



# IEEE Long Island Section 2005 Annual Awards Ceremony

## MESSAGE FROM THE CHAIRMAN

*I am delighted to welcome all of you to the 2005 Long Island Section's Awards Banquet. Tonight we will be presenting awards in several categories from the national to the section level to members of the Long Island Section. The IEEE uses these prestigious awards to recognize its members for their outstanding accomplishments. These awards honor technical, professional and service achievements to the engineering profession. I am very pleased that the members of the Long Island Section continue to demonstrate the excellent quality of their capabilities and character.*

*If you read the about the awardees in the program you'll find that tonight's awardees are examples of the best the engineering profession can offer.*

*The section is honored to be able to present the IEEE-USA president for 2006, Dr. Ralph W. Wyndrum, Jr. as our keynote speaker. Among his many credits is a long and fruitful career as a top executive at ATT and Bell Labs. I eagerly anticipate his presentation.*

*We will be taking time tonight to thank the section volunteers. All of us can be proud of the efforts expended by these people who work many hours in order to help provide such IEEE services such as technical lectures and professional development events to the members on Long Island. One excellent example of these events is the Long Island Systems, Applications and Technology Conference, to be held May 6 of this year. Please support this event, information about it is available tonight.*

*I'd like to thank Ted Pappas for doing such a great job planning and directing this year's Awards Banquet. And thanks to the Awards Committee headed by Jesse Taub in their important work of selecting and advocating tonight's awardees.*

*I'd also like to take this opportunity to thank our corporate sponsors. Without their generous financial support and the use of their facilities the section could not provide the technical program and professional development activities. The supporters of today's events are listed in the program, I thank each one of them.*

*Last, but not least, we thank our honorees who are a continuing source of pride for the Long Island Section.*

**Sincerely,  
Daniel A. Rogers, Chairman IEEE Long Island Section**



## IEEE Awards Ceremony Agenda

6:00 - 7:00 PM	Guest Arrival, Hors d'oeuvres	8:00 - 9:00 PM	Dinner
7:00 - 7:10 PM	Call to Order, Welcome Daniel Rogers Chairman, IEEE, L.I. Section	9:00 - 9:10 PM	IEEE/IEEE-USA Awards Ralph Wyndrum, IEEE-USA
7:10 - 7:30 PM	Keynote Address: Ralph Wyndrum President-Elect IEEE-USA	9:10 - 9:25 PM	IEEE Region 1 Awards Jesse Taub, Awards Chairman
7:30 - 7:45 PM	IEEE Long Island Section Volunteer Recognition Daniel Rogers	9:25 - 9:30 PM	IEEE Fellow Award Jesse Taub, Awards Chairman
7:45 - 8:00 PM	IEEE Long Island Section Awards Jesse Taub, Awards Chairman	9:30 - 9:35 PM	Closing Remarks Daniel Rogers Chairman, IEEE, L.I. Section
		9:35 - 10:00 PM	Dessert and Coffee



# The Institute of Electrical and Electronics Engineers, Inc. Long Island Section

## 2005

### SECTION OFFICERS

CHAIR: Daniel Rogers, Telephonics Corporation  
1st VICE CHAIR: David Wolff, BAE Systems  
2nd VICE CHAIR: Ted Pappas, KeySpan Energy  
TREASURER: Bill DeAgro, Northrop Grumman Corporation  
SECRETARY: Stephen Dodd, Telephonics Corporation  
JUNIOR PAST CHAIR: Christian DiFranco, Data Device Corporation  
SENIOR PAST CHAIR: Dave Mesecher, Northrop Grumman Corporation

