

THE IEEE NORTH JERSEY SECTION NEWSLETTER

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JUNE-JULY 2014

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A Note from the Chair

Election season is upon us in the IEEE North Jersey Section. I cannot believe that almost two years have passed, and it is time for me to pass the baton to the next Chair. Please read through the Newsletter and follow the procedure to nominate candidates for Chair, Vice Chairs 1 and 2, Treasurer, Secretary and three Members at Large. Once the nominations are received, and the ballots are finalized, make it your duty to vote for the various EXCOM positions. Over the past several months, several IEEE Members have joined the ranks of the North Jersey Section to volunteer for a position in one of our Societies or Committees. We still welcome more Volunteers to the EXCOM. It is a great way to get involved in the fundamental work of the IEEE, give back to the profession, network with your colleagues, and have fun socializing with others in your field. Several positions are open, and many Societies and Committees need additional support. Feel free to contact me directly at rcpepe@ieee.org, to get involved.

Also, keep your eyes and ears open for our next Social Event. Due to the great success of the Somerset Patriots Baseball Game that we sponsored last year, we decided to do it again. A date has not been set yet, but we are working on it. The Somerset Patriots are an AAA Minor League Baseball Team, so the skill level is high, and the games are very exciting.

Plus, it is a great chance to meet the Volunteers in the IEEE North Jersey Section. If you are not yet an IEEE Member, it is also a great way to learn more about the benefits of IEEE Membership. Note that Membership dues are now half-price for 2014, so now is a great time to become a Member. We also strongly encourage our Engineering students to attend. It really is a great way to spend a weekend afternoon in the summer.

Anyway, read through the Newsletter to find out what is happening in the Section. Upcoming Meetings, Seminars, Classes and Events are listed. Also, check out the pictures of the Awards Banquet, which was held in May. Of course, do not forget to read the latest article from our monthly contributor, Harry Roman.



L-R: Russell Pepe, Kirit Dixit, Anne Giedlinski, Amit Patel, Howard Leach – Section Distinguished Service Awards



From L-R: Ken Oexle presents to Joseph Weber - IAS Certificate of Appreciation

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



IEEE North Jersey Section - Past Chairs - Front row: Frank Gialanella, Herbert Blaicher, Jr., Kirit Dixit, Dr. Michael Liechenstein, and Anne Giedlinski,
Last row: Dr. Naresh Chand, Howard Leach, Dr. Fred Chichester, Russell Pepe, Har Dayal, Amit Patel, Art Greenberg, Ken Oexle, and Richard Tax



From L-R: Russell Pepe, and Dr. Ralph Wyndrum , Jr., Fellow and Chair, Jersey Coast Section, recognizing new IEEE Fellow Dr.Emina Soljanin



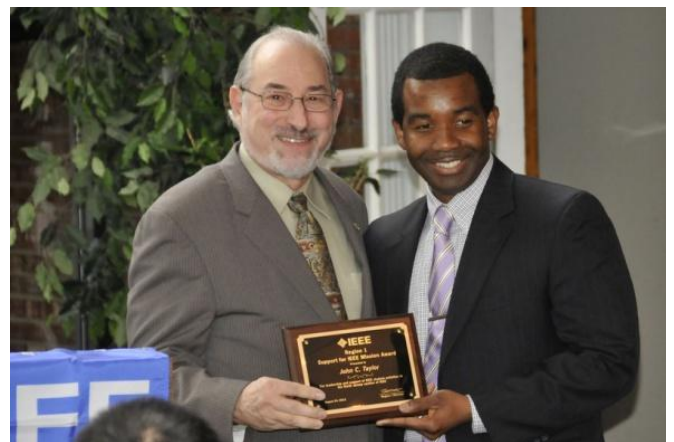
From L-R: Robert Pelligrino, Southern Area Chair, Region I, presents to Dr. Naresh Chand, Russell Pepe, Dr.Adriaan van Wijngaarden – Special Recognition Awards



From L-R: Ronald Quade presents Gregory Olson – PES Outstanding Engineer Award



From L-R: Russell Pepe receives from Charles Rubenstein, Secretary, Region I, – MGA Outstanding Large Section Award



From L-R: Dr.Charles Rubenstein, Secretary, Region I, presents to John Taylor – Region I Service Award
Remember, my e-mail is always open, so keep the correspondence coming.
I look forward to hearing from you.
Sincerely,

Russell C. Pepe,
 Chair, IEEE North Jersey Section,
 201-960-6796, rcpepe@ieee.org or atm_pepe@yahoo.com
 LinkedIn: www.linkedin.com/pub/russell-c-pepe/0/a85/ba8

The 2014 EXCOM meetings are now in vTools - the schedule is as follows -

Wed	Jun 4	Clifton Library
Wed	Aug 6	Bell Labs, Murray Hill
Wed	Sep 3	Clifton Library
Wed	Oct 1	NJIT, Newark
Wed	Nov 5	Clifton Library

Nomination Committee Invites Executive Committee Officer Nominations for 2015

The IEEE North Jersey 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.

The IEEE North Jersey Section Nomination Committee invites nominations (self nominations are allowed) for the election of section officers for 2015.

All elected section officer nominations are due by the end of July to the committee.

The following positions listed are being sought:

- Chair
- Vice Chair 1
- Vice Chair 2
- Secretary
- Treasurer
- Member-at-Large (3 positions)

In addition, various Society chapters will hold election of their respective officers (Chair, Vice Chair, etc.).

The members are encouraged to nominate for these positions if interested.

One requirement for a Society position is that the member must be a member of the society for which the nomination is made.

The Society Chairs will conduct these elections.

A list of societies is published at the end of the newsletter and on the website.

There are a number of volunteer opportunities available in all capacities in various committees. The members are encouraged to apply for any of these positions.

Please contact Amit Patel (a.j.patel@ieee.org), or Naresh Chand (chandnaresh@gmail.com) and send in your nominations with your Name, Address, Membership Number, E-mail and position for which the nomination is desired.

