The IEEE Newsletter

Unemployed? - Did you know?

Unemployed IEEE members are entitled to a 50% dues reduction

IEEE realizes that economic circumstances may impact some members' ability to pay the full amount of IEEE membership dues. For this reason, the following special circumstance categories have been established. Special circumstances are not available to Student members. Only one category may be claimed in any year.

IEEE offers the following special circumstances categories:

- Minimum Income
- Retired
- Unemployed
- Disabled

Minimum Income Provision: Applicants who certify that their prior year's income did not exceed US $12,900 or equivalent are granted a 50% reduction in IEEE dues, regional assessment and dues for one IEEE Society and its optional publications. Please submit written certification with application and payment. Student members are NOT eligible.

Retired Provision: A retired member, not gainfully employed and not qualifying for Life Member Status, on attaining the age of 62 years, may apply for a 50% reduction in dues and assessments. An individual who qualifies for the IEEE Retired Member category may continue any and all Society memberships held for not less than the 5 prior years. Optional publication fees equal those established for Student members.

Unemployed Provision: A 50% reduction in membership dues, Society dues, other subscriptions and assessments are available to a member or applicant who informs the IEEE Operations Center Office that he/she: (1) has become involuntarily unemployed and is seeking reemployment, or (2) has become voluntarily unemployed for reasons of raising children. A statement of continued unemployment shall be provided with each annual dues payment. In the case of voluntary unemployment,

the provisions of this Bylaw shall not exceed four years. The reduced payments may not be made in installments.

Permanently Disabled Provision: The IEEE membership dues and assessments, if any, shall be waived for those members who become permanently disabled. "Permanent disability" shall mean a medically determinable physical or mental impairment which (i) renders the individual incapable of performing any substantial gainful employment, (ii) can be expected to be of long-continued and indefinite duration or result in death, and (iii) is evidenced by a certification to this effect by a doctor of medicine approved by the Executive Director. The Executive Director shall determine the date on which the permanent disability shall have occurred if such determination is necessary.

NJIT Course on Microwave Filters and Networks

Taught by Prof. Richard V. Snyder (RS Microwave), this course will take the student through microwave filter and network design for lumped and distributed elements, covering passive and active implementations. This course will be offered at NJIT on Thursday evenings in Fall 2009. If you are interested in finding out more about the course content, contact Ralph Giffone (ralph.giffone "AT" gdsatcom.com, 814-360-3733) for a 33-page PDF file containing a course abstract, bibliography and excerpts from the course notes.

JUNE 2009

In Memoriam, Mr. Jerry Minter

(as Published in the Daily Record on 5/20/2009)

JERRY B. MINTER AGE: 95 MORRIS Jerry Minter, 95, Engineer, Inventor, of Morris Township NJ passed away on May 19, 2009 in Morristown, NJ. Mr. Minter, a 1934 graduate in engineering from MIT, helped found Measurements Corporation in Parsippany, NJ in 1939 and, at his death, was the founder and president of Components Corporation in Denville, NJ. Measurements made signal generators during World War II and one of them was in use at Pearl Harbor during the Japanese attack. Mr. Minter held 26 patents. Six involved recent work in aviation. Components Corporation, under his leadership has produced electrical connectors and power supplies, some of which have been used by NASA in its satellites. Mr. Minter was a long-time member of IEEE (Institute of Electrical and Electronic Engineers, Inc.) and the founding chair of the North Jersey chapter. A private pilot, he was a longtime member of the Quiet Birdmen. He was also a past president of the Radio Club of America. Among his diverse interests was work in development of surgical suite closed circuit television for several New York City hospitals and the design of the sound and light production for the battleship USS North Carolina moored at Wilmington, NC. Jerry Minter is predeceased by his son, Mark Ayers Minter. He is survived by his wife of 69 years, Monica Hanlon Minter as well as sons, Claude Minter of New Bern, NC and Byron Minter of Springfield, NJ and daughters, Claire Andrews of Morris Plains, NJ and Maureen Frydlewicz of Rahway, NJ. He is also survived by seven grandchildren and thirteen great-grand children. A Funeral Service will be held at the Doyle Funeral Home, 106 Maple Ave., Morristown on Friday, May 22, at 10:00 a.m. Interment Holy Rood Cemetery. Hours of visitation at the funeral home on Thursday, May 21, 2-4 & 7-9 p.m.

For more on Mr. Jerry Minter's life in IEEE, see North Jersey Section History – Made Again! (http://web.njit.edu/~ieeenj/may07_index.html#_2007_North_Jersey) which was published in the May 2007 Newsletter.

NJ Section PACE, GOLD, WIE:
Engineers Meet:
For a June Social

On Wednesday, June 10, 2009 the North Jersey Section Professional Activities Committee, Graduates of the Last Decade and Women in Engineering will meet for an Informal Social, with Pizza, soda & refreshments. This is the lighter side of the profession. Come on and bring your friends.

About the Meeting
This meeting is to bring members of the Section together for an evening of conversation and hospitality.

These meeting's offer opportunities for lively discussions. Historically, once members get started they just don't want to leave. Our meetings are entertaining and thought provoking.

All are invited. We encourage North Jersey Section Ex-Com officers to attend. When they do, our Section membership can meet with them on a first name basis.

Bring your associates, friends and spouses.

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, June 10, 2009. 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) 664-0803, rtax "AT" verizon.net, Dr. Katherine Duncan, (973) 209–8607, kduncan "AT" ieee.org.