### SOCIETY CHAPTER CHAIRS

Aerospace and Electronic Systems: Richard S. Pierro, Technology Service Corporation  
Antennas and Propagation: Kurt Vetter, Brookhaven National Labs  
Communication: Dave Mesecher, Northrop Grumman Corporation (Chair)  
Brian Quinn (Vice Chair)  
Computer: Daniel Rogers, Telephonics Corporation  
Electromagnetic Compatibility: Santo Mazzola, BAE Systems (Chair)  
David Sterner, Honeywell (Vice Chair)  
Engineering in Medicine and Biology: Joel Levitt, Pratt Institute  
Lasers and Electro Optics: Efrain Avila, Unwired Technology (Chair)  
Gregory Hovagim, Student (Associate Chair)  
Instrument and Measurement: Ken Jacobsen  
Microwave Theory and Techniques: James Colotti, Telephonics Corporation  
Nuclear and Plasma Sciences:  
Chair: Ralph James, Brookhaven National Laboratories  
Vice Chair: Arlene Zhang, Brookhaven National Laboratories  
Power Engineering: Michael Miller, Con Edison  
Signal Processing: James Voulgarakis  
Vehicular Technology: Arlene W. Zhang, Brookhaven National Laboratories

### ACTIVITY LEADERS

Awards Nomination: Jesse Taub, Consultant  
Educational Activities: Charles Richardson, The Literacy Council  
Employee Assistance: Bruce Willard, Telephonics Corporation  
LI Consultant's Network: Irwin Weitman, Consultant  
EJCLI: Charles Richardson, The Literacy Council  
Historian: Roderic V. Lowman  
IEEE USA: Robert Bruce, Consultant  
Industry Liaison: Dave Mesecher, Northrop Grumman Corporation  
LIMSAT: Frederick Kruger, Kruger Associates Inc.  
Membership Development: Ted Pappas, KeySpan Energy  
Nominations: William Rooney, Northrop Grumman Corporation  
PACE: Irwin Weitman: Consultant  
Professional-Society Liaison: Dave Mesecher, Northrop Grumman Corp.  
Pulse Business Manager and Editor: Babak Beheshti, NYIT  
Student Activities: Roman Khazanovich, BAE Systems  
Tellers Committee: John Peterson, Consultant  
Webmaster: James Colotti, Telephonics Corporation

### Student Officers

SUNY Stony Brook: Gregory Hovagim, President  
SUNY Stony Brook: Konstantin Poukalov, Vice President

### EX OFFICIO OFFICERS

Region 1 Director: Roger Sullivan  
Area B Chair: Gerhard Franz  
METSAC Chair: Ernest A. Heidelberg

## 2004

### SECTION OFFICERS

CHAIR: Christian DiFranco, Data Device Corporation  
1st VICE CHAIR: Daniel Rogers, Telephonics Corporation  
2nd VICE CHAIR: David Wolff, BAE Systems  
TREASURER: Bill DeAgro, Northrop Grumman Corporation  
SECRETARY: Basiru Samba, Morgan Stanley  
JUNIOR PAST CHAIR: Dave Mesecher, Northrop Grumman Corporation  
SENIOR PAST CHAIR: William Rooney, Northrop Grumman Corporation

### SOCIETY CHAPTER CHAIRS

Aerospace and Electronic Systems: Richard S. Pierro, Technology Service Corporation  
Antennas and Propagation: Kurt Vetter, Brookhaven National Labs  
Communication: Dave Mesecher, Northrop Grumman Corporation  
Computer: Daniel Rogers, Telephonics Corporation  
Electromagnetic Compatibility:  
Chair: Richard Mohr, R.J. Mohr Associates  
Vice chair: Santo Mazzola, BAE Systems  
Engineering in Medicine and Biology: Joel Levitt, Pratt Institute  
Lasers and Electro Optics:  
Chair: Efrain Avila, Unwired Technology  
Associate Chairman: Gregory Hovagim, Student  
Instrument and Measurement: Ken Jacobsen  
Microwave Theory and Techniques: James Colotti, Telephonics Corporation  
Nuclear and Plasma Sciences:  
Chair: Ralph James, Brookhaven National Laboratories  
Vice Chair: Arlene Zhang, Brookhaven National Laboratories  
Power Engineering: Alan Osborne  
Signal Processing: Babak Beheshti, NYIT  
Vehicular Technology: Brad Craig,  
Arlene W. Zhang, Brookhaven National Laboratories