North Jersey Section Employment Network Announcement

Join the North Jersey Employment Network for assistance with your job search. By joining our network, you will have access to our LinkedIn group and to seminars in a variety of emerging technologies such as Hadoop, Big Data, Python, Cloud, Analytics, Java, etc.

Please email the chair, Suzanne McIntosh (SKranjacMcIntosh@yahoo.com) for additional information, or to join the LinkedIn group.

About Senior Membership

Do you know an outstanding IEEE member who is not yet an IEEE Senior Member? Do you feel that you are qualified for such recognition? If you are interested in becoming a Senior Member or nominating a fellow IEEE member please see http://www.ieee.org/membership_services/membership/senior for an application and for qualification requirements.

Assistance with references is found on the Senior Member Web page and within the application form. You can also contact any of the North Jersey Section Executive Committee members including Membership Development Chair or Society Chapter Chairs at the local level or attend an IEEE North Jersey Section meeting or upcoming Senior Member Drives, where qualified attendees will be happy to actively support you in the nomination process.

Important information – Buyer’s Edge Shopping

IEEE - North Jersey Group # 1431

The IEEE North Jersey Section is now a Member of the Buyer’s Edge Shopping Service. The Buyer’s Edge is a buying service that guarantees the lowest prices on major purchases for its 4 million members in the tri-state area of NY, NJ, CT and greater Philadelphia. They offer a Buy-By-Phone, Buy-Online and, in certain benefit categories and areas, Buy-In-Person. Many member benefits are available nationally, like Cars, Furniture and Kitchens; whereas, some benefits, like Appliances, are for the tri-state area only.

It is easy to use the services of the Buyer’s Club. Visit the Web Site at: <http://www.buyersedgeinc.com>

Then, enter the following login information: Username: 1431, Password: member1

Happy shopping!

Remembering Steve Mallard

Steve Mallard [1924-2014]

Steve Mallard was an IEEE Fellow, and long-time member of the North Jersey Section. He was past section chair (1966-67); and my life-long role model and mentor at PSE&G.

I write this remembrance with gratitude and great respect for the man.



As I sit here in my home writing lair, staring at my IEEE membership card, I ponder how quickly the 43+ years of membership have passed. I remember the moment Steve Mallard urged me to get involved with IEEE; and now with Steve's passing, that moment of guidance becomes ever more poignant.

I had the pleasure of knowing him since 1970; and working directly for him for 20 years. He was a seminal influence on my engineering career. The greatest lesson I learned from Steve was the difference between leadership and management, something Steve practiced daily“Walking the talk”, as they say. His consistent striving for excellence impressed us all at PSE&G.

A regular saying he perpetuated was “If you have done something worthy of review, be proud to sign your work; and be prepared to stand-up and ask for the money to implement it at the annual budget review meetings.” Steve believed in getting his young engineers in front of the senior managers at PSE&G so they could develop presentation experience. That, and clear, concise written expression were highly prized skills in his department. As I would stand there, making my budget pitch to grizzled chief executives, “trembling in my young boots”, I knew Steve's big guns were ready to provide cover-fire if needed. He was always there as your backstop; content and comfortable with letting his young engineers get credit for their work- building a corporate reputation. He stood out among his peers in this approach to developing talent.

IEEE Winter Power Engineering Society meetings back then were held in January in NYC. We young engineers were required to attend the various sessions and write up what we learned, and to exchange this information with our colleagues in Steve's System Planning Department. He always encouraged each of us to write a paper for these annual sessions, and to participate in relevant IEEE committees throughout the year. Steve was the IEEE flag-pole for the department.

He took a deep interest in my first large project, development of a graphical computer system for portraying and analyzing sub-transmission circuit load flow runs directly on a CRT. I still remember his excitement at first seeing this interactive system up and running. Throughout the design and development of the system, Steve was there with sage advice and counsel as this young engineer cut his project management teeth. Back in 1974/75, \$300,000 was a big

chunk of change for a new piece of power system analytical hardware and software; and Steve trusted me with it.

After enjoying this “design and build something from scratch” project, I asked Steve to transfer me to the R&D department, also under his purview. Project management had gotten in my blood; and Steve realized I had a passion to bring new ideas and concepts to practical form. He was always interested and protective of the company's R&D efforts-knowing the future value of developing new technology. Here again, he stood out among his peers, championing and establishing one of the first R&D departments in the electric utility industry

If I close my eyes, I can see Steve and I sitting in the old 744 Club in Newark, talking and languishing over lunch—a kind of quarterly project review meeting...no formalities..., just a delightful discussion about where each project was, lessons learned, mistakes corrected, and some new ideas for the future. He seemed to have as much fun with new technology as me; and sometimes I think he would have liked to trade all those executive meetings for a couple weeks--- get his hands dirty, and fly by the seat of his pants. I always came away so refreshed and re-committed from those lunches. He so believed in my work and my capabilities.

A “Steve moment” comes to mind. I was heading out to San Francisco for a meeting, and had been working quite hard on some robotic applications. Steve called me after receiving and reviewing my trip request and told me to add several days onto my trip, to take some time to rest and smell the flowers out there. He suggested a visit to the redwood forest and some other attractions; and then told me not to be back at work before a certain date. He concluded our conversation with a hearty congratulation on my accomplishments, and told me how proud he was of my work. He also mentioned something that has echoed so profoundly in my psyche. He told me to always remember that in the grand scheme of things, it was family and God first, the job second. That says more about the man's character and perspective than I could ever pen.

Another memorable moment came after he had retired from PSE&G. He learned I had received an IEEE award, and called me at home to lavish praise. For me, Steve was the kind of ideal manager/leader talked about in today's modern business books. He was the last person in the world I ever wanted to disappoint.

We stayed in touch throughout his retirement. When he saw I was developing a very strong interest in writing and publishing educational books, he was incredibly supportive. I would send him copies of my articles and he would offer comments and guidance for future writings. I was blessed to have so many years of his caring mentorship.

