

The



# IEEE Newsletter

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

VTS Chapter:

## How Compound Wireless Services Will Change Our Lives

On Thursday, January 20, 2005 the Vehicular Technology Society will host a presentation entitled "How Compound Wireless Services Will Change Our Lives" by Thad Kobylarz.

### About the Talk

Future wireless telecommunications users/subscribers will be able to build elaborate services to satisfy their individual requirements. Facilities within wireless terminals (advanced cell phones, accessible service provider resources, and third party service providers) will provide the components for users/subscribers to build these elaborate services. User/subscribers will link component services from these three sources and program sequences that can be invoked upon command. These linked service sequences are termed "Compound Wireless Services".

Compound Wireless Services are beyond 3G and are not now available. Nor are they planned for 3G wireless systems. However, user/subscriber programmed services represent a natural extension beyond 3G and provide an incentive for users/subscribers to desire 3G services. Dr. Kobylarz will employ his vision of future architecture to discuss how Compound Wireless Services will make the wireless telecommunications terminal an indispensable data tool and will subjugate voice communications to a secondary service.

### About the Speaker

Thad Kobylarz spent over 20 years at Bell Laboratories and Lucent Technologies prior to his retirement in 2001. Most of his efforts were as an architect of telecommunications hardware & software. For five years he represented Lucent Technologies at wireless standards committees. After retirement he was a consultant to AT&T Wireless Services also as a standards representative. His work has addressed various topics relating to computers and

communications, with an emphasis on wireless services. Dr. Kobylarz received a BSEE from the New Jersey Institute of Technology, a MSEE from the University of Vermont, and a PhD in EE and Computer Science from the North Carolina State University. The first part of his career was in academia as an Assistant Professor at Princeton University, an Associate Professor at Stevens Institute of Technology, and the EE Department Chairman at the University of Petroleum & Minerals (Dhahran, Saudi Arabia). He is a Life Member of IEEE.

### All Welcome!

Free admission. You do not have to be a member of IEEE to attend.

### Pre-Registration is Requested

Contact Arthur Greenberg at (973) 386-6673 (ahg1@lucent.com) for reservations.

**Time:** 7:00 PM, Thursday, January 20, 2005. Pre-meeting buffet will start at 6:00 PM.

**Place:** Lucent Technologies, 67 Whippany Rd, Whippany, NJ 07981.

**Information:** Arthur Greenberg (973) 386-6673 (ahg1@lucent.com).

## Newly Elected IEEE Fellows

The North Jersey Section IEEE congratulates the following members who were elected to the Fellow grade:

### Dr. Laurence W. Nagel

*"for contributions to the field of integrated circuit simulation."*

### Dr. Thomas H. Wood

*"for contributions to high performance optical communications systems."*

### Dr. Amy Ruth Reibman

*"for contributions to the transport of video over networks."*

### Prof. Nicholas Geoffrey Duffield

*"for contributions to the measurement, analysis and management of telecommunications networks."*

### Prof. Yun-Qing Shi

*"for contributions to multidimensional signal processing."*

### Prof. Kadangode K Ramakrishnan

*"for contributions to congestion control and traffic management communication networks."*

### Dr. Walter Willinger

*"for the analysis and mathematical modeling of Internet traffic."*

### Dr. Jeff D. Bude

*"for contributions to the deep submicron MOSFETs."*

JANUARY 2005

# January 2005

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### IEEE NJ SECTION HOME PAGE

<http://web.njit.edu/~ieeenj/>

### IEEE NJ SECTION NEWSLETTER HOME PAGE

<http://web.njit.edu/~ieeenj/NEWSLETTER.html>

### REPORT ADDRESS CHANGES TO:

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**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 Dr. Sanghoon Shin at (973) 492-1207 Ext. 22, s.shin@ieee.org.**

### NJ Computer Chapter:

## Computational Support for Dynamic Parallel/Distributed Applications

On Monday, January 24<sup>th</sup>, 2005, the IEEE North Jersey Section Computer Chapter will host a presentation titled "Computational Support for Dynamic Parallel/Distributed Applications" by Manish Parashar.

### About the Talk

Adaptive and interactive simulations yield highly advantageous ratios for cost/accuracy and can enable accurate solutions to realistically model complex physical phenomenon. However their efficient implementation on widely distributed, highly heterogeneous and dynamic execution environments such as the computational grid presents significant challenges in computer/computational science. In this talk Manish will present computer science solutions that enable efficient and scalable implementations of these applications. Specifically, Manish will address distributed and dynamic data-management, adaptive load-balancing and runtime management, interactive monitoring and control.