### ACTIVITY LEADERS

Awards Nomination: Jesse Taub, Consultant  
Educational Activities: Charles Richardson, retired, Sperry Gyroscope Co.  
Employee Assistance: Bruce Willard, Telephonics Corporation  
LI Consultant's Network: Irwin Weitman, Consultant  
EJCLI: Charles Richardson, retired, Sperry Gyroscope Corporation  
Historian: Roderic V. Lowman  
IEEE USA: Robert Bruce, Consultant  
Industry Liaison: Dave Mesecher, Northrop Grumman Corporation  
LIMSAT: Frederick Kruger, Kruger Associates Inc.  
Membership Development: Ted Pappas, KeySpan Energy  
Nominations: William Rooney, Northrop Grumman Corporation  
PACE: Irwin Weitman: Consultant  
Professional-Society Liaison: Dave Mesecher, Northrop Grumman Corp.  
Pulse Business Manager and Editor: Babak Beheshti, NYIT  
Student Activities: David Wolff, BAE Systems  
Tellers Committee: John Peterson, Consultant  
Webmaster: James Colotti, Telephonics Corporation

### Student Officers

SUNY Stony Brook: Gregory Hovagim, President  
SUNY Farmingdale: Russell Bannan, President  
Hofstra University: Jamie Patterson, President

### EX OFFICIO OFFICERS

Region 1 Director: Roger Sullivan  
Area B Chair: Gerhard Franz  
METSAC Chair: Ernest A. Heidelberg



# ***Congratulates This Years Award Recipients!***

## **Section Awards**

Outstanding Young Engineer: Justin Maloney-Hahn  
Charles Hirsch Award: Peter Vanier  
Alex Gruenwald Award: David Mesecher  
Harold Wheeler Award: Peter McVeigh  
Athanasios Papoulis Award: Prof. Kenneth Short

## **Region 1 Awards**

New Technical Concepts: Richard Clouse  
New Technical Concepts: Mark Zuchowski  
Electrical Engineering Management: Gary Cachules  
Electrical Engineering Management: Stanley Zoubek

## **Newly Elected Fellows**

Dr. Gregory Belenky

## **National Awards**

Dennis J. Picard Medal: Dr. William Caputi, Jr.  
Robert S. Walleigh Award: Charles Rubenstein



## **Keynote Speaker**

**Dr. Ralph Wyndrum, Jr.**

Dr. Wyndrum leads Executive Engineering Consultants, consulting in areas of R&D resource allocation and decision sciences targeted at new product and service development. He served as Business Development Director for SmartOrg, Inc. , a start-up firm based in Menlo Park, CA. He also teaches a Seminar on Leadership, Decision Quality and Strategic Planning at Rutgers University. Prior to assuming these positions, he had a long and successful career at Bell Labs and AT&T Labs, beginning in thin film and solid state circuit R&D, and retiring as Program Planning and Management Vice President.

During his 36 year career at AT&T and Bell Labs, Dr. Wyndrum was a member of the Technical Staff; Supervisor of Integrated Circuit Exploratory Development; head of several Transmission Systems and R&D Departments; Director of Systems Analysis; Director of Quality Processes; Director of Quality, Engineering, Software and Technologies; Technology Vice President of AT&T Labs; and Program Planning and Management Vice President. In 2000 at AT&T Labs, he was an Executive Consultant where he was involved in a wide variety of business-related projects and development of a graduate level Internet Protocol curriculum for AT&T's technical staff. In the 1970s and 1980s, Dr. Wyndrum served as a CCITT (ITU) delegate from AT&T for local Transmission Systems. He led the development for manufacture of several major Subscriber Loop carrier systems now serving millions of customers, and of the early prototype TouchTone ® Telephones. He also taught graduate EE courses at Stevens Institute of Technology as adjunct Professor from 1981-1988, and has advised masters and doctoral thesis students at Rutgers and NJIT.

In the IEEE, Dr. Wyndrum is the 2006 President of IEEE-USA. In 2004 he served as IEEE Vice President of Technology Activities and has served as a member of the IEEE Executive Committee, and the IEEE Board of Directors for five years. In 2003, he was VP for Technology Policy of IEEE-USA. He has served on the Boards of Governors of the Communications Society and the CPMT Society, and was the President of the CPMT Society. He has also served as IEEE Publications Vice President, and on the Technical Activities Board (TAB), the United States Activities Board, as an ABET evaluator.

