

May 2003
(VOL 50, NO. 9)



The  **IEEE**
MONITOR
PUBLISHED BY THE NEW YORK SECTION OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

See You In
September

Visit our web page at
http://www.ewh.ieee.org/r1/new_york/

PERIODICAL
TIME SENSITIVE MATERIAL

Volt, Amp, Ohm.....Who?

Mel Olken, Historian

In 1791 Luigi Galvani of the University of Bologna published a treatise about the nerve-muscle relationship of a frog's leg based on the muscle contraction that was caused by contact with a scalpel. Galvani theorized that the contraction was caused by the release of "animal electricity" which made the leg jerk. Galvani sent a copy of his treatise to his friend, Alessandro Volta (1745-1827)



Alessandro Volta

at the University of Pavia. Volta repeated the experiment in many variations and, in 1797, came to the conclusion that what Galvani described as "animal electricity" was in fact "contact electricity" of two dissimilar materials. Continuing in this vein Volta then discovered that a stack of alternating

zinc and copper disks, if kept moist, generated a constant electric current,

This was the invention of the electric battery which, at the time, was called a "voltaic pile" and the beginning of a new school of electrical experimentation--for the first time a constant source of electric current was available. Shortly after Volta's invention of the battery, he described the device and it was not long before people on both sides of the Atlantic were making voltaic piles.

At the University of Copenhagen, Hans Oersted noticed that an electric current caused the deflection of a magnetic needle. He concluded that a current loop produced magnetic action exactly as a magnetic pole would do....the interrelationship between electricity and magnetism. The report of this discovery stimulated experimentation in many countries.

In Paris, several French experimenters repeated Oersted's work and carried it further to prove that the force between a current carrying wire and a magnet pole was inversely proportional to the distance between them. A professor of mathematics,

Andre Maria Ampere (1775-1836), then derived a mathematical theory of attraction and repulsion between two parallel wires. Ampere further suggested that this force could be used in an instrument to measure the electric current strength and suggested that the instrument be called a "galvanometer". Others, including Michael Faraday, soon constructed similar instruments.



Andre Maria Ampere

However the relation between the force of the voltaic pile (which soon became known as "voltage") and the resulting current in a closed circuit was unknown. In 1825 Georg Simon Ohm (1789-1854) a mathematics professor at the Jesuit College in Cologne, began to examine this relationship both theoretically and experimentally. He used a galvanometer, the only sensitive instrument available to control current. He prepared metallic wire samples of different lengths and used boiling water and melting ice for constant temperature references. Control of the voltaic pile

was essential and, to achieve it, he made use of the recently discovered thermoelectric effect. The publication of Ohm's results were greeted with some skepticism but later independent verification led to the full recognition of his contributions. Today, of course, the linear relationship between current and voltage for metallic conduction is our own Ohm's Law.

And, to think, had these discoveries been made in times such as exist today where informality rules, we would be talking about a Georg being equal to an Alessandro divided by an Andre. Perhaps we're better off with the original.



Georg Simon Ohm

The  IEEE
MONITOR

Vol. 50 No. 9

May, 2003

OFFICERS

SECTION CHAIRMAN - Robert Pellegrino
VICE CHAIRMAN, OPERATIONS - Kenneth Vought
VICE CHAIRMAN, ACTIVITIES - Benjamin Schall
TREASURER - Robert Noberini
SECRETARY - Paul Sartori
AWARDS CHAIRMAN - Peter Mauzey
P.A.C.E. CHAIRMAN - Peter J. Greco
PUBLICATIONS CHAIRMAN - Frank E. Schink

STAFF

EDITOR - Harold Ruchelman
ASSISTANT EDITOR - Michael Miller
HISTORIAN - Melvin Olken

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.

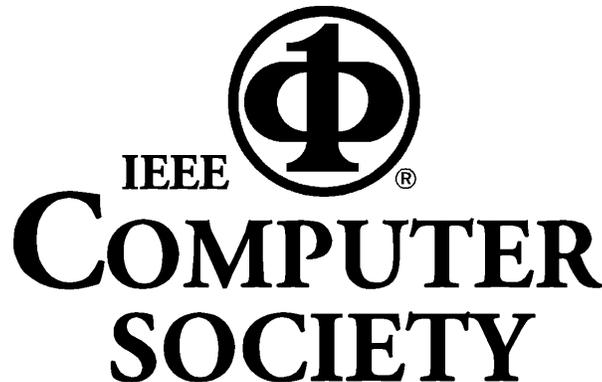
Phone (212) 460-6363, Fax (212) 529-0463. IEEE Corporate Office, 3 Park Avenue, 17th Floor, New York, NY 10016-5997

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.