### About the Speaker

Manish Parashar (M'89-SM'03) is Associate Professor of Electrical and Computer Engineering at Rutgers University, where he also is director of the Applied Software Systems Laboratory. He received a BE degree in Electronics and Telecommunications from Bombay University, India in 1988, and MS and PhD degrees in Computer Engineering from Syracuse University in 1994. He has received the NSF CAREER Award (1999) and the Enrico Fermi Scholarship from Argonne National Laboratory (1996). His current research interests include autonomic computing, parallel, distributed and grid computing, networking, scientific computing, and software engineering.

Manish is a member of the executive committee of the IEEE Computer Society Technical Committee on Parallel Processing (TCPP), part of the IEEE Computer Society Distinguished Visitor Program (2004-2006), and a member of ACM. He is also the co-founder of the IEEE International Conference on Autonomic Computing (ICAC). Manish has co-authored over 130 technical papers in international journals and conferences, has co-authored/edited 5 books/proceedings, and has contributed to several others in the area of parallel and distributed computing.

### All Welcome!

You do not have to be a member of the IEEE to attend. Bring your friends and network during the free pre-meeting buffet starting at 6:00 PM

**Time:** 7:00 PM, Monday, January 24, 2005. Pre-meeting buffet starts at 6:00 PM.

**Place:** Public Meeting Room, Morris County Library, 30 E. Hanover Ave, Whippany, NJ, (973) 285-6930.

**Information:** Seth Jakel (973) 731-1902, ([sgjakel@comcast.net](mailto:sgjakel@comcast.net)) or Vivek Shaiva (908) 229-6125 ([vshaiva@computer.org](mailto:vshaiva@computer.org)).

### NJ Section PACE & GOLD:

## ENGINEERS MEET:

First: Thanks to David DuPont for helping with our last December PACE meeting and to Bob Glynn and Paul Lorenzen, all of Hepco, Inc for speaking to our members. Bob and Paul did an excellent and very professional job of addressing the subject of Contract Engineering.

They provided a generic and informative presentation. Once again I had to encourage members to leave by the nine o'clock whistle. The meeting was friendly and high in quality. I believe all had an enjoyable evening. Hepco is a contract firm in Rutherford, NJ, and they can all be reached at [www.hepcoinc.com](http://www.hepcoinc.com). I owe you guys.

Thanks, Richard F. Tax, PACE Chair.

### January Meeting & Social

On Wednesday, January 12, 2005 the North Jersey Section Professional Activities Committee and Graduates of the Last Decade will host a meeting to network, socialize, enjoy refreshments and discuss the professional side of engineering.

All will have an opportunity to present their views about the profession, the job market, review past meetings and discuss future issues for PACE.

### All Welcome!

Members and students from other professional societies and engineering disciplines are always welcome. We now include members from IEEE, ASME and AEA. For more information about these groups see:

[www.aea.org/chapters/nj/](http://www.aea.org/chapters/nj/)  
[www.ieeeusa.org](http://www.ieeeusa.org)  
[web.njit.edu/~ieeenj/](http://web.njit.edu/~ieeenj/)  
[www.asme.org/sections/northjersey](http://www.asme.org/sections/northjersey)

**Time:** 6:30 to 9:00 PM, Wednesday, January 12, 2005. Refreshments will be served.

**Place:** Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ, (973) 772-5500.

**Information:** Paul Ward, (973) 790-1625 ([PWard1130@aol.com](mailto:PWard1130@aol.com)) or Richard F. Tax, (201) 664-6954 ([rtax@AEA.org](mailto:rtax@AEA.org)).

# IEEE North Jersey Section Activities

## January 2005

**Jan. 5** – “NJ Section Meeting”, 6:30 PM, “Executive Committee Meeting” - 7:00 PM, ITT, 100 Kingsland Rd, Clifton, NJ. Russell Pepe at [rpepe@worldnet.att.net](mailto:rpepe@worldnet.att.net).

**Jan. 12** – “Meeting and Social” - NJ PACE & GOLD, 6:30 – 9:00 PM, Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ. Paul Ward, (973) 790-1625 ([PWard1130@aol.com](mailto:PWard1130@aol.com)) or Richard F. Tax, (201) 664-6954 ([rtax@AEA.org](mailto:rtax@AEA.org)).

**Jan. 20** – “How Compound Wireless Services Will Change Our Lives” - NJ VTS Chapter, 7:00 PM, Lucent Technologies, 67 Whippany Rd, Whippany, NJ. Arthur Greenberg (973) 386-6673 ([ahg1@lucent.com](mailto:ahg1@lucent.com)).

