

The



IEEE Newsletter

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

NJ SP Chapter & SAC:

Overview of Signal Classification Techniques for Wireless Communications

On October 1, 2008, the IEEE NJ Signal Processing Chapter together with the IEEE NJ Student Activities Committee and New Jersey Institute of Technology will host a talk on "Overview of Signal Classification Techniques for Wireless Communications." The speakers will be Drs. Wei Su and John Kosinski.

About the Talk

Signal classification is an important subject for military radio communications. With the revolution of digitizing communications ever closer to the antenna, cognitive radios with programmable modulation schemes and transmission rates have become a practical wireless communication platform. Signal classification techniques have attracted much attention recently by the commercial applications in developing the next generation receivers with automatic modulation scheme recognition and selection. However, the technical expectations and goals in commercial cognitive radios are quite different with that in military surveillance systems. A key research area is to develop new algorithms with the real-time adaptive demodulation capability. An overview of automatic signal classification techniques and the challenges in migrating current modulation recognition methods into the cognitive radios will be discussed.

About the Speaker

Dr. Wei Su received the BS degree in electrical engineering and the MS degree in systems engineering from Shanghai Jiao Tong University, China, in 1983 and 1987, respectively. He received his PhD degree in electrical engineering from The City University of New York, New York, in 1992. Currently, he is a senior engineer in U.S. Army Communication Electronics Research Development and Engineering Center in Fort Monmouth, NJ. His research interests include wireless

communication, signal and image processing, and adaptive control with over 160 patents and papers. Dr. Su has been a recipient of numerous prestigious awards for technical achievements including the 3rd highest honor in the U.S. Army – Superior Civilian Service Award and Medal, 2007 and 2004 AOC International Research and Development Awards, 2007 IEEE Region I Award, 2005 Army Research and Development Achievement Award, Army Material Command Top 10 Employee Nomination, and 2002 Thomas Alva Edison Patent Award.

All Welcome!

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

Time: 4:45 PM, Wednesday, October 1, 2008. Pizza will be offered at 4:30 PM.

Place: New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Directions are available at <http://www.njit.edu/University/Directions.html>.

Information: Yun Shi (973) 596-3501 (shi "AT" njit.edu), Alfredo Tan (201) 692-2347 (tan "AT" fdu.edu), and Hong Man (201)-216-5038 (hman "AT" stevens-tech.edu).

2009 EXCOM Nominations

The North Jersey EXCOM announces the following slate of the officers for 2009.

Chair:	Amit Patel
Vice Chair 1:	Sanghoon Shin
Vice Chair 2:	Open
Secretary:	Russell Pepe
Treasurer:	Pete Donnegan
Members-at-Large:	Dr. Naresh Chand Dr. Kate Duncan Seth Jakel

Nominations are invited from IEEE members for the open position or any other position. If, you are interested in contesting any of the aforementioned positions, please submit your name. In order to get on the election ballot, you will need to be nominated by a IEEE member and seconded by another IEEE member. In addition you will also need twelve supporting signatures. If you have any questions or need any further information, please contact Dr. Chandra Gupta at [c.gupta "AT" ieee.org](mailto:c.gupta@ieee.org).

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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, (302) 683-7162.

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 Russell Pepe at (201) 960-6796, rpepe "AT" att.net.

NJ Section PACE, GOLD, & WIE:

Engineers Meet:

History of Education in China

On October 8, 2008, the North Jersey Section Professional Activities Committee and Graduates of the Last Decade will host a meeting for a presentation about the History of Education in China. Our guest speaker will be Ying Wu, a young women engineer. This meeting is a repeat due to the interest at our past meeting in 2007 on the subject.

About the Meeting

The discussion will be about the history of education in China. We might even make a comparison between education in China and that of the United States. Surely, we will discuss the recruiting efforts of American colleges in foreign countries, the promises, and results and how it affects the foreign student. Are the promises ever kept?

The meeting will include a PowerPoint presentation with time for Q & A and an open discussion.

All are encouraged to attend and invite your associates.

About the Speaker

If you wish to meet the speaker, you will just have to come to the meeting.

Ying Wu, our guest speaker, is a young women engineer with a BSEE from Beijing, China, a MSEE and an MSME from NJIT. She is going to share her experiences with a PowerPoint presentation and pictures from China.

All Welcome!

Members and students from all professional societies and engineering disciplines are welcome. We now have attendees from IEEE, ASME, NSPE, ASCE and AEA. For information about these groups see:

www.aea.org
www.ieeeusa.org/policy/care/
www.ieeeusa.org
www.programmersguild.org
<http://web.njit.edu/~ieeenj/>
www.asme.org/sections/northjersey

CARE is the Congressional Advocacy Recruitment Effort. CARE is a voluntary network of IEEE members who are interested in public policy. To help go to www.ieeeusa.org/policy/care/.

Time: 6:30 PM to 9:00 PM, Wednesday, October 8, 2008. Refreshments will be served.

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

Information: Paul Ward, (973) 790-1625, PWARD1130 "AT" aol.com, Richard F. Tax, (201) 664-6954, rtax "AT" verizon.net.

NJ GOLD & WIE Chapters:

Field Trip to Historic Speedwell the "Birthplace of the Telegraph"

Remember what the other "T" in AT&T stood for? North Jersey Section GOLD and WIE Affinity Groups in conjunction with Central Jersey Section GOLD are jointly sponsoring a field trip to Morristown's National Historic Landmark Historic Speedwell on Saturday, October 4, 2008.

Come tour the "Birthplace of the Telegraph" where Samuel Morse and Alfred Vail invented the American commercial telegraph and the modern telecommunications industry. Cost is \$4/adult, \$3/child/senior payable at the door. Online registration is required to get an accurate count for the tour. Sign up at the GOLD website at: http://ewh.ieee.org/r1/north_jersey/gold/. Bring a friend, enjoy the afternoon learning, interacting with your fellow members and win some door prizes.

The group will assemble between 12-12:30 PM in the parking lot located on the corner of Cory Road and Speedwell Avenue. The group will be treated to a special guided tour exclusively for the IEEE group. The tour will conclude at 4 PM. Afterward, the group will go to Cafe Arabica (<http://www.cafearabicanj.com/>) to network, mingle, and discuss future IEEE events.

