

The



IEEE Newsletter

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

NJ EDS, C&S & LEOS Chapters: **An Overview of Recent Developments in Nanotechnology**

On April 7, 2003, the IEEE NJ Section Electron Devices, and Circuits and Systems Chapter, Laser and Electro Optics Chapter, together with the New Jersey Institute of Technology will host a talk on "Recent Developments in Nanotechnology." The speaker will be Dr. M. Meyyappan.

About the Talk

Nanotechnology deals with creation of functional materials, devices and systems in the nanoscale through exploiting novel properties (electrical, physical, chemical...) arising solely due to the nanoscale. This is a broad, enabling technology with expected impact on materials and manufacturing, electronics and computing, health and medicine, energy, transportation, national security and space exploration. The basic science and applications are of great deal of interest to the IEEE community. This talk will provide an overview of novel nanoelectronics concepts based on carbon nanotubes (CNTs) and molecular electronics, nanosensors and detectors, nanoelectromechanical systems (NEMS), nanoscale materials and fabrication techniques.

About the Speaker

Dr. M. Meyyappan is the Director of the Center for Nanotechnology at NASA Ames Research Center in Moffett Field, CA. NASA's Nanotechnology Center, established in 1997, consists of about 50 scientists working on various aspects of nanotechnology including carbon nanotubes for nanoelectronics, sensors and detectors, molecular electronics, inorganic nanowires for sensors and devices, protein nanotubes, nanotechnology in gene sequencing, quantum computing, computational nanotechnology, computational quantum electronics and optoelectronics. The center has strong academic ties through programs for undergraduate and high school interns, and visiting faculty and graduate students.

Dr. Meyyappan's research interests include nanoelectronics, nanodevices and sensors, CVD and plasma, CVD approaches for growth of nanotubes and inorganic nanowires. He has published over 80 papers in refereed journals including 25 in nanotechnology related subjects and has given over 50 Invited, Plenary and Keynote talks and Invited seminars in the last four years. He is a member of the Interagency Working Group on Nanotechnology (IWGN), which is responsible for the National Nanotechnology Initiative (NNI). He is the chairman of the Nanosensors Working Group of the IEEE Nanotechnology Council. He has a PhD from Clarkson University and is a member of IEEE, AVS, MRS, and ECS. He is on the Editorial Board of Journal of Nanoscience and Nanotechnology.

All Welcome!

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

Time: 5:00 PM, Monday, April 7, 2003. Free buffet will be starting at 4:45 PM.

Place: New Jersey Institute of Technology (NJIT), Room 202, ECE Center, Newark, NJ. Directions are available at www.njit.edu.

Information: Dr. Richard Snyder (973) 492-1207 (RS Microwave), Dr. Edip Niver (973) 596-3542 (NJIT), or Dr. H. Grebel (973) 596-3538 (grebel@njit.edu).

North Jersey Student Activities Committee and GOLD Seek Volunteers and Speakers

The NNJ IEEE SAC and GOLD are seeking new volunteers to help conduct business at the section level for the benefit of students in the North Jersey section and surrounding areas. Additionally local student chapters are seeking speakers to give talks on professional and technical topics.

If you would like to speak on professional topics ranging from career development, time or project management, engineering experiences, and many more, or have specific technical topics and developments you would like to contribute, or even have some pet topics of your own, please contact the organizer below.

Additionally, the NNJ SAC is seeking volunteers to get involved at the section level to help organize local events for students and the GOLD membership in the NY-NJ Metro area. If you would like to help out even for short periods of time or maybe take on leading a committee in the section, please contact the organizer Amit Patel (a.j.patel@ieee.org) to find out more and come to a section business meeting.

APRIL 2003

April 2003

Volume 49, Number 10

Publication No: USPS 580-500

"The IEEE Newsletter" (North Jersey Section), is published monthly except June and July by The Institute of Electrical and Electronics Engineers, Inc. Headquarters: 3 Park Avenue, 17th Floor, New York, NY 10016-5997. \$1.00 per member per year (included in annual dues) for each member of the North Jersey Section. Periodicals-class postage paid at New York, NY and at additional mailing offices. Postmaster send address changes to: "The IEEE Newsletter", 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331. USPS 580-500 (ISSN 1076-3732).

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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 or to *The IEEE Newsletter*, c/o Keith Saracinello, 25 Messenger Ln, Ringoes, NJ 08551, (908) 791-4067.

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:

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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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 Section PACE:

Unemployed Engineers

On Wednesday, April 9th, the North Jersey Section Professional Activities Committee will meet to discuss the unemployment situation for members of the engineering community. You do not have to be unemployed to attend. All jobs are being threatened. You are invited to attend.