Dr. Wyndrum holds BS and MS degrees in Electrical Engineering and an MS in Business Administration (Executive MBA) from Columbia University and a Doctor of Engineering Science (Eng.Sc.D.) from New York University. He has published over 40 papers, articles and reviews and is a contributing author to texts published by Wiley and McGraw Hill. He is frequently invited to speak at international conferences and workshops and holds six patents.

# Long Island Section Awards



## Outstanding Young Engineer

### Mr. Justin Maloney-Hahn

*“For outstanding contributions to the development of the Monopulse Secondary Surveillance Radar Air Traffic Control System”*

Justin Maloney-Hahn earned his BSEE degree in 2001 from Bucknell University in Lewisburg, PA. While at Bucknell, Justin was a member of the IEEE and was inducted into the Alpha Lambda Delta and the Tau Beta Pi Honor So-

cieties. He then earned a Master of Engineering degree in Systems Engineering from Cornell University in Ithaca, NY in 2002.

Justin’s first job after college is his current- a systems engineer at Telephonics Corporation in Farmingdale. In this position, he has been lucky enough to be involved with all facets of IFF/MSSR systems, from IRAD to system integration, test, and sell-off. He has had the opportunity to work in areas ranging from detailed digital design to requirements analysis to system modeling and simulation. Justin was promoted to Engineer I in January of 2004.



## Charles Hirsch Award

### Mr. Peter Vanier

*“For new radiation detector concepts with important application to non-proliferation and homeland security.”*

Peter Vanier was born in St. Kitts, West Indies when it was still a British colony. He attended high school in Basseterre, St. Kitts, won the Leeward Islands Scholarship and “went up” to Cambridge University. He obtained an Honours degree in Natural Sciences, and came to the US for graduate school at Syracuse University, where he earned an MS in Materials Science and a Ph.D. in Physics. His experimental thesis explored the effects of high magnetic fields on photoluminescence in compensated silicon at liquid He-3 temperatures, and the detection of electron spin resonance by means of optical transitions.

After a Post-doc at the Belfer Graduate School of Science, where he studied crystal growth of mercury cadmium telluride for infrared detectors, he came to Brookhaven to work on electro-optical characterization of amorphous silicon for solar cells.

He then became a naturalized US citizen, and joined the Neutral Beam Test Facility at BNL where he assembled the computer control and data acquisition system for the Laser Resonance Fluorescence experiment. That project was followed by studies of high-temperature erosion by hydrogen of protective coatings for nuclear fuel particles, in support of a particle-bed nuclear rocket program. He performed data acquisition and analysis for an experiment at the Alternating Gradient Synchrotron to determine the spallation neutron production rate as a function of energy in the 1-4 GeV range, in support of the Accelerator Production of Tritium.

In the Nonproliferation and National Security Department at BNL, he has worked for the last 10 years on radiation signatures of nuclear weapons, and was part of a BNL team that measured gamma ray spectra from all the types of weapons in the enduring US stockpile. He is a member of the DOE/DoD Joint Coordinating Group for cooperative projects with Russian weapons laboratories under the Weapons Safety and Security Exchange Agreement. At present he is engaged in the development of advanced radiation detectors, most notably in the Coded Aperture Thermal Neutron Imaging Project (CATNIP).

## Athanasios Papoulis Award

### Professor Kenneth L. Short

*“For pioneering contributions to computer engineering education”*



Kenneth L. Short received the BSEE degree from Howard University, Washington, DC and the MS and Ph.D. degrees in electrical engineering from Stony Brook University. He is a professor of electrical and computer engineering at Stony Brook where he has taught for over thirty five years.

He has authored/coauthored technical papers and book chapters in the areas of digital systems design, embedded systems design, and instrumentation. He is the author of the books Microprocessors and Programmed Logic (Prentice-Hall) and Embedded Microprocessor Systems Design (Prentice-Hall). He is a recipient of the Frederick Emmons Terman Award from the American Society for Engineering Educa-

tion. He has also received numerous teaching awards, including: The Chancellor’s Award for Excellence in Teaching, State University of New York and the President’s Award for Excellence in Teaching, SUNY at Stony Brook.

At Stony Brook he has developed and taught numerous courses. He developed the ABET accredited computer engineering program at Stony Brook and served as its director for many years. He was instrumental in this program later becoming a separate a major.