The National Landmark website and directions are at: <http://www.morrisparks.net/speedwell/home.html> (973-285-6550).

Time: Assemble between 12-12:30 PM in the parking lot, Saturday, October 4, 2008. Tour concludes at 4:00 PM.

Place: Historic Speedwell, 333 Speedwell Ave, Morristown, NJ 07960.

Cost: \$4/adult, \$3/child/senior, payable up front.

Information/Questions: Contact northjerseygold "AT" ieee.org.

IEEE North Jersey Section Activities

October 2008

Oct. 1 – “NJ Section Meeting”, 6:30 PM, “Executive Committee Meeting” - 7:00 PM, ITT, 77 River Rd, Clifton, NJ. Russell Pepe at rpepe “AT” att.net.

Oct. 1 – “Overview of Signal Classification Techniques for Wireless Communications” by Dr. Wei Su, NJ SP Chapter and SAC, 4:45 PM, New Jersey Institute of Technology (NJIT), Room 202, ECE Center, Newark, NJ. Yun Shi (973) 596-3501 (shi “AT” njit.edu), Alfredo Tan (201) 692-2347 (tan “AT” fdu.edu), and Hong Man (201)-216-5038 (hman “AT” stevens-tech.edu).

Oct. 2 – “2008 MTT/AP Symposium and Mini-Show” – MTT-S/AP-S Chapter, 9:00 AM - 4:30 PM, Hanover Manor, 16 Eagle Rock Avenue, E. Hanover, NJ. Kirit Dixit (201) 669-7599 (kdixit “AT” ieee.org), Art Greenberg (973) 386-6673 (ahg1 “AT” alcatel-lucent.com), Har Dayal (973) 633-4618 (har.dayal “AT” baesystems.com), or George Kannell (973) 386-4170 (gkk “AT” gsinnovations.com).

Oct. 4 – “Field Trip to Historic Speedwell the ‘Birthplace of the Telegraph’”, NJ GOLD & WIE Chapters, Assemble between 12-12:30 PM, Historic Speedwell, 333 Speedwell Ave, Morristown, NJ. Contact northjerseygold “AT” ieee.org.

Oct. 8 – “Engineers Meet: History of Education in China” by Ying Wu, NJ PACE, GOLD, & WIE, 6:30 PM to 9:00 PM, Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ. Paul Ward, (973) 790-1625, PWARD1130 “AT” aol.com, Richard F. Tax, (201) 664-6954, rtax “AT” verizon.net.

Oct. 14-Dec. 2 – “Project Management” by Dr. Donald Hsu, North Jersey Section, Tuesday Evenings, 8 sessions, 6:30-9:00 PM, NJ International Bulk Mail Center, 80 County Rd, Jersey City, NJ. Donald Hsu (yanyou “AT” hotmail.com).

Oct. 15 – “The Development of Multi-Gigabit Radio Technology for Terabit Wireless Personal Area Networks” by Dr. Joy Laskar, NJ EDS/C&S Chapters, 7:00 PM, New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Dr. Richard Snyder (973) 492-1207 (RS Microwave), Dr. Edip Niver (973) 596-3542 (NJIT), or Dr. Durga Misra (973) 596-5739 (dmisra “AT” njit.edu).

Oct. 16 – “Life Grade Luncheon”, Hamilton Park Conference Center, Florham Park, NJ. Ken Oexle (973) 386-1156.

Oct. 18 – “Edison West Orange Laboratory IEEE Milestone Dedication”, Group tour at 11:30 AM, plaque dedication at 2:00 PM, Group tour at Edison’s Glenmont estate at Llewellyn Park, West Orange, NJ. Plaque dedication at West Orange Township Municipal Building, West Orange, NJ. Howard Leach, Historian, at h.leach “AT” ieee.org or (973) 540-1283, or Ken Oexle, Awards Chairman, at k.oexle “AT” worldnet.att.net or (973) 386-1156

Oct. 22 – “Multisensor Data Fusion and Applications” by Professor Pramod K. Varshney, NJ AES Chapter, 7:00 PM, BAE Systems, 164 Totowa Road, Wayne, NJ. Dr. Naresh Chand, (973) 636-7408, naresh.chand “AT” baesystems.com.

Oct. 23 – “Designing Current-Fed Switchmode Power Supplies and Magna-Power Electronics Facility Tour” by Dr. Ira J. Pitel, NJ Consultants’ Network, 7:30 PM, Magna-Power Electronics, 39 Royal Road, Flemington, NJ. Robert Walker (973) 728-0344 or www.TechnologyOnTap.org.

Oct. 23 – “Digital Signal Processing – Enabling the Wireless Revolution” by Dr. Emad Farag, NJ VTS Chapter, 7:00 PM, Alcatel-Lucent, 67 Whippany Rd, Whippany, NJ. Stephen Wilkowski at (973) 386-6487 or at swilkowski “AT” alcatel-lucent.com.

Oct. 28 – “Towards Robust Photonic Crystal Fiber Platform for Chemical Sensing Using Surface-Enhanced Raman Scattering” by Dr. Henry Du., NJ LEOS Chapter, 5:00 PM, New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Professor H. Grebel (973) 596-3538 (grebel “AT” njit.edu).

Oct. 30 – “4G Mobile Telecommunications Systems and Standards” by Dr. Raziq Yaquub, NJ SMC Society, 7:00 PM, New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Directions are available at <http://www.njit.edu/University/Directions.html>. Dr. Mike Liechenstein (973-471-0721) or E-Mails: (itsmikesju “AT” aol.com or zhou “AT” njit.edu).

Upcoming Meetings

Nov. 5 – “NJ Section Meeting”, 6:30 PM, “Executive Committee Meeting” - 7:00 PM, ITT, 77 River Rd, Clifton, NJ. Russell Pepe at rpepe “AT” att.net.