About the Meeting

This meeting provides an opportunity to meet and discuss the unemployment situation. High on the IEEE-USA list of subjects is unemployment and the displacement of American citizens by imported foreign workers under the H-1B and L1 legislation. Now the New Jersey State Senate and Assembly have introduced legislation affecting US and foreign workers in NJ. See **PACE News** in this issue.

This year one IEEE-USA goal is to roll the H-1B number back to 65,000. And, please do not confuse this as an "immigration" issue. This is all about money and wage busting.

We need input and views from the unemployed on this important issue. We would also like you to confirm your attendance via e-mail or telephone. When we reach a suitable attendance we will invite the press to give visibility to the employment situation here in New Jersey.

Our PACE meeting is open to discuss professional needs. PACE provides the opportunity to meet, address, discuss and perhaps improve the professional aspects of the engineering profession. We should take advantage of the opportunity to have a place and time to meet. Invite your associates to join us.

According to IEEE-USA leaders "Employment Assistance and Career Development are important" and they request your help. More on these projects can be found at www.ieeeusa.org. "Today's Immigrant - Tomorrow's Victim" see www.aea.org.

All Welcome!

You do not have to be a member of the IEEE to attend. Members of other professional societies and engineering disciplines are always welcome.

Time: 6:30 to 8:30 PM, Wednesday, April 9, 2003

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

Information: Richard F. Tax (201) 664-6954 (rtax@bellatlantic.net) or Paul Ward (973) 790-1625 (PWard1130@aol.com).

NJ Consultants' Network:

Infrequently Asked Questions: The Art of Networking

The art of finding help when you need it will be demonstrated and practiced at the May 22nd 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 Talk

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 Speaker

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

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

All Welcome!

You do not have to be a member of the IEEE or of the Consultants' Network to attend. Admission is free.

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

Place: MCE/KDI Triangle, 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. To download a map to KDI, go to: <http://www.kditriangle.com/directions.htm>.

IEEE North Jersey Section Activities

April 2003

Mar. 31-Apr. 2 - "Wireless Telecommunication Technology Trends (Wireless 3T) - Strategic Look at Wireless Technologies" - NJ Communications Chapter, 9:00 AM, Headquarters Plaza Hotel, Three Headquarters Plaza, Morristown, NJ. General Info. - Dr. Nader Bolourchi (nbolourchi@nbcwireless.com), Registration - Dr. K. Parsa (203) 570-6964 (kparisa@3g-gprs.com).

Apr. 2 - "NJ Section Executive Committee Meeting" - 7:00 PM, ITT, 100 Kingsland Rd, Clifton, NJ. Dr. Sanghoon Shin at (973) 492-1207 Ext. 22 or s.shin@ieee.org .

Apr. 7 - "An Overview of Recent Developments in Nanotechnology" - EDS/C&S and LEOS Chapters, 5:00PM (buffet at 4:45PM), NJIT, 202 ECE Center, Newark, NJ. Dr. Richard Snyder (973) 492-1207 (RS Microwave), Dr. Edip Niver (973) 596-3542 (NJIT), or Dr. H. Grebel (973) 596-3538 (grebel@njit.edu).

Apr. 9 - "Unemployed Engineers" - NJ PACE, 6:30 – 8:30 PM, Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ. Richard F. Tax, (201) 664-6954 (rtax@bellatlantic.net), Paul Ward (973) 790-1625 (PWard1130@aol.com).

Apr. 11 - "Power Systems Design Seminar" - NJ IAS/PES Chapters, 9:00 AM to 3:00 PM, Cutler-Hammer, 379 Thornall Street (Alferi Building), 8th Floor, Edison, NJ. For additional information contact Ronald W. Quade at (212) 833-0268 or RonaldWQuade@eaton.com.

Apr. 17 - "Delivering Business Benefits from Customer-Centric Data Warehouses" - NJ Computer Chapter, 7:00 PM, Public Meeting Room, Morris County Library, 30 E. Hanover Ave, Whippany, NJ. Mario Bernadel (201) 489-8492 (mbernadel@ieee.org) or Vivek Shaiva (908) 229-6125 (vshaiva@computer.org).

Apr. 24 - "Tour of the New CNNNJ Website" - NJ Consultants' Network, 7:30 PM, MCE/KDI Triangle, 60 S. Jefferson Rd, Whippany, NJ. Robert Walker (973) 728-0344 or www.TechnologyOnTap.org.

Apr. 25 & 26 - "The 12th Annual Wireless and Optical Communications Conference", 8:00 AM-5:50 PM, Wyndham Hotel, Newark, NJ. Dr. Hongya Ge, (973) 642-4990 (ge@njit.edu) or see <http://www.wocc.org> for additional details.

Upcoming Meetings

May 4 - "NJ Section Awards Reception" - 3:00 to 6:00 PM at the Birchwood Manor, 111 North Jefferson Rd, Whippany, NJ. Anne Giedlinski (973) 377-3175.