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 NY Chapter of the IEEE-Computer Society will be making a presentation on the subject of software development entitled:

"The Two (Software) Cultures",

By Dr. George Hacken

Tuesday, September 23rd, 2003 at 6:00 PM (Refreshments at 5:30 PM).

**The Con Edison Building,
4 Irving Place, NYC.
Sign in at Reception Table**

**To reserve a seat please email Wilson Milian at wimilia@nyct.com
Admission is free.**

Professional Activities Information Page

This page dedicated to member professional activities information

CALL ON CONGRESS FOR MORE INVESTMENT IN R & D

On April 2-3 I traveled with other IEEE members to Washington D.C to express to Congress the need for increased and balanced federal investment in science and engineering R & D. The IEEE-USA group joined with more than 200 scientists, engineers and technology leaders who made visits on Capitol Hill as part of the eight "Congressional Visits Day" and annual event sponsored by the Science-Engineering-Technology Work Group.

While visiting Congressional offices, IEEE-USA members discussed the importance of the nation's broad portfolio of investments in science, engineering and technology in promoting national security, prosperity and innovation. Most importantly, they provided a constituent perspective on the local and national impact of these programs and their significance to IEEE members. I was pleased to have the opportunity to participate in this event. I feel strongly that making our voices heard to our elected representatives in Washington is critical to ensure ongoing support of Federal R&D program. It is crucial to the continued leadership of the nation that we commit increased resources to these efforts.

Highlights of the two-day event included remarks by Mike Holland of the White House Office of Science and Technology Policy and staff members from Capitol Hill. A reception was held at the Rayburn House Office Building where James Walsh (R-NY)

was presented with the George E. Brown Jr. Science-Engineering Technology Leadership Award. On April 3rd, CVD participants made hundred of visits to their Senators and Representatives.

BIG IEEE –USA EVENT COMING IN SUPPORT OF OUR UNEMPLOYED MEMBERS.

On June 10-11 IEEE-USA is sponsoring a Engineering Careers Congressional Visits Day

The two-day event will focus on the impact of temporary work visas and global outsourcing on high tech employment in the United States.

On June 10th there will be a briefing on key issues and training. June 11th will be devoted to visits to Congressional offices.

For more information on this event contact <http://www.ieeeusa.org/forum/h1bcvd/>

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

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.

May 14	General meeting
June 11	General Meeting

NEWS from IEEE-USA

Offshore Outsourcing and Labor Importing Put the Squeeze on Jobs in the U.S. High-Tech Industry

WASHINGTON (24 March 2003) - The United States lost 560,000 jobs in the high-tech industry in 2001-02, according to a 19 March report by the American Electronics Association (http://www.aeanet.org/PressRoom/idmk_2002_tech_employment_press.asp). While IEEE-USA commends AeA for its Tech Employment Update, the unanswered question is where these jobs have gone.

"In addition to the downturn in the U.S. economy, we're worried about the eagerness of American businesses to move high-tech jobs overseas," IEEE-USA President-Elect John Steadman said. "Congress should take a close look at overseas outsourcing to see what can be done to create and keep high-value, high-tech jobs here in the U.S."

During roughly the same time period (FY '01 and '02) our nation lost more than half-a-million high-tech jobs - both blue collar and professional - 799,700 new or renewal H-1B visas were issued. And according to a 6 March article in Business Week, another 329,000 people were working in the U.S. on L-1 visas in 2001, many in the high-tech sector.

In "A Mainframe-Size Visa Loophole," Business Week noted that the L-1 visa is intended for "intracompany transfers by multinational corporations," but "many employers looking to slash costs have discovered that they can use [outsourcing] firms that hire L-1s to dump high-paid Americans in favor of cheaper workers from abroad." Read on at http://www.businessweek.com/careers/content/mar2003/ca2003036_6655.htm.

The unemployment rate for electrical and electronics engineers (EEs) has more than tripled since 2000, going from 1.3 percent to 4.2 percent last year. For computer scientists, the jobless rate jumped from two percent to five percent.

"We have thousands of unemployed engineers, computer scientists and recent college graduates who are having difficulty finding employment because many of the jobs are taken by cheaper, foreign labor," Steadman said. "With jobs disappearing and historically high levels of unemployment among high-tech professionals, IEEE-USA asks why we continue importing thousands of new workers through the H-1B and L-1 visa programs.

"We should put our own people to work before sending any more good jobs to other countries."

Moreover, IEEE-USA President Jim Leonard, in a 10 March letter, asked every member of Congress to limit the number of H-1B visas available for admission to the U.S., and ensure that more of the H-1B fee revenue is used to address the specialized instructional needs of unemployed engineers, scientists and other high-tech professionals. The money currently goes more to entry-level training for lower-skilled workers.