**Jan. 24** – “Computational Support for Dynamic Parallel/Distributed Applications” - NJ Computer Chapter, 7:00 PM (pre-meeting buffet at 6:00 PM), Public Meeting Room, Morris County Library, 30 E. Hanover Ave, Whippany, NJ. Seth Jakel (973) 731-1902, ([sgjakel@comcast.net](mailto:sgjakel@comcast.net)) or Vivek Shaiva (908) 229-6125 ([vshaiva@computer.org](mailto:vshaiva@computer.org)).

**Jan. 28** – “Seminar - Electrical System Reliability Analysis, Reliability-Centered-Maintenance (RCM) Concepts and Performance-Based Maintenance” - NJ IAS/PES Chapters, 9:00 AM – 1:00 PM, JCP&L, 300 Madison Ave, Punchbowl Room, Morristown, NJ. Ronald Quade, PE, (732) 205-2614 or [rwquade@ieee.org](mailto:rwquade@ieee.org).

### Upcoming Meetings

**Feb. 2** – “NJ Section Meeting”, 6:30 PM, “Executive Committee Meeting” - 7:00 PM, ITT, 100 Kingsland Rd, Clifton, NJ. Russell Pepe at [rpepe@worldnet.att.net](mailto:rpepe@worldnet.att.net).

**Feb. 22-Apr. 19** – “Marketing Research” – North Jersey Section, Tuesday Evenings, 8 sessions, 6:30-9:00 PM, NJ International Bulk Mail Center, 80 County Rd, Jersey City, NJ. Bhanu Chivukula ([b.chivakula@computer.org](mailto:b.chivakula@computer.org)).

**Feb. 24** – “Marketing Ideas Workshop” - NJ Consultants' Network, 7:30 PM, Aeroflex/KDI-Integrated Products, 60 S. Jefferson Rd, Whippany, NJ. Robert Walker (973) 728-0344 or [www.TechnologyOnTap.org](http://www.TechnologyOnTap.org).

**Members and Non-Members Welcome**  
**PLEASE POST**

## North Jersey Section to Form Alliance With NJIT Career Development Services

In an effort to leverage resources and create on-going communication channels, the IEEE North Jersey Section and the New Jersey Institute of Technology, Division of Career Development Services (CDS) have entered into an alliance that stands to greatly benefit both organizations.

"It is our objective to distribute information about various career development programs, services, and events that we think will be of interest and value to the IEEE members and their employing companies," stated Gregory Mass, Executive Director of the Career Development Center at NJIT. Information that is typically communicated includes career fair dates, co-op and internship program information sessions, industry relevant seminars and presentations, and on-campus company information sessions. "We have similar mutually beneficial arrangements with the NJ Tech Council, the Regional Business Partnership; and The Metropolitan Electric League. Their members have appreciated staying informed."

It is CDS' objective to become a value-added resource for the association. There are several potential connecting points, including an opportunity for CDS to support the work being done by the PACE committee. Mass intends to meet with the North Jersey Section Executive Committee (EXCOM) to discuss how CDS can best support their initiatives. "At a base level, we could supplement some of the curriculum with relevant career development information, and perhaps fulfill occasional workshop and seminar facilitator roles."

At a broader level of involvement, Mass intends to arrange a discussion with the EXCOM or a representative and NJIT's Division of Continuing and Professional Education. "It makes sense to explore the development of customized training and development programs that address the members' needs for knowledge, skills, and credentials advancement."

NJIT is extremely excited about this new alliance and looks forward to working with the IEEE North Jersey Section this year.

## Student Activities Update

IEEE North Jersey Student Activities has been busy again. The most recent activities concluded this past November with the Professional Skills Development Workshop held on 11/13 and hosted by the IEEE Student Branch at Rutgers University in Piscataway, NJ. The event was jointly sponsored with Central Jersey and Jersey Coast GOLD groups. The event (details on the SAC website at: [ewh.ieee.org/r1/north\\_jersey/sac/ieee.htm](http://ewh.ieee.org/r1/north_jersey/sac/ieee.htm)) was very well attended with some 55 attendees representing a number of different universities and corporations in the area. Below is a photo from the event, with Professor Don Hsu giving a talk on Introductory Project Management.

This upcoming spring semester also has some events planned with the Paper Presentation Contest scheduled for early March 2005 and being hosted by FDU in Teaneck, NJ. Stay tuned to the SAC website for details of exact time, place, and participation in the contest, as well as the registration form (required) for presenting in the contest.

Lastly, Student Activities Committee is looking for new volunteers. If you would like to become involved in section student activities, either as a volunteer, speaker, or in some leadership capacity, contact the organizer at the website above.