May 7 - "NJ Section Executive Committee Meeting" - 7:00 PM, ITT, 100 Kingsland Rd, Clifton, NJ. Dr. Sanghoon Shin at (973) 492-1207 Ext. 22 or s.shin@ieee.org .

May 8 - "Low Noise Millimeter Wave Signal Generation Using Electro-Optic Solid State Microchip Lasers" - EDS/C&S and LEOS Chapters, 7:00PM (buffet at 6:15PM), NJIT, 202 ECE Center, Newark, NJ. Dr. Richard Snyder (973) 492-1207 (RS Microwave), Dr. Edip Niver (973) 596-3542 (NJIT), or Dr. H. Grebel (973) 596-3538 (grebel@njit.edu).

May 22 - "Infrequently Asked Questions: The Art of Networking" - NJ Consultants' Network, 7:30 PM, MCE/KDI Triangle, 60 S. Jefferson Rd, Whippany, NJ. Robert Walker (973) 728-0344 or www.TechnologyOnTap.org.

Aug. 10-13 - "ITRE 2003 - IEEE International Conference on Information Technology: Research and Education" - Newark, NJ. For further information see <http://web.njit.edu/itre2003> or email itre2003@njit.edu.

Oct. 17-18 - "Call for Participation - Consortium for Computing Sciences in College - Eastern Region - Nineteenth Annual Conference" - Montclair State University, Upper Montclair, NJ. For further information see <http://www.csam.montclair.edu/~deremer/CCSCE2003Call.pdf> or <http://www.ccsc.org>.

Members and Non-Members Welcome
PLEASE POST

PACE NEWS

By Richard F Tax

Unemployment Legislative Alert: NJ State Senate

IEEE-USA is inviting you to write, FAX and/or call your Representatives at the New Jersey State and local level. This is another important step in enhancing the job market for engineers.

With your much needed help we will be more successful in informing your representatives.

NJ Senator Shirley Turner is requesting your assistance regarding Bill S1349. S1349 provides that only citizens or legal residents of the United States may be employed in performing certain State contracts. S1349 and its Assembly version, A2425, are being considered by the Assembly State Government Committee.

This bill is in trouble because of special interest groups that are mobilizing to oppose the bill. These groups have suggested certain amendments that would "gut" the bill.

We do not want this legislation watered down to defeat the purpose of keeping US jobs, especially those of the public sector, in the hands of US citizens.

The State Government Committee is:

- Assemblyman Alfred Steele: AsmSteele@njleg.org 973-247-1555
- Assemblyman Mims Hackett: AsmHackett@njleg.org 973-762-1886
- Assemblyman Nicholas Asselta: AsmAsselta@njleg.org 856-691-3004
- Assemblywoman Linda Greenstein: AswGreenstein@njleg.org 609-395-9911
- Assemblyman George Geist: AsmGeist@njleg.org 856-309-2200
- Assemblyman Albio Sires, Speaker of the Assembly: AsmSires@njleg.org 201-854-0900
- Majority Leader, Assemblyman Joe Roberts: AsmRoberts@njleg.org 856-742-7600

Entire list of your NJ representatives:

<http://www.njleg.state.nj.us/members/abcroster.asp>

Here's a handy map to find your local NJ rep.:

<http://www.njleg.state.nj.us/districts/njmap210.html>

Call and Email these representatives.

Be sure to call and email! Calling will be more effective in the emotional and importance of the message. Also, stay focused on off shoring.

Leave an impression on this issue. Call back if you have other issues.

You might want to mention that

according to your source www.nomoreh1b.com more than 220,000 New Jersey workers are unemployed while more than 140,000 foreign workers are employed in NJ under the H-1B legislation.

Please, call the Star Ledger, Main office: 973-392-4141 & ask for coverage on S1349, A2425 (www.starledger.com).

Check out www.techsunite.org for more on New Jersey.

How is the employment situation affecting you? How is outsourcing affecting you?

REMEMBER: the job you save may be your own. We have 5000 members in North Jersey. Make it work.

For more information attend our PACE meetings. See meeting notice in this issue.

NJ Computer Chapter:

Delivering Business Benefits from Customer-Centric Data Warehouses

On Thursday, April 17th, 2003, the IEEE North Jersey Section Computer Chapter will host a presentation on "Delivering Business Benefits from Customer-Centric Data Warehouses" by Dave Coler and Vivek Shaiva.

About the Talk

The continued interest in customer-centric data warehouses reflects the high value that organizations place on customer focused business intelligence. Unfortunately, many organizations lack customer-centric business processes and information architectures. Industry studies cite this deficit as one of the primary reasons why so many customer-centric data warehouses and their associated CRM initiatives fail.

