# IEEE Newsletter

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

# First Transistor IEEE Milestone Dedication

By Howard Leach, Historian

The North Jersey Section will be dedicating a fourth IEEE Milestone in Electrical Engineering and Computing on Tuesday, December 8th, 2009, at Alcatel-Lucent Bell Labs, Murray Hill, NJ, for the 'Invention of the First Transistor at Bell Telephone Laboratories, Inc., 1947.' The citation will read as follows:

At this site, in Building 1, Room 1E455, from 17 November to 23 December 1947, Walter H. Brattain and John A. Bardeen -- under the direction of William B. Shockley -- discovered the transistor effect, and developed and demonstrated a point-contact germanium transistor. This led directly to developments in solid-state devices that revolutionized the electronics industry and changed the way people around the world lived, learned, worked, and played.

As the exact time of the dedication ceremony during the morning of Tuesday, December 8th, has not been decided, anyone that would like to be notified when the time has been decided can contact Howard Leach at h.leach@ieee.org or (973) 540-1283 and be put on a notification list.

Currently, the Section has dedicated three other Milestones.

The first, dedicated in 1987 was for the first: 'Two-Way Police Radio Communication, 1933.' The citation reads as follows.

'In March 1933, the first two-way AM mobile radio was installed in a patrol car of the Bayonne Police Department. The system was designed by Lieutenant Vincent J. Doyle of the Bayonne Police and radio engineer Frank Gunther. Through the use of a combined transmitter and receiver in the patrol car, the two-way system allowed communication between patrol cars and with the police station.'

The second, dedicated in 1988 at a building in Historic Speedwell, Morristown, NJ, and part of the Morris County Park System, is for: 'Demonstration of Practical Telegraphy, 1838.' The citation reads as follows.

'In this building in January 1838, Samuel F. B. Morse and Alfred Vail first demonstrated publicly crucial elements of their telegraph system, using instruments that Vail had constructed during the previous months. Electrical pulses, transmitted through two miles of wire, caused an electromagnet to ink dots and dashes (grouped to represent letters and words) on а strip of Commercialization began in 1844 when funding became available.'

The third, dedicated in 2008 and located in front of the West Orange Municipal Building is for: 'Thomas A. Edison West Orange Laboratories and Factories, 1887.'

The citation reads as follows.

'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.'

For further information on other milestones, see the IEEE History Center list of Milestones worldwide at http://www.ieeeghn.org/wiki/index.php/Milestones:List\_of\_IEEE\_Milestones.

# No job? Take a hot course to get a job!

**IEEE North Jersey Education Committee** ran **programming and management courses** since 1993. 229 IEEE members and non-members completed these courses. Proven benefits: They **got jobs** at **AT&T and Microsoft Corporation**.

We need **hot courses, instructors and classrooms.** If you can teach a hot course (the course that people can get jobs), email your one-page abstract and your resume. If your NJ firm can provide a conference room, evening or Saturday morning, contact Donald Hsu, Chair, yanyou@hotmail.com. Thank you and act NOW!

# November 2009

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### **IEEE NJ SECTION HOME PAGE**

http://web.njit.edu/~ieeenj/ IEEE NJ SECTION NEWSLETTER HOME PAGE http://web.njit.edu/~ieeenj/NEWSLETTER.html

### **REPORT ADDRESS CHANGES TO:**

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, rcpepe@ieee.org.

NJ Section PACE, GOLD, WIE:

# Engineers Meet: IEEE's Engineering Career Alternative –

### **Patent Law**

On Wednesday, December 9, 2009 the North Jersey Section Professional Activities Committee, Graduates of the Last Decade and Women in Engineering will host a meeting to discuss alternative engineering career paths. Our guest speakers will be Brian Myers and Stan Tso.

### **About the Meeting**

Have you ever wondered what potential career alternatives might lie ahead? Many individuals have entered the field of patent law after a satisfying career in Electrical and Electronics Engineering. These individuals often become some of the best patent attorneys and agents, perhaps because they have already developed superior technical and analytical capabilities while working as an Electrical and Electronics Engineer.

The two primary speakers, Brian Myers and Stan Tso, will offer views on patent law as a career alternative for Electrical and Electronics Engineers. Brian and Stan will take you through the requirements for becoming a patent agent or attorney and describe the patent process, including drafting applications and interacting with the United States Patent and Trademark Office. In addition, Brian and Stan will offer a glimpse of what it might be like to work in a law firm or as an "in-house" patent agent or attorney.

You are encouraged to attend and invite your associates.