IEEE North Jersey Section Activities
June 2009

June 3 – "NJ Section Meeting", 6:30 PM, "Executive Committee Meeting" - 7:00 PM, ITT, 77 River Rd, Clifton, NJ. Russell Pepe at rcpepe "AT" ieee.org.

June 4-5 – "Cyber Infrastructure Protection Conference 2009", 8:00 AM – 5:00 PM, City College (CCNY), Grove School of Engineering Room T-27, 140th Street and Convent Ave, New York NY. Dr. Ed Camp, 212-650-6684, camp@ccny.cuny.edu.

June 7-13 – "Free Workshop - Parallel Programming and Cluster Computing", Kean University, Union, NJ. See http://sc-education.org/workshops/ for more details.

June 8 – "Polymer Based Sensor Systems for Healthcare & Homeland Security" by Dr. V. Ramgopal Rao, NJ EDS/C&S Chapters, 5:00 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).

June 10 – "Engineers Meet: For a June Social", 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) 664-0803, rtax "AT" verizon.net, Dr. Katherine Duncan, (973) 209–8607, kduncan "AT" ieee.org.

June 17 – "Systems Engineering in Japan: State-of-the-Art" by Prof. Yoshiaki Ohkami, NJ Section, 7:00 PM, BAE Systems, 164 Totowa Road, Wayne, NJ. RSVP required by June 15th. Dr. Naresh Chand, (973) 636 7408, Naresh.chand "AT" baesystems.com, or Mark Grasso, (973) 305 2783, mark.grasso "AT" baesystems.com.

June 18 – "NBTI in p-MOSFETs: Characterization, Modeling and Material Dependence" by Dr. Souvik Mohapatra, NJ EDS/C&S Chapters, 5:00 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).

June 25 – "Hitting Bottom is the Best Thing that Can Happen to You – But I Wouldn't Wish It on Anyone" by Randi Altschul, NJ Consultants' Network, 6:00-8:00 PM, Morris County Library, 30 East Hanover Avenue, Whippany, NJ. Robert Walker (973) 728-0344 or www.TechnologyOnTap.org.

Upcoming Meetings

July 10 – "Engineers Meet: The Professional's View" by Stanley Karoly, P.E, 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) 664-0803, rtax "AT" verizon.net, Dr. Katherine Duncan, (973) 209–8607, kduncan "AT" ieee.org.

Aug. 5 – "NJ Section Meeting", 6:30 PM, "Executive Committee Meeting" - 7:00 PM, ITT, 77 River Rd, Clifton, NJ. Russell Pepe at rcpepe "AT" ieee.org.

Sep. 17 – "Nanowire Biosensors" by Professor Mark A. Reed, 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. 1 – "2009 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 (a.h.greenberg "AT" ieee.org), Har Dayal (973) 633-4618 (har.dayal "AT" baesystems.com), or George Kannell (973) 386-4170 (gkk "AT" gsinnovations.com).

Oct. 14 – "C# .NET Programming" by Donald Hsu, Ph.D, 6:30 PM to 9:00 PM, Advanced Technical Marketing, Suite 113, 1719 Route 10, Parsippany, NJ. Donald Hsu, yanyou "AT" hotmail.com.

Oct. 29 – "Life Grade Luncheon", Hamilton Park Conference Center, Florham Park, NJ. Ken Oexle (973) 386-1156.

Members and Non-Members Welcome
PLEASE POST

Polymer Based Sensor Systems for Healthcare & Homeland Security

On June 8, 2009, the IEEE NJ Section Electron Devices, Circuits and Systems Chapters together with NJIT will host a talk on "Polymer Based Sensor Systems for Healthcare & Homeland Security." The speaker will be EDS Distinguished Lecturer, Dr. V. Ramgopal Rao, Professor, EE Department, IIT Bombay.

About the Talk

Micro fabricated sensors based on the detection of nanomechanical motion are known to be promising for biochemical sensing. The use of conventional silicon based materials to fabricate microcantilevers results in a lower sensitivity and higher cost for the sensor depending on the Young's modulus of the structural material, the geometrical dimensions, as well as the process complexity. UV patternable polymer materials such as SU-8 have a very low Young's modulus compared to the silicon (Si) based materials, are cheaper, and show excellent promise as structural layers. In this talk, we discuss the progress made at IIT Bombay towards the development of a SU-8 microcantilever platform for sensing applications. The three approaches, namely the optical, piezo-resistive (with polysilicon films as well as with conductive nanoparticles dispersed in an epoxy matrix) and piezo-electric (based on a novel multi-ferroic material synthesized at IIT Bombay) based read out schemes are implemented using a polymeric cantilever platform and show excellent promise. We demonstrate practical applications involving these novel cantilever platforms for cardiac diagnostics & explosive detection.

About the Speaker

Dr. V. Ramgopal Rao is a Professor in the Department of Electrical Engineering, IIT Bombay. Dr. Rao has over 200 publications in the area of Electron Devices & Nanoelectronics in refereed international journals and conference proceedings and holds three patents, with seven US patents currently pending.