The speakers will present a framework for building customer-centric data warehouses. The framework will describe required changes to processes for data collection and data quality. Specific best practices will be discussed for addressing modeling issues related to managing customer profiles in the context of complex business relationships. The speakers will also provide examples of specific revenue generating and cost savings initiatives driven from successful customer-centric data warehouses.

About the Speakers

David (Dave) Coler is the Chief Operations Officer of NDS. Mr. Coler developed NDS' proprietary project

management methodology adopted by many NDS clients today. Business process evaluation and strategic planning are two areas that led Mr. Coler to develop the NDS Collaboration Model, a tool used to effectively plan the integration of business process, organizational dynamics, and technology. Mr. Coler also spends a significant amount of time with clients, advising them on eBusiness strategy and execution planning. Dave has a BS in Mechanical Engineering from New Jersey Institute of Technology and a BA in French from Rutgers University.

Vivek Shaiva is a Senior Technical Architect with NDS. Mr. Shaiva's areas of expertise include CRM systems, Enterprise Application Integration, J2EE technologies and Database Architecture. He has architected technical application frameworks and best practices that are integrated with NDS methodologies and have been used as the basis for design and implementation of enterprise wide applications. He has a diverse range of business experience with a focus on media, finance and telecommunications. Vivek graduated from the Indian Institute of Management, Lucknow in 1989 with an MBA in Information Systems.

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, Thursday, April 17, 2003. Pre-meeting dinner 6:00 PM in the Public Meeting Room, Morris County Library.

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

Information: Mario Bernadel (201) 489-8492 (mbernael@ieee.org) or Vivek Shaiva (908) 229-6125 (vshaiva@computer.org).



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a Crisis!**

FREE referral service:
**IEEE CONSULTANTS' NETWORK
OF NORTHERN NJ**
www.TechnologyOnTap.org

NJ EDS, C&S & LEOS Chapters:
**Low Noise Millimeter
Wave Signal Generation
Using Electro-Optic
Solid State Microchip
Lasers**

On May 8, 2003, the IEEE NJ Section Electron Devices, and Circuits and Systems Chapter, Laser and Electro Optics Chapter, together with the New Jersey Institute of Technology will host a talk on "Low Noise Millimeter Wave Signal Generation Using Electro-Optic Solid State Microchip Lasers." The speaker will be Dr. Peter R. Herczfeld.

About the Talk

This presentation covers the generation of low noise millimeter wave signals using diode pumped solid state microchip lasers. The microchip lasers comprise of a gain medium, usually YVO₄, and an electro-optic medium, such as LiNbO₃ where the electric and optical fields interact. There are two laser configurations we employ. The first one is a multimode laser, which is mode-locked that produces a fixed frequency signal in the form of a closely spaced train of pulses. This type of laser is used in high speed optical A to D converters. The second configuration consists of two short cavity, single mode lasers, whose heterodyned output generates a tunable millimeter wave output. These lasers can produce extremely fast chirped output, 10 GHz/microsecond, useful in medical diagnostics. They can also produce a widely tunable millimeter wave signal with phase noise below -100 dBc/Hz @ 10 kHz offset. We have also used these in advanced communication systems.

About the Speaker

Born in Budapest Hungary in 1936 and now a US citizen, Peter R. Herczfeld received his BS degree in Physics from Colorado State University in 1961, his MS in Physics in 1963, and his PhD in Electrical Engineering in 1967, both from the University of Minnesota. Since 1967 he has been on the faculty of Drexel University, where he is the Lester Kraus Professor of Electrical and Computer Engineering. Dr. Herczfeld received numerous teaching honors including the Mary and Christian Lindback Distinguished Teacher Award at Drexel University and the IEEE-MTT-S Fred Rosenbaum Distinguished Educator Award.

Dr. Herczfeld is the Director of the center for Microwave-Lightwave Engineering at Drexel, a Center of Excellence that conducts research in microwaves and photonics. He has

published over 400 papers in Solid-State Electronics, Microwaves, Photonics, Solar Energy, and Biomedical Engineering. A member of APS and IEEE, he is a recipient of several research and publication awards, including the European Microwave Prize (1986 and 1994). He is a fellow of the IEEE, he is a recipient of the IEEE Millennium Medal and served as a Distinguished Lecturer of IEEE-MTT-S. He initiated the Microwave Photonics Conferences, a LEOS-MTT joint venture, which has blossomed into a highly respected international meeting.

All Welcome!

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

Time: 7:00 PM, Thursday, May 8, 2003. Free buffet will be starting at 6:15 PM.

Place: New Jersey Institute of Technology (NJIT), Room 202, ECE Center, Newark, NJ. Directions are available at www.njit.edu.

Information: Dr. Richard Snyder (973) 492-1207 (RS Microwave), Dr. Edip Niver (973) 596-3542 (NJIT), or Dr. H. Grebel (973) 596-3538 (grebel@njit.edu).