### **About the Speakers**

Brian Myers and Stan Tso both moved to the field of patent law after each having worked as an engineer for over 14 years. Brian Myers is a founding partner of the Myers Wolin LLC law firm. Brian holds a MSEE, a BSEET both from Fairleigh Dickinson University, a EET diploma from DeVry Technical Institute and a law degree (Juris Doctor) from Seton Hall University. Stan received a BSEE from Cornell University, an MBA from Duke University and a law degree (Juris Doctor) from Rutgers University School of Law. Brian and Stan are both members of the IEEE.

### All Welcome!

Members and students from all professional societies and engineering disciplines are welcome.

### **RSVP Required!**

Please RSVP by December 7 to Dora

Sharps, (973) 401-7157 or dora.sharps @myerswolin.com.

**Time:** 6:30 PM to 9:00 PM, Wednesday, December 9, 2009. Pizza and refreshments will be served.

Place: Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ, (973) 772-5500. Information: Paul Ward, (973) 790-1625, PWard1130@aol.com, Richard F. Tax, (201) 664-6954, rtax@aea.org, Dr. Katherine Duncan, (973) 209-8607, kduncan@ieee.org.

# 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@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 below.
- GOLD (Graduates of the Last Decade)
   Affinity Group Volunteers and
   Committee members needed contact
   northjerseygold@ieee.org
- WIE (Women in Engineering) Affinity Group Volunteers and Committee members needed - contact kduncan@ieee.org
- EMBS (Engineering in Medicine and Biology Society) is seeking a chair and active committee volunteers - contact c.gupta@ieee.org.
- Membership Development Committee Chair and Volunteers - contact c.gupta below.

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 c.gupta@ieee.org.

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# IEEE North Jersey Section Activities November 2009

- **Nov. 4** "NJ Section Meeting", 6:30 PM, "Executive Committee Meeting" 7:00 PM, ITT, 77 River Rd, Clifton, NJ. Russell Pepe at rcpepe@ieee.org.
- **Nov. 11** "Engineers Meet: Learn Ways to Define Your Retirement Goals and Plan to Reach Them in Today's Changing Market" by Matthew Niemczyk and TJ Spizzo, 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@aol.com, Richard F. Tax, (201) 664-6954, rtax@aea.org, Dr. Katherine Duncan, (973) 209–8607, kduncan@ieee.org.
- **Nov. 30** "Multimodal Biometrics Uses in Person Identification and Verification" by Dr. George J. Proeller, NJ Computer, SP, I&M, & TMC, 7:00 PM, Public Meeting Room, Morris County Library, 30 E. Hanover Ave, Whippany, NJ. Michael Malm, (201) 355-6167, mmalm@ieee.org, Yun Shi, (973) 596-3501, shi@njit.edu, Russell Pepe (201) 960-6796, rcpepe@ieee.org, or Saumil Vyas, saumil.ieee.org.

### **Upcoming Meetings**

- **Dec. 2** "Volunteer Open House, Officer Training Workshop and Senior Membership Info Session", NJ Section, 6:00-9:00 PM, New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. RSVP required. Amit Patel, Section Chair, a.j.patel@ieee.com.
- **Dec. 8** "First Transistor IEEE Milestone Dedication", NJ Section, time TBA, Alcatel-Lucent Bell Labs, Murray Hill, NJ. Howard Leach, h.leach@ieee.org, or (973) 540-1283.
- **Dec. 9** "Engineers Meet: IEEE's Engineering Career Alternative Patent Law" by Brian Myers and Stan Tso, 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@aol.com, Richard F. Tax, (201) 664-6954, rtax@aea.org, Dr. Katherine Duncan, (973) 209–8607, kduncan@ieee.org.

Members and Non-Members Welcome PLEASE POST

NJ Computer, SP, I&M, & TMC:

# Multimodal Biometrics Uses in Person Identification and Verification

On Monday, November 30, 2009, the IEEE North Jersey Section Computer Society, Signal Processing Society, Instrumentation and Measurement Society, and Technical Management Council Chapters will host a presentation entitled "Multimodal Biometrics Uses in Person Identification and Verification" by Dr. George J. Proeller.

### **About the Talk**

Accurate person identification and authentication grows in importance each day. Whether to access a location, use a device with attendant access to information, or to travel, the need to ensure person identity increases as does the population of those needing these services. This discussion begins with an overview of biometrics and biometric systems then transitions to focus on the application of multi-modal biometrics to better facilitate person identification and authentication.