Leonard also urges Congress to let the current H-1B visa cap of 195,000 drop back to the historical level of 65,000, which will happen on 1 October with no further congressional action.

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-USA PRESIDENT'S COLUMN: IT'S YOUR CAREER, MANAGE IT

In his latest IEEE-USA President's Column, Jim V. Leonard encourages all IEEE members to take control of managing their careers and to continue learning new skills. Read on at: http://www.todaysengineer.org/April03/prez_column.asp

IEEE-USA TO CO-SPONSOR SECURE IT WORKSHOP - 20 MAY

IEEE-USA's Committee on Communications and Information Policy (CCIP) will join the National Institute of Standards and Technology (NIST) and Carnegie Mellon University's Sustainable Computing Consortium in co-sponsoring a 20 May workshop for senior government officials, industry executives, educators, policy leaders, scientists, and engineers, that will address how the federal government, private industry and infrastructure providers can identify, develop and evaluate off-the-shelf, commercially available information technology (IT) products and services for secure system applications. The Secure IT workshop comes in response to the U.S. government's recognition of the need to address security risks associated with the public and private sector components of the critical information infrastructure. For more information on this workshop, visit: <http://www.ieeeusa.org/conferences/secureit/>

ENGINEERING CAREERS CONGRESSIONAL VISITS DAY – 10-11 JUNE

U.S. IEEE members concerned about their careers, the effects of globalization, outsourcing and guest labor on engineering employment, and the health of the U.S. engineering workforce are invited to participate in IEEE-USA's Engineering Careers Congressional Visits Day to share their concerns with Members of Congress. The event is scheduled for 10-11 June. For more information, visit: <http://www.ieeeusa.org/forum/H1Bcvd/index.html>

FORMER IEEE-USA PRESIDENT TAPPED TO HEAD U.S. ITER PLANNING GROUP

On 30 January, Secretary of Energy Spencer Abraham announced that the United States would participate in the negotiations for the construction and operation of the International Thermonuclear Energy Reactor (ITER), a major international magnetic fusion research project which has been hailed by some members of the House Science Committee as "one of the most important endeavors being undertaken by the international energy science community." In March, the Department of Energy selected Princeton Plasma Physics Laboratory's (PPPL) Ned Sauthoff to head the U.S. ITER Planning Group. Sauthoff served as president of IEEE-USA in 2001 and is currently chair of IEEE-USA's Nominations and Appointments Committee. Read an interview with Sauthoff in PPPL's newsletter HOTLINE, in which he discusses opportunities for U.S. researchers, challenges facing the U.S. ITER Team, and the progress expected during the next few years as the international project makes the transition from negotiations to construction, at: [http://www.pppl.gov/publications/pics/hotline_24\(06\).pdf](http://www.pppl.gov/publications/pics/hotline_24(06).pdf)

IEEE AND FLUOR CORPORATION TAKE OVER AS CO-CHAIRS OF EWEEK 2004

In April, the IEEE and Fluor Corporation formally took over as co-chairs of the National Engineers Week (EWEEK) 2004 steering committee. Although the two groups have been involved in behind-

the-scenes planning for months, the meetings held at the National Society of Professional Engineers headquarters in Alexandria, Va., marked the official kick-off of EWEEK 2004. The IEEE, whose efforts are coordinated through IEEE-USA, last chaired EWEEK in 1992, when it helped launch the popular Future City Competition (FCC) as its legacy project. Plans for 2004 include supporting expansion of FCC to three new U.S. cities, providing a framework to enable FCC's future fundraising efforts, and also to leverage the IEEE's projects relating to precollege education. For more about the EWEEK 2004 chairs, visit:

<http://www.eweek.org/site/About/2004chairs.shtml>

IEEE-USA GOVERNMENT FELLOWS FILL KEY ROLES IN CONGRESS

IEEE-USA's 2003 Government Fellows are in place and hard at work, bringing their technical expertise and professional experience to bear on key issues facing the U.S. government. In January, four new IEEE-USA government fellows began their one-year assignments in Washington, while another IEEE-USA Congressional Fellow continued his Senate staff assignment. Find out more about these IEEE members, and how they're actively contributing to the public policy process. In the April edition of IEEE-USA Today's Engineer:

<http://www.todaysengineer.org/April03/scene.asp>

IEEE-USA ISSUES ACTION ALERTS ON CAREER, TECHNOLOGY ISSUES

IEEE-USA has released four grassroots action alerts asking U.S. IEEE members to communicate with Congress on the H-1B Temporary Work Visa quota, unsolicited commercial email (i.e. spam), national nanotechnology legislation, and funding for federal computer/IT security programs. The full texts of IEEE-USA's action alerts, along with tools for communicating with Congress, are available online at the IEEE-USA Legislative Action Center at: <http://www.capwiz.com/ieeusa/>