NJ Consultants' Network:

**Tour of the New
C>NNNJ Website**

On April 24, 2003, IEEE Consultants' Network of Northern NJ will hold a meeting featuring a Tour of the New C>NNNJ Website, given by Chris Mesibov of TechGenesis, Inc. The presentation will be followed by an informal networking session for members and guests and by a meeting of the C>NNNJ Executive Committee.

About the Talk

C>NNNJ website, TechnologyOnTap.org, serves as a focal point of the network, providing reference to our activities and offering information on our members. Our Webmaster, Chris Mesibov, will give a guided tour of the recently redesigned site, which has an all-new look and exciting new functions, giving members direct control over their entries and streamlining handling of referrals. The tour will outline resources available to visitors and members, in particular mechanisms to be used by members to manage their sections and listings, generate and send intra-network messages. The presentation will be of particular interest to those who intend to maximize the effectiveness of their on-line presence on network site or who contemplate joining the group.

Information for site visitors:

- Meetings
- Member Consultants

- Referral Form
- Joining the Network

Member Services:

- Member Profile Editor
- Referral Archive
- Consultant Business Description Editor

Administrator Services:

- Managing New Members
- Meeting Editor
- Member Communications
- Session/Security Management

About the Speaker

Chris Mesibov is the President of TechGenesis Inc. His consulting business provides analog and digital design services, specializing in development of automated test systems in network environments. Mr. Mesibov's experience of 20+ years includes RF ATE systems for military avionics, cellular and satellite equipment, and power systems for telecom products. His website is www.techgenesis1.com; he can be reached at chris@techgenesis1.com.

About the Consultants' Network

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

All Welcome!

You do not have to be a member of the IEEE or of the Consultants' Network to attend. Networking after the meeting is encouraged. There is no charge for admission. Bring your friends.

Time: 7:30 PM, Thursday, April 24, 2003.

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

Information: For directions and up-to-date meeting status, call Robert Walker (973) 728-0344 or visit our website at www.TechnologyOnTap.org. To download a map to MCE/KDI, go to: <http://www.kditriangle.com/directions.htm>.

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Metuchen, NJ 08840

In Memoriam
Donald O. Weinstein,
Senior Member, IEEE



Donald O. Weinstein, Membership Chairman of the North Jersey Section of the IEEE died on Wednesday, March 5th, 2003, at the age of 77. He was well known within the Section for his dedication, membership activities, as well as for his good nature and sense of humor.

He was born in 1925 and was raised in the Bronx, NY. At the age of 18 in 1943, he was drafted and served in the US Army infantry. After his US Army discharge, he earned his BEE degree in 1947 and his MEE degree in 1950, both from New York University.

He worked at his last employer, Kulite Semiconductor, for 25 years and never retired. He was still working when he became ill on November 30th, 2002. Don's hobbies included stamp collection and photography.

Don will be long remembered for his dedicated service as Membership Chairman of the North Jersey Section. For his service he was recognized in 1984 with a Centennial Medal award and in 2000 with a Third Millennium Medal award. Don will be missed by his associates and fellow members of the Executive Committee of the North Jersey Section not only for his efforts in boosting the membership within the IEEE but for his ready wit and humor that infused all around him with joy.

WAITER, WHY DO YOU HAVE YOUR THUMB ON MY STEAK?
 SO IT DOESN'T FALL ON THE FLOOR AGAIN, SIR.

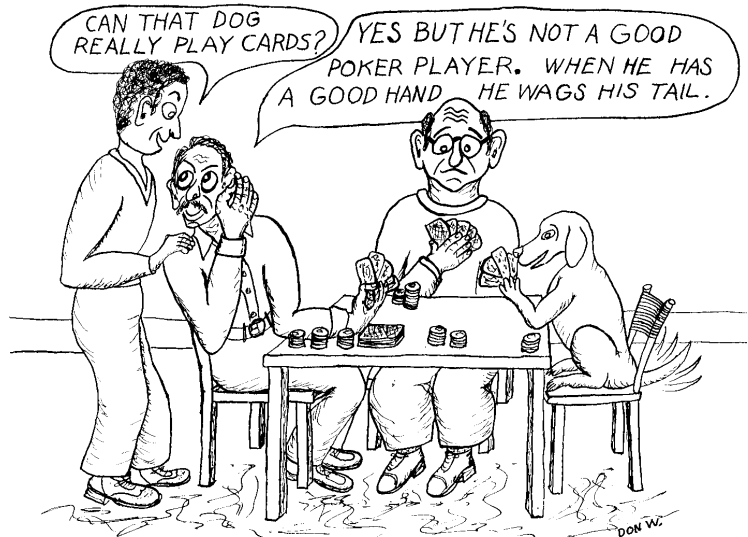


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Illustrations by Don Weinstein