Nov. 18 – “Engineers Meet: Design for Six Sigma Seminar” by Kathi Kivi, NJ PACE, GOLD, & WIE, 6:30 PM to 8:30 PM, Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ. northjerseygold “AT” ieee.org, Paul Ward, (973) 790-1625, PWARD1130 “AT” aol.com, Richard F. Tax, (201) 664-6954, rtax “AT” verizon.net.

Nov. 21 – “Automatic Transfer Switch Seminar” by Cathy Clausen, NJ PES/IAS, 9:00AM to 2:00PM, PSE&G, 80 Park Plaza, Newark, NJ. Ronald W. Quade, PE, (732) 205-2614 or rwquade “AT” ieee.org.

Dec. 12 – “Adjustable Frequency Drives Seminar” by Dan Kupersmith, NJ PES/IAS, 9:00AM to 2:00PM, PSE&G, 80 Park Plaza, Room 101, Newark, NJ. Ronald W. Quade, PE, (732) 205-2614 or rwquade “AT” ieee.org.

Members and Non-Members Welcome

PLEASE POST

Edison West Orange Laboratory IEEE Milestone Dedication

The Edison West Orange Laboratory IEEE Milestone plaque will be officially dedicated at a ceremony to be held at the West Orange Township Municipal Building on Saturday, October 18th, as follows:

- ☞ 11:30 AM - Group tour of Edison's Glenmont estate, limited to 25.
- ☞ 12:30 PM - Registration and refreshments.
- ☞ 1:00 PM - Welcome and opening remarks by Kirit Dixit, IEEE North Jersey Chairman, and others including the Honorable John F. McKeon, State Assemblyman and Mayor of West Orange Township, NJ.
- ☞ 1:30 PM - Keynote address by Dr. Paul Israel, Director, Edison Papers Project, Rutgers University.
- ☞ 2:00 PM - Official Milestone Award presentation by Lew Terman, IEEE President, or his representative.

The plaque citation for this IEEE Milestone in Electrical Engineering and Computing will read:

*Thomas A. Edison West Orange
Laboratories and Factories, 1887*

Thomas Alva Edison, a West Orange resident from 1886 until his death in 1931, established his final and most comprehensive laboratory and factory complex about one-half mile (0.8 km) north of here in 1887. Edison's visionary combination in one organization of basic and applied research, development, and manufacturing became the prototype for industrial enterprises worldwide. Work here resulted in more than half of Edison's 1,093 patents.

Reservations Required

For further information and for reservations for the limited 11:30 AM group tour of Edison's Glenmont estate at Llewellyn Park, West Orange, NJ, contact Howard Leach, Historian, at h.leach "AT" ieee.org or (973) 540-1283, or Ken Oexle, Awards Chairman, at k.oexle "AT" worldnet.att.net or (973) 386-1156.

Time: Group tour at 11:30 AM, plaque dedication at 2:00 PM, Saturday, October 18, 2008.

Place: Group tour at Edison's Glenmont estate at Llewellyn Park, West Orange, NJ. Plaque dedication at West Orange Township Municipal Building, West Orange, NJ.

Information: Howard Leach, Historian, at h.leach "AT" ieee.org or (973) 540-1283, or Ken Oexle, Awards Chairman, at k.oexle "AT" worldnet.att.net or (973) 386-1156.

NJ EDS/C&S Chapters:

The Development of Multi-Gigabit Radio Technology for Terabit Wireless Personal Area Networks

On October 15, 2008, the IEEE NJ Section Electron Devices, Circuits and Systems Chapters together with the New Jersey Institute of Technology will host a talk on "The Development of Multi-Gigabit Radio Technology for Terabit Wireless Personal Area Networks." The speaker will be Dr. Joy Laskar.

About the Talk

The development of millimeter waves radios at the same cost structure of consumer electronic radios operating in C-Band opens a new field of innovation for systems designers. The convergence of FR4 based Modules, CMOS MMIC, Signal Processing and high efficiency PHY-MAC technologies will enable a new generation of low cost high performances millimeter-wave systems. The feasibility of ultra high-speed wireless transmission beyond 10 Gbps has been demonstrated on a low power low cost platform. Power budgets well below the one hundred pico-joules/bit range have been achieved. One may expect that 100 Gbps serial transmission with a femto-joule/bit power budget can be developed in the near future. These advances will enable a variety of volume millimeter-wave CMOS applications including: peer-to-peer ultra fast synchronization and adaptive WPAN, automotive radar, out-door point-to-point/multi-point links, portable radar, security, sensing and imaging and medical applications

About the Speaker

Dr. Joy Laskar received the BS degree (Computer Engineering with Math/Physics Minors, summa cum laude) from Clemson University in 1985. He received the MS and the PhD degrees in Electrical Engineering from the University of Illinois at Urbana-Champaign in 1989 and 1991 respectively. Prior to joining Georgia Tech in 1995, Dr. Laskar was a visiting professor at the University of Illinois at Urbana-Champaign and an assistant professor at the University of Hawaii at Manoa.

At Georgia Tech he holds the Schlumberger Chair in Microelectronics in the School of Electrical and Computer Engineering. He is also Founder and Director of the Georgia Electronic Design Center, and he heads a research group of 70 members (graduate students, research staff and administration) with a focus on integration of high-frequency mixed-signal

electronics for next-generation wireless and wire line systems. Between 1995 and Spring 2008 Dr. Laskar graduated 34 PhD students. He has authored or co-authored more than 500 papers, several book chapters and three books (with another book in development). He has given numerous invited talks, and he has more than 40 patents issued or pending.

Dr. Laskar's work has resulted in the formation of two companies. In 1998 he co-founded an advanced WLAN IC Company: RF Solutions, which is now part of Anadigics (Nasdaq: Anad). In 2001 he co-founded a next-generation analog CMOS IC company, Quellan, which is developing collaborative signal-processing solutions for the enterprise, video, storage and wireless markets.