Prof. Rao received the coveted Shanti Swarup Bhatnagar Prize in Engineering Sciences (the highest scientific award for researchers in India) awarded by the Hon'ble Prime Minister, Govt of India in 2005 for his work on Electron Devices. He is also a recipient of the 2004 Swarnajayanti Fellowship award from DST, 2007 IBM Faculty award and the 2008 MRSI-ICSC Annual Prize. He is an Editor for the IEEE Transactions on Electron Devices in the CMOS Devices and Technology area and serves on the Editorial boards of three other international journals. Dr. Rao is a Fellow of the Indian National Academy of Engineering and a Fellow of the Indian Academy of Sciences. He is a Distinguished Lecturer, IEEE Electron Devices Society and interacts closely with many semiconductor industries. He has served on the program/organizing committees of a large number of international conferences in the area of electron devices and was Chairman, IEEE AP/ED Bombay Chapter during 2002-2003. He currently serves on the executive committee of the IEEE Bombay Section besides being the vice-chair, IEEE Asia-Pacific Regions/Chapters Subcommittee. For more information about Prof. Rao's current research interests, and a list of publications, please visit: http://www.ee.iitb.ac.in/~rrao.

All Welcome!

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

Time: 5:00 PM, Monday, June 8, 2009. Refreshments will begin at 4:45 PM.
Place: 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).

NBTI in p-MOSFETs: Characterization, Modeling and Material Dependence

On June 18, 2009, the IEEE NJ Section Electron Devices, Circuits and Systems Chapters together with the New Jersey Institute of Technology will host a talk on "NBTI in p-MOSFETs: Characterization, Modeling and Material Dependence." The speaker will be Distinguished Lecturer, Dr. Souvik Mohapatra.

About the Talk

Negative Bias Temperature Instability (NBTI), causing shifts in device parameters such as drain current and threshold voltage, is a serious reliability concern for p-MOSFETs. Though identified more than 40 years ago, NBTI has become the most severe front end reliability issue only recently, as gate oxide thickness is scaled below 2nm, and Nitrogen is incorporated into the gate oxide to prevent Boron penetration and leakage. Besides Si oxynitride/poly-Si devices, NBTI is also a serious concern for high-k/metal gate devices as well.

Like other reliability issues (like HCI), device lifetime under NBTI is determined by accelerated stress tests done at short time, and extrapolating the degradation under operating condition to end of life. It is very important to choose proper stress condition such that defects responsible for NBTI are only accelerated and no new defects are formed. As NBTI degradation recovers (unlike HCI) after stress is turned off for measurement, conventional stress-measure-stress methods give erroneous results, and fast methods must be implemented. It is important to understand and model NBTI physical mechanism, so that proper physics-based models can be developed for reliable determination of device lifetime. It is also important to understand the process / material dependence of NBTI to develop robust, NBTI safe gate insulators that meet other (leakage, mobility) requirements. The talk will address some of these issues.

About the Speaker

Souvik Mahapatra received his PhD in Electrical Engineering from Indian Institute of Technology, Bombay (IITB), India in 1999. From 2000 to 2001 he was at Bell Laboratories, Lucent Technologies, Murray Hill, NJ. From 2002 he has been with the Department of Electrical Engineering, IITB, where he is presently a Professor. He is also an Adjunct Professor of ECE Department at Purdue University. His research interests are electrical characterization of defects in dielectric-semiconductor interfaces; hot-carrier and bias temperature instability in CMOS devices; high-k and novel dielectrics for CMOS; and Flash EEPROMs. He has published more than 85 papers in refereed international journals and conferences, was invited to speak at several major international conferences including the IEDM, was a tutorial presenter at IRPS and has worked as a reviewer for many international journals and conferences. Dr. Mahapatra is an IEEE EDS Distinguished Lecturer.

All Welcome!

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

Time: 5:00 PM, Thursday, June 18, 2009. Refreshments to begin at 4:45 PM.
Place: 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).

Systems Engineering in Japan: State-of-the-Art

On June 17, 2009, the International Council on Systems Engineering (INCOSE) Liberty Chapter, the IEEE Aerospace and Electronics Systems Society, and the North Jersey Section will host a meeting on "Systems Engineering in Japan: State-of-the-Art." The speaker will be Prof. Yoshiaki (Yoshi) Ohkami.

About the Meeting

Systems Engineering (SE) in Japan in its current form is gradually getting known. Keio University's program is the first of its kind and is drawing much attention from industries such as IT Consulting, Space, Retail, Financial Services, Consumer Electronics etc. Japanese industry is in a unique position to adopt SE considering that it has such a rich history of concurrent design and engineering, and quality control. Prof. Ohkami will share with the audience the concurrent design and engineering, and quality control in Japan as the background of SE efforts. He will discuss the challenges and issues of spreading the message of SE in Japan, and success and lessons learned. He will also address the difference in SE approaches and its application between the US and Japan and how the role of SE is viewed by the Japanese industry in maintaining product quality lead in the world.

About the Speaker

Prof. Yoshiaki (Yoshi) Ohkami is the founder President of the Japanese Chapter of the International Council on Systems Engineering (INCOSE). He is the founder Dean, of the Graduate School of Systems Design and Management at Keio University in Japan. His major fields of research include but not limited to are the Strategic Systems Engineering, Dynamics and Control of Large Mechanical Systems, Field and Space Robotics, and Distributed Control with Computer Networking. He is a member of the IEEE, American Institute for Aeronautics and Astronautics, The Japan Society of Mechanical Engineers, The Japan Society for Aeronautical and Space Sciences and The Robotics Society of Japan. He is awarded Academic Prizes from JSME SICE, and John Breakwell Memorial Lecture from IAF Astrodynamics Committee. In 1968, he obtained his PhD (Dr. Engineering) from Tokyo Institute of Technology in Control Systems Engineering, and joined National Aerospace Laboratory of Japan as research engineer on spacecraft attitude control and large space systems (1968-1992). During the period of 1972-1974, he worked at UCLA as visiting researcher and NASA International Fellow for Marshal Space Fight Center, in 1985-1986 Deputy Director for Space Station Program Office at Science and Technology Agency for Phase-B study of the International Space Station Program. He was invited to by Tokyo Institute of Technology to establish a new graduate school of Space Mechanical Systems and served as a professor in 1992-1999, and was invited by National Space Development Agency (now JAXA) to manage the overall R&D activities of the Tsukuba Research Center from 1999 to 2006. In 2000, he was invited as a full professor of graduate school of Keio University to augment the higher education programs in system design engineering, and now he is the Dean of Graduate School of Systems Design and Management, Keio University. He took the initiatives in establishing this new graduate school that started in April, 2008.

