



The IEEE

# Newsletter

PUBLICATION OF THE NORTH JERSEY SECTION OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

## Congratulations To Our New Senior Members

### January 2001

Di Fabrizio, Giuseppe  
Kim, Hong Kook  
Lemp, Ronald A  
Liu, Chun Ting  
Mynbaev, Djafar K  
Valley, Joseph E.

### February 2001

Barg, Alexander  
Monroe, Donald P.

### March 2001

Boric-Lubecke, Olga  
Divakaran, Ajay  
D'Stefan, Dominick J.  
Gehani, Narain  
Pingali, Gopal  
Sassler, Marvin L.  
Victory, James  
Wiltzius, Pierre

### May 2001

Barnes, William E.  
Chang, Chorng-Ping  
Duffield, Nicolas G.  
Herkert, Arthur G.

### June 2001

Quackenbush, Schuyler  
Rexford, Jennifer

Add your name to the list of Senior Members. All new Senior Members will receive an engraved wood and bronze Senior Member plaque from the IEEE.

To get information and an application to advance to Senior Member Grade, give your name and mailing address to: Don Weinstein, Kulite Semiconductor, One Willow Tree Road, Leonia, NJ 07605-2239, (201) 461-0900 Ext 234, mornings, FAX (201) 461-0990, email don@kulite.com.

### *NJ PES/IAS:*

## California Energy Situation

On October 18<sup>th</sup>, the IEEE North Jersey Chapters of IAS/PES will sponsor a session on the evolving energy supply and pricing events being experienced on the west coast.

### **About the Talk**

California was the first state to restructure both its wholesale and retail electricity markets. Since the fall of 2000, the fabric of their innovation has begun to unravel, due to a combination of bad design and bad luck. This presentation will discuss the history of California's restructuring efforts and its implications for the electricity industry.

### **About the Speaker**

The speaker will be Laura Manz, Manager-Transmission Planning and Technical Services at PSE&G.

**Date:** 7:00 PM, Thursday, October 18, 2001.

**Place:** PSE&G Training Center, Edison, NJ. Directions: Route 287 to Route 1 North, about 500 feet. Right on Pierson Road. PSE&G first drive on left.

**Information:** Ken Oexle (973) 386-1156 (k.oexle@worldnet.att.net).

## In Memory of Fred L. Katzmann

Fred Katzmann died on June 13, 2001. Mr. Katzmann was a Life Fellow of the IEEE. He worked for Ballantine Laboratories in Boonton for many years. As an inventor, he held more than two dozen patents.

Mr. Katzmann earned a Bachelor's Degree from the City College of New York and a Master's Degree from Stevens Institute of Technology in Hoboken.

## New IEEE Job Site Launched

WASHINGTON, DC (8 June 2001) – A new IEEE Job Site at [www.ieee.org/jobs](http://www.ieee.org/jobs) features the IEEE e-Recruiter™ job service that makes the job-hunting process easier and more effective for technical professional job seekers. The online service, sponsored by IEEE-USA and IEEE Spectrum, allows IEEE members worldwide to create and submit a profile of their background and the characteristics they'd like in a new job.

The service, powered by Hire.com's e-Recruiter™ software, then scours its extensive database for positions that match what the job hunter is looking for in employment. New job postings are continually being added, and the job seeker is notified by e-mail if there is a profile match. And the process can be conducted anonymously.

To encourage IEEE members to register and submit their profiles early, IEEE Spectrum will award a Personal Digital Assistant to three members who establish a profile within the first 90 days of the site's 7 June launch. The job service is free for IEEE members.

For more information or to register and submit a profile, visit [www.ieee.org/jobs](http://www.ieee.org/jobs). The Institute of Electrical and Electronics Engineers, Inc., is the world's largest technical professional society with over 360,000 members in 150 countries. IEEE-USA promotes the careers and public-policy interests of the more than 230,000 IEEE members in the United States. IEEE Spectrum magazine is the society's flagship publication and has won four National Magazine Awards.

e-Recruiter is a registered trademark of Hire.com. All other trademarks or registered trademarks are properties of their respective companies.