### **About the Speaker**

Dr. George J. Proeller is experienced security engineer and also serves as an Adjunct Professor of Computer Science at Colorado Technical University where he teaches courses in computer security at the graduate and doctoral level. He holds numerous Security Certifications and graduate degrees including Masters of Science in Computer Security and Software Engineering from the Colorado Technical University where he also earned a Doctorate in Computer Science with an emphasis on Enterprise Information Systems.

Dr. Proeller is active in several professional organizations including the Information Systems Security Association (ISSA), the Industrial Advisory Board of the Colorado State University, and the IEEE. Internationally, George is engaged in the Security Outreach and Awareness Project to extend Information Security awareness and education to students in South America.

### All Welcome!

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

**Time:** 7:00 PM, Monday, November 30, 2009, pre-meeting buffet starting at 6:00 PM.

**Place:** Public Meeting Room, Morris County Library, 30 E. Hanover Ave,

Whippany, NJ, (973) 285-6930.

Information: Michael Malm, (201) 355-6167, mmalm@ieee.org, Yun Shi, (973) 596-3501, shi@njit.edu, Russell Pepe (201) 960-6796, rcpepe@ieee.org, or Saumil Vyas, saumil.ieee.org.

NJ Section PACE, GOLD, WIE:

# Engineers Meet: Learn Ways to Define Your Retirement Goals and Plan to Reach Them in Today's Changing Market

On Wednesday, November 11, 2009 the North Jersey Section Professional Activities Committee, Graduates of the Last Decade and Women in Engineering will host a meeting to help you define goals and plan for your retirement. Our speakers will be Matthew Niemczyk, Financial Advisor at Ameriprise Financial and TJ Spizzo, CRPC Advanced Financial Advisor at Ameriprise Financial.

### **About the Meeting**

If you're looking for help defining your ideal retirement, along with planning to save and invest for it, then you should attend our informative seminar: Retirement: Planning Beyond the Numbers®.

During this complimentary seminar, you'll learn ways to:

- Envision your ideal retirement.
- Build a plan to help you reach your retirement goals, even in a changing economy.
- Position your finances as you plan for a long retirement.

This is an informational seminar, and there's no cost or obligation to attend. Ameriprise Financial is committed to helping you learn more about your options in managing your financial resources and giving you straight forward guidance on personal money management and investment strategies.

You will receive our Dream Book® guide, to help you explore your retirement dreams.

### **About the Speakers**

Matthew Niemczyk received his BS in Business Economics, from the Pennsylvania State University. He has been working in the investment industry for over 7 years and is currently a fully certified financial advisor for Ameriprise Financial. His areas of focus include personal financial planning for retirement, retirement income strategies, education funding, and investments. He works with his clients to design a personal financial plan based on their life goals. This

strategy focuses on helping them become more confident about managing their financial objectives.

TJ Spizzo received his BS in Business and Environmental Economics from Rutgers University. He is currently a fully certified. Advanced Financial Advisor with Ameriprise Financial. TJ has over 12 years experience in the investments industry and currently holds his Chartered Retirement Planning Counselor designation. His area of focus is on personal financial planning for retirement, retirement income strategies, management strategies, and protection planning/family security. His mission is to help his clients reach their financial goals through a personal relationship based on personalized, knowledgeable advise. TJ is, also, actively involved in volunteering in the Mahwah Youth Sports Boosters Association.

### 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 and for information go to www.ieeeusa.org/policy/care/.

**Time:** 6:30 PM to 9:00 PM, Wednesday, November 11, 2009. Refreshments will be served.

Place: Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ, (973) 772-5500. Information: Paul Ward, (973) 790-1625, PWard1130@aol.com, Richard F. Tax, (201) 664-6954, rtax@aea.org, Dr. Katherine Duncan, (973) 209–8607, kduncan@ieee.org.

# Volunteer Open House, Officer Training Workshop and Senior Membership Info Session at NJIT December 2, 2009

The IEEE North Jersey Section is proud to announce it annual end of the year executive committee meeting and updated workshop agenda. Each year, the election results for new officers for the North Jersey Section for the following year are announced by the tellers committee at the December executive committee meeting. The new officers are then installed and take office in the coming January. This year's agenda has been expanded to address a number of key topics in response to member requests.

A number of section IEEE members and non-members have been inquiring how they can become more informed about and involved with the section and different IEEE activities being held throughout the year. Some from increased attendance and others from increased active participation and volunteering for different events.