CALL FOR NOMINATIONS - IEEE-USA OFFICERS

The IEEE-USA Nominations and Appointments Committee has issued a call for nominations for 2004 IEEE-USA officers. The nomination deadline is 19 May 2003. More details and nomination forms are now available online at: <http://www.ieeeusa.org/elections/nominations.html>

IEEE-USA EXPANDS GRASSROOTS ACTIVITIES

Russell Harrison has joined IEEE-USA's government relations staff as legislative representative for grassroots activities. Harrison will develop IEEE-USA's CARE grassroots program, with the twin goals of recruiting a strong core of grassroots advocates and strengthening the role of IEEE-USA's PACE Network in this area. Harrison comes to IEEE-USA from his position as director of grassroots programs for the Institute of Scrap Recycling Industries.

IEEE-USA'S PUBLIC POLICY PRIORITIES FOR 108TH CONGRESS (2003)

A comprehensive list of IEEE-USA's public policy priority issues is available online at: <http://www.ieeeusa.org/forum/issues/>

IEEE-USA TABLETOP DISPLAYS AVAILABLE FOR IEEE SECTION AND SOCIETY MEETINGS

IEEE-USA has two tabletop displays available for Section and Society use. To reserve a display, please contact Helen Hall at 1 202-785-0017, or by e-mail at h.hall@ieee.org. The display will be available on a first come, first serve basis. If you are interested in purchasing your own display, contact Prodisplays at 1 800-989-2146 or www.prodisplays.com. See a picture of the display online at: <http://www.ieeeusa.org/notable/display.htm>

Calendar of Upcoming Events

May 1, 2003 (Thursday) 6:00 – 8:00 PM

Vehicular Technology Society

“New Rail Car Technology vs. Maintenance” and “Wireless Communications on Trains

Cisco Systems, Inc., One Penn Plaza, New York City, 5th Floor

For information call Mr. Ramdane Benferhat at 718-243-4926 or by e-mail at rabenfe@nyct.com.

May 3, 2003 (Saturday) 8:00 AM – 5:00 PM

The IEEE Westchester Subsection

“Energy Independence: Real World Solutions for Homes and business

Westchester County Center, White Plains

For information call the Federated Conservationists of Westchester county Inc. at 914-422-4053 or

Visit: www.FCWC.org.

May 22, 2003 (Thursday) 7:30 PM

The IEEE Consultants’ Network of Northern NJ

“Infrequently Asked Questions: The Art of Networking”

MCE-KDI Corp., 60 S. Jefferson Road, Whippany, NJ

For directions call Robert Walker at (973) 728-0344 or go to

<http://www.kditriangle.com/directions.htm>

June 26, 2003 (Thursday) 7:30 PM

The IEEE Consultants’ Network of Northern NJ

“Investing For Retirement In A Challenging Market”

MCE-KDI Corp., 60 S. Jefferson Road, Whippany, NJ

For directions call Robert Walker at (973) 728-0344 or go to

<http://www.TechnologyOnTap.org>

September 23, 2003 (Thursday) 6:00 PM Refreshments at 5:30 PM

The NY Chapter of the IEEE Computer Society

“The Two (Software) Cultures”

Con Edison Building, 4 Irving Place, 19th Floor, New York, NY

For information e-mail Wilson Milian wimilia@nyct.com

**The following New York Section members
have been elevated to Senior Member**

Radhakrishnaiah Setty

Mingming Jiang

Lakshmi N. Reddy

Nominations for Officers of the New York Section 2003

The Nominations Committee of the New York Section of the IEEE chaired by Junior past Chairman, Ralph Tapino, is soliciting nominations for the following positions in the 2003 term:

Chairman
Vice Chairman – Section Activities
Vice Chairman – Chapter Operations
Treasurer
Secretary
All Standing Committee Chairs*

Nominations should be postmarked no later than October 15, 2003 and mailed to:

Ralph Tapino
Chairman, NY Section Nominations Committee
71 Amsterdam Avenue
Staten Island, NY 10314
E-mail: r.tapino@ieee.org

***Standing Committees:** Awards and Appointments, Budget, Bylaws, Chapter Organization, Education, Historian, Long Range Planning, Membership Development, Nominating, Professional Activities, Publications, Publicity and Public Relations, Special Events, Student Activities, and Student Representative

Nominations for Officers of the New York Chapter IEEE Power Engineering & Industrial Applications Society

The Nominations Committee of the New York Chapter of the IEEE Power Engineering & Industrial Applications Society chaired by Junior past Chairman, Uwe Enke, is soliciting nominations for the following positions in the 2003 term:

Chairman
Vice Chairman – Section Activities
Secretary
Treasurer
Senior Member at Large
Junior Member at Large

Nominations should be postmarked no later than October 15, 2003 and mailed to:

Uwe Enke
Chairman, PES/IAS Nominations Committee
41-73 Glenwood Street
Little Neck, NY 11363
E-mail: uenke@worldnet.att.net



**Chairperson
& Membership
Committee**

Jim Boyd
(973) 584-0329
j.boyd@ieee.org

Vice Chairperson

Dan Kamdar
(973) 890-2783
afford@optonline.net

Secretary-Treasurer

Robert Walker
(973) 728-0344
robert@rdwalker.com

Referrals & Newsletter

Robert Walker
(973) 728-0344
robert@rdwalker.com

Publicity Committee

Merrill Rutman
(201) 447-6041
mrutman@optonline.net

Program Committee

Gary Dan
(973) 243-1024
gdan@chuckware.net

Ethics Committee

Laurie Cox
(973) 663-5778
lcox@rlcdesigns.com

Member-At-Large

Laszlo Laskai, PhD
(973) 879-8804
laskai@ieee.org

Webmaster

Chris Mesibov
(914) 584-2659
c.mesibov@ieee.org

Past Chairperson

Pat Banker
(201) 307-9212
pbanker@bankercote.com

IEEE CONSULTANTS NETWORK OF NORTHERN NJ

99 Conklintown Road
Wanaque, NJ 07465

<http://www.TechnologyOnTap.org>

MEETING ANNOUNCEMENT for Thursday, May 22, 2003

Infrequently Asked Questions: The Art of Networking

The art of finding help when you need it will be demonstrated and practiced at the May 22 meeting of the IEEE Consultants Network of Northern NJ (CNNNJ). CNNNJ member Merrill Rutman will lead a discussion on networking techniques. The discussion will be followed by a live networking session.

ABOUT THE TOPIC

Networking is our middle name at the CNNNJ. As independent engineering practitioners, we rely upon *who* we know, as well as what we know, for almost every aspect of our businesses. Landing consulting assignments and then delivering the product or service that our clients expect requires human connections, so we're constantly challenged to exercise our network of contacts to locate someone with information and skills that we don't have. At this meeting, we'll discuss and demonstrate techniques for using our current contacts as a springboard to the wider world where lie the answers that we seek.

ABOUT THE MODERATOR

Merrill Rutman, a technical writer and a former electronics engineer and procurement project leader with the Defense Department, is a veteran member of the CNNNJ. He founded and ran a successful job-search networking organization for engineers and other technical professionals during the economic recession in the early 1990s. Merrill enjoys networking and believes that the key to success is in the listening.

ABOUT THE CONSULTANTS NETWORK

Founded in 1992, the IEEE Consultants Network of Northern NJ encourages and promotes the use of independent technical consultants by business and industry.

ALL ARE WELCOME!

Time: 7:30 PM. Thursday, May 22, 2003

Place: MCE/KDI Triangle, 60 S. Jefferson Road, Whippany, NJ. (Entrance at rear of building.)

Information: For directions and up-to-date meeting status, call Robert Walker, 973-728-0344 or visit our website at www.TechnologyOnTap.org.

Map to MCE/KDI: www.kditriangle.com/directions.htm

Free Admission. Non-members are welcome.



SECOND INTERNATIONAL CONFERENCE ON INFORMATION TECHNOLOGY & APPLICATIONS (ICITA 2004)

HARBIN, CHINA
7-10 January 2004
www.icita.org

Supported by:
IEEE NSW Section, Australia, IEEE CS Chapter Beijing

CALL FOR PAPERS

Each year many conferences in the area of Information Technology (IT) are organised, however, in many ways, ICITA is unique. It provides a platform for academics in all IT areas to meet, exchange ideas, establish and extend professional networks. It is important that IT professionals stretch across narrowly defined subject areas and constantly acquire a global technical and social prospective. ICITA 2004 offers an opportunity to facilitate such a cross-disciplinary and social gathering.

The Technical Programme Committee is soliciting papers in areas that include but not necessarily limited to IT applications in the following areas (The Technical Programme Committee is calling for people to create and chair new topic areas. A new Topic area can be opened if there are more than 4 presentations can be scheduled.):

Topic 1: IT in Telecommunication and Mobile Communications.

Topic 2: IT in Multimedia, Computer Networking, Database, and Interface.

Topic 3: IT in National Security.

Topic 4: Web Content Generation, Usage and Management. (Chair: Aruna Rohra)

Topic 5: IT in Engineering: AI, Signal/Image Processing; Power & Power Electronics; Sensors.

Topic 6: IT in Education and Open Learning.