Upon learning of Steve's passing, I contacted many old PSE&G friends and IEEE colleagues. In responding back to me, the same descriptors were evident: “incredible manager”; “caring and gentle”; “true gentleman”.

We all have to leave this earthly place; and if there is a good time to go...I would have to say I am glad Steve died in the spring. It is fitting that during this season of re-birth and renewal that a renaissance man like Steve should be called home. Spring so epitomizes his life.....ever green in outlook.

I will always hear his voice in my head, and it will continue to guide me. I am grateful for everything he taught me; and I promise to do my best to pass it along to those I am privileged to mentor. His story is a true example of IEEE member-to-member mentorship.

Talk to you again soon....

Harry T. Roman

Senior Member, IEEE

North Jersey Section

In Memoriam

The following Mike Perugini Obituary is in memory of his dedicated outstanding service as our Section's Newsletter Editor, Managing Editor, Business Manager, or Advertising Editor from as far back as 1962, might be earlier, through 1998. That's at least 36 years of continuous service where, Mike would encourage all to get their articles in on time for the nearly monthly Newsletter publications. I along with others remember sending our articles either to him or his wife Audrey and getting them published despite missing the cut off dates. They were always accommodating for the Section's interest and were the managers of Girard Associates, Mt. Arlington, NJ.

- *Howard Leach, Section Historian*

Obituary for Morris (Mike) Perugini

Morris (Mike) Perugini, originally from Jessup, Pennsylvania passed away on May 24th after a long illness. A resident of Mt. Arlington since 1965, Mike was a graduate of Girard College High School in Philadelphia and served in the U.S. Navy as a Petty Officer First Class in Interior Communications on the U.S.S. Fulton out of New London, Connecticut. He went on to earn his B.S. in Electrical Engineering from Newark College of Engineering (now NJIT), an M.A. in Industrial Management from City University of New York, and was a Life Member of the Institute of Electrical and Electronics Engineers (IEEE).

Mike was also certified by the state of New Jersey as a tax assessor, tax collector and chief financial officer and in those capacities he served various communities in Morris, Sussex, Warren and Bergen counties. In addition, he served on the Planning Board and Town Council in the borough of Mt. Arlington and was an usher for over 40 years at Our Lady of the Lake church.

Although he was born at the start of the Great Depression and lost his own father at the age of 7, Mike worked hard all his life - to get a good education, to serve his country and his community, and to care for his family. He was a truly selfless person who put the needs of others before his own, and who was a devoted son, brother, husband, father and grandfather. He enjoyed camping, traveling, spending time with his family, crossword puzzles and Sudoku, as well as an occasional trip to the slot machines. He will be remembered by many for his sense of humor, his honesty and integrity. The family hopes he

will once again enjoy Tuesday night poker games with his friends Hal and Andy.

His parents, Romeo and Christina (Nedorostek) Perugini, preceded him in death, as did his brothers Louis and Joseph, and his sisters Elizabeth (all from Buena, New Jersey) and Norma Pagano, of Richland. He is survived by his loving wife of 57 years, Audrey (nee Beattie), son James of Mount Arlington, daughter Valerie and her husband Dennis Sullivan of Mount Olive, daughter Carol and Justin Tindall of Bruneau, Idaho, and daughter Nancy and her husband David Riggs of New Fairfield, Connecticut. In addition, he leaves four grandchildren: Sarah and Jenna Sullivan, and Lindsay and Sam Riggs, as well as several nieces and nephews.

Relatives and friends are respectfully invited to celebrate Mike's life on Thursday May 29 from 7-9 pm at the Leber-Lakeside Funeral Home, Landing. A Liturgy of Christian Burial will be offered on Friday May 30 beginning at 11:00 am at Our Lady of the Lake Church in Mt. Arlington. All are invited to meet directly at church for Mass. Mike will be laid to rest at St. John's Cemetery in Jessup, PA on Saturday May 31. In lieu of flowers, please consider donations to the Wounded Warrior Project, www.woundedwarriorproject.org.

For more information please visit:

<http://www.leberlakeside.com/obituaries/Morris-Mike-Perugini/#/Obituary>

Calendar of Events

- June 4, 5:30 PM to 6:30 PM: IEEE Senior Member Drive**
Location: Clifton Public Library - Allwood Branch, Activity Room, 44 Lyall Road, Clifton, NJ 07012, [Getting to Clifton Public Library](#)
Contact: Mani Iyer, mani.iyer@ieee.org Kai T. Chen, k.t.chen@ieee.org Ajay K. Poddar, poddar_ajay@yahoo.com Adriaan J. van Wijngaarden, avw@ieee.org (avw@ieee.org), [Read More...](#)
- June 4, 6:00 PM to 8:45 PM: IEEE North Jersey Section EXCOM Meeting – Clifton NJ**
Location: Clifton Public Library - Allwood Branch, Activity Room, 44 Lyall Road, Clifton, NJ 07012, [Getting to Clifton Public Library](#)
Contact: Adriaan J. van Wijngaarden, avw@ieee.org (avw@ieee.org), [Read More...](#)
- June 11, 6:30 PM to 9:00 PM: IEEE North Jersey Section PACE- Engineers Meet**
Location: Clifton Memorial Library, 292 Piaget Ave., Clifton, NJ 07011 [Getting to Clifton Memorial Library](#) (Tel. 973 772-5500)
 (On the Second Wednesday of every month)
Contact: Paul Ward, 973 790-1625, peward@ieee.org Richard F. Tax, (201- 664-6954) rtax@verizon.net
- June 12, 6:30 PM to 8:30 PM: IEEE CNNNJ – Design of Devices to Augment Human Movement-** John Rogers of US Military Academy in West Point
Location: Morris County Library, 30 East Hanover Avenue, Whippany, NJ, [Getting to Morris County Library](#)
Contact: Robert Walker, 973-728-0344, or visit our website, www.TechnologyOnTap.org
- June 25, 5:30 PM to 7:00 PM: IEEE ED/CAS – Transformational Electronics for Smart Living and Sustainable Future -** Muhammad Mustafa Hussain of Computer Electrical Mathematical Science and Engg Division King Abdullah University of Science and Tech.
Location: NJIT - ECE 202, 161 Warren Street, Newark, NJ 07102 [Getting to NJIT](#)
Contact: Durga Misra, (973) 596-5739, (dmisra@njit.edu), Edip Niver, (973) 596-3542, (edip.niver@njit.edu) [Read More...](#)
- August 6, 6:00 PM to 8:45 PM: IEEE North Jersey Section EXCOM Meeting – Murray Hill NJ**
Location: Bell Laboratories, Alcatel-Lucent, Main Building, Room Number: 6A-106, 600 Mountain Avenue, Murray Hill, NJ 07974, [Getting to Bell Labs](#)
Contact: Adriaan J. van Wijngaarden, avw@ieee.org (avw@ieee.org), [Read More...](#)