From those who are already active volunteers, many have inquired how they can take on leadership roles in the section and beyond and what is exactly involved and expected with officer positions. Lastly, many members have inquired how they can apply for a senior-member grade elevation and go about obtaining required elements of their senior member application.

To help the membership, the December executive committee meeting will host a volunteer open house which will give all attendees the opportunity to meet North Jersey Section chapter and committee officers, as well as a chance to talk and explore individually, potential volunteering opportunities with their areas of interest. Current vacant positions will also be reviewed.

There will also be an officer training session for the newly elected officers to educate them and committee members on their responsibilities and basic required operations of the section. Lastly, there will be an information session on the senior member grade elevation process for those seeking senior membership with an active application in process.

All section members are invited to attend, especially those who are interested in learning how to stay better informed of section and area wide IEEE activities that are occurring. For those

interested in becoming more active in general IEEE activities, in becoming actual volunteers, officers or seeking senior member grade elevation. Student and Graduate Student members are encouraged to attend and learn how they can continue their IEEE participation beyond the university.

The event will be held on Wednesday, December 2, 2009, 6-9PM at NJIT in the ECE Building, Lecture Room 202. There is free parking in the enclosed parking deck next to the ECE building and a free buffet dinner will be served for all attendees. RSVP is required on-line at the following address

http://meetings.vtools.ieee.org/meeting\_view/list\_meeting/1073

or contact Amit Patel, Section Chair, a.j.patel@ieee.com.

# IEEE and North Jersey Section Going Web 2.0, Facebook & Linked-In

If you are reading this article, there is a good chance you are reading this either on a paper newsletter or on a static webpage. Some of that will be changing to provide the reader alternative channels of accessing important information.

This article tries to provide a brief introduction to RSS, Really Simple Syndication, which is the core technology behind Web 2.0 features, applications, and how IEEE is now using it.

There are many detailed descriptions of RSS and how it works (see Wikipedia for a good introduction to RSS and XML), but in the context of Web 2.0, it is an XML (eXtensible markup language) based push technology that allows for moving information from the content producer to the appropriate client software being used to aggregate data from many sources to present to the user.

Many people are already using such client software without actually knowing that it is RSS and XML driving it under the hood. For example, news portal sites like Yahoo utilize RSS, Google Reader is an aggregator that also collects subscribed feeds as diverse as news stories, daily blogs, to audio and video podcasts. Popular social networking sites like Facebook and Linked-In are also powered by this technology and push member's status changes and postings out to email, twitter and SMS.

So what does this have to do with the IEEE? One great example of how the IEEE currently uses Web 2.0 is the individualized myIEEE (http://www.ieee.

org/web/membership/myieee.html) portal that every single member has as part of their membership. It allows for customization of products and services of interest to the member as well as notification of IEEE wide events of interest in different categories.

Additionally, a little over a year ago the IEEE introduced a new meeting and event announcement system which allows for publishing feeds of these events to the public. This data is then collected using the subscriber's favorite client aggregator software.

Many people make use of one or more of such technologies and can now integrate their access to local IEEE event notifications. Over the course of the next year the North Jersey Section will roll out all meeting and event notifications using RSS. You can begin to participate now using the following URL:

### meetings.vtools.ieee.org/meetings/rss/1/ NORTH%20JERSEY

Paste this address into your RSS reader or aggregator software of choice. You can even use Microsoft Outlook 2007 to collect notifications. Just go to the tools, account settings, RSS feeds tab and paste this URL into the dialog box.

Additionally, if you use Facebook or LinkedIn, the North Jersey Section now has a Facebook fan page that you can become a fan of and all these meeting postings will be notified via the fan page which you can join here:

www.facebook.com/pages/IEEE-North-Jersey-Section/

If you use LinkedIn, you can join the IEEE North Jersey Section Group to receive the same event notifications as well. Just go to

### www.linkedin.com

and search for IEEE North Jersey Section under the groups menu.

Click through links for both the fan page and group will be available off the main North Jersey Section website at web.njit.edu/~ieeenj. As the process of rolling out better integrated Web 2.0 functionality continues via myIEEE and our Facebook fan page and Linked-In group, the updates will be publicized in future articles. For now, try out RSS feeds and our Fan Page and or Group to see how you can make better use of this information using your notification channel of choice.

# **LEGO Robotics Judges Needed**

The **FIRST** Lego League http://www.usfirst.org needs judges for the Montclair Qualifying Tournament, which will be held on Friday, December 4th from 4:30 to 9:00 at Union Congregational Church in Montclair. The teams are made up of middle school student who design and program autonomous LEGO-based robots to compete in performing various tasks. They will also present a research project, which this year is on transportation. Three groups of judges will interview the teams and rate them on either robot design, teamwork or the project. For more information or to volunteer contact Pete Donegan, doneganp@ieee.org.