Topic 7: IT in Health and Medical Care.

Topic 8: Security and Hacking.

SUBMISSION GUIDELINES

Authors are invited to submit an electronic soft-copy of their abstract and extended summary (not more than 4 pages including figures), in Adobe PDF format (instructions provided on web) to icita@ieee.org. The first page should include the title, the name of author(s), affiliation, mailing address, fax number, e-mail address, **preferred topic number**. The second and subsequent pages should include the title and extended summary.

Deadlines: Intending authors should note the following deadlines:

1. Receipt of full paper/abstract: 30 June 2003
2. Notification of review result: 30 August 2003
3. Receipt of final manuscript and registration fee: 30 September 2003

Conference location:

Although it was hardly ever reported, in the past 50 years, the events developed in Harbin have contributed to the collapse of the League of Nations and altered the outcome of modern history and the WWII with its vast oil reserve hidden, until early 1950s, from the competing world powers.

Just over a hundred years ago in 1898, the city of Harbin erupted out of a tiny fishing village in the Northeast of China, formally known as Manchuria. In the next 12 years, Harbin became a city with the largest foreign settlement (over 44,000, most from Russia) in China with modern architectures, which could only be found in Europe. Although the international influence of Harbin has slipped into oblivion, the city still boasts its many European architectures as well as sparkling spectacles of ice-encrusted Russian buildings, winter sports and its famous Ice Lantern Festival, which fascinate many international visitors (<http://www.hrb-bxj.com.cn/english/tour/tour.htm>).

IEEE

E-NOTICE: AUTOMATED ELECTRONIC NEWSLETTERS!

Initial development of an automated electronic newsletter service, e-Notice, for use by unit volunteers has been completed. This capability was used for the rollout of the IEEE Institute Online Alert. The service is currently being piloted by IEEE Canada, the San Francisco Bay Area Council, the Fort Worth Section, IEEE Power Engineering, Solid State Circuits, and Broadcast Technology Societies.

The key components of the service are:

- * The Section provides the mail piece
- * Staff creates the distribution list
- * Staff sends the message
- * Staff manages the unsubscribes
- * Staff tracks the mailing statistics
- * Staff manages the bounces

Not all phases of the e-Notice service are completely automated for staff. However, since this service will significantly reduce the time and energy needed to maintain an electronic mailing list for an organizational unit, Sections are now invited to participate. For more information or to register visit: <http://www.ieee.org/e-notice>.

ENCOURAGING CONTINUED VOLUNTEER INVOLVEMENT

How can you keep your volunteers? One way may be positive reinforcement in the form of praise, recognition and feedback. These are proven methods of encouraging continued volunteer involvement and are often the crux of volunteer retention. Keeping in mind that not everyone likes to be recognized in the same way, here are some ideas:

- * Specific feedback (do not simply say "thanks for serving as Treasurer," but state detail "we really appreciate the fact that you take the time to reconcile the bank statements each month and to keep us within our planned budget.").
- * A handwritten note, or an email copying Region level volunteers or others.
- * A special "thank you" in the Section newsletter or on the Section's web page.
- * Formal recognition in the form of a certificate, plaque or pin (purchased locally or through Section/Chapter Support. See the "products" link at <http://www.ieee.org/scs>).
- * For Section Executive officers and Chapter Chairs: a letter to employer from the Vice President of Regional Activities. (available at no cost through IEEE Section/Chapter Support. The request form is on the web at <http://www.ieee.org/scs>, select the button for "FORMS.")

FEBRUARY MEMBERSHIP STATISTICS, A REAL DROP?

In February, IEEE membership totaled 294,338. This appears to be a 14.9 percent decrease from February 2002, but can be explained by changes in the IEEE's renewal cycle.

These changes include deactivating Life Members who did not return their renewal profiles, and moving the renewal grace period for members in Regions 8-10 to coincide with that of Regions 1-7. Life Members whose memberships were inadvertently terminated will be reinstated upon request. Memberships for those who did not renew by February were terminated and placed in arrears.

For more information, read the February 2003 Membership Development Progress report at <http://www.ieee.org/organizations/rab/md/mdprogrpt.html>.

"ANNUAL STATISTICS OF THE IEEE" ONLINE

The "2002 Annual Statistics of the IEEE" is available on the IEEE Web site at <http://www.ieee.org/organizations/corporate/secrpt/>. It is accessible from the Volunteer Resources or About the IEEE pages. An IEEE Web Account is required to access these pages.