# August 2001

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Editor.....Keith Saracinello  
Business Manager.....Theresa Saracinello

**Deadline for receipt of material** is the 1st of the month preceding the month of publication. All communications concerning editorial and business matters, including advertising, should be sent to the Business Manager via e-mail at [k.saracinello@ieee.org](mailto:k.saracinello@ieee.org) or to *The IEEE Newsletter*, c/o Keith Saracinello, 25 Messenger Ln, Ringoes, NJ 08551, (732) 465-4067.

### IEEE NJ SECTION HOME PAGE

<http://www-ec.njit.edu/~ieeenj/>

### IEEE NJ SECTION NEWSLETTER HOME PAGE

<http://www-ec.njit.edu/~ieeenj/NEWSLETTER.html>

### REPORT ADDRESS CHANGES TO:

IEEE Service Center, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331, (732) 981-0060. It is not necessary to inform the North Jersey Section when you change your mailing address. "The IEEE Newsletter" and other section mailings use a list provided by IEEE's national headquarters.

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Naz Simonelli ([naz@sprynet.com](mailto:naz@sprynet.com))  
Dr. Richard Snyder ([r.snyder@ieee.org](mailto:r.snyder@ieee.org))

*The North Jersey Section Executive Committee usually meets the first Wednesday (except holidays and December) of each month at 7:00 PM. Meetings are open to all members. For information on meeting agenda contact Secretary Wayne Owens at (201) 767-3400, ext. 226, [wowens@crestron.com](mailto:wowens@crestron.com).*

NJ PES/IAS:

## Partial Discharge Monitoring for Predictive Maintenance

On September 20th, the IEEE North Jersey Chapters of IAS/PES will feature a talk on the subject of "Partial Discharge Monitoring for Predictive Maintenance". The Speaker will be Gabe Paoletti, P.E. of Cutler-Hammer Engineering Services and Systems.

### About the Talk

Advances in partial discharge monitoring technology are making it an effective on-line predictive maintenance tool for medium voltage equipment such as motors, generators, switchgear, transformers and power cables. The benefits of on-line testing allow equipment analysis and diagnostics to be performed during normal equipment operation. Corrective actions can then be planned and implemented, resulting in reduced unscheduled downtime. Understanding the principles of partial discharge technology, and the relationship to early detection of insulation deterioration, is essential to the proper evaluation and use of this tool for predictive maintenance.

This talk will promote your better understanding of partial discharge technology, along with the various implementation and measurement techniques that have evolved in the industry today. The speaker will also discuss corona damage, surface tracking, partial discharge data interpretation, corrective actions for electrical distribution equipment, and IEEE Standard P1434. The meeting should provide a useful update for all practicing electrical engineers.

### About the Speaker

The speaker, Gabriel Paoletti, received his BSEE degree from Drexel University, Philadelphia, PA in 1976. He has over 25 years engineering service experience with Westinghouse, ABB, and Cutler-Hammer. His electrical distribution experience includes field testing, predictive and preventive maintenance, applications engineering, failure analysis, and power systems studies. Mr. Paoletti is a registered professional engineer in the states of Pennsylvania and Delaware, and is currently Product Line Manager for Predictive Diagnostics for Cutler-Hammer.

**Date:** 7:00 PM, Thursday, September 20, 2001.

**Place:** PSE&G Training Center, Edison, NJ. Directions: Route 287 to Route 1 North, about 500 feet. Right on Pierson Road. PSE&G first drive on left

**Information:** Ken Oexle (973) 386-1156 ([k.oexle@worldnet.att.net](mailto:k.oexle@worldnet.att.net)).

## The VT Conference Committee Wants You!! Looking for Volunteers, Sponsors, Exhibitors

The IEEE North Jersey Section is hosting the Fall 2001 Vehicular Technology Conference in Atlantic City, NJ from October 7-11, 2001. And now's your chance to get involved.