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- SHOP FIRST** - decide on your exact specifics (e.g., make and model or style number). When you have completed your shopping, then...
- CALL** participating vendor for price. See phone numbers below.
- BUY-BY-PHONE** - using credit card or check. The items will be delivered to you

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DIAMONDS, FINE JEWELRY, WATCHES. .	800-635-9136
EXERCISE EQUIPMENT	800-541-9905
FURNITURE.....	800-631-0286
LIGHTING.....	800-631-0286
LUGGAGE.....	800-543-8237
PIANOS & ORGANS	800-526-6825
TRAVEL	800-634-8538
VACUUM CLEANERS	800-377-3700

NOTE: Product coverage is constantly being improved; however some products or services may not be available in your area. If one of the above phone numbers must be changed, your call will be transferred to the new number.

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If you buy a product for \$150 or more through a Buyer's Edge Plan, and within 30 days (24 hours on Travel) and 50 miles, find the **exact item** for less at a factory-authorized dealer, THE BUYER'S EDGE requires that the participating vendor mail you the difference, plus 20% of that difference.

This guarantee even covers advertised sales, discount houses and other buying plans. (Silver and gold items, services, merchandise offered with limits on availability or quantity, dealer installed options, and prices after manufacturers' cut-off dates for model year on new cars are not covered by this guarantee.

BUY-IN-PERSON

**CARPETING - CHINA - PIANOS
DIAMONDS - EXERCISERS - LUGGAGE**

- No need to know make, model, etc.
- Free in-store services may be available
- Call Buy-By-Phone vendor for local dealer referral (see below)

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 - CALL** for a referral to local cooperating dealer
 - DEALERSHIP SAVINGS:** ask for THE BUYER'S EDGE price documentation book. Compute your Price. If book not available, contact the Car Plan
- ***USED CARS:** Late models only (3 years or less 12 month/12,000 mile limited warranty).

OPTION #2 COMPUTER PRINTOUT PACKAGE... for new cars only -- dealer's cost of vehicle...and much more...FREE via fax with a referral to a co-operating dealer.

KITCHEN CABINETS/COUNTERTOPS..... 800-327-3599

Call for referral
Designer services available.

MOVING PLAN..... 800-356.7771

Professional services, household goods/autos (distances over 40 miles or interstate). Free in-home estimate. Call 4weeks prior to moving date.

OPTICAL PLAN.....NJ ONLY.... 888-393-3791

REAL ESTATE PLAN..... 800-232-6766

1% savings on purchase or sale of home in most cases.
Call referral service **before contacting broker.**

**MEMBER PROTECTION SERVICE
THAT WORKS FOR YOU**

If you ever receive less than superior treatment with regard to price, delivery or service, speak to the management of the participating vendor. If you don't get results, contact:

THE BUYER'S EDGE
1429 Route 22, Mountainside, NJ 07092
or E-mail to: info@buyersedgeinc.com

**VISIT ABOVE WEBSITE FOR MORE DETAILS
RE: HOURS, COVERAGE, ETC.**

Revised February, 2003

**BE PREPARED TO GIVE YOUR GROUP NUMBER (SEE ABOVE)
WHENEVER YOU CONTACT A PARTICIPATING VENDOR**

Would Spielberg

have won a

VINNY



YOU Could...

Combine skills in research and writing with teamwork and creativity to win prizes and recognition. Teachers, students, and mentors are you ready? Lights, camera, education!

Named after Leonardo da Vinci, the **VINNY** is an award for the best one-minute videos explaining how science, technology, engineering, or mathematics can help solve common global problems.

<http://vinny.pcs.cnu.edu>

SIGN UP NOW! Registration Deadline is OCTOBER 31, 2003

The VINNY award is sponsored by the NASA Center for Distance Learning, Christopher Newport University, and the Institute of Electrical and Electronics Engineers (IEEE). Funding is provided by the IEEE Foundation.





National Aeronautics and
Space Administration

Langley Research Center
Hampton, VA 23681-2199



The NASA Center for Distance Learning, Christopher Newport University, and the Institute of Electrical and Electronics Engineers (IEEE) announce **VINNY** award. **VINNY** is a worldwide video competition designed to build awareness of science, technology, engineering, and mathematics (STEM). **VINNY** can be used to supplement curricula and support commonly recognized standards of learning.

PROBLEM

- Teams made up of one teacher and three students will identify and research a global problem and discover ways that STEM can help solve it.



CHALLENGE

- Teams will create a one-minute video explaining the global problem and a possible STEM solution.

AWARDS

- Win school prizes and recognition.
- Win student prizes and recognition.
- Win teacher prizes and recognition in each category.