FARADAY LECTURE 2003, VIDEO TAPES AVAILABLE

Did you miss the opportunity to take part in the live presentation of the February 2003 IEE Faraday Lecture? The IEE Faraday Lecture is designed for 14-16 year-old students and is presented by a team of six specially chosen presenters, all talented young scientists. This year's subject, "Fighting Crime with Science," interactively simulates a police investigation using optics and computers to construct a crime scene and demonstrate the growing role for technology and forensics in creating a safe society. Copies of the 2003 Lecture are now available on videotape at the cost of \$15USD. Please contact Celeste Torres at c.torres@ieee.org or phone 1 732 981 3425. For more information on the Faraday Lectures, go to <http://www.ieee.org/organizations/eab/precollege/faraday/index.htm>.

TECHNICAL SYMPOSIA GRANT PROGRAM 2003

In 2002, IEEE Regional Activities provided grants of \$500 each to ten events in five of the IEEE's 10 Regions. The 2003 program is underway, and one symposium has already been funded in Greece. The guidelines have changed slightly for 2003: priority will be given to those units who have not been funded in the past; events shall be one day in length; and recurring (or annual) events shall not be funded.

For more information and the grant request form visit <http://www.ieee.org/scs> and click on "FORMS". Please direct questions to Tracy Hawkins (t.hawkins@ieee.org).

UNIT RESERVE GUIDELINES

Each IEEE Organizational Unit that generates revenue, or is authorized by the IEEE Board of Directors to receive assessments or a portion of IEEE dues, may have custodial responsibility for a portion of IEEE Reserves, to the extent determined by the Board of Directors (Policy Manual 11.4.A). Reporting of the reserves will be included in the year-end reports (Financial Operations Manual 4.A).

Unit reserves should be adequate but not excessive. As a general guideline, a reserve up to three times the annual rebate, after known commitments and unusual requirements are deducted, would be considered reasonable.

In special circumstances, such as being in a good location for conferences, some Units can provide outstanding services to their members as well as generate surplus funds. In keeping with the policy of avoiding large reserves, the level of activity should be increased so as to best serve the interests and needs of the membership. This can be done through additional meetings, conferences, educational programs, publications, etc., or by putting these funds to work elsewhere in the Institute, through Regional Activities, Technical Activities, Educational Activities, or other Sections, Chapters, or Branches within the Region. (Policy Manual 9.7. The IEEE Policy Manual can be found in PDF format on the web at <http://www.ieee.org/policies>)

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.

FINDING ANSWERS TO YOUR FINANCIAL QUESTIONS

A quick and easy reference for answers to your financial questions is the Treasurer's Handbook. It can be found on the web at <http://www.ieee.org/treasurers>. Often under revision to provide the most current information, each category includes an IEEE staff contact in case you have additional questions. Some of the subjects covered are: required financial reports, funding, solicitations, travel expense guidelines, record retention schedules, and banking and investment guidelines.

Another resource for financial information is the "Financial Operations Manual", available in PDF format at <http://www.ieee.org/organizations/vols/>

. Look for the file in Administration/Finance under the heading "Resources for All Volunteers."



**Chairperson
& Membership
Committee**

Jim Boyd
(973) 584-0329
j.boyd@ieee.org

Vice Chairperson

Dan Kamdar
(973) 890-2783
afford@optonline.net

Secretary-Treasurer

Robert Walker
(973) 728-0344
robert@rdwalker.com

Referrals & Newsletter

Robert Walker
(973) 728-0344
robert@rdwalker.com

Publicity Committee

Merrill Rutman
(201) 447-6041
mrutman@optonline.net

Program Committee

Gary Dan
(973) 243-1024
gdan@chuckware.net

Ethics Committee

Laurie Cox
(973) 663-5778
lcox@rlcdesigns.com

Member-At-Large

Laszlo Laskai, PhD
(973) 879-8804
laskai@ieee.org

Webmaster

Chris Mesibov
(914) 584-2659
c.mesibov@ieee.org

Past Chairperson

Pat Banker
(201) 307-9212
pbanker@bankercote.com

IEEE CONSULTANTS NETWORK OF NORTHERN NJ

99 Conklintown Road
Wanaque, NJ 07465

<http://www.TechnologyOnTap.org>

MEETING ANNOUNCEMENT for Thursday, June 26, 2003

Investing for Retirement in a Challenging Market

Managing financial planning for retirement in today's challenging market will be discussed by Christina Schatz of Citigroup/Salomon Smith Barney at the June 26 meeting of the IEEE Consultants Network of Northern NJ.

ABOUT THE TALK

The talk will center on steps that you and other consultants and independent contractors can take now to plan for financial well being in retirement. Topics include:

- Defining financial goals
- Determining tolerance for risk
- Allocating assets
- Establishing a savings plan
- Implementing an investment program
- How new tax laws affect retirement planning
- Reviewing your plans

ABOUT THE SPEAKER

Since 1993, Christina Schatz has managed clients' retirement funds on both a discretionary and non-discretionary basis for Citigroup/Salomon Smith Barney, focusing on stock and bond investments. She began her investment management career with Merrill Lynch, Inc., in 1990.