Have you ever wondered how a conference comes together? How speakers, tutorials, meals, and many other activities are smoothly integrated? How to produce a powerful technical program of international caliber? How to advertise your company's name on the coffee cups during the lunches and breaks? Then this is the deal for you. The conference committee is issuing an open call for volunteers to help man its sub-committees. Currently the following have some openings: local arrangements, banquet, publicity, publications, registration, special/social events, transportation, and many others.

But it doesn't stop there. There are special discounts for student volunteers and sponsoring companies. What better way for your organization to get its name out to hundreds of people from worldwide in the mobile communications arena than by becoming Platinum, Gold, or Silver sponsors? You can even tailor your sponsorship to meet your advertising needs. This includes getting tables or floor space to exhibit YOUR products and services to those people with the purchasing power or an all electronic advertisement on the website.

Even students can get involved. There is a significant student admissions discount and does not require any society affiliations. We are also looking for students to man the registration desk and take on other activities. Universities are also welcome to become sponsors.

How can you find out more and get involved? Contact conference chair Art Greenberg at [a.h.greenberg@ieee.org](mailto:a.h.greenberg@ieee.org) or (973) 386-6673, and Industry Liaison/Exhibits chair Stephen Wilkowski at [swilkowski@lucent.com](mailto:swilkowski@lucent.com) or (973) 386-6487. Check out the website at <http://www.fallvtc2001.org>.

# North Jersey Section Activities

## August 2001

**Aug. 1**—"NJ Section Executive Committee Meeting" – 7:00 PM, ITT, 100 Kingsland Rd, Clifton, NJ. Wayne Owens at (201) 767-3400 ext. 226 or [wowens@crestron.com](mailto:wowens@crestron.com).

### Upcoming Meetings

**Sept. 5**—"NJ Section Executive Committee Meeting" – 7:00 PM, ITT, 100 Kingsland Rd, Clifton, NJ. Wayne Owens at (201) 767-3400 ext. 226 or [wowens@crestron.com](mailto:wowens@crestron.com).

**Sept. 13**—"2001 MTT/AP Symposium and Mini-Show" – MTT-S/AP-S Chapter, 9:15AM - 6:00PM, Hanover Marriott, Whippany, NJ. Kirit Dixit (516) 642-3800, Willie Schmidt (973) 492-0371, or George Kannell (973) 386-4170.

**Sept. 20**—"Partial Discharge Monitoring for Predictive Maintenance" – NJ IAS/PES Chapters, 7:00 PM, PSE&G Training Center, Edison, NJ. Ken Oexle (973) 386-1156.

**Oct. 7-11**—"2001 IEEE Vehicular Technology Conference", NJ VTS Chapter, Sheraton Convention Center Hotel/AC Convention Center, Atlantic City, NJ. For more details see <http://www.fallvtc2001.org> or contact Art Greenberg at [a.h.greenberg@ieee.org](mailto:a.h.greenberg@ieee.org) or (973) 386-6673.

**Oct. 12**—"International Conference on Computing and Information Technologies (ICCIT'2001)", Montclair State University, Upper Montclair, NJ. For more details see <http://www.csam.montclair.edu/~ICCIT2001/> or contact ICCIT'2001 Secretariat at [iccit2001@pegasus.montclair.edu](mailto:iccit2001@pegasus.montclair.edu) or (973) 655 - 4250.

**Oct. 18**—"California Energy Situation" – NJ IAS/PES Chapters, 7:00 PM, PSE&G Training Center, Edison, NJ. Ken Oexle (973) 386-1156.

**Dec. 7**—"Electric Power Cable Seminar" – NJ IAS/PES Chapters, 9:00 AM – 3:00 PM, Morristown area (exact location TBA). Ken Oexle (973) 386-1156.