He developed and serves as director of the Embedded Systems Design Laboratory and the Digital Systems Rapid Prototyping Laboratory at Stony Brook.

He is a member of the IEEE and a registered professional engineer in the state of New York

---

## Alex Gruenwald Award

### David Mesecher

*“For dedicated and effective leadership in fostering IEEE professional and technical activities on Long Island”*



Dave began his career at Hazeltine Corporation, now part of BAE Systems, where he modeled adaptive antenna arrays using Space-Time Adaptive Processing to achieve wideband-jamming cancellation in the presence of multipath for spread-spectrum airborne military communications systems. Later at AIL Systems, now EDO Corporation, he modeled and developed signal processing techniques for passive geolocation systems, using super-resolution algorithms to achieve blind-source separation. Dave then worked on base-band receiver digital signal processing algorithms for CDMA wireless communications systems at InterDigital Communications, including channel estimation, adaptive receiver filtering, carrier recovery, smart-antenna processing,

and handset location. He is now a Principal Engineer at Northrop Grumman Integrated Systems, Airborne Early Warning and Electronic Warfare Systems, where he has developed and applied tools to analyze the performance of HF over-the-horizon and of SAT-COM communications systems. He is also involved in creating expert systems to automate tactical target assessment, and is developing conformal antenna array processing techniques for future-generation military satellite communications. Dave is a Senior Member of the IEEE and of the AIAA, Chairman of the Long Island Chapter of the IEEE Communications Society, and Senior Past Chair of the IEEE Long Island Section. He holds 23 US patents and several foreign patents for signal processing techniques in the areas of wireless channel estimation and carrier recovery, adaptive antenna array processing, and wireless location techniques.

Dave lives in Huntington Station with his wife Margaret and their two boys Mitch and Keith.

---

## SPECIAL THANKS TO OUR AWARDS NOMINATION COMMITTEE

### Jesse Taub, Chairman

**Dr. Ralph James  
Alfred Lopez  
Rod Lowman**

**Dr. Velio Marsocci  
Richard Mohr  
Dr. Martin Shooman**



## Harold Wheeler Award

### Peter McVeigh

*“For outstanding leadership in the field of antenna development resulting in many effective products”*



Mr. McVeigh received the B.S.E.E. degree from Manhattan College, New York in 1967 and the M.S.E.E. from Polytechnic University, New York in 1973.

He has been employed at EDO Corporations/AIL Systems Inc., Deer Park, New York for 37 years. He is currently the Vice President of Sensors & Force Protection Systems. This group develops advanced communications and electronic countermeasures systems as well as advanced antenna sub-systems for a variety of U.S. Government agencies and aerospace primes. The group generates more than \$80M in annual revenue of which

about 15% is international. Its principal operations are in Bohemia, NY and Thousand Oaks, CA.

Mr. McVeigh is responsible for the operational performance of the Communications and Countermeasure Systems and the Antenna Products and Technology operating divisions of EDO. A wide variety of sophisticated electronic systems and products are produced in these two divisions for literally hundreds of customers and a wide variety of applications. Key products currently being supplied include:

- Warlock and Shortstop Electronic Protection Systems(SEPS) for the US Army
- Interference Cancellation Systems for the F-18 Growler, CV-22, Rescue 21, and Rivet Joint
- Anti-Jam GPS systems for guided munitions for Raytheon for the US Navy and US Army.
- 40,000 antennas per year for military and commercial (aviation) applications.
- R&D in broadband electrically small antennas for DARPA and the US Army CECOM

Prior to this time, Mr. McVeigh was General Manager of the Antenna Systems Division. During that time, EDO(at that time AIL) acquired Dorne and Margolin Inc and integrated it with AIL's own antenna business under Mr. McVeigh's leadership. During his tenure as GM, he turned around the profitability and increased division revenue by 50%. During that time key development programs were successfully pursued that led to production of many new sophisticated antenna products and systems for:

- Low observable antennas for the F-18 E/F and the Comanche helicopter
- A broadband ESM antenna system for the Israeli AF "Crowned Crane" program
- SPS-67 V(4) Antenna Group Upgrade from NAVSEA for the Aegis class ships
- State-of-the-art circular array direction finding antennas for ESM systems for International shipboard and submarine applications.