Dr. Laskar's honors include the Army Research Office's Young Investigator Award in 1995, the National Science Foundation's CAREER Award in 1996, NSF Packaging Research Center Faculty of the Year in 1997, and co-recipient of the IEEE Rappaport Award (Best IEEE Electron Devices Society Journal Paper) in 1999. He was faculty advisor for the 2000 IEEE MTT IMS Best Student Paper award, was Georgia Tech Faculty Graduate Student Mentor of the year in 2001, received a 2002 IBM Faculty Award, and the 2003 Clemson University College of Engineering Outstanding Young Alumni Award. He was the 2003 recipient of the Outstanding Young Engineer award of the Microwave Theory and Techniques Society and was named an IEEE Fellow in 2005. For the 2004-2006 term, Dr. Laskar served as an IEEE Distinguished Microwave Lecturer and currently is an IEEE EDS Distinguished Lecturer. He received Georgia Tech's "Outstanding Faculty Research Author" award in 2007 and ECE's Distinguished Mentor Award in 2008. Dr. Laskar served as General Chairman of the IEEE International Microwave Symposium 2008.

All Welcome!

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

Time: 7:00 PM, Wednesday, October 15, 2008. Free buffet will begin at 6:15 PM.

Place: New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Directions are available at <http://www.njit.edu/University/Directions.html>.

Information: Dr. Richard Snyder (973) 492-1207 (RS Microwave), Dr. Edip Niver (973) 596-3542 (NJIT), or Dr. Durga Misra (973) 596-5739 (dmisra "AT" njit.edu).

NJ VTS Chapter:

Digital Signal Processing – Enabling the Wireless Revolution

On October 23, 2008, the IEEE NJ Section Vehicular Technology Society Chapter will host a talk on "Digital Signal Processing – Enabling the Wireless Revolution." The speaker will be Dr. Emad Farag of Alcatel-Lucent.

About the Talk

The advancement of signal process technology as predicated by Moore's law has led to the implementation of digital signal processing algorithms that a few decades ago were considered prohibitively complex to implement. Today, driven by the quest to enhance user experience, increase system capacity and lower cost, features as MIMO and higher order modulation, among others, are becoming part of the wireless standards. In this presentation, we will look at some of the digital signal processing algorithms used in CDMA and OFDMA based wireless standards to support these features. We will show how the computation complexity of these algorithms are becoming within the capabilities and power budgets of today's VLSI circuits for mobile terminals and base stations. Finally, we will explore how the development of the next generation wireless standards is influencing VLSI circuits to have greater computation capabilities, and more flexibility within constrained power budgets.

About the Speaker

Emad Farag received his BSc and MSc degrees both in Electrical Engineering from Ain Shams University (Cairo, Egypt) in 1990 and 1994 respectively. He received his PhD degree in Electrical Engineering from the University of Waterloo (Ontario, Canada) in 1997. Dr. Farag worked as a Research Assistant Professor at the University of Waterloo in 1997. He joined Lucent Technologies in December 1997 as a Member of the Technical Staff. In 2002, he was promoted to become a Distinguished Member of the Technical Staff. He is currently a channel element architect, where he is responsible for the modem architecture for WCDMA and LTE cellular systems. Dr Farag has published a book on wireless communications, in addition to over 20 journal and conference articles. He holds 8 patents (or pending patents) in wireless communications and related areas.

All Welcome!

You do not have to be a member of the IEEE to attend. There is no charge to attend.

Time: 7:00 PM, Thursday, October 23, 2008. Free buffet will begin at 6:30 PM.

Place: Alcatel-Lucent, 67 Whippany Rd, Whippany, NJ.

Information: Please reserve in advance to expedite badge processing. For reservations, please contact Stephen Wilkowski at (973) 386-6487 or at swilkowski "AT" alcatel-lucent.com.

NJ Consultants' Network:

Designing Current-Fed Switchmode Power Supplies and Magna-Power Electronics Facility Tour

On Thursday, October 23, 2008, the IEEE Consultants' Network of Northern NJ (www.technologyontap.org) will feature a presentation on Designing Current-Fed Switchmode Power Supplies along with a facilities tour of Magna-Power Electronics. The speaker will be Dr. Ira J. Pitel.

About the Topic

Switching power supplies in the tens of kilowatt power range have been slowly replacing traditional silicon controlled rectifier (SCR) based topologies over the past several decades. Voltage-fed hard-switched, soft-switched, and resonant converter configurations are commonly deployed in newer generation products. Current-fed power converters, the electrical dual of voltage-fed converters, is still another, but less known and used, power circuit alternative. The speaker will present the pros and cons of higher power, switch mode circuits and the evolution of his company's product line.

The meeting will be held at Magna-Power Electronics and will conclude with a facility tour of a vertically integrated power electronics manufacturing operation.

About the Speaker

Ira J. Pitel is President of Magna-Power Electronics, a company which he founded in 1981. Dr. Pitel is responsible for research and development and manufacturing of its line of 3.3-750 kW DC power supplies. In 1986, he joined Texas A&M University as an Adjunct Associate Professor and in 2008, he joined Rutgers the State University as a visiting Professor. Ira received the BS degree from Rutgers -- The State University of New Jersey, the MS degree from Bucknell University, and the PhD degree from Carnegie-Mellon University in 1972, 1975, and 1978, respectively.

Dr. Pitel holds 28 patents in the field of power electronics and is co-recipient of the 1995 Society Prize Paper Award of

the Industry Applications Society. He was honored as the Rutgers Outstanding Engineering Alumnus in 2000. He is a Fellow of the IEEE and has served in many IEEE capacities including Society President of the Industry Applications Society. He is a member of the Eta Kappa Nu and Tau Beta Pi.

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.

CNNNJ Invites You to Join the Network For 2008

The IEEE Consultants' Network of Northern NJ invites all engineers engaged in independent practice to join its ranks. We have recently revised our membership structure, hoping to make it even more worthwhile to participate.

For more details on member benefits and on sign-on requirements, please visit our website at www.TechnologyOnTap.org.

All Welcome!

Everyone is welcome. Admission to the meeting and plant tour is free. However, advance registration is required.

Time: 7:30 PM, Thursday, October 23, 2008.

Place: Magna-Power Electronics, 39 Royal Road, Flemington, NJ 08822.

Registration: Registration is required – for the pre-meeting dinner and for the meeting/tour at Magna-Power Electronics. To register, contact Robert Walker, (973) 728-0344.