3 levels of competition: elementary grades K-5,
middle grades 6-8, high grades 9-12
 $\frac{x}{2}$ languages: English and Spanish
6 categories and prizes

SIGN UP NOW! <http://vinny.pcs.cnu.edu> **REGISTRATION DEADLINE: OCTOBER 31, 2003**

Telecommunications Technology Trends

Media Sponsor
RCR WIRELESS NEWS



JOINTLY ORGANIZED BY PARSA WIRELESS COMMUNICATIONS AND NBC WIRELESS INC.
COSPONSORED BY IEEE COMSOC North Jersey Chapter
March 31-April 2, 2003; Morristown, New Jersey

ABSTRACT - Hotspot technologies are experiencing a significant surge globally and the deployment of next generation wireless technologies such as 2.5G and 3G are still being pursued amidst a severe economic downturn and cutbacks in the telecommunication sector.

Wireless 3T provides a unique forum for industry clients to learn the latest trends in wireless communications, and gain exposure to techniques for building the hotspot-enabled wireless environment. The conference will focus on the major advances and trends in the wireless sector and aim to capture the macro-trends in major wireless areas such as Wireless WAN, Wireless LAN, Hotspot technologies and Home networking. The key objective in various presentations will be provision of basic understanding of the segment and capturing the key technological trends and innovations in each area. Moreover, we will have a unique session on the current state of the wireless communication industry and its future.

WHO SHOULD ATTEND?

Technical and non-technical managers, product managers from the operators, manufacturers and application developers and particularly executives from the start-up companies, analysts from the venture capitalists would optimally benefit from this event. The decision makers and engineers who are required to capture the big picture and technology trends in the wireless industry will mostly benefit from this event.

REGISTRATION

On Line : <http://www.3g-gprs.com>

		IEEE Member		Non-IEEE	
		Regular	FT. Student/Unemployed	Regular	FT. Student/Unemployed
Register Before March 21, 2003	Wireless 3T (March 31-April 2)	\$700.00	\$375.00	\$850.00	\$450.00
	Technical Sessions (March 31 - April 1)	\$500.00	\$270.00	\$600.00	\$320.00
	One day Technical Sessions	\$270.00	\$155.00	\$320.00	\$180.00
	Full Day Short Courses (April 2)	\$270.00	\$155.00	\$320.00	\$180.00
	½ day Short Course	\$155.00	\$100.00	\$180.00	\$115.00
Register After March 21, 2003	Wireless 3T (march 31-April 2)	\$800.00	\$475.00	\$950.00	\$550.00
	Technical Sessions (March 31 - April 1)	\$560.00	\$330.00	\$660.00	\$380.00
	One day Technical Sessions	\$300.00	\$185.00	\$350.00	\$210.00
	Full Day Short Course (April 2)	\$300.00	\$185.00	\$350.00	\$210.00
	½ day Short Course	\$175.00	\$120.00	\$200.00	\$130.00

By Mail: Please mail the completed registration form to:

By Fax: Please Fax the completed registration form to:

CONFERENCE PROGRAM

PARTICIPANT: AT&T Research; Lucent Technologies; InstaView Systems; Signal Lake; Wharton School, Penn; Decision Strategies International; ATT Labs; SBC Technology Resources; AT&T business Services

PLENARY SESSION (9:00 AM - 12:00 PM, MARCH 31, 2003)

STRATEGIC LOOK AT WIRELESS TECHNOLOGIES

TECHNICAL SESSION - O (1:00-5:00 PM, MARCH 31, 2003)

Wireless Technology Overview

"IEEE 802.11 Overview

"Technical overview of 3G technologies"

"Technical overview of GPRS-EDGE"

"Technical overview of Home networking technologies"

TECHNICAL SESSION - B (9:00AM - 12:00 PM, APRIL 1, 2003)

Trends and technology choices in 2.5G-3G and beyond

Session Chairman: Dr. Qi Bi, Bell Lab Fellow

TECHNICAL SESSION - A (1:00 - 3:30 PM, APRIL 1, 2003)

Trends and innovations in WiFi and hotspot technologies

STRATEGY SESSION - P (4:00 - 5:30 PM, APRIL 1, 2003)

Panel Discussion: Managing Uncertainty in the Wireless Industry: Is your business future proof? Is your portfolio future proof?