# A New Program For Life Members

Starting in 2010, the IEEE Life Members Committee (LMC) will be sponsoring a Technical Tour Program. The focus of these tours will be IEEE Historical Milestones or similar attractions of interest to IEEE Life Members.

The benefits of conducting these tours include:

- An opportunity to engage IEEE Life Members in a program which satisfies their interest in a technical field of interest:
- An opportunity to increase the awareness of the IEEE Life Members Fund (LMF) and the projects supported by the LMF;
- An opportunity to contribute a portion of the cost of the tour to the LMF;
- Promotion of the IEEE Historical Milestone Program.

The first tour will be conducted as a pilot program and will be held from 3-10 March 2010 in Panama. The 8 night / 7 day itinerary will include a tour of the Panama Canal, the Miraflores Visitors Center, and a special visit to the ordinarily restricted Control House at the Miraflores Locks. Additionally, participants will have further opportunities to experience the environment and culture of Panama itself. Information on the tour will be available on the LMC Web page.

As more information is available it will be reported in the North Jersey Newsletter.

# Life Members Invited to the December 2nd North Jersey Section's Volunteer Open House.

Life Members who are interested in getting involved with North Jersey Life Member activities in 2010 are invited to the North Jersey Section's Volunteer Open House.

The Volunteer Open House will be held on Wednesday, December 2, 2009, 6-9PM at NJIT in the ECE Building, Lecture Room 202. There is free parking in the enclosed parking deck next to the ECE building and a free buffet dinner will be served for all attendees.

We will be discussing volunteer opportunities for members of the North Jersey Life Member Affinity Group Committee, ideas for meetings that would interest the many Life Members, Senior Life Members and Life Fellows in the section.

As of October 2009 the North Jersey has a total of 582 Life Members with active IEEE memberships plus and additional 26 who are in "arrears" by not having renewed their 2009 Life Member memberships either by mail or internet renewal plus another 63 Life Members who have not renewed their (free) Life Membership for two or more years.

Please note: An RSVP is required online for the December 2nd Meeting at the following address:

http://meetings.vtools.ieee.org/meeting\_vi ew/list\_meeting/1073

or contact Amit Patel, Section Chair, a.j.patel@ieee.org.

Alan H. Stolpen Chair, NJ Life Members Affinity Group a.stolpen@ieee.org 908-575-8288

# North Jersey Section Seeks Volunteers to Conduct Business at the Section Level

The NNJ IEEE Section ExCom is seeking new volunteers to help conduct business at the section level for an elected or nominated position for the benefit of its membership in the North Jersey section and surrounding areas. You must be an active IEEE member to hold an elected office at the section level. There are a variety of volunteer positions open and available. They range from long-term to short-term, technical to nontechnical, leadership or just participatory. All activities have varying levels of time commitment. For 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 NNJ IEEE Section, please contact Dr. Chandra Gupta at c.gupta@ieee.org or Har Dayal at har.dayal@baesystems. com. You can even attend the section business meeting held the first Wednesday of every month to find out more and other volunteer activities that require some help.

Additionally, if interested volunteers would like to get more general information about other activities in our section, visit the North Jersey Section website for newsletter information http://web.njit.edu/~ieeenj/ or contact Dr. Chandra Gupta, c.gupta@ieee.org.

# Call for Papers

# The 33<sup>rd</sup> IEEE Sarnoff Symposium 2010

Exhibits Chair:

Web master:

Sponsor

### IEEE Princeton/Central Jersey Section

Co-Sponsors (approved and pending)



Conference Chairs: Nicholas Madamopoulos (City College of CUNY)

Ajay Rajkumar (Alcatel-Lucent)

Edwin Hou (NJIT) Technical Program Chairs:

Pantelis Monogioudis (Alcatel-Lucent) Sweta Jain (WinLab, Rutgers Univ.) Publication Chair: Publicity Chair: Christian Makaya (Telcordia) Registration Chair: Maria Fresia (Princeton Univ.) Student Poster Chair: Pravin Raghuwanshi (DeVry)

Tutorial Chair: Elias Kpodzo (iNetS-Stevens Institute of Techn.) Finance Chair: **D. Deng** (API Nanofabrication and Research Corp.)

Malay Ganai (NEC) Local Arrangement Chair.