Pre-Meeting Dinner: (for CNNNJ Members and invited guests only) 5:30PM at Perkins Restaurant & Bakery, 14 Royal Rd, Flemington, NJ 08822, (908) 237-0500.

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

Visit the IEEE North Jersey Section Webpage at

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

North Jersey Section information such as officer contact details, meeting presentation slides, and the online Newsletter can be found there. Check for last minute meeting updates and schedule changes.

As an added benefit, all North Jersey Section members that have provided an email address in their IEEE member profile will receive an email with early notification of the Newsletter posting.

NJ AES Chapter:

Multisensor Data Fusion and Applications

On October 22, 2008, the North Jersey Chapter of the IEEE Aerospace & Electronic Systems Society will sponsor a talk titled "Multisensor Data Fusion and Applications." The speaker will be Professor Pramod K. Varshney.

About the Talk

Multisensor data fusion refers to the acquisition, processing and synergistic combination of information gathered by various knowledge sources and sensors to provide a better understanding of a phenomenon. It is a fascinating and rapidly evolving field that has generated a lot of excitement in the research and development community. These concepts are being applied to a wide variety of fields such as military command and control, robotics, image processing, air traffic control, medical diagnostics, pattern recognition, and environmental monitoring. A number of sensor networks are also being implemented where data fusion is a key component. This talk will present a brief overview of the field and will illustrate its potential by means of some examples.

About the Speaker

Pramod K. Varshney received the BS degree in electrical engineering and computer science (with highest honors), and the MS and PhD degrees in electrical engineering from the University of Illinois at Urbana-Champaign in 1972, 1974, and 1976 respectively. Since 1976 he has been with Syracuse University, Syracuse, NY where he is currently a Distinguished Professor of Electrical Engineering and Computer Science and the Research Director of the New York State Center for Advanced Technology in Computer Applications and Software Engineering. His current research interests are in distributed sensor networks and data fusion, detection and estimation theory, wireless communications, image processing, and remote sensing. He is an IEEE Fellow and has received numerous awards. He serves as a distinguished lecturer for the AES society of the IEEE. He was the President of International Society of Information Fusion during 2001.

All Welcome!

You do not have to be a member of the IEEE to attend the talks but you need to email your name, address, and citizenship to Dr. Naresh Chand by October 16. In your email, please use your subject as "IEEE AESS talk". A free buffet dinner, starting at 6:00 PM, will be provided. Come and bring your friends.

Time: 7:00 PM (free buffet starts at 6:00 PM), Wednesday, October 22, 2008.

Place: BAE Systems, 164 Totowa Road, Wayne, NJ 07474.

Information: Dr. Naresh Chand, (973) 636-7408, naresh.chand@baesystems.com

NJ SMC Society:

4G Mobile Telecommunications Systems and Standards

On October 30, 2008, the NJ Systems, Man & Cybernetics (SMC) Chapter will be hosting a seminar titled "4G Mobile Telecommunications Systems and Standards." Dr. Raziq Yaqub, a professor of Polytechnic University at Brooklyn, New York, will be the presenter.

About the Talk

The talk will be in four parts: Part-1 will be a brief introduction to 4G wireless technologies; organizations involved in the standardization of 4G, and an updated status of the work being carried out in those standards organizations. Part-2 will cover some IEEE-based efforts towards 4G that include 802.16e and 802.16m. Part-3 will mainly focus on 3GPP and 3GPP2-based efforts in the standardization of 4G mobile telecommunications systems. The last part will provide some conclusions and open the floor for questions and answers.

About the Speaker

Dr. Raziq Yaqub is working as Executive Director, Toshiba America Research, Inc., Piscataway, NJ. He conducts research, manages and evaluates patents, and builds coalitions to achieve common goals. He participates and contributes to several standards bodies, including, 3GPP, WiMAX, OMA and IEEE. He has been working on various aspects of IP-based wireless communication technologies that include Network Discovery, WAN-WALN interworking, QoS, Mobility Management, and Fast, Secure, and Seamless Handoff in Heterogeneous Wireless Networks. He has published several papers in professional conference proceedings, etc. He currently holds, and has pending, a number of patents in the areas of mobile telecommunications systems. He earned a PhD in wireless communication from Keio University, Japan, as well as a MBA in Marketing from Fairleigh Dickenson University, NJ.

All Welcome!

You need not be a member of IEEE to attend, and there is no charge for admission. Light refreshments will be served starting at 6:45 PM.

Time: 7:00 PM, Thursday, October 30, 2008. Light refreshments will be offered at 6:45 PM.

Place: New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Directions are available at <http://www.njit.edu/University/Directions.html>.

Information/RSVP: Dr. Mike Liechenstein (973-471-0721) or E-Mails: (itsmikesju "AT" aol.com or zhou "AT" njit.edu). Please RSVP and check the electronic newsletter for any changes.

North Jersey Section Seeks Committee Chairs and Volunteers

The North Section is seeking new volunteers to help conduct business for the benefit of its membership. There are a variety of volunteer positions open and available. They range from technical to non-technical, leadership or just participatory. For Society Chapter Chairs, you must be a member of the corresponding IEEE Society.

If you would like to become involved with volunteering in some of these efforts or positions or just become more informed about what is happening at the North Jersey Section, please contact Dr. Chandra Gupta at [c.gupta "AT" ieee.org](mailto:c.gupta@ieee.org). You are welcome to attend the Section business meeting held the first Wednesday of every month to find out more and other volunteer activities that require some help.

Some committees needing volunteers include the following. Please contact the person indicated for additional information.

- Power Electronics Society Chapter Chair - contact [c.gupta](mailto:c.gupta@ieee.org) below.
- GOLD (Graduates of the Last Decade) Affinity Group Volunteers and Committee members needed - contact [northjerseygold "AT" ieee.org](mailto:northjerseygold@ieee.org)
- WIE (Women in Engineering) Affinity Group Volunteers and Committee members needed - contact [kduncan "AT" ieee.org](mailto:kduncan@ieee.org)

Additionally, if interested volunteers would like to get more general information about the Section, including a complete listing of all chapters and committees, visit the North Jersey Section website <http://web.njit.edu/~ieeenj/>, or contact Dr. Chandra Gupta at [c.gupta "AT" ieee.org](mailto:c.gupta@ieee.org).