## The NJ Section Education Committee Requests Your Feedback

The IEEE North Jersey Section has been helping fellow engineering professionals for the last fifty years. The Education Committee has successfully conducted software and engineering training courses over the last few decades. The Committee is committed to professional development of the members and the instructors for the courses are very qualified and experienced in their respective fields. Classes are arranged on weekday evenings or on Saturdays provided at least fifteen candidates are available. Completion certificates are issued by IEEE Headquarters with CEU credits for the number of training hours.

Due to the slow growth of the economy and several other factors, registration for these courses has diminished over the last few years. I would urge members to send their feedback regarding what courses they would be interested in, the format, location, and day/time, etc., by email to [b.chivakula@computer.org](mailto:b.chivakula@computer.org).

Regards,  
Bhanu Chivukula  
Chair, Education Committee  
Vice Chair, IEEE North Jersey Section



Professor Donald Hsu teaching a recent NJ Section Project Management course

*NJ Consultants' Network:*

## **Marketing Ideas Workshop**

On February 24, 2005, the IEEE Consultants' Network of Northern NJ (CNNNJ) will host a workshop on Marketing Ideas. The speaker will be Peter K. Schutz, P.E.

### **About the Talk**

Marketing is one of the things that technical consultants find the hardest to do. One of the primary functions of CNNNJ is to make the services provided by CNNNJ members visible and attractive to potential customers, for example, by the existing periodic mailing and through the web site. What other marketing efforts could CNNNJ make? We'll discuss our plans, but also ask what do consultants think is the most important thing that their prospective customers should be made aware of? Some examples:

- "Optimizing efficiency through use of technical consultants"
- "Using technical consultants to your advantage"
- "Proper use of consultants for small technology businesses"
- "How to find the right consultant"
- "Effective outsourcing"

Join our workshop and give us your ideas so that CNNNJ can provide you the best value for your membership dollars!

### **About the Speakers**

The workshop will be led by Peter Schutz, Vice Chairperson of the CNNNJ executive committee. Peter is a mechanical engineer who has been working as an independent consultant for the last 20 years. He specializes in the development of new products, especially in the areas of medical and laboratory equipment, instrumentation, prototypes, and special machinery. Some of his areas of technical expertise include: electronics packaging, fluid systems, and thermal analysis. Peter has a BSME from Lehigh University and a MSME from NJIT. He survived his first year of consulting by eating rice. He has been a member of CNNNJ for the last 6 years.

All CNNNJ members and visitors are welcome to participate and help make this a successful program!

### **All Welcome!**

Everyone welcome. No registration needed. Free admission.

### **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.

**Time:** 7:30 PM, Thursday, February 24, 2005.

**Place:** Aeroflex/KDI-Integrated Products, 60 S. Jefferson Rd, 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](http://www.TechnologyOnTap.org). To download a map to KDI, go to: <http://www.mcekdi-integrated.com/directions.htm>.

## **Improving Exports Could Help EE Employment, IEEE- USA Webzine Says**

WASHINGTON (12 November 2004) The U.S. Department of Commerce (DOC) is working to help technology companies increase their exports, which could in turn open more employment doors for engineers and other workers, according to a recent article in the IEEE-USA Today's Engineer monthly Webzine.

"There's really a huge untapped market," said Neal Burnham, deputy assistant secretary of U.S. Commercial Services. "We estimate that 95 percent of the market for small companies is outside the United States."

The DOC's Commercial Services program includes exhibits by 39 government agencies that attend nearly three dozen major trade shows around the country. The agencies are putting a significant focus on China, where significant growth is expected. "It's a very dynamic place where they need a lot of things," Burnham said.

DOC officials note that companies increasing their exports usually increase their employee counts. That's a big positive in electronics, which continues to see shrinkage in employment despite signs of an economic up tick. A key benefit of the government efforts is that many services are free, while others have lower costs than similar services provided by companies in foreign countries, according to IEEE-USA Today's Engineer.

The entire article is available at <http://www.todayengineer.org/July04/experts.asp>.

## **2006 IEEE Fellow**

### **Nominations**

Deadline: 1 March 2005

Nominations are being accepted for the 2006 class of IEEE Fellows. For the second year, nominations, references and endorsements may be submitted electronically. The deadline is 1 March 2005.

At its June 2003 meeting, the IEEE Board of Directors approved changes to the process for nominating and electing IEEE members to Fellow grade. The change established a new nomination category for individual contributions, with the goal of increasing nominations for members in industry and encouraging nominations of application engineers or engineering practitioners who have made contributions of unusual distinction to the profession.

The board also established a Fellow Nomination Resource Center to help nominators locate the required number of references to support a nomination.

To nominate an IEEE senior member or to learn more about the Fellow program, visit [www.ieee.org/fellows](http://www.ieee.org/fellows).