Ms. Schatz is a graduate of University of Maryland and speaks Spanish, Greek, and English.

ABOUT THE CONSULTANTS NETWORK

Founded in 1992, the IEEE Consultants Network of Northern NJ encourages and promotes the use of independent technical consultants by business and industry.

ALL ARE WELCOME!

Time: 7:30 PM. Thursday, June 26, 2003

Place: MCE-KDI Integrated Products, 60 S. Jefferson Road, Whippany, NJ.
Entrance at rear of building.

Information: For directions and up-to-date meeting status, call Robert Walker, 973-728-0344 or visit our website at www.TechnologyOnTap.org.

Map to MCE/KDI: <http://www.mcekd-integrated.com/directions.htm>

Free Admission. Non-members are welcome.



THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

VTS - May Technology-Sharing Forum

Join the NY Section of the Vehicular Technology Society at their Technology-Sharing Forum featuring Presentations by the Long Island Railroad and Cisco Systems, Inc.:

New Rail Car Technology vs Maintenance

Presented by Dave Elliot

Wireless Communications on Trains

Presented by Christopher Kolb

May 1, 2003, 6:00 to 8:00 PM

**Hosted by: Cisco Systems, Inc. 5th Floor
One Penn Plaza, New York City**

- Learn how the M7's onboard Central Diagnostic System will change Rail Car Maintenance. Presented by Dave Elliot, Long Island Railroad Project Manager for the Advanced M7 Rail Car Program.
- Christopher Kolb of Cisco Systems will present current and future trends in wireless technologies and systems for the Rail Transit industry

Advance registration is required for admission.

- There is a \$35.00 charge for the forum and refreshments commencing 5:30 PM.
- IEEE Members and non-members may register for the May 1, 2003 forum.
- \$35.00 checks payable to: IEEE NY Section
- Mail To: Mr. Ramdane Benferhat
NYCT - Rail Transit Operations Support,
370 Jay St Room 323B
Brooklyn NY 11201
- If you are an IEEE member, please provide your membership number.
- Additional information regarding program specifics can be obtained by contacting Mr. Ramdane Benferhat at 718-243-4926 or by e-mail at rabenfe@nyct.com.

The IEEE Westchester Subsection is proud to Co-Sponsor, and the IEEE NY Section and IEEE Region I support the FCWC conference described below.

Energy Independence: Real World Solutions for Homes and Business

**Saturday May 3, 2003
Westchester County Center, White Plains
8AM -5 PM**

The conference will feature:

- **Case studies: Energy Solutions for Homes and Buildings**
- **Wind Power Purchasing**

For the residential track:

- **Energy Efficiency for the Existing Home: Options and Financing**
- **Residential Green Construction: The Elements and Financing**
- **Residential: Real world solar and geothermal solutions**

For the commercial, institutional and municipal track:

- **Energy Efficiency for the Existing Building: Options and Financing**
- **Green Building Construction for commercial, institutional and municipal applications: The Elements and Financing**
- **Commercial, Institutional and Municipal Buildings: Real world solar and geothermal solutions**

All Day Trade show (tables are still available)

Registration Fee \$ 40 (includes continental breakfast, lunch, and refreshments)

Energy Independence May 3, 2003 Conference: Registration Form

Name: _____
Organization: _____ **Title:** _____
Address: _____
City: _____ **State:** _____ **Zip:** _____
Phone(____)_____ **E-mail:** _____ **Fax:** (____)_____

**Please mail your check for \$40.00 payable to FCWC with the above form to:
FCWC, E. House, Pace Law School, 78 North Broadway, White Plains, NY, 10603.**

Space is limited - Please register early.

Visit: www.FCWC.org or call Federated Conservationists of Westchester County Inc. at 914-422-4053 for program details.

**Gigawatt Sponsor: Con Edison,
Kilowatt Sponsor: Community Energy**

Host: Federated Conservationists of Westchester County Inc. **Co-hosts:** American Institute of Architects/Westchester and Lower Hudson Chapter, Environmental Business Association- NY, Croton Solar Coop., Hudson River Sloop Clearwater Inc, Kitchawan Institute. **Co-Sponsors:** Institute of Electrical and Electronics Engineers, League of Women Voters of Westchester, League of Conservation Voters of Westchester, Lower Hudson Sustainable Communities Network, Westchester Subsection, The Westchester Business Journal, Westchester County Chamber of Commerce, Westchester County Department of Parks Recreation and Conservation, Westchester County Ass., Westchester Municipal Planning Federation, Westchester Municipal Officials Ass.