NJ LEOS Chapter:

Towards Robust Photonic Crystal Fiber Platform for Chemical Sensing Using Surface-Enhanced Raman Scattering

On October 28, 2008, the IEEE NJ Lasers And Electro-Optics Chapter together with the Electronic Imaging Center at NJIT will host a talk on "Towards Robust Photonic Crystal Fiber Platform for Chemical Sensing Using Surface-Enhanced Raman Scattering." The speaker will be Dr. Henry Du.

About the Talk

This presentation will focus on the strategy and the methods to integrate surface-enhanced Raman scattering (SERS) functionality with the emerging photonic crystal fiber (PCF) technology in order to achieve a robust sensing platform for ultra-trace chemical detection and molecular fingerprinting. SERS is referred to as the orders of magnitude enhancement of the Raman scattering cross section in the presence of a metallic nanostructure. PCF is a class of optical fiber with axially aligned air holes along the fiber length. Key to realizing SERS-active silica-based PCF platform lies in the controlled immobilization of Ag nanoparticles in the fiber air channels. Highlighted in the presentation will be (1) our theoretical study of the interaction of the evanescent field with the nanoparticles immobilized on the guiding core for proper selection of their size and the coverage density in consideration of resultant light attenuation; (2) synthesis of colloids of Ag nanoparticles and their general characteristics; (3) immobilization of the Ag nanoparticles on planar silica substrates and inside the PCF using self-assembled polyelectrolyte monolayers as intermediate; and (4) demonstrated feasibility of SERS-active PCF platform with measurements of positively and negatively charged analytes in aqueous solutions as examples.

About the Speaker

Henry Du is Professor and Director of Department of Chemical Engineering and Materials Science at Stevens Institute of Technology, Hoboken, NJ. Du holds a doctoral degree in Ceramic Science from Penn State. His primary research interests include photonic crystal fibers as novel sensing platform, molecular and nanoscale surface functionalization, targeted delivery and release of drugs, and biomedical imaging. His research has been funded by NSF, AFOSR, NASA,

ONR, U.S. Army, New Jersey Commission on Science and Technology, Bell Laboratories, and Honeywell International. Du's work has resulted in more than eighty technical publications and over one hundred invited and contributed presentations. He is a recipient of Dean's Research Award and Jess Davis Memorial Award for Faculty Research Excellence at Stevens and a National Science Foundation Research Initiation Award. He is a member of the American Ceramic Society, the Materials Research Society, and SPIE. He also serves as Associate Editor for the Journal of the American Ceramic Society, among other activities in professional societies.

All Welcome!

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

Time: 5:00 PM, Wednesday, October 28, 2008. Pizza will be offered at 4:45 PM.

Place: New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Directions are available at <http://www.njit.edu/University/Directions.html>.

Information: Professor H. Grebel (973) 596-3538 (grebel@njit.edu).

NJ Section PACE, GOLD, & WIE:

Engineers Meet:

Design for Six Sigma Seminar

On Tuesday, November 18, 2008, the North Jersey Section of Professional Activities Committee, Graduates of the Last Decade and Women in Engineering will offer a free seminar on the "Design for Six Sigma" (DFSS). The course is one in a series of IEEE Expert Now Educational Courses. You will earn IEEE Continuing Education Units and Professional Development hours for attending the course and seminar.

About the Course

The course will be accompanied by a lecture on applying the tools of Six Sigma to real world examples in the Information Technology industry and other transactional and process based problem domains. This will be contrasted with the traditional application of Six Sigma in manufacturing domains. It will also compare the DMAIC, DFSS and Lean "flavors" of Six Sigma.

After the seminar, the attendee should understand the core concepts and key processes of Six Sigma and tools needed to accomplish transaction and reliability improvements as well as understand how they are applied to different problem domains.

Six Sigma improves both product and process quality, reducing defects using a suite of tools that span: statistical,

analytical, and collaborative domains. The Six Sigma process has been extended to take the initiative in developing better designs that avoid problems rather than having to go back and correct them. This is the Design-for-Six Sigma (DFSS) initiative.

About the Speaker

Kathi Kivi is president of Superior Project Solutions Inc., which provides consulting services in IT security, Six Sigma and project management. Kathi has over 20 years of experience in housing, telecommunications and government in the U.S. and Canada. Her experience is multi-faceted in information security, Six Sigma business operations process improvement, managing web applications, analysis, planning, disaster recovery and business continuity, business systems, network administration and operations, systems analysis and applications development, managing human resources, as well as outsourcing planning, execution and management. As an applications manager with Sony Electronics she became a Six Sigma Black belt and certified Greenbelt. Six Sigma process improvement projects in both IT and business focused on increasing customer satisfaction and bottom-line performance resulting in measurable savings of over \$1 million in less than one year. She is a member of IEEE, (ISC)2, ISSA, Infragard, and PMI. She is a Certified Information Systems Security Professional (CISSP) and has been a U.S. Researcher for Information Systems Audit and Control Association (ISACA). She received a Business Data Processing diploma from Confederation College, a BS in MIS from Regents College, and a MS in Telecommunications from Iona College. Kathi may be contacted at kkivi@SuperiorProjectSolutions.com. Company website is www.superiorprojectsolutions.com.

All Welcome!

This talk is free to attend, you do not have to be an IEEE member, invite your friends. But you **MUST register** at ewh.ieee.org/r1/north_jersey/gold to insure an accurate count of attendees.

Time: 6:30 PM to 8:30 PM, Tuesday, November 18, 2008. Free pizza and soda will be served.

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

Information: northjerseygold.ieee.org, Paul Ward, (973) 790-1625, PWard1130@att.net, Richard F. Tax, (201) 664-6954, rtax@att.net.