## **IEEE-USA Backs**

### **Center to Provide**

### **Congress with**

### **Technological Expertise**

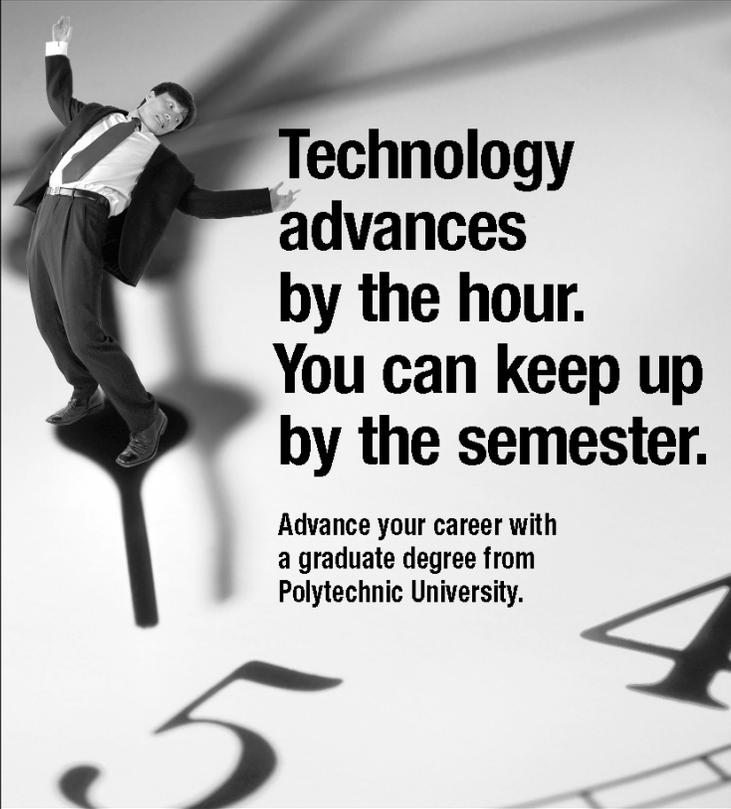
WASHINGTON (8 October 2004) - IEEE-USA has joined a coalition of engineering societies in supporting a bipartisan bill recently introduced in the U.S. House of Representatives that would establish a Center for Scientific and Technical Assessment (CTSA) to provide Congress with technological expertise.

In a letter sent on 6 October to Rep. Rush Holt (D-NJ) and Rep. Amo Houghton (R-NY), IEEE-USA and its sister organizations wrote: "The sheer volume and complexity of the technological data facing federal legislators necessitate some mechanism for balanced, non-partisan and technologically informed analysis provided in a judicious manner."

As envisioned in H.R. 4670, the CTSA would operate under the Government Accountability Office (GAO) as overseen by the Technical Assessment Board, consisting of Members of Congress and the Comptroller General of the GAO.

IEEE-USA joined a coalition which included AAES, ASCE, ASHRAE, NSPE and the Optical Society of America.

The joint letter is posted at <http://www.ieeeusa.org/policy/POLICY/2004/100704.pdf>.



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(See list of other online courses available at [epoly.poly.edu](http://epoly.poly.edu))

Electrical Engineering (MSEE)

## JOIN US FOR GRADUATE INFOSESSIONS

### BROOKLYN

6 MetroTech Center, Brooklyn, NY

**Wed, January 12, 2005 5-7:30 pm**

### MANHATTAN

55 Broad Street, 13C, Manhattan, NY

**Tues, January 18, 2005 6-7:30 pm**

(Management of Technology and Telecomm. & Info. Management)

### WESTCHESTER

40 Saw Mill River Rd (Rt 9A), Hawthorne, NY

**Tues, January 11, 2005 5-7:30 pm**

(Info. Systems Engineering 6-7:30 pm)