All Welcome/RSVP!

You do not have to be a member of INCOSE or IEEE to attend the event but you need to email your name, address, and citizenship to Dr. Naresh Chand by June 15th. In your email, please use your subject as "INCOSE - IEEE AESS talk".

Time: 7:00 PM, Wednesday, June 17, 2009. Free buffet starts at 6:00 PM.
Place: BAE Systems, 164 Totowa Road, Wayne, NJ 07474.
Information: Dr. Naresh Chand, (973) 636 7408, Naresh.chand "AT" baesystems.com, or Mark Grasso, (973) 305 2783, mark.grasso "AT" baesystems.com.

NJ Consultants' Network:

Hitting Bottom is the Best Thing that Can Happen to You – But I Wouldn't Wish It on Anyone

On Thursday, June 25, 2009, the IEEE Consultants' Network of Northern NJ (www.TechnologyOnTap.org) will be holding its monthly meeting, beginning at a new time: 6pm. We will feature a talk by Randi Altschul about her exciting approach to new product development.

About the Topic

Randi Altschul offers unorthodox views on new product development – something of great interest to independent engineering practitioners. She spoke to the Consultants' Network in the past; this presentation is a follow-up to her well-received talk on entrepreneurship in 2000. In her own words:

"Over the past few years my life has been a roller coaster ride from which I have emerged better than I ever was before. Smarter, Stronger, More Energized than I'd ever thought possible. During this time I lost everything I owned and the two people I loved more than anything, but all in all I wouldn't change a thing because I'm in a really good place, I own several new companies and am developing groundbreaking product for industries I never thought I'd enter. Conceive it, Believe it, Achieve it! And never let them get you down.

"Our discussion will take you through the creation and development of incredible products to the pitfalls along the way and the realization that they can take everything away but as long as you have your brain and your reputation you can make miracles happen."

About the Speaker

Randice-Lisa Altschul is an inventor of new products and author of books and intellectual properties. She created the disposable cell phone, the credit card phone, the programmable debit card, the paper laptop, and other new products and properties which range from games and game shows to high tech electronics and everything in between, including food, gifts, etc. She has licensed more than 250 projects around the World and has been associated with major licenses since she started her first company, Dieceland, in 1985.

Her first major project was the Miami Vice game, which put her on the map in the toy industry. She went on to create games and shows for the likes of Tonka, Coleco, Ohio Art, Toy Biz, and NBC.

Randi has written several books, including her memoir, "Financiers, Lawyers and Other Assorted Snakes" and her latest novel, "Sorry, You Can't Enter Heaven". She was the first inventor represented by William Morris Agency and the first inventor contracted by NBC to develop merchandise-based television programs. Randi has two patents on Interactive Cereal and numerous patents in the telecommunication / technology fields.

Randi Altschul established herself as a creative resource to virtually any market from simple toys and games, to television, medical and high-tech industries. She also teaches classes on How to Make Money from Your Ideas. For more information, visit www.inventing411.com.

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.

All Welcome!

Free admission. Members and non-

members are welcome.

Time: 6:00-8:00 PM, Thursday, June 25, 2009.
Place: Morris County Library, 30 East Hanover Avenue, Whippany, NJ.
Registration Requested: Due to limited seating, participants must PRE-REGISTER in advance with Robert Walker at 973-728-0344, r.d.walker "AT" ieee.org.
Information: For directions and up-to-date meeting status, call Robert Walker (973) 728-0344 or visit our website at www.TechnologyOnTap.org.

NJ Section PACE, GOLD, WIE:

Engineers Meet:
The Professional's View

On Wednesday, July 8, 2009 the North Jersey Section Professional Activities Committee and Graduates of the Last Decade will host a meeting to discuss the Profession as viewed from the very active Stanley Karoly, P.E. Mr. Karoly is the Past Chair of the IEEE, New York Section.

About the Meeting
The meeting will focus on the status of our engineering profession from the viewpoint of Mr. Stan Karoly, P.E., an executive in the Electrical Engineering field, responsible for recruiting and hiring as well as production and who is an engineer with more than 35+ years experience".

You are encouraged to attend and invite your associates..

About the Speaker
Mr. Stanley Karoly, P.E., has a long and distinguished career, for more than 35+ years, as an Electrical Engineer. He graduated from Pratt Institute with a Bachelors Degree in Electrical Engineering (BEE) and obtained an MS in Engineering Management from Polytechnic Institute. He has worked for the New York City Transit Authority since 1990 and currently is the Chief Electrical Engineer. Mr. Karoly has been an IEEE member since 1969 and is very active in the New York Sections' IEEE community holding various positions on the NY Section's Executive Committee including Chair, Vice Chair, and Treasurer.