### Members and Non-Members Welcome

## PLEASE POST

*NJ PES/IAS:*

### Electric Power Cable Seminar

On December 7, 2001, the IEEE North Jersey Chapters of IAS/PES will sponsor a daytime seminar on the design, operations, testing electric characteristics and failure modes of medium and low voltage electric power cables.

**Date:** 9:00 AM - 3:00 PM, Friday, December 7, 2001.

**Place:** The exact location will be announced in the September Newsletter but it will be in the Morristown area.

**Information:** Ken Oexle (973) 386-1156 ([k.oexle@worldnet.att.net](mailto:k.oexle@worldnet.att.net)).

### IEEE Vehicular Technology Conference

The IEEE Vehicular Technology Society will hold its Fall 2001 Conference on October 7-11, 2001 in Atlantic City. It is one of the major international mobile communications conferences in the world and will be hosted by the North Jersey chapter. Information about the conference is available at [www.fallvtc2001.org](http://www.fallvtc2001.org).

Companies that are interested in sponsorship should contact Steve Wilkowski at [swilkowski@lucent.com](mailto:swilkowski@lucent.com).



Awards Reception – 4/22/01  
New Fellows George Zysman (left) and Charles Lawrence share conversation



Awards Reception – 4/22/01  
Irv Engelson (right), IEEE Region 1 Director, presents Region 1 Award to Dr. Fred Chichester



Awards Reception – 4/22/01  
Irv Engelson (left) presents Region 1 Award to Naz Simonelli



Awards Reception – 4/22/01  
Members of Section Executive Committee gather for photograph  
(left->right) Nirwan Ansari-Section Chair, Willie Schmidt-MTT/AP, Ken Oexle-IAS Chair/Awards,  
Wayne Owens-Section Secretary, and Vittal Rebbapragada-PES Chair



#### Awards Reception – 4/22/01

Irv Engelson (left), IEEE Region 1 Director, and his wife Mina with Richard Snyder, Past Section Chair

## IEEE Accelerated Stress Testing Tutorial CD-ROM Now Available

Accelerated Stress Testing, an IEEE Educational Activities joint CD-ROM tutorial production with the IEEE Reliability Society is now available. Learn how to get started with AST, from reducing cycle time to deciding on stress levels.

Accelerated Stress Testing, AST, has become mandatory in order to meet time-to-market and product quality needs. AST has been shown to ferret out problems that would otherwise plague the customer in the field. One study demonstrated that AST was able to reduce Printed Wiring Board failures by almost two orders of magnitude compared to a control sample. AST uncovers problems before they are shipped to the customer, thereby rapidly maturing the product and demonstrating diligence protecting the customer. Today's market place demands and rewards such diligence.

This tutorial provides fundamentals for reliability and test engineers and is supported by case studies from four expert practitioners and a panel discussion about practical implementation issues. Dr. Samuel Keene, a recognized international resource in the R & QA field, introduces presenters who are well qualified and broadly known in their fields. The learner is able to access the following sections:

- H. Anthony Chan, AT & T Labs, covers stress testing at the design, component and test levels as well as problems at the customer level.
- Charles Felkins, Storage Techniques, describes the components of highly accelerated life test and highly accelerated stress screening.
- Paul Parker, Lucent Technologies, Texas, covers test equipment for power monitoring, thermal/vibration

equipment and environmental analysis accessories.

- Anthony Oates, Lucent Technologies, Florida, includes discussions of circuit reliability models, early failure rate characterizations, IC wearout failure mode and package/assembly failure model.
- Panel discussion covering the most frequently asked questions, including comments on professional development and customer relations.

The single CD-ROM, gives full access to the four power point presentations and the panel discussion. It uses functions from the Internet tool bar as well as built in features such as jump, search, and scroll capabilities, navigation, full audio, and an MPEG player video component with full complimentary transcript. The transcript provides extra support for users with non-English as their primary language.