SHORT COURSES - I (9:00 AM - 12:00 PM; APRIL 2, 2003)

- SC-I: Introduction to CDMA2000
- SC-II: Basics of GPRS-EDGE technologies
- SC-III: Basics of UMTS

SHORT COURSES - II (1:30 - 4:30 PM; APRIL 2, 2003)

- SC-IV: WLAN tutorial
- SC-V: UMTS Radio Resource Optimization

ADVISORY BOARD

- Dr. Saied Kazeminejad, SBC Technology Resources Inc.
- Dr. Donald Bowen, AT&T Labs
- Michael Mavadat, Decision Strategies International Inc.
- Prof. Nirwan Ansari, New Jersey Institute of Technology

POINTS OF CONTACT

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www.nbcwireless.com

IEEE AWARDS RECEPTION

*North Jersey Section
May 4, 2003
Birchwood Manor, Whippany NJ*

*A time to relax, unwind and enjoy --
A time to pay tribute to our new Fellows --
A time to honor our Award Winners --
YES it's time for the Annual Section Reception*

The Annual Section IEEE Awards Reception will be held at the Birchwood Manor, 111 North Jefferson Road, Whippany again this year. The affair is scheduled for **Sunday, May 4, 2003** from 3 to 6 PM. Tickets are \$35.00 each and include a complete prepaid, two-hour open bar, hors d'oeuvres, buffet, and dessert. Spouses and guests are welcome. We are limited to 90 attendees, so please make your reservations early.

Reservations are required by April 28, 2003. Complete the reservation form and return it with your payment. If you would like tickets mailed back to you, please enclose a self-addressed **stamped** envelope. Otherwise, your tickets will be held at the door for you. If any additional information is required concerning the reception, contact Anne Giedlinski at (973) 377-3175.

Use this form for Reception reservations. **ENCLOSE A SELF-ADDRESSED STAMPED ENVELOPE to receive tickets in advance.** **Reservations are required by April 28, 2003.** Mail reservation request to:

Anne Giedlinski
299 Brooklake Road
Florham Park, NJ 07932

Enclosed is _____ for _____ ticket(s) at \$35.00 each (make check payable to **North Jersey Section IEEE**) for:

NAME: _____

ADDRESS: _____

NJ PES/IAS:

Power Systems Design Seminar

The PES and IAS Chapters will sponsor a one-day seminar covering the basics of Power System Design. The session will be held on Friday, April 11th, from 9:00 AM – 3:00PM, at Cutler-Hammer, 379 Thornall Street (Alferi Building), 8th Floor, Edison, NJ.

About the Seminar

The seminar will cover the basics of designing power distribution systems for industrial and commercial facilities. The seminar will focus on the selection of the various types of power distribution equipment, and how to configure the systems to provide the proper level of reliability based on available project funding.

Topics to be covered include:

- Power System Design
 - ↵ Simple Radial Systems
 - ↵ Primary Selective Systems
 - ↵ Secondary Selective Systems
 - ↵ Spot Networks
- Low Voltage Distribution and Protection
 - ↵ Metal Enclosed Switchgear (UL 1558)
 - ↵ Dead-Front Switchboards (UL 891)
 - ↵ Secondary Unit Substations
- Medium Voltage Distribution and Protection
 - ↵ Metal Clad Switchgear (ANSI C37.20.2)
 - ↵ Metal Enclosed Switchgear (ANSI C37.20.3)
 - ↵ Primary Unit Substations
- Short Circuit and Overcurrent Protective Device Coordination
 - ↵ Circuit Breakers - Power, Insulated Case, Molded Case
 - ↵ Fuses
 - ↵ Selective Coordination
 - ↵ Series Rated Devices
 - ↵ Zone Selective Interlocking

The registration fee for this seminar prior to March 28th will be \$100 (non-IEEE members), \$75 (IEEE Members), and \$25 (students with valid ID). The fee will be waived for IEEE Life Member Grades with verification at the seminar. Registrations after March 28th must include an additional late fee of \$25. The seminar fee includes lunch, refreshments and handouts. Non-members joining IEEE within 30 days of the seminar will be rebated 50% of the IEEE registration charge.

Time: 9:00 AM to 3:00 PM, Friday, April 11, 2003.

Place: Cutler-Hammer, 379 Thornall Street (Alferi Building), 8th Floor, Edison, NJ.

Directions:

- Garden State Parkway to Exit 131A (Metropark). The exit ramp (from either direction) puts you on Wood Ave.
- At third traffic light, make a left onto Thornall Street.
- Drive about 1/4 mile, see the ALFIERI Building (379 Thornall St.) on left. Make left into driveway, and proceed to parking garage. Cutler-Hammer is in the left wing (when entering from the rear of the buildings via the parking garage), on the 8th floor.

Information: Ronald W. Quade, PE, (212) 833-0268 or RonaldWQuade@eaton.com.

Registration: Power Systems Design Seminar 4/11/2003

Register via US mail to: Ronald W. Quade, PE
Eaton Cutler-Hammer
830 Third Avenue
Suite 920
New York, NY 10022

Name _____

Address _____

Phone _____ Email _____

IEEE # _____ Student @ _____ Non IEEE _____ Life Member _____

Payment Enclosed \$ _____ Add \$25 late registration after March 28th

Make Check payable to North Jersey Section IEEE