As Chief Electrical Engineer he is responsible for being the senior technical authority for electrical engineering which includes Electrical (non traction power), Power (sub stations, d-c, traction, etc), and Instrumentation & Control. He is accountable for the quality of work and staffing for scope development, engineering design, construction support and field inspection in support of the multi-billion dollar Capital Program. Mr.

Karoly oversees the development of electrical engineering standards and guidelines for design, inspection and testing for all phases of engineering and construction. He directs the administration and assignment of personnel for design and construction including hiring, promotion, training, career development and counseling/mentoring. His staff also provides support to the Operating Departments. He also has approval authority for design and construction force account budgets.

Prior to joining NYC Transit in 1990 Mr. Karoly worked for major A/E and other engineering and manufacturing and production firms, (such as EBASCO Services, Inc, Combustion Engineering, Gibbs & Hill Inc and Nestle Enterprises ,Inc), where he held various positions including draftsperson, designer, engineer, lead engineer, project manager and business developer.

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, July 8, 2009. 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) 664-0803, rtax "AT" verizon.net, Dr. Katherine Duncan, (973) 209–8607, kduncan "AT" ieee.org.

NJ EDS/C&S:

Nanowire Biosensors

On September 17, 2009, the IEEE NJ Section Electron Devices, Circuits and Systems Chapters together with the New Jersey Institute of Technology will host a talk on "Nanowire Biosensors." The speaker will be Distinguished Lecturer, Professor Mark A. Reed.

About the Talk
Nanoscale electronic devices have the potential to achieve exquisite sensitivity as sensors for the direct detection of molecular interactions, thereby decreasing diagnostics costs and enabling previously impossible sensing in disparate field environments. Semiconducting nanowire-field effect transistors (NW-FETs) hold particular promise, though contemporary NW approaches are inadequate for realistic applications. We present here a novel approach using complementary metal-oxide-semiconductor (CMOS) technology that has not only achieved unprecedented sensitivity, but simultaneously facilitates system-scale integration of nanosensors for the first time. This approach enables a wide range of label-free biochemical and macromolecule sensing applications, including cell type discrimination through the monitoring of live, stimulus-induced cellular response, and specific protein and complementary DNA recognition assays. An important achievement is the introduction of real-time, unlabeled detection capability, allowing for fundamental studies of cellular activation, and specific macromolecule interactions at femtomolar concentrations. Important aspects of microfluidic integration and Debye screening will be discussed, along with the demonstration of live cell peptide-specific immunoresponse.

About the Speaker
Professor Mark A. Reed received his PhD in Physics from Syracuse University in 1983, after which he joined Texas Instruments. In 1990 Mark joined Yale University where he holds the Harold Hodgkinson Chair of Engineering and Applied Science, and is the Associate Director of the Yale Institute for Nanoscience and Quantum Engineering. His research activities have included the investigation of electronic transport in nanoscale and mesoscopic systems, artificially structured materials and devices, molecular scale electronic transport, plasmonic transport in nanostructures, and chem/bio nanosensors. Mark is the author of more than 180 professional publications and 6 books, has given 19 plenary and over 260 invited talks, and holds 25 U.S. and foreign patents on quantum effect, heterojunction, and molecular devices. He has been elected to the Connecticut Academy of Science and Engineering and Who's Who in the World. His awards include; Fortune Magazine "Most Promising Young Scientist" (1990), the Kilby Young Innovator Award (1994), the Fujitsu ISCS Quantum Device Award (2001), the Yale Science and Engineering Association Award for Advancement of Basic and Applied Science (2002), Fellow

of the American Physical Society (2003), the IEEE Pioneer Award in Nanotechnology (2007), and Fellow of the Institute of Electrical and Electronics Engineers (2009).

All Welcome!

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

Time: 7:00 PM, Thursday, September 17, 2009. 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).

Cyber Infrastructure Protection Conference 2009

This Two-Day conference is a policy and technical seminar presented by the Center of Information Networking and Telecommunications (CINT), the Grove School of Engineering, City College of New York (CCNY), and the Strategic Studies Institute (SSI), at the US Army War College.

The conference invites prominent academic, government and industrial researchers in the fields of information systems security, networking and telecommunications infrastructure protection to present their work to the audience with the purpose of helping policy makers and researchers keep abreast of the latest research and foster greater contact with both researchers and policy makers.

The Internet as well as other telecommunication networks and information systems become integrated part of our daily lives, and our dependency upon their underlying infrastructure is ever-increasing. Unfortunately, as our dependency has grown, so have hostile attacks on cyber infrastructure by network predators. The lack of security as a core element in the initial design of these information systems and the continuous creation of new forms of attacks due to flaws in common desktop software and infrastructure services have resulted in networks becoming increasingly vulnerable. Worms, viruses, and spam are examples of attacks that cost billions of dollars worldwide in lost productivity. Sophisticated distributed denial of service

(DDOS) attacks that use thousand of bots on the Internet and telecommunications networks are on the rise. However, the ramification of such attacks on the network infrastructure might be devastating as it might cause a large-scale network failure, interruption, or unavailability.

Yet many security schemes are based solely on preventive or reactive, rather than proactive, measures such as patching of software or detecting already occurred attacks. Most of the network security configurations are performed manually and require experts to monitor, tune security devices and recover from attacks. On the other hand, attacks are getting more sophisticated and highly automated which gives the attackers an advantage in this arms race.