IEEE NORTH JERSEY SECTION – Short Courses

- IEEE North Jersey Section Course: Marketing Research** - Seven weekly classes (June 14, 21, 28, July12, 19, 26, August 2 2014., 9:00 AM to 12:00 noon) New Jersey Institute of Technology, Newark, New Jersey
- IEEE North Jersey Section Course: Project Management** - Seven weekly classes (June 14, 21, 28, July12, 19, 26, August 2 2014., 9:00 AM to 12:00 noon) New Jersey Institute of Technology, Newark, New Jersey

- Prior registration is encouraged and appreciated.
- You do not have to be an IEEE member to attend any event.
- For up to date information, visit our website: [IEEE North Jersey Section](#)
- Visit: [vTools Registration](#) to register for a meeting or event

Meeting Announcements

4 June, 2014

IEEE North Jersey Section - Senior Member Drive

Meeting Agenda: If you have not started your senior membership application yet, start now and have your references completed by early June 2014 or sooner to be ready for review by the IEEE senior member selection review panel scheduled for June 2014.

For Senior Member requirements see:

http://www.ieee.org/membership_services/membership/senior/senior_requirements.html

For the application see:

http://www.ieee.org/membership_services/membership/senior/senior_application.html

If you are having trouble finding that last senior member reference, bring printed out hard copies of your full resume and senior member application portfolio with you to the meeting for review by other senior members and to find that last reference. The registration link is below.

All section members are invited to attend, especially those who are current senior members and are willing to volunteer as references, and any of those interested in becoming more active in general IEEE activities, volunteering, or those seeking senior membership. If you are interested in serving as a reference contact our membership development chair at this address: northjerseymembership@yahoo.com or mani.iyer@ieee.org and register below in VTOOLS.

The event will be held on Wednesday, June 4, 2014, 5:30-6:30 PM. There will be a free buffet dinner and an opportunity to network with section members. Seating is limited and registration is required for all.

The meeting will take place in the Activity Room of the Clifton Public Library (Allwood Branch, 44 Lyall Road, Clifton, NJ 07012, T: (973) 471 0555).

Location: Clifton Public Library - Allwood Branch, Activity Room, 44 Lyall Road, Clifton, NJ 07012, [Getting to Clifton Public Library](#)

Time: 05:30PM to 06:30PM

Contact: Mani Iyer, mani.iyer@ieee.org Kai T. Chen, k.t.chen@ieee.org Ajay K. Poddar, poddar_ajay@yahoo.com Adriaan J. van Wijngaarden, avw@ieee.org (avw@ieee.org),

[For Updates and Registration: Click Here](#)

4 June, 2014

IEEE North Jersey Section EXCOM Meeting – Clifton NJ

Meeting Agenda: This executive committee (EXCOM) meeting of the IEEE North Jersey Section will be held in the Activity Room of the Clifton Public Library (Allwood Branch, 44 Lyall Road, Clifton, NJ 07012, T: (973) 471 0555).

There will be a get-together with a buffet starting at 6 pm.

The meeting starts at 7 pm EST and typically ends at 8:45 pm, when the library closes. The meeting is meant to discuss and coordinate the section's activities and new initiatives.

Everyone is welcome to attend this meeting.

Please register in advance for this meeting using VTOOLS to provide the meeting organizers an accurate head count. You can change/cancel the registration if your plans change.

For more information, please contact Russell Pepe (rcpepe@ieee.org), Chris Peckham, and/or Adriaan van Wijngaarden (avw@ieee.org).

Location: Clifton Public Library - Allwood Branch, Activity Room, 44 Lyall Road, Clifton, NJ 07012,

[Getting to Clifton Public Library](#)

Time: 06:00PM to 08:45PM

Contact: Russell Pepe (rcpepe@ieee.org), Chris Peckham, and/or Adriaan van Wijngaarden (avw@ieee.org).

[For Updates and Registration: Click Here](#)

11 June, 2014

IEEE North Jersey Section PACE – Engineers Meet

Meeting Agenda: Engineers Meet NNJ Section PACE (Professional Activities Committee for Engineers) meets on the Second Wednesday of every month.

Our North Jersey Section Professional Activities Committee (PACE) meets for informal discussions about the Engineering Profession. Join us with your thoughts and concerns and meet other Engineers.

Pizza & Refreshments: will be served during the mid-meeting break.

Location: Clifton Memorial Library, 292 Piaget Ave., Clifton, NJ 07011 [Getting to Clifton Memorial Library](#) (Tel. 973 772-5500)

Time: 6:30 to 9:00 PM, on the Second Wednesday of every month

Contact: Paul Ward, 973 790-1625, peward@ieee.org Richard F. Tax, (201- 664-6954) rtax@verizon.net

12 June, 2014

IEEE CANNJ present - Design of Devices to Augment Human Movement

Speaker: John Rogers of US Military Academy in West Point

Abstract: Simulation-based Design of Devices to Augment Human Movement - Musculoskeletal dynamic simulation can be used to aid the design of devices that augment human movement. Devices in this category are like exoskeletons for single joints—they augment the load-carrying ability of the human by taking a share of the torque at the body joint.