Software Requirements: Windows 95, 98, NT or 2000; Internet Explorer 4.0 (or higher), or Netscape Navigator 4.0 (or higher); Windows Media Player 6.1 (or higher), or RealPlayer G2, version 6.0.5.27 (or higher) Hardware Requirements: Pentium 200 MHz processor; 32 MB RAM; Windows compatible sound card; 4x CD-ROM drive (for CD-ROM delivery)

EC 133:1 CD ROM, PC compatible only, \$700 member; \$875 non-member. HV 7061: 3 videotapes & presentation notes; same price, NTSC only.

The CD-ROM and video set can be ordered from the IEEE Customer Service Department, 445 Hoes Lane, PO Box 1331, Piscataway, NJ 08855-1331, USA; by e-mail: [customer-service@ieee.org](mailto:customer-service@ieee.org); by phone: 1.800.678.4333; and on the Web at <http://shop.ieee.org/store/> For further information on Education Activities check out our Website <http://www.ieee.org/organizations/eab/index.htm>.

## IEEE North Jersey Section Newsletter Advertising

The “NEWSLETTER” is the non-profit professional publication of the North Jersey Section of the Institute of Electrical and Electronics Engineers, Inc.

Published monthly except June (electronic only) and July, it is distributed to approximately 5,000 qualified members of the section.

Editorial content is pertinent and timely. It contains current information and details about special meetings, field trips, and seminars scheduled during the month and for future dates.

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Classified and Per Inch	30	25	25

**THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS, INC.**



**IEEE**  
**NORTH JERSEY SECTION**  
**MTT-Society and AP-Society Joint Chapter**

PRESENT

**16<sup>TH</sup> ANNUAL SYMPOSIUM AND MINI-SHOW**

**FOCUS: NEW CHALLENGES IN WIRELESS, HIGH SPEED DATA AND MICROWAVE TECHNOLOGIES**

**THURSDAY, SEPTEMBER 13, 2001**  
**HANOVER MARRIOTT, 1401 ROUTE 10 EAST WHIPPANY, NJ**  
**973-538-8811**

**PRELIMINARY SCHEDULE OF EVENTS**  
**Technical Sessions (9:15AM-5:45PM)**

- OC-192 Transimpedance Amplifier Design
  - ✦ Rajah Vysyaraju-----Anadigics
- Microwave Component Design Tradeoffs for OC192 SDH/SONNET Systems
  - ✦ John Odel-----CTI
- Recent Advances in the Implementation of Quasi-Optimum Filters
  - ✦ Dick Snyder-----RS Microwave
- RFIC Design Using Advanced Integrated EDA Tools
  - ✦ Tony Donisi-----Ansoft
- IEEE 802.11 - The Emerging Wireless Standard
  - ✦ Len Decostanzo, Jim Nadolski-----Intersil
- Challenges of High Speed Switch/Router Design \*
  - ✦ Jian-Guo Chen-----Agere Systems
- Power Amplifier Simulation and Test in an Integrated Environment
  - ✦ Dave Erickson-----Agilent
- Wireless Base Station Amplification Overview
  - ✦ Joe Lipowski
- Maximizing Cellular Network Performance Through Optimal Antenna Orientation
  - ✦ Gee Rittenhouse-----Lucent Technologies
- Migrating to 3G
  - ✦ Gerry Flynn-----Verizon Wireless

\* Courtesy North Jersey COMSOC Chapter.

**10:00 AM TO 6:00 PM - MINI SHOW FEATURING LATEST PRODUCTS**

Details of the schedule, speakers and topics will be published in the September issue of the IEEE NEWSLETTER and posted on the IEEE North Jersey Section Homepage at

<http://www-ec.njit.edu/~ieeenj/NEWSLETTER.html>

FOR FURTHER INFORMATION CONTACT KIRIT DIXIT (516-642-3800), WILLIE SCHMIDT (973-492-0371), OR GEORGE KANNELL (973-386-4170). **THERE IS NO CHARGE TO ATTEND THE SYMPOSIUM OR SHOW. FREE BREAKFAST / LUNCH INCLUDED FOR ALL**