Life Grade Luncheon

The PES Chapter and the Section will sponsor a luncheon for North Jersey IEEE Life Grades (Members, Senior Members and Fellows) on Thursday, October 16, at

Hamilton Park Conference Center
175 Park Avenue
Florham Park, NJ 07932

The luncheon will begin at 11:30 AM in the Terrace area. Cost is \$ 5.00 per person

Advance registration is required prior to October 9. We can accommodate only 30 people. Registrations will be processed in the order of receipt and will be confirmed by return mail. Please complete the following registration form and include a check payable to the North Jersey Section IEEE in the amount of \$ 5.00 per person.

Reservations cannot be accepted at the door. For additional information regarding the event contact Ken Oexle 973-386-1156.

IEEE Life Grade Luncheon Registration NJ - October 16, 2008

Name _____

Address _____

Phone _____

IEEE # _____ Life Grade ____ Yes

Return to: Ken Oexle
11 Deerfield Rd
Whippany, NJ 07981

Prior to October 9 and enclose \$5.00. Make check payable to **NJ Section IEEE**

IEEE North Jersey Section Course Project Management

Tuesday Evenings, October 14, 2008 through December 2, 2008
Eight weekly classes (October 14, 21, 28, November 4, 11, 18, 25, December 2, 2008)
USPS, NJ International Bulk Mail Center, 80 County Road,
Jersey City, NJ 07097 (Checks should not be mailed to this address)

IEEE North Jersey Section thanks USPS, NJIBMC for sponsoring this course at its site

The North Jersey Section IEEE is offering an evening course entitled "Project Management". Dice.com lists 5800+ Project related jobs in the New York tri-state area daily! This course will help you to break down a master project into manageable tasks, pinpoint possible solutions, and provide information to keep the project under control. Using Microsoft Project software, you will learn to accomplish various project plans. In addition, it will greatly enhance your business, communications and interpersonal skills.

You will receive the IEEE certificate of completion when you finish the course. You may wish to take two Certification exams, one in *Project Management* administered by Project Management Institute from the knowledge that you learned in this course. (This is *not an exclusive PMP-PMI examination prep course*. No PDUs are issued for PMP eligibility. CEU credits would be given by IEEE)

Instructor: **George Sierchio**, has 16 years of experience in owning and operating technical consulting and training based businesses. He has personally managed over 30 projects and developed/delivered training to over 500 adult students on both business and technical subjects.

TOPICS

1. Explain the need for a project manager in different industries
2. Define SOW, PERT, GANTT, CPM, and Scope of the project
3. Identify the team members, resources and plan for the strategy
4. Calculate schedule, budget variances, and monitor project progress
5. Manage changes, estimates, and communications
6. Employ the use of MS Project 2007, MS Visio 2007 and related software
7. Set a baseline, import tasks from MS Excel, export Project files to MS Word
8. Create and modify custom reports, templates and combination views
9. Approve updates and conclude a project plan
10. Market global E-commerce projects
11. Present final projects from the participants

WHERE: NJ International Bulk Mail Center, Jersey City, NJ. (Checks **should not** be mailed to this address)

WHEN: 8 Tuesdays, October 14, 21, 28, November 4, 11, 18, 25, December 2, 2008, 6:30-9:00 PM.

COST: IEEE (& affiliate) members \$450; Non-IEEE members \$490.

CONTACT: Donald Hsu: yanyou "AT" hotmail.com

REGISTRATION: Project Management

Please mail the registration form with the check (**Checks payable to "North Jersey Section IEEE"**) to:
Donald Hsu, Chair Education Committee, IEEE North Jersey Section, P. O. Box 2093, Fort Lee, NJ 07024

Name: _____ Email address _____

Non-member

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**

As soon as a completed registration form and the payment are received, you are officially registered for this course. Registration status will be emailed to you for confirmation.

I wish to receive the IEEE Completion Certificate

Tuition receipt will be issued only if this box is checked Signature: _____

NJ Power Engineering Society/Industry Applications Society

Adjustable Frequency Drives Seminar

The PES and IAS Chapters will sponsor a technical seminar on the topic of variable frequency drives. The session will be held on Friday, December 12, 2008, at Public Service Electric & Gas Corporate Headquarters in Newark, NJ.

Topics

Adjustable Frequency Drives:

- ✓ Why use AFD's
- ✓ Motor Theory
- ✓ Drive Theory
- ✓ Energy Savings
- ✓ AFD Applications
- ✓ What are harmonics
- ✓ IEEE-519 Recommendations
- ✓ AC Drives and Harmonics
- ✓ Why Harmonics Matter
- ✓ How to Mitigate Harmonics

About the Instructor

The instructor will be Dan Kupersmith, Senior Application Engineer with Eaton Corporation in Watertown, Wisconsin. Dan is degreed in Electrical Engineering from the University of Wisconsin in Milwaukee. He has 30 years of experience in the drives industry, including drives and system design, systems engineering management and application engineering. Prior to Eaton, Dan worked for Allen Bradley, Louis Allis (later became Magnetek). His last 9 years have included a major focus on practical harmonic mitigation solutions.

The registration fee for this seminar prior to November 26th 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 November 26th 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.

If desired, IEEE Continuing Education Units will be offered for this course - a small fee of \$25 will be required for processing. A total of 0.4 CEUs will be offered. Please indicate if desired below.

Time: 9:00 AM to 2:00 PM (lunch is included), Friday, December 12, 2008.
Place: PSE&G, 80 Park Plaza, Room 101, Newark, NJ 07101
Directions: <http://www.pseg.com/about/directions.jsp> or Amtrak, NJ Transit or PATH buses and trains
Information: Ronald W. Quade, PE, (732) 205-2614 or rwquade@ieee.org

Registration: Variable Frequency Drive Seminar 12/12/2008

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

Name _____

Address _____

Phone _____ Email _____

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

Continuing Education Units: _____ Yes \$25 _____ No

If CEUs are chosen, please include a \$25 processing fee

Payment Enclosed \$ _____ Add \$25 late registration after November 26, 2008

Make checks payable to North Jersey Section IEEE (Credit Cards cannot be processed at this time).

NJ Power Engineering Society/Industry Applications Society

Automatic Transfer Switch Seminar

The PES and IAS Chapters will sponsor a technical seminar on the topic of automatic transfer switches. The session will be held on Friday, November 21, 2008 at Public Service Electric & Gas Corporate Headquarters in Newark, NJ.