The design of devices requires knowledge of the expected speed, torque, and power profiles at the joint over time for a particular motion (like running). In-vivo measurement of these quantities is inherently difficult, but they can be predicted by simulation. This study demonstrates how to use the joint torques and power from simulation to help select motors and springs for an augmentation device. The brief will show how to estimate motor speed, torque, current, and power for a hypothetical hip actuator for augmented running.

Biography: John R. Rogers, Ph.D., P.E., is an Associate Professor in the Department of Civil and Mechanical Engineering at West Point, the United States Military Academy. He teaches mechatronic design, computer graphics, programming, dynamics, and engineering materials. His research interests are the design of unmanned systems, modeling of dynamic systems, and the biomechanics of machine-assisted human movement.

Dr. Rogers earned the Ph.D. degree in mechanical engineering at Rensselaer Polytechnic Institute in 2003. Prior to joining West Point, he built and tested underwater systems, analyzed structures, and designed industrial electro-hydraulic systems. He can be contacted at John.Rogers@usma.edu.

ABOUT THE NETWORK

Founded in 1992, the IEEE Consultants Network of Northern NJ encourages and pro-motes the use of independent technical consultants by business and industry.

CANNJ INVITES YOU TO JOIN THE NETWORK

The IEEE Consultants' Network of Northern NJ invites all engineers engaged in independent practice to join its ranks. For more details on member benefits and on sign-on requirements, please visit our website at (www.TechnologyOnTap.org)

ALL ARE WELCOME! No fees or registration required.

Location: Morris County Library, 30 East Hanover Avenue, Whippany, NJ (www.mclib.info)

Time: 06:30PM to 08:30PM

Contact: Robert Walker, 973-728-0344

25 June, 2014

IEEE ED/CAS present - Transformational Electronics for Smart Living and Sustainable Future

Speaker: Muhammad Mustafa Hussain of Computer Electrical Mathematical Science and Engineering Division King Abdullah University of Science and Technology

Abstract: Complementary growth of information technology and CMOS electronics has advanced today's digital world. Looking forward we will see unusual applications of them

focusing on smart living and sustainable future. Transformation of materials, device architecture to waste materials can serve both purposes. Using conventional CMOS processes, we have introduced the concept of transformational electronics. While retaining high performance, energy efficiency, multi-functionality due to ultra-large-scale-integration (ULSI) density and low-cost, we bring life to formerly dead piece of electronics by integrating web into it. Our objective is to discover new application areas for electronics and web to integrate physical electronics with our daily life through cloud computation, big data, cyber-physical system, ultra-mobile computation and virtual reality. A few examples of such transformational electronics will be shown:

1) Transformation of device architecture: silicon nanotube field effect transistor and beyond. [Nano Lett. 2011, Sci. Rep. 2012, IEEE TED 2013] 2) Transformation of substrates: flexible-stretchable-transparent nanoelectronic systems. [Adv. Mat. 2014, ACS Nano 2014, Sci. Rep. 2013, Small 2013, IEEE TED 2013, APL 2013] 3) Transformation of waste materials: micro-sized microbial fuel cells and thermoelectric windows. [NPG Asia Mat. 2014, ACS Nano 2013, Sci. Rep. 2012, Nano Lett. 2012]

Biography: John R. Rogers, Ph.D., P.E., is an Associate Professor in Dr. Muhammad Mustafa Hussain (PhD, University of Texas at Austin, Dec 2005) is an Associate Professor of Electrical Engineering in KAUST. Before joining KAUST in Aug 2009, he was Program Manager of Novel Emerging Technology Program at SEMATECH, Austin, Texas. His program was funded by DARPA NEMS, CERA and STEEP programs. A regular panelist of US NSF grants reviewing committees, Dr. Hussain is the Editor-in-Chief of Applied Nanoscience (Springer) and an IEEE Senior Member since February 2010. He has 168 research papers (including 11 invited and 10 cover articles). Prof. Hussain has given 45 invited talks and has offered 3 tutorials in international conferences. He has 15 issued and pending US patent applications. His 4 PhD graduates have landed researcher positions in UC Berkeley, UC Davis and in DOW Chemicals. His students have won numerous research awards including DOW Chemical SISCA Award 2012, World Intellectual Property Indicator 2013. Dr. Hussain is an IEEE Electron Devices Society Distinguished Lecturer and a Fellow of Institute of Nanotechnology, UK.

Email: muhammadmustafa.hussain@kaust.edu.sa

Address: Associate Professor, Electrical Engineering, King Abdullah University of Science and Technology, Thuwal 23955-6900, Saudi Arabia, 23955-6900

Location: NJIT - ECE 202, 161 Warren Street, Newark, NJ 07102 [Getting to NJIT](#)

Contact:

Time: 04:30PM to 06:00PM

Contact: Durga Misra, (973) 596-5739, (dmisra@njit.edu), Edip Niver, (973) 596-3542, (edip.niver@njit.edu)

[For Updates and Registration: Click Here](#)

6 August, 2014

IEEE North Jersey Section EXCOM Meeting – Murray Hill, NJ

Meeting Agenda: This executive committee (EXCOM) meeting of the IEEE North Jersey Section will be held at Bell Laboratories, Alcatel-Lucent, in Murray Hill, NJ. The meeting will take place in Room 6A-106, which is located near the main entrance behind the Bell Labs Showcase exhibition area. It is not necessary to sign in to access this area.

There will be a get-together with a buffet starting at 6 pm.

The meeting starts at 7 pm EST and typically ends at 8:45 pm. The meeting is meant to discuss and coordinate the section's activities and new initiatives.

Everyone is welcome to attend this meeting.

Please register in advance for this meeting using VTOOLS to provide the meeting organizers an accurate head count. You can change/cancel the registration if your plans change.