This conference is proposed to address important issues in the security and protection of information systems and network infrastructure policy and directions. This includes classification of network infrastructure attacks, the implications of failure of our critical network infrastructures, identifying critical infrastructure networks and services, analysis and risk assessment of current network infrastructure, automating the management of infrastructure security and building defense system to proactively detect attacks in early stage in the network.

See http://134.74.16.84/ for more details.

Time: 8:30 AM to 4:45 PM, June 4 – 5, 2009.
Place: City University of New York, City College (CCNY), Grove School of Engineering Room T-27, 140th Street and Convent Ave, New York NY 10031.
Regustration: Register online: Government, Academia: $75; Industry: $250, (Lunch is included). There is an additional 20% discount for IEEE Members. (students / CUNY Employees fees: $20, lunch is n't included) .
Information: For Registration questions - Mrs Oilda Martinez (professional development@ccny.cuny.edu), for general questions - Dr Ed Camp, (212) 650-6684 (camp@ccny.cuny.edu).

IEEE-USA Establishes New Award for Leadership in Entrepreneurial Spirit

Washington (29 May 2009) - IEEE-USA has established an award to honor an IEEE member for furthering entrepreneurial growth and spirit in the United States.

The IEEE-USA Entrepreneur Achievement Award for Leadership in Entrepreneurial Spirit is designed to honor a member whose perseverance and visionary efforts have created "a successful business that has commercialized technology products or services," and "advanced society through commerce and community improvement."

"U.S. high-tech entrepreneurs are at the forefront of creating quality jobs in the United States and advancing U.S. competitiveness," IEEE-USA Entrepreneurial Activities Committee co-Chair Mauro Togneri said. "We established this award because we think these entrepreneurs should be recognized for the key role they play in strengthening the U.S. economy."

Nominations are open to all IEEE members who demonstrate the entrepreneurial spirit, support IEEE's goals and improve the image of engineers or the engineering profession. See http://www.ieeeusa.org/volunteers/awards/award12.html.

The IEEE-USA Entrepreneur Achievement Award for Leadership in Entrepreneurial Spirit is one of many IEEE-USA awards designed to recognize and honor IEEE members for their professional, technical and literary accomplishments. Nominees for IEEE-USA's literary awards -- for furthering public understanding of the profession and for furthering engineering professionalism -- do not have to be IEEE members. The nomination deadline for 2009 awards is 31 July 2009.

IEEE-USA's awards program is administered under its Awards and Recognition Committee and approved by the IEEE-USA Board of Directors. For additional information, go to www.ieeeusa.org/volunteers/committees/awards or contact Sandra Kim at sandra.kim@ieee.org.

The next Awards Ceremony will be held in conjunction with the IEEE-USA Annual Meeting in Nashville, Tenn., on 6 March, 2010. For more on the 2008 award recipients, see http://www.ieeeusa.org/communications/releases/2009/022509.asp.

IEEE-USA advances the public good and promotes the careers and public policy interests of more than 210,000 engineers, scientists and allied professionals who are U.S. members of IEEE. IEEE-USA is part of IEEE, the world's largest technical professional society with 375,000 members in 160 countries. See http://www.ieeeusa.org.

Contact: Chris McManes, IEEE-USA Public Relations Manager , (202) 530 8356, c.mcmanes@ieee.org.

Nomination for the Southern Area Chair Region 1

Nominations are invited from the excom pool of volunteers for people who would be interested in being candidates to bring forth by the summer meeting so they can make their pitch to all the chairs who would vote at the meeting officially if there are multiple candidates.

Area Chair definition, responsibilities and duties per the excerpt from Region 1 Bylaws are:

4.6.1 Area Chair Responsibilities

1. Provide an informal and direct communication link between the Director and the Sections, Society Chapters, Councils, Subsections and members
2. Meet with the Section Chairs within their Area during the Region 1 summer and winter meetings
3. Routinely visit each section within the area, typically at an EXCOM meeting and/or annual awards meeting
4. Serve as "middle management" reminding the Sections within their Area to prepare the Section report for the Region 1 winter & summer meetings, submit annual reports to the IEEE, and other items as requested by the Region Director and/or Region Secretary.
5. Promote exchange of information and ideas among the Sections within an Area.
6. At the Executive Committee level, represent the interests of the Sections in their Areas. They also act as the representatives of the Region Director at the local Area level in matters delegated to them by the Region Director
7. Work with the Director-Elect to prepare an agenda for the training sessions at the Region 1 summer meeting.
8. Work with the Director-Elect, who represents the Region on the RAB/TAB Section/Chapter Rejuvenation Committee, to ensure that all existing Chapters within their Area are removed from the action-required list through rejuvenation, not dissolution
9. Work with the various Region 1 Committee Coordinators
10. Serve as members of the Region 1 Awards Committee

4.6.2 Guidelines
The Area Chair is expected to
1. Develop an open and active communications between the Area Chair and the Sections chairs, typically using email.
2. Organize, within funding limitations, meetings where senior personnel from all sections in the Area can come together to discuss items of interest to the Sections.

4.6.2 Authority

Each Area Chair operates under the direction of the Regional Director, and within the authority specifically granted to them by the Region 1 Bylaws. Each Area Chair is provided with a Budget Line Item to enable him/her to carry out his/her Area Chair function.