Topics

Automatic Transfer Switches:

- ✓ Maintenance Bypass Switches
- ✓ Code considerations & service entrance applications
- ✓ Open transition, closed transition, soft transition
- ✓ Application of 3-pole vs. 4-pole
- ✓ Coordination considerations with other electrical distribution equipment
- ✓ Transfer Controllers

About the Instructor

The instructor will be Cathy Clausen from Eaton. Cathy received a Bachelor of Science degree in Mechanical Engineering from the University of Wisconsin in 2001. Since 2001 she has worked for Eaton in Milwaukee, WI, Hengelo, Netherlands, and Asheville, NC (www.eaton.com) and now holds the position of ATS Engineering Manager. She serves as the Madame Chairman of the Automatic Transfer Switch Workgroup NEMA 11S SC16, which is responsible for the various standards involving transfer switches with primary focus on UL1008. She is also a member of the tri-national CANENA committee for automatic transfer switches.

The registration fee for this seminar prior to November 7th 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 November 7th 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.

If desired, IEEE Continuing Education Units will be offered for this course - a small fee of \$25 will be required for processing. A total of 0.4 CEUs will be offered. Please indicate if desired below.

Time: 9:00 AM to 2:00 PM (lunch is included), Friday, November 21, 2008.
Place: PSE&G, 80 Park Plaza, Newark, NJ 07101
Directions: <http://www.pseg.com/about/directions.jsp> or Amtrak, NJ Transit or PATH buses and trains
Information: Ronald W. Quade, PE, (732) 205-2614 or [rwquade "AT" ieee.org](mailto:rwquade@at.ieee.org)

Registration: Automatic Transfer Switch Seminar 11/21/2008

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

Name _____

Address _____

Phone _____ Email _____

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

Continuing Education Units: _____ Yes \$25 _____ No

If CEUs are chosen, please include a \$25 processing fee

Payment Enclosed \$ _____ Add \$25 late registration after November 7, 2008

Make checks payable to North Jersey Section IEEE (Credit Cards cannot be processed at this time).



THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS, INC.

IEEE NORTH JERSEY SECTION

MTT-Society and AP-Society Joint Chapter



PRESENT

23rd ANNUAL SYMPOSIUM AND MINI-SHOW



THURSDAY OCTOBER 2, 2008

PLACE: Hanover Manor, 16 Eagle Rock Ave, E. Hanover, NJ 07936. Ph# 973-992-7425

The conference presents a series of 8 lectures describing the state of the art in Microwave, RF, Optical and Wireless, technologies by leaders in their respective fields.

**MINI SHOW FEATURING LATEST PRODUCTS - (10:00 AM TO 4:30 PM)
& TECHNICAL SESSIONS (8:50AM TO 4:30PM)**

Time	Topic	Speakers	Title	Affiliation
8:50	Opening Remarks	George Kannell	Tech. Chair IEEE MTT/AP Chapter	LGS Innovations
9:00-	HOW TO SUCCEED IN NEXT GENERATION			
9:30	CELLULAR COMMUNICATIONS - LTE	Michael Garyantes	Distinguished Member of Tech Staff	Alcatel Lucent
9:30-	CHANNEL IMPULSE RESPONSE ESTIMATION USING			
10:00	ALGORITHMS FOR FAST COMMUNICATION	Dr. Barnet Schmidt	Project Engineer	BAE Systems - CNIR
10:00	BREAK - MINI SHOW EXHIBITION			
10:30-	PLANAR RESONATOR ARMS HIGH PERFORMANCE			
11:30	TINY VCOs	Dr. Ajay K. Poddar	Chief Scientist	Synergy Microwave
11:30-	ADVANCES IN MILLIMETER-WAVE POWER			
12:00	AMPLIFIER LINEARIZATION	Dr. Allen Katz	Prof. E/CE / President	TCNJ/ Linearizer Technology
12:00	LUNCH - MINI SHOW EXHIBITION			
1:00-	PHASED ARRAY ANTENNA SYSTEM DESIGN AND			
1:30	SIMULATION	Bill McGinn	Application Engineer	Ansoft Corp.
1:30-	DIGITAL PREDISTORTION LINEARIZES BROADBAND			
2:00	PAs	Steve Taranovich	Global Account Executive	Texas Instruments
2:00-	ULTRA LOW PHASE NOISE HIGH PERFORMANCE			
2:30	Ka-BAND BLOCK UPCONVERTER	John Odell	Director of Engineering	Herley-CTI
2:30	BREAK - MINI SHOW EXHIBITION			
2:50-	PRACTICAL ASPECTS OF MICROWAVE FILTER			
3:40	DEVELOPMENT	Dr. Richard V. Snyder	President	RS Microwave Company
3:40	Closing remarks	Kirit Dixit	Chair IEEE North Jersey Section	Microcom Sales
3:40-				
4:30	MINISHOW EXHIBITORS			

Registration is on-site. Details will be in the October issue of the NORTH JERSEY IEEE NEWSLETTER and at http://web.njit.edu/~ieeenj/sep08_index.html# THE INSTITUTE OF 2

**ALL ARE WELCOME (IEEE Membership not required). REGISTRATION IS ON_SITE
THERE IS NO CHARGE TO ATTEND THE SYMPOSIUM OR SHOW.
FREE BREAKFAST / LUNCH INCLUDED FOR ALL.**

FOR FURTHER INFORMATION

Chair / Exhibition:	Kirit Dixit	(201) 669-7599	kdixit "AT" microcomsales.com
Chair MTT/APS Symposium	Har Dayal	(973) 633-4618	har.dayal "AT" baesystems.com
Technical Program Chair:	George Kannell	(973) 437-9990	gkk "AT" lgsinnovations.com
Publicity:	Arthur Greenberg	(973) 386-6673	ahg1 "AT" alcatel-lucent.com
Event / Location Coordinator:	Ken Oexle	(973) 386-1156	
Event Coordinator:	Russell Pepe	(201) 960-6796	rpepe "AT" att.net
Event Coordinator:	Peter Donegan		
Event Coordinator:	Willie Schmidt		