For more information, please contact Russell Pepe (rcpepe@ieee.org), Chris Peckham (cdp@ieee.org) and/or Adriaan van Wijngaarden (avw@ieee.org).

Location: Bell Laboratories, Alcatel-Lucent, Main Building, Room Number: 6A-106, 600 Mountain Ave, Murray Hill, NJ 07974, [Getting to Bell Labs](#)

Time: 06:00PM to 08:45PM

Contact: Russell Pepe (rcpepe@ieee.org), and/or Adriaan van Wijngaarden (avw@ieee.org).

[For Updates and Registration: Click Here](#)

How to subscribe to this newsletter if you are not an IEEE North Jersey Member?

To subscribe, send an email to: listserv@listserv.ieee.org, with the body containing "subscribe northjerseypublic"

To unsubscribe, send an email to: listserv@listserv.ieee.org, with the body containing "signoff northjerseypublic"

Additionally, you can join the IEEE North Jersey Section Facebook Fan Page at:

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

Follow us on Twitter at: twitter.com/ieeenorthjersey

Or join the LinkedIn IEEE North Jersey Section Group at: [LinkedIn Group Invitation](#)

Welcome! New Members of the IEEE North Jersey Section

Full Name	Current IEEE Grade
Gary Ruland	Member
Dmitry Vaynberg	Member
John L. Signori	Student Member
Humberto Hilario	Graduate Student Member
Ousmane Mbacke	Member
Alison F Kalman	Graduate Student Member
Hiren Patel	Student Member
Jim Kang	Graduate Student Member
Prem Patel	Student Member
Danny Dufresne	Student Member
Yang Liu	Associate Member
Mallika Bandyopadhyay	Member
Yves F. Eboras	Student Member
Annamarie Prinsloo	Student Member
Roberto Oquendo	Student Member
Akeem K Valley	Student Member
Jerry W. Okutu	Student Member
Joshua Gorospe	Member
Farnaz Abtahi	Graduate Student Member
Philip J. Whalen	Member
Sonia Shahaly	Member
Mohammed A Kutbi	Graduate Student Member
Changjiang Cai	Student Member
Ali Asghar Arab	Graduate Student Member
Guillermo A Falquez	Member
Robert T Conti	Member
Elisa N. Iribarne	Student Member
Adam M Engelson	Student Member
Michael Wei	Graduate Student Member
William Bickford	Member
Abby Adesina	Member
David Li	Graduate Student Member
Zhao Liu	Graduate Student Member
Vaseem Ahmed	Member

North Jersey Section Hosts Fall 2014 Advanced Communications Symposium

The IEEE North Jersey Section, ComSoc, Computer, IT, and VTS Chapters will host a one-day technical symposium covering communication topics on Saturday, September 20, 2014 at the Babbio Center, Stevens Institute of Technology, in Hoboken, NJ. The program will consist of six presentations by distinguished speakers and a parallel poster session of graduate students. There will also be plenty of opportunity to interact with presenters and network with peers at any of the breaks, lunch and closing. The section's and chapter's primary goal is to provide a local event that is focused on bringing value to local engineers working in the field and local graduate students doing research. With increasing pressure on time and travel budgets for conference attendance, this event is at a local venue within easy reach for everyone in New Jersey and the New York metropolitan area. It will also give students from nearby universities and institutes a chance to showcase their work and all participants an opportunity to learn what is happening now.

The organizing committee is currently inviting distinguished speakers who would like to give a 50-minute presentation on recent work, recent research results, and cutting edge developing technologies in wireless, networking, or communications. The six selected speakers will be notified based on specific themes chosen for the symposium. If interested, please reach out to the speaker coordinator Mani Iyer at email: mani.iyer@ieee.org.

General information will be made available at: <http://sites.ieee.org/northjersey/events/2014-NJACS>

The organizing committee is currently inviting graduate students to prepare a poster presentation on recent work, recent research results, and cutting edge developing technologies in wireless, networking, or communications. Additionally, posters are not limited to wireless topics but can cover other broader communication topics as well. Masters students working on a thesis, PhD candidates, and postdocs are encouraged to participate. There will be blocks of time reserved for poster review by all attendees. If interested, please reach out to the poster session coordinator Hong Man at email: hong.man@stevens.edu.

Registration will be opened shortly on vTools. General audience members are invited to participate and register online to save their seats. If you have any questions, need additional information, or would like to volunteer or participate in the symposium, contact the General Chair or appropriate members of the organizing committee.

General Chair, Amit Patel, a.j.patel@ieee.org

Speaker Coordinator, Mani Iyer, mani.iyer@ieee.org

Poster Session Coordinator, Hong Man,
Hong.Man@stevens.edu

Local Arrangements Coordinator, Yu-Dong Yao, Yu-Dong.Yao@stevens.edu

Publicity Coordinator, Adriaan J. van Wijngaarden,
avw@ieee.org

IEEE North Jersey Section Seeks Committee Chairs and Section Volunteers

The IEEE North Jersey 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. A list of IEEE North Jersey Societies, Chapters, Groups and Committees are published at the end of the newsletter for those interested in participating. 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 Nominations Committee chair, Amit Patel at a.j.patel@ieee.org. You are welcome to attend the Section's executive committee meeting held the first Wednesday of every month to learn more about volunteer activities that require some help. Please check out the website below for published meeting times and locations. Some committees needing volunteers include the following. Please contact the person indicated for additional information.

Young Professionals (formerly Graduates of the Last Decade) Affinity Group Volunteers and Committee members needed

Contact: Sean Kennedy (sean.kennedy@alcatel-lucent.com)

WIE (Women in Engineering) Affinity Group Volunteers and Committee members needed –

Contact: Zhiwei Mao (zmao@fdu.edu)

EMBS (Engineering in Medicine and Biology Society) is seeking active committee volunteers –

Contact: raquelpc@njit.edu

Computer Society Chapter Committee Volunteers –

Contact zhao@fdu.edu

Technical Management Council Committee Volunteers –

Contact: almeida@synergymwave.com

North Jersey Section Awards Committee Volunteers –

Contact k.oexle@ieee.org

Membership Development Committee Volunteers –

Contact miyer108@gmail.com

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://sites.ieee.org/northjersey> or contact anyone listed above.