5.1 AREA CHAIRS DUTIES

5.1 DUTIES

5.1.1 The Area Chair shall provide an informal and direct communication link between the Director and the Sections, Society Chapters, Councils, Subsections and members.
5.1.2 The Area Chair will promote exchange of information and ideas among the Sections within an Area.
5.1.3 At the Executive Committee level, the Area Chairs will represent the interests of the Sections in their Areas. They will also act as the representatives of the Region Director at the local Area level in matters delegated to them by the Region Director.

5.2 SELECTION

5.2.1 Qualifications
Area Chairs must be members of a Section in the Area that they represent, and may not serve more than two consecutive two-year terms in that

position. They must be of IEEE Member or higher grade.

5.2.2 Election/Appointment Process
The Section Chairs of each Area will elect in August of odd numbered years, the Area Chair who will serve in that capacity for the following two years. If the Section Chairs cannot agree on whom to elect, or prefer to act as a nominating committee, then they will, by the end of August of each odd numbered year, present no fewer than two nor more than three candidates for the position of Area Chair. In such a case the Region Director Elect will, no later than October 31 of that odd numbered year, name one of these nominees as Area Chair for the following two years. In the event that the Section Chairs of an Area fail to agree on and submit at least two nominees for the position of Area Chair, the Region Director Elect, without further consultation, will name the Area Chair for the following two years.

If you are interested and would like to put forward your name for this position, please contact Chandra Gupta, c.gupta@ieee.org or call 973 887 5700 x203.

NJ Section Seeks Training Facility

NJIT Electrical Engineer Cracks Code To Detect Media Tampering

An NJIT electrical engineer has cracked the code that will enable researchers around the world to detect tampering with electronic images. "Using our program, we can usually inspect a photograph on a computer screen and know that someone has changed it," said Yun-Qing Shi, a professor of electrical and computer engineering. "We still cannot say, nor can anyone else, where in the media the image has been changed. But we will get there."

Earlier this year, "System and Method of Steganalysis," developed by Shi and his collaborator Guorong Xuan received a U.S. patent. The research has already been licensed. Since 2003, Shi has received four other patents in this area and awaits news of more than two dozen pending patents. Steganalysis is a method of determining whether data has been hidden in a digital medium.

Image tampering came to the world's attention following changes to two widely-recognized images--a Los Angeles Times photo of the Iraqi War in 2003 and a BBC News image of the Israeli air strike against Beirut in 2006. Since then, Shi, an expert in information assurance and digital data forensics who lectures worldwide, has made it his business to highlight new and better ways to detect tampering with electronic images.

"In our digital age," said Shi, "digital media has been massively produced, easily manipulated, and swiftly transmitted to almost anywhere in the world at any time. While the great convenience has been appreciated, information assurance has become an urgent and critical issue faced by the digital world."

In many applications, data hiding, cryptography or a combination of both, will not reveal a problem. Rather, the science of digital data forensics, which gathers evidence of data composition, origin, and history, is necessary. Although this research field remains in its infancy, it is attracting increasing attention from the multimedia-security research community.

Shi lectures often about safety features multi-media users should put in place when posting any kind of media on the Internet. A common safety feature is simply being active: This means taking the time to add or hide secret codes in the original image or media. Codes might be as simple as crediting the photographer or adding a publication date and location.

A digital signature also works. "The signature is generated electronically and then one of many available methods can be employed to hide it," Shi said. Such a tact enables the user to verify the authenticity of a photo by extracting the embedded signature, then comparing it to other signatures possibly written over it.

Of course in most circumstances, most people don't have the time nor technical knowledge to embed a signature or sign their medium. How can an expert like Shi know if the image has been touched? "Thanks to our new patents if a user hasn't embedded identifying information, we will still be able to detect a forged image," said Shi. What our research can't yet determine is where the image has been touched. That's why our research is still ongoing."

Shi is the chair of the local North Jersey IEEE Signal Processing Chapter, a founding editor-in-chief of LNCS Transactions on Data Hiding and Multimedia Security (Springer), an editorial board member of Multidimensional Systems and Signal Processing (Springer), a member of IEEE Circuits and Systems Society and other IEEE committees, and a fellow of IEEE.

He's been a reviewer for Mathematical Reviews; a contributing author for the Comprehensive Dictionary of Electrical Engineering and has chaired more than a half dozen IEEE conferences and taught four tutorials. He received his doctorate from the University of Pittsburgh.

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. 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 "AT" ieee.org
- WIE (Women in Engineering) Affinity Group Volunteers and Committee members needed - contact kduncan "AT" ieee.org
- EMBS (Engineering in Medicine and Biology Society) is seeking a chair and active committee volunteers - contact c.gupta "AT" 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 "AT" ieee.org.

THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS, INC.

IEEE NORTH JERSEY SECTION
MTT-Society and AP-Society Joint Chapter

PRESENT

24th ANNUAL SYMPOSIUM AND MINI-SHOW
FOCUS:
SELECTED TOPICS IN RF AND MICROWAVE TECHNOLOGIES FOR COMMERCIAL AND MILITARY APPLICATIONS

DATE: THURSDAY OCTOBER 1, 2009

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-ec.njit.edu/~ieeenj/NEWSLETTER.html by July 2006.