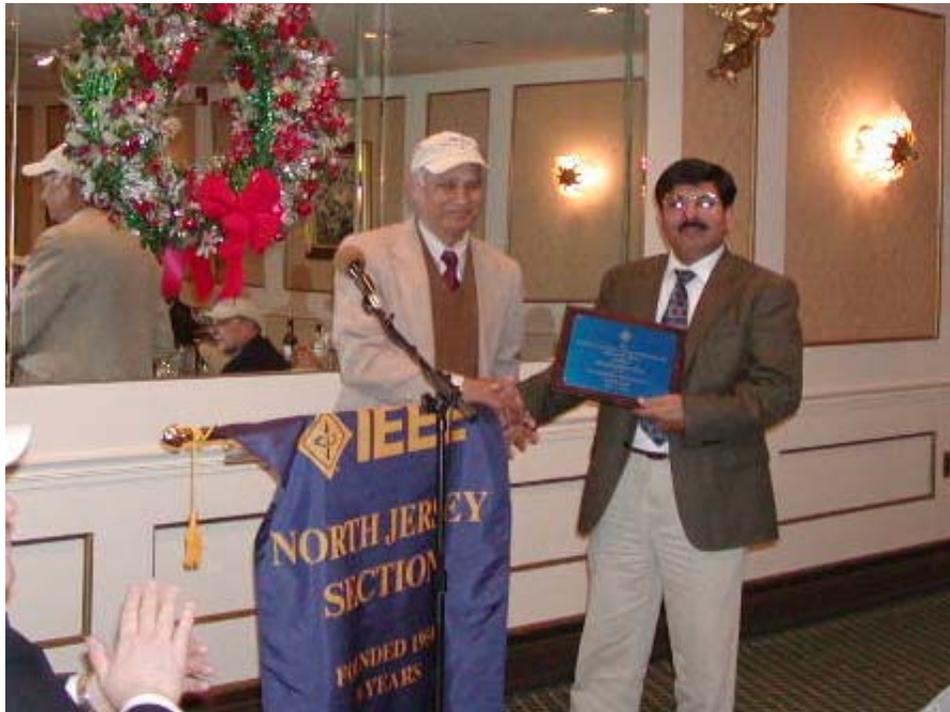
### LONG ISLAND

105 Maxess Road, Ste N201, Melville, NY

**Thurs, January 13, 2005 5-7:30 pm**

(Systems Integration 6-7:30 pm)

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Call: 1-800-POLYTECH • Email: [gradinfo@poly.edu](mailto:gradinfo@poly.edu)



2005 North Jersey Section Chair Har Dayal (left) gives recognition award to 2004 Chair Dr. Durga Misra



EXCOM Members Reminisce at the Holiday Workshop  
From left: Kirit Dixit, Dr. Mike Liechenstein, Al Stolpen, and Richard Tax



Life Member Willie Schmidt (left) receives recognition award from Chair Dr. Durga Misra



Past NJ Section Chairs at the Holiday Workshop – From Left: Richard Tax, Howard Leach, Ken Oexle, Dr. Durga Misra, Anne Giedlinski, Dr. Richard Snyder, Dr. Fred Chichester, Al Stolpen, Art Greenberg



Students from the Project Management course help at HPTI, Dover, NJ, in April 2004

## “Sister Section” Cooperation with Thailand Section became Stronger

Since June 1<sup>st</sup>, 2004, the North Jersey Section of IEEE (Region 1) and Thailand Section of IEEE (Region 10) have formed the “Sister Section” relationship to exchange ideas, experiences and share information about their operations. This cooperation between the sections is of immense value for organizing conferences, symposia and workshops. This year Thailand Section organized TENCON, the premier technical conference of Region 10 of IEEE. The Thailand Section, being a smaller section (membership approximately 800), requested the North Jersey Section (membership approximately 6000) help in reviewing some papers for TENCON 2004 and members of North Jersey Section gladly obliged.

Dr. Durga Misra, Chair of IEEE North Jersey Section, visited their Sister Section from November 21<sup>st</sup> to November 25<sup>th</sup>, 2004, during the TENCON 2004, which was held in the northern city of Chiang Mai. During the opening of ceremony of TENCON 2004, the Sister Section alliance was announced. Dr. Misra gave an invited talk on “Nanoelectronics Beyond 65nm Node” at TENCON 2004 and chaired a session on Electron Devices. In the conference, technical presenters of Region 10 shared some perspective of Region 1.



North Jersey Section Chair Dr. Durga Misra (left) and Thailand Section Chair Kraisi Karnasuta during the opening of TENCON 2004

On the sidelines of TENCON 2004 on November 21<sup>st</sup>, Dr. Misra met with the Thailand Section Chair Mr. Kraisi Karnasuta, the Governor of Electricity Generating Authority of Thailand, and the committee members of Thailand Section EXCOM. Mr. Karnasuta plans to continue as Section Chair for two more years, which will keep the Sister Section relationship in a steady pace. At present, Power Engineering is leading in terms of expansion and funding in Thailand. During the meeting, exchange of ideas and future plans to further the cooperation were discussed. The idea of possible student exchange between the sections came up. It was determined that logistics for such exchange will be established after further discussions by respective EXCOMs.