[Back to Calendar of Events](#)



THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS, INC.

IEEE NORTH JERSEY SECTION

MTT-Society and AP-Society Joint Chapter

PRESENTS

29th ANNUAL SYMPOSIUM AND MINI-SHOW

FOCUS:

**SELECTED TOPICS IN RF AND MICROWAVE TECHNOLOGIES FOR
COMMERCIAL AND MILITARY APPLICATIONS**

DATE: THURSDAY OCTOBER 2, 2014

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

SCHEDULE OF EVENTS

9:00 AM TO 4:30 PM

TECHNICAL SESSIONS

**10 –12 LECTURES FEATURING SPEAKERS FROM LEADING
COMPANIES, WITH EMPHASIS ON MILITARY ELECTRONICS,
WIRELESS TECHNOLOGIES AND MICROWAVE COMMUNICATIONS**

MINI SHOW FEATURING LATEST PRODUCTS

(APPX. 30-40 EXHIBITORS)

(COMPLIMENTARY LUNCH SERVED)

**Details of the schedule and speakers and the topics will be posted on the IEEE North Jersey Section Home page
<http://www.ieee.org/go/njsection> by September 2014.**

For further information contact:

CHAIR-EXHIBITION: KIRIT DIXIT (201-669-7599), kdixit@ieee.org

PUBLICITY: ARTHUR GREENBERG (gardner1@optonline.net)

EVENT/ LOCATION CO-ORDINATOR: KEN OEXLE (973-386-1156) k.oexle@verizon.net

CO-CHAIR– TECHNICAL PROGRAMS : HAR DAYAL , dayalhar@gmail.com

CO-CHAIR - TECHNICAL PROGRAM: GEORGE KANNELL (973-437-9990), gkk@lgsinnovations.com

CHAPTER CHAIR : Dr. AJAY PODDAR , akpoddar@synergymwave.com

CHAPTER Vice -CHAIR: Dr. EDIP NIVER , edip.niver@njit.edu

SECTION CHAIR: RUSSELL PEPE , rpepe@att.net

THERE IS NO CHARGE TO ATTEND THE SYMPOSIUM OR SHOW

IEEE North Jersey Section Course

Marketing Research

Saturdays, June 14 through August 2, 2014

Seven weekly classes (June 14, 21, 28, July 12, 19, 26, August 2 2014)

New Jersey Institute of Technology, Newark, New Jersey (Checks should not be mailed to this address)

IEEE North Jersey Section thanks New Jersey Institute of Technology, for sponsoring this course.

The North Jersey Section IEEE is offering "Marketing Research" course. Careerbuilder.com lists 6100+ Marketing jobs in the New York tri-state area daily! As an engineer, you never did marketing. Getting the MBA takes two years. This is a better alternative to learn marketing and how you work as a marketing researcher.

This course deals with the collection, evaluation and analysis of the market-related information. Topics are: market research industry, problem definition, research process, focus group, secondary database, quantitative research, questionnaire design, sampling techniques, statistical testing, bivariate and multivariate correlation, communicating results and management reports. Using IBM SPSS software, you will perform detailed data analysis in healthcare, finance, social sciences, and marketing research firms.

You will receive the IEEE completion certificate. You may work as a market researcher in any organization that needs your quantitative skills.

Instructor: Donald Hsu, PhD., has been a corporate manager for 11 years and is an experienced trainer. Since 2007, he has trained 950 people in Management, Marketing, Global Marketing, and Marketing Research courses in seven organizations. In addition, he does international business in 73 countries.

TOPICS

- Describe the market research industry, problems and research process
- Understand the importance of primary data collection, secondary database, and survey
- Define quantitative research, measurement technique and sampling methods
- Explain the questionnaire design, data processing and statistical testing
- Build the knowledge of bivariate regression and multivariate data analysis
- Communicate results, manage ethical issues, and prepare reports
- Employ IBM SPSS software for frequency analysis, ANOVA, T-test and others
- Review real-world marketing research using Harvard Business School cases
- Present Final Project in Marketing Research

WHERE: New Jersey Institute Technology, Newark, New Jersey [Getting to NJIT](#)

WHEN: 7 Saturdays, June 14, 21, 28, July 12, 19, 26, August 2 2014., 9:00 AM to 12:00 noon

COST: IEEE members \$500; Non-IEEE members \$550.

Contact: Donald Hsu, yanyou@hotmail.com

REGISTRATION: [Marketing Research](#)

Please mail the completed registration with a check (payable to "North Jersey Section IEEE") to:

Donald Hsu, PhD, Chair Education Committee, IEEE North Jersey Section, P.O. Box 2093, Fort Lee, New Jersey 07024.

Name: _____ Email address _____

Non-member

IEEE Member Member #: _____

Employer: _____

Employer Address: _____

Home Address: _____

Business (day) telephone #: _____ Home telephone #: _____

Please enclose required fee payable to: **North Jersey Section IEEE**

I wish to receive IEEE Completion Certificate

Signature: _____

IEEE North Jersey Section Course Project Management

Saturdays, June 14 through August 2, 2014

Seven weekly classes (June 14, 21, 28, July 12, 19, 26, August 2 2014)

New Jersey Institute of Technology (Checks should not be mailed to this address)

IEEE North Jersey Section thanks New Jersey Institute Technology for sponsoring this course

The North Jersey Section IEEE is offering a course entitled "Project Management". Dice.com lists 5000+ 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 2010* 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 Achievement and earn 2 IEEE Continuing Education Units (CEUs) when you complete the course. You may wish to take the Certification exam 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. However, past attendees did successfully get the PMP certifications!

Instructor: Marilyn Moux, PMP, ITILv3, Cloud Essentials, CAP and Security+., has been a corporate manager for 20+ years and an IT security professional with experience within the entire Software Development Life Cycle Project Management.