For further information contact:
CHAIR/EXHIBITION: KIRIT DIXIT (201-669-7599), kdixit@ieee.org
PUBLICITY: ARTHUR GREENBERG, ahg1@lucent.com
EVENT/ LOCATION CO-ORDINATOR: KEN OEXLE (973-386-1156)
CO-CHAIR– TECHNICAL PROGRAMS : HAR DAYAL (973-633-4618)
har.dayal@baesystems.com
CO-CHAIR - TECHNICAL PROGRAM: GEORGE KANNELL (973-386-4170) gkk@lucent.com

THERE IS NO CHARGE TO ATTEND THE SYMPOSIUM OR SHOW

IEEE North Jersey Section Course
C# .NET Programming

Wednesday, October 14, 2009 through December 9, 2009
Eight weekly classes (October 14, 21, 28, November 4, 11, 18, December 2, 9, 2009)
Place: Advanced Technical Marketing, Suite 113, 1719 Route 10, Parsippany, NJ 07054
(Checks should not be mailed to this address)

IEEE North Jersey Section thanks Advanced Technical Marketing ATM for sponsoring this course.

The IEEE North Jersey Section is offering a course entitled "C# .NET Programming". Since 2004, C# .NET has generated significant headway in Fortune 1000 enterprise development systems. Dice.com lists 700+ C# .NET jobs in the New York tri-state area daily! This course will cover the fundamentals of C# language, the .NET framework, window and web-based applications, ADO.NET, ASP.NET, and XML. It will be useful for anyone to develop applications based upon these tools.

You will receive the IEEE Certificate of Completion when you finish the course. Microsoft Corp. has MCAD and MCSD certifications. You may wish to get certified by taking the necessary Microsoft exams with the knowledge gained from this course.

Instructor: **Donald Hsu, Ph.D**., has been a corporate manager for 11 years and is an experienced trainer. Since 2004, he has trained 700+ people in database, Java, WebLogic, XML, and C# .NET courses in 7 organizations.

TOPICS

1. Compare the enterprise development tools using Java to C# .NET
2. Define Visual Studio .NET Version 2005 to 2008
3. Identify C# syntax, data type, control structures and common language runtime
4. Distinguish methods, arrays, object-oriented programming
5. Build graphical user interface, multithreading, files and streams
6. Explain the benefit of using extensible markup language (XML)
7. Select database, SQL server, and ADO .NET
8. Choose ASP .NET, web forms, web services, advanced topics
9. Present student Projects

WHERE: Advanced Technical Marketing ATM Suite 113, 1719 Route 10, Parsippany, NJ 07054
WHEN: Eight Wednesdays, October 14, 21, 28, November 4, 11, 18, December 2, 9, 2008, 6:30 to 9:00 p.m.
COST: IEEE (& affiliate) members $500; Non-IEEE members $550.
CONTACT: Donald Hsu, yanyou "AT" hotmail.com

REGISTRATION: C# .NET Programming

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

As soon as the completed registration form and the payment are received, you are officially registered for this course.
Registration status will be confirmed by email.

☐ I wish to receive IEEE Completion Certificate   Signature:_____

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 29, 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 Oct. 19. 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 - Oct. 29, 2008

Name_____

Address_____

Phone _____

IEEE #_____   Life Grade _____Yes

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

Prior to October 19 and enclose $5.00. Make check payable to **NJ Section IEEE**

Free Workshop
Parallel Programming and Cluster Computing

Sun. June 7 - Sat. June 13, 2009 @ Kean University, Union, New Jersey

http://sc-education.org/workshops/

Please apply to register by *THURSDAY MAY 14*.

DETAILS:
Kean University has partnered with Supercomputing 2009 Education Program's summer workshop series, Shodor, and TeraGrid to host a *FREE* weeklong workshop titled "Parallel Programming and Cluster Computing." It is scheduled Sunday, June 7 through Saturday, June 13, 2009 on the campus of Kean University in Union, New Jersey.

The Parallel Programming & Cluster Computing workshop focuses on techniques and tools for parallel computing. Much of this workshop concentrates on distributed parallelism (MPI); in addition, shared memory parallelism (OpenMP), instruction level parallelism, Graphics Processing Unit parallelism and hybrid shared/distributed parallelism are also
explored.

Participants will learn about developing, debugging, profiling and tuning of parallel applications across a variety of architectures, using tools from a variety of sources, including GNU, Intel, TotalView, and the Bootable Cluster CD. The material is designed for undergraduate faculty from a variety of disciplines who would like to add parallel computing to their undergraduate teaching and research. In addition, undergraduate and graduate students are encouraged to attend alongside a sponsoring faculty member. The workshop is hands-on, with exercises in both programming and curriculum development.

The workshop will be *FREE* (except you have to pay your own transportation costs to and from Kean University) and we'll feed you and house you at no charge.

The workshop will require a $150 FULLY REFUNDABLE DEPOSIT. To get the refund, you'll need to attend the workshop EVERY DAY, and submit the daily surveys as well as the pre-survey and the post-survey. The deposit is not required until you are accepted into the workshop.

The registration webpage for this Parallel Programming and Cluster Computing workshop is:

http://sc-education.org/workshops/

If you want to apply to register, you *MUST* do so no later than *THURSDAY MAY 14*.

We would prefer that you apply *RIGHT AWAY* if at all possible so we know how many people to plan to accommodate.

You'll need to create a login, which you'll be directed to automatically when you click the button to apply. Please bear in mind that you are *applying* for registration, and that applying doesn't guarantee acceptance. We plan to accept up to 24 people.

Preference will be given to faculty (or soon-to-be-faculty) who expect to use the workshop content in their own teaching, although historically we have accepted a limited number of others (students, staff etc.) at some workshops. Please feel free to forward this e-mail to any faculty, staff, etc., who may be interested, not just locally but nationwide.