Dr. Misra met the Region 10 representative Dr. Janina Mazierska, who is also a candidate for Region 10 Director Elect for 2007-2008. Many ideas of “Sister Section” collaborations were discussed. Tokyo Section representative Dr. Akinori Nishihara, who was present at TENCON 2004, joined the discussion and discussed their ‘Sister Section’ progress with the Boston Section. Dr. Misra also discussed the IEEE membership development with many faculty members and the vice-president of research of Chiang Mai University.

Dr. Misra has had extensive discussions with Thailand Section Secretary Dr. Ekachai Leelarasmees, a professor at Chulalongkorn University, who served as one of the technical program chairs of TENCON 2004. Both of them also met in Bangkok after the conference. Both the section representatives will meet again during Section Congress in October 2005. The trip to Thailand by the North Jersey Section Chair has fulfilled the mission of the IEEE by exchanging information and by networking with the Sister Section members.



North Jersey Section Chair Dr. Durga Misra (left) and Thailand Section Secretary Dr. Ekachai Leelarasmees at Chulalongkorn University in Bangkok, Thailand.

## 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 4,500 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.

NEWSLETTER readers are influential in the Electrical and Electronics industries. They are in decision-making positions or can influence decisions in this important field.

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Classified and Per Inch	30	25	25

**Classified job advertisements are welcome!**

# NJ Power Engineering Society/Industry Applications Society

## Electrical System Reliability Analysis, Reliability-Centered-Maintenance (RCM) Concepts and Performance-Based Maintenance Seminar

The PES and IAS Chapters will sponsor a one-day seminar covering electrical system reliability analysis, reliability-centered-maintenance (RCM) concepts and performance-based maintenance. The session will be held on Friday, January 28, 2005 at JCP&L, 300 Madison Ave, Punchbowl Room, Morristown, NJ .

### Objective

This session will review electrical system reliability analysis, incorporating techniques of IEEE-493 (Gold Book), reliability-centered-maintenance concepts, potential solutions and performance-based maintenance to help improve reliability while reducing traditional outage-based maintenance costs.

### Topics

- |   |   |
|---|---|
| a. Evaluate past issues with electrical system reliability  | f. Identifying failure contributors and predicting failures   |
| b. Evaluate the current condition of your electrical system   | g. Techniques to warn and prevent of pending failures   |
| c. Determine the likelihood of potential failures based on IEEE-493 guidelines combined with operating equipment transfer-times and probabilities of proper operation | h. Economic analysis of various solutions   |
| d. Effects of maintenance on equipment reliability  | i. Performance-Based Maintenance  |
| e. Sorting of equipment "most at risk" based on historical IEEE data  | j. You are encouraged to bring along a short section of your electrical single-line to apply the reliability analysis techniques during the work-shop section |

### Who Should Attend

Plant Engineers, Engineering Managers, Electrical Supervisors Technical Buyers and Field Engineering personnel would all benefit from this review of available tools and processes to improve your understanding of an electrical distribution system and available techniques to evaluate and improve system reliability.

### About the Instructor

Gabriel J. Paoletti, PE received a BSEE degree from Drexel University, Philadelphia, Pa. in 1976. Mr. Paoletti has over twenty-six years of engineering service experience with Westinghouse, ABB and Eaton Electrical (Cutler-Hammer) Engineering Service. His electrical distribution equipment experience includes field-testing, predictive and preventive maintenance, partial discharge technologies, RCM programs, applications engineering, failure analysis, and power systems studies. He has design experience with vacuum circuit breaker modernization, low voltage circuit breaker cell-retrofits and motor and transformer repair experience. Mr. Paoletti is a Senior Member of IEEE and a Registered Professional Engineer in the States of Pennsylvania and Delaware. Mr. Paoletti has had technical papers published in the IEEE-IAS concerning microprocessor-based protective relays (1990), vacuum modernization of MV circuit breakers (1997), partial discharge technology related to MV motors and MV switchgear (2001) and condition-based maintenance of MV switchgear (2002). He also was a contributing author to the IEEE-Buff Book regarding topics on maintenance, testing and calibration. Mr. Paoletti is currently Division Applications Engineer for Eaton Electrical Services and Solutions Division.

If desired, IEEE Continuing Education Units will be offered for this course. A small fee of \$15 will be required for processing. A total of 0.4 CEUs will be offered. Please indicate if desired below.

The registration fee for this seminar prior to January 14<sup>th</sup> will be \$150 for non-IEEE members, \$100 for IEEE Members, \$75 for GOLD Graduates (last 1-10 years) and \$25 for students with valid ID. The fee will be waived for IEEE Life Member Grades with verification at the seminar. Registrations after January 14<sup>th</sup> must include an additional late fee of \$25. The seminar fee includes lunch, refreshments, handouts and a calculator. Non-members joining IEEE within 30 days of the seminar will be rebated 50% of the IEEE registration charge.