TOPICS

- Explain the need for a project manager
- Define SOW, PERT, GANTT, CPM, and Scope of the project
- Identify the team members, resources and plan for the strategy
- Calculate schedule, budget variances, and monitor project progress
- Manage changes, estimates, and communications
- Set a baseline, import tasks from MS Excel, export MS Project files to MS Word
- Approve updates and conclude a project plan
- Analyze Cloud Computing, Service Level Agreements, IT Security
- Present student Projects

WHERE: New Jersey Institute Technology, Newark, New Jersey [Getting to NJIT](#)

WHEN: 7 Saturdays, June 14, 21, 28, July 12, 19, 26, August 2 2014, 9:00 am to 12:00 noon

COST: IEEE (& affiliate) members \$500; Non-IEEE members \$550.

CONTACT: Donald Hsu, yanyou@hotmail.com

REGISTRATION: [Project Management](#)

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

I wish to receive the IEEE Completion Certificate

Signature: _____

2014 IEEE North Jersey Section Volunteer

Executive Committee

Chair - Russell Pepe
rcpepe@ieee.org

1st Vice-Chair – Adriaan van Wijngaarden
avw@ieee.org

2nd Vice-Chair – Ajay Poddar
akpoddar@synergymwave.com

Secretary - Chris Peckham
cdp@ieee.org

Treasurer - Kalyan Mondal
mondal@fdu.edu

Member-at-Large

Mengchu Zhou – zhou@njit.edu

Goran Djuknic – gd@ieee.org

John C Taylor –
john.taylor1204@gmail.com

Junior Past Chair – Naresh Chand
chandnaresh@gmail.com

Senior Past Chair – Amit Patel
a.j.patel@ieee.org

Society Chapters

Aerospace Electronic Systems Society

Chair – Goran Djuknic

gd@ieee.org

Vice-Chair – Naresh Chand
chandnaresh@gmail.com

Antennas and Propagation Society/ Microwave Theory and Techniques Society

Chair - Ajay Poddar

akpoddar@synergymwave.com

Vice-Chair – Edip Niver

niver@adm.njit.edu

Circuits and Systems Society / Electron Devices Society

Chair - Durga Misra

dmisra@njit.edu

Communications Society

Chair - Amit Patel

a.j.patel@ieee.org

Computer Society

Chair - Hanna (Hong) Zhao

zhao@fdu.edu

Controls Society

Chair - David Haessig

davidhaessig@ieee.org

Engineering in Medicine and Biology Society

Chair - Raquel Perez-Castillejos

raquelpc@njit.edu

Industrial Applications Society

Chair - Ken Oexle

k.oexle@ieee.org

Information Theory Society

Chair – Adriaan van Wijngaarden

avw@ieee.org

Instrumentation Measurement Society

Chair – Emad Farag

emad.farag@alcatel-lucent.com

Photonics Society

Chair – Naresh Chand

chandnaresh@gmail.com

Power & Energy Society

Chair - Ronald W. Quade

rwquade@ieee.org

Signal Processing Society

Chair - Alfredo Tan

tan@fdu.edu

Systems, Man, and Cybernetics Society

Co-Chair – Mike Liechenstein

itsmikesju@aol.com

Co-Chair – Mengchu Zhou

zhou@njit.edu

Vehicular Technology Society

Chair - Mani Iyer

mani.iyer@ieee.org

Technical Councils

Technology Management Council

Chair - Tony Almeida

almeida@synergymwave.com

Affinity Groups

Consultants Network

Chair - Peter Schutz

schutz@compuserve.com

Young Professionals

Chair - Sean Kennedy

sean.kennedy@alcatel-lucent.com

Women in Engineering

Chair - Zhiwei Mao

zmao@fdu.edu

LIFE Members

Chair - Art Greenberg

a.h.greenberg@ieee.org

Committees

60th Anniversary Committee

Chair – Har Dayal

dayalhar@gmail.com

Awards/Recognition

Chair - Ken Oexle

k.oexle@ieee.org

Audit Committee

Chair - Fred Chichester

fdchichester@gmail.com

Education

Co-Chairs

Donald Hsu – yanyou@hotmail.com

Kalyan Mondal – mondal@fdu.edu

Mengchu Zhou – zhou@njit.edu

Employment Network

Chair - Suzanne McIntosh

skranjacmcintosh@yahoo.com

Government and Industry Relations Committee

Chair – Art Greenberg

a.h.greenberg@ieee.org

Group coordinator / History

Chair - Howard Leach

h.leach@ieee.org

Membership Development

Chair - Mani Iyer

mani.iyer@ieee.org

Vice-Chair - Ajay Poddar

akpoddar@synergymwave.com

MTT/AP Trade Show and Symposium

Chair - Kirit Dixit

kdixit@ieee.org

Vice-Chair – Har Dayal

dayalhar@gmail.com

TPC Co-Chair – George Kennall

gkk@lgsinnovations.com

TPC Co-Chair – Ajay Poddar

akpoddar@synergymwave.com

Newsletter

Chair - Anisha Apte

anisha_apte@ieee.org

Nominations

Chair – Amit Patel

a.j.patel@ieee.org

PACE

Chair - Richard Tax

rtax@verizon.net

Co-Chair – Paul E. Ward

peward@ieee.org

Pre-University Activities

Chair – Steve Majkowski

steve.majkowski@alcatel-lucent.com

Vice-Chair – Jesse Colby

jjc37@njit.edu

Student Activities

Chair -John C Taylor

john.taylor1204@gmail.com

Vice-Chair - Daniel Cerone

dcer@dcerone.com

Webmaster

Chair – Adriaan van Wijngaarden

avw@ieee.org

Industrial Liaison

Chair-Kirit Dixit

kdixit@ieee.org

Intersection activities

Chair- Amit Patel

a.j.patel@ieee.org

Legal Activities

Joel Miller

jm@joelmillerlaw.com