 14 February 2002  
Wyndham Buttes Resort  
Tempe, Arizona USA

The 2001 TAB Finance Workshop will be held:

Monday, 8 April 2002  
IEEE Operations Center  
Piscataway, New Jersey USA

The Society Officers Workshop is designed for 2002 Society Presidents, Presidents-Elect and incoming officers. It is held in conjunction with the first 2002 TAB meeting series. Plan to attend and gain valuable insights about the IEEE and your role as a Society leader. The program includes presentations on IEEE, TAB, your Society's interactions with these groups, and how and where you can get involved. This year, based on volunteer requests, the Society Officers Workshop will include a module on finances. This module will be a shortened version of the annual TAB Finance Workshop, and is designed to give Society Officers an introduction to IEEE financial reports, procedures, and financial policy.

The annual 2002 Finance Workshop, being held in April, is for all Society Treasurers and Financial Officers, as well as Presidents and other officers involved in Society financial operations. This hands-on program is designed to give you experience with the actual numbers/reports/analyses that are part of the financial duties. The workshop is scheduled to follow the release of the first run of the 2003 budgets.

Travel, hotel and per diem expenses are the responsibility of the Society.

For more information on any of these workshops, and to ensure that you are on the workshop announcement list, CONTACT Jayne F. Cerone - IEEE Technical Activities - telephone 1 732 562 3908; fax 1 732 981 1769; "MailTo:j.cerone@ieee.org".

FREE ON-LINE HOW-TO GUIDE FOR COURSE DESIGN: The IEEE Educational Activities Board (EAB) has posted an online tool for course designers, "Reference Guide for Instructional Design and Development." This how-to guide was developed by EAB in partnership with Telcordia Technologies to help individuals design courses and tutorials efficiently and effectively. Based on the Systematic Design of Instruction by Walter Dick and Lou Chaney, the guide outlines six distinct steps to acquire "sound principles of design" when creating courses. These clear steps are displayed on a colorful, friendly webpage. Learn to:

- Assess the needs of the instructional situation
- Analyze the learners
- Write learning objectives
- Select an instructional strategy that fits your assessment
- Develop materials that enhance your strategy
- Evaluate your work

With each step there is a concise concept outline, tools to aid in the application of the step, and online references that can add to the material in the outline. Links to suggestions for further study are on each page. This guide will help designers to add education value to their tutorials, which can qualify them for Continuing Education Unit credits. Access this guide at

<http://www.ieee.org/organizations/eab/tutorials/refguide/mms01.htm>.

For additional information CONTACT Lynn Murison - IEEE Educational Activities - telephone 1 732 562 6526; "MailTo:l.murison@ieee.org".

# Romano's Forum by Mario Romano

## HIGH TEMPERATURE SUPERCONDUCTORS

The purpose of this article is to give the facts concerning high- temperature superconductors in the power industry today. The facts are given in a question and answer format.

I always had a goal to ask one intelligent question every day in which I didn't know the answer, and then find the answer and make a note of it. This is very difficult to do because you must be knowledgeable to ask an intelligent question and industrious to find the answer. That is why most ignorant people are also lazy.

This article was written for me since I am ignorant of the latest developments in the use of high temperature conductors. Since I am lazy I decided to write in the simplest format possible – question and answer. The facts are taken from a New York Times “Science Section” dated 5/29/2001, entitled, “They’re a Puzzle, but They Work”.

Q1. What is a high temperature super conductor?

A1. As of this date it is a conductor that can conduct electricity at about 220 degrees of above absolute zero or minus 240 degrees Fahrenheit.

Q2. What is this superconducting cable made of?

A2. The new class of superconductor is made of exotic ceramics.

Q3. What is used to cool the conductors?

A3. Liquid nitrogen.

Q4. Are there any superconductors supplying utility customers today?

A4. No, but they were installed by Detroit Edison in May of this year (2001) in which they will undergo a year of testing before going into service to supply electricity to 14,000 customers.

Q5. Who manufactured the cables?

A5. Pirelli Cables and Systems of Milan assembled the American Superconductors wires to the power cables used in the Detroit Edison project.

Q6. How many cables were installed and what was the total weight of the superconducting material?

A6. Three cables were installed containing 250 pounds of superconductors.

Q7. How many copper cables will they replace and what is their weight?

A7. The three new high temperature superconducting cables will replace 9 copper cables containing 18,000 pounds of copper. Swapping copper cables for superconducting ones will allow utilities to triple their power capacity without disruptive digging.

Q8. Will the superconducting cables in the Detroit project save any energy compared with the old copper cables?

A8. No. The A-C losses are very high.

Q9. What is the cost of the Detroit Project?

A9. \$13.9 million.

Q10. Are there any proposals to reduce the losses in these new cables?

A10. There are proposals by the Electric Power Research Institute that the new superconductors operate at D-C for long distance transmission lines.

Q11. Have scientists agreed on a theory for the workings of these new high temperature superconductors?

A11. No. “The theorists working on it are the smartest ones on earth, and they’ve been working on it for 15 years. They still haven’t come to a census that everyone is happy with” (1)

(1) New York Times, 5/28/2001, page F2

**THE NEW YORK CHAPTER  
of  
THE IEEE  
COMMUNICATIONS SOCIETY**

sponsors a full-day conference on

**Building A High Volume  
Scalable Web Site**

**Thursday, November 15, 2001**

**9:00 am to 4:45 pm**

**The Management Dinning Room (19th Floor)**

**Consolidated Edison**

**4 Irving Place, New York, New York**

For full details:

<http://www.comsoc.org/~nyc/15nov2001.htm>