**Time:** 9:00 AM to 1:00 PM followed by lunch, Friday, January 28, 2005.  
**Place:** JCP&L, 300 Madison Ave, Punchbowl Room, Morristown, NJ.  
**Directions:** Rt 287 to Rt 124 Exit in Morristown. Follow signs toward Madison, JCP&L is about 1.5 miles on the left side.  
**Information:** Ronald W. Quade, PE, (732) 205-2614 or rwquade@ieee.org.

### Registration: Electrical System Reliability Analysis, RCM, PBM Seminar 1/28/2005

Register via US mail to: Ronald W. Quade, PE  
Eaton Electrical  
379 Thornall St, 8<sup>th</sup> Floor  
Edison, NJ 08837

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

IEEE # \_\_\_\_\_ Student @ \_\_\_\_\_ Non IEEE \_\_\_\_\_ Life Member \_\_\_\_\_

Continuing Education Units: \_\_\_\_\_ Yes \$15 \_\_\_\_\_ No

If CEUs are chosen, please include a \$15 processing fee

Payment Enclosed \$ \_\_\_\_\_ Add \$25 late registration after January 14<sup>th</sup>

**Make checks payable to North Jersey Section IEEE**

# IEEE North Jersey Section Course Marketing Research

*Tuesday Evenings, February 22, 2005 through April 19, 2005 (No class on March 22)  
Eight weekly classes (February 22, March 1, 8, 15, 29, April 5, 12, 19, 2005)  
at NJ International Bulk Mail Center, 80 County Road, Jersey City, NJ  
(Checks should not be mailed to this address)*

The North Jersey Section IEEE is offering an evening course entitled "Marketing Research". Monster.com lists 450+ Market Research jobs in the New York tri-state area daily! This course deals with the collection, evaluation and analysis of the market-related information. Topics are: market research industry, problem definition, research process, focus group, secondary database, quantitative research, questionnaire design, sampling techniques, statistical testing, bivariate and multivariate correlation, communicating results and management reports. Using the SPSS software, you will learn to perform detailed data analysis.

The IEEE certificate of completion will be given to you when you finished this course. In addition, you will be qualified to work as a market researcher in any organization that needs your quantitative skills.

Instructor: Donald Hsu, PhD, has been a corporate manager for 11 years and is an experienced trainer. Since 2000, he has trained 400+ people in *Management, Marketing, Global Marketing, and Marketing Research* courses in five organizations.

### TOPICS

1. Describe the market research industry, problems and research process
2. Understand the importance of primary data collection, secondary database, and survey
3. Define quantitative research, measurement technique and sampling methods
4. Explain the questionnaire design, data processing and statistical testing
5. Build the knowledge of bivariate regression and multivariate data analysis
6. Communicate results, manage ethical issues, and prepare reports
7. Employ SPSS software for frequency analysis, ANOVA, T-test and others
8. Review real-world marketing research using Harvard Business School cases
9. Present final Group Project

Class size will be limited to a maximum of 25 with a minimum of 15. Early registration is recommended. Phone reservations will NOT be accepted. Reservations accepted after February 10, 2005 will require a late fee of \$25. No reservations will be accepted after February 15, 2005.

**WHERE:** NJ International Bulk Mail Center, 80 County Road, Jersey City, NJ. (Checks **should not** be mailed to this address)  
**WHEN:** 8 Sessions, Tuesdays, February 22, March 1, 8, 15, 29, April 5, 12, 19, 2005, 6:30-9:30 PM.  
**COST:** With textbook or notes: IEEE (& affiliate) members \$375; Non-IEEE members \$475.  
**CONTACT:** Bhanu Chivukula -email b.chivakula@computer.org

### REGISTRATION: Marketing Research

Please send the checks in the name of **North Jersey Section IEEE** with filled in registrations to:  
Bhanu Chivukula, 19 Prestwick Way, Edison, NJ 08820. Please email inquiries to b.chivakula@computer.org

Name: / Mr. / Mrs. / Miss / Ms. / \_\_\_\_\_

Non-member ✉ email address ✉  
 IEEE Member    Member #: \_\_\_\_\_    Member of \_\_\_\_\_ technical society

Employer: \_\_\_\_\_

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

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

Business (day) telephone #: \_\_\_\_\_    Home telephone #: \_\_\_\_\_

Please enclose required fee payable to: **North Jersey Section IEEE**  
Registration status will be mailed after February 15, 2005. Phone inquiries concerning registration will NOT be honored. In general, the effective date of the application corresponds to the date when BOTH a fully completed application/registration and payment are received.

Tuition receipt will be mailed only if this box is checked    Signature: \_\_\_\_\_