Joe Stack (DSI RF Systems, Inc.) Military Panel Chair: Matthew Zieniewicz (CERDEC) Commercial Panel Chair:

Narayan Gehlot Komlan Egoh (NJIT)

Since 1978 the IEEE Sarnoff Symposium has been bringing together a tremendous and rich diversity of telecom experts from industry, universities, and government. The popularity of the Sarnoff Symposium, again being held in the historic Nassau Inn located in the heart of downtown Princeton, NJ, continues to grow as the premier forum for researchers, engineers, and business executives in the North East drawing an attendance from all over the world. Besides the technical paper presentations, the Symposium will include tutorials, student paper poster presentations, executive panels, and exhibition.

Prospective authors are encouraged to submit a full paper for review. Only original papers that have not been published or submitted for publication elsewhere will be considered. The submission process is carried through the EDAS conference management system (http://edas.info/). The manuscripts must follow the IEEE two-column format with single-spaced, 10-point font in the text. The maximum paper length is of five (5) pages. A sixth page may be accepted after an additional fee. Submission of a regular paper implies that at least one of the authors will have a full registration to the Conference and present the paper upon the acceptance of the submission. Manuscript template available at: www.sarnoffsymposium.org.

All accepted papers (after review by experts in the field) will be presented in oral sessions, included in the 33rd IEEE Sarnoff Symposium Proceedings and published through IEEE Xplore. Student papers should be submitted to the Student Papers Chair (praghuwanshi@devry.edu). Prospective tutorial presenters should contact the Tutorials Chair (ekpodzo@msn.com).

### IMPORTANT DATES

Papers, Panel and Tutorial Proposals Due: Nov. 15, 2009 Dec. 5, 2009 Student Papers Due: Jan. 7, 2010 Notification of Tutorials Acceptance: Notification of Papers Acceptance: Jan. 30, 2010 Final Version Due: Mar. 1, 2010

### CONFERENCE SCHEDULE

Apr. 12, 2010 Tutorials: Paper Sessions and Panels: Apr. 13-14, 2010 Exhibits: Apr. 13, 2010 Poster Presentations: Apr. 14, 2010

The Symposium is soliciting state-of-the-art research papers, panels and tutorial proposals in the following areas of interest.

### Wireline Communication Systems

- Triple / Quad Play Architectures
- Broadband Access Networks
- **IPTV**

### **Optical Communications & Networking**

- WDM Systems and Devices
- **Broadband Access Communications**
- Radio over Fiber (RoF)

### Wireless Communications Systems

- 4G Cellular and Wireless LAN Systems
- MIMO Transmission Schemes
- Hierarchical Networks (Femto, Pico, Relays)
- Radio Resource and Interference Management
- Self Configuring and/or Optimizing Networks (SON)
- Sensor, Mesh and Ad Hoc Networks
- Free Space Optics (FSO) Wireless Systems
- Ultra Wideband (UWB) Communications
- Power Management for Green Communication
- Satellite Communication Systems
- Military Communication Systems
- Disruption Tolerant Networks

### **Communications and Information Theory**

- Network Information Theory
- Cross-Layer Optimization Schemes

### **Applications**

- Multimedia Applications for Mobile and Tethered Users
- Mobile Payment Applications
- Trust, Security, and Privacy
- Business Models for Mobile Applications

### Wireless Communications Components

- Power Amplifiers
- Microwave Devices
- Antennas Design
- RF Repeaters
- Transceivers

# **2010 Officer Ballot**

## **Instructions for Casting Ballots**

Completed ballots should be mailed to the North Jersey Section Newsletter Editor as follows:

Keith Saracinello IEEE North Jersey Section Newsletter Editor 25 Messenger Ln Ringoes, NJ 08551

The ballot MUST be filled out completely with members name, membership number, and signature. The ballots are invalid without this information. Xerox copies of the ballot are acceptable as long as they are filled out completely. Ballots received after December 1, 2009, will not be counted.

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Chairperson: (choose one)
□Amit Patel
□ (write-in)
Vice Chairman-1: (choose one)
□Dr. Sanghoon Shin
□ (write-in)
Vice Chairman-2: (choose one)
□ Dr. Naresh Chand
□(write-in)
Treasurer: (choose one)
□(write-in)
Secretary: (choose one)
□Russell Pepe
□(write-in)
Members-At-Large: (choose three)
□Peter Donegan
□Dr. Katherine Duncan
□ Dr. Mengchu Zhou
(write-in)
Member Name Member No
Signature Date