Previously, Mr. McVeigh served in various capacities on a number of AIL programs. He developed special function antennas for the ALQ-161 self protect system for the B-1B, Linear Interferometer Arrays for the LHX and AN/ALR-77 electronic Sensing Measure (ESM) Systems, as well as novel phased arrays for Tactical Microwave Landing Systems (TMLS). In addition, he has developed low RCS antennas for advanced platforms.

He is a senior member of the IEEE, a member of the professional societies for Microwave Theory and Techniques (MTT) and Antennas and Propagation (AP), Old Crows, Navy League and AUSA. In 1996, Mr. McVeigh was the recipient of the IEEE Long Island Section's Charles Hirsch Award "For innovation in phased array antenna design". He has authored or co-authored a number of Antenna and Microwave technology related papers and is the holder of 7 U.S. patents relating to advanced antenna and microwave technology.

He and his wife Nelda reside in Hauppauge, New York and enjoy a variety of outdoor activities including boating, swimming and hiking. They have three children. Peter, age 34, an environmental engineer presently pursuing a law degree at GWU; Ursula, age 33, is a medical doctor practicing in Vermont; and James, age 28, a chemical engineer, is presently studying law at UCLA.

---

# Symbol Technologies Salutes the IEEE LI Section Award Winners



## Outstanding Student Branch Award

### State University of New York at Stony Brook

*“For exceptional involvement in student activities programs and extraordinary efforts on promoting the benefits of IEEE membership”*

Under the stewardship of Greg Hovagim, Konstantin Poukalow, Shelanda Clark and Scott Perl the student branch has expanded from 63 members in September, 2003 to 89 in August, 2004 to 122 in December, 2004. Active members have also grown to 32 in December of 2004 or an active member rate of over 26%.

The branch attracts members by offering workshops on careers and resume writing and by a series of discussions with engineers from industry. BAE, Turner Construction, Data Device Corporation and Telephonics engineers have met with branch members. The IEEE lab was also recently refurbished into a professional looking workspace.

---

### *2005 IEEE Long Island Section Awards Banquet Sponsorship*

## **Honor Roll**

**BAE Systems**

**EDO Corporation**

**KeySpan Corporation**

**The Long Island Power Authority**

**Northrop Grumman Corporation**

**State University of New York at Stony Brook**

**Symbol Technologies, Inc.**

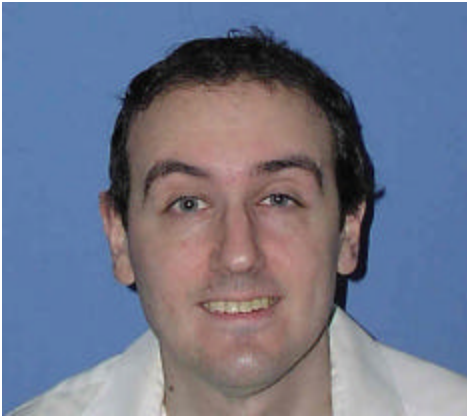
**Telephonics Corporation**



## **IEEE facts**

- The IEEE is a non-profit, technical professional association of more than 377,000 individual members in 150 countries.
- The IEEE produces 30 percent of the world's published literature in electrical engineering, computers and control technology.
- The IEEE annually holds more than 300 major conferences
- *IEEE Vision: To advance global prosperity by fostering technological innovation, enabling members' careers and promoting community world-wide.*
- *IEEE Mission: The IEEE promotes the engineering process of creating, developing, integrating, sharing, and applying knowledge about electro and information technologies and sciences for the benefit of humanity and the profession.*
- *The IEEE and its predecessors, the AIEE (American Institute of Electrical Engineers) and the IRE (Institute of Radio Engineers), date to 1884.*

# Region 1 Awards



## Region 1 Award For Electrical Engineering Management

### Mr. Gary Cachules

*“For excellence in Electrical Engineering Management of Intercommunications System Development”*

Gary Cachules has a B.S. (Academic Honors) in Electrical Engineering from Columbia University and an MBA (With Distinction) from Cornell University. He has over 19 years of progressively responsible engineering and management experience in the communications industry.

Mr. Cachules is currently Director of Engineering at Telephonics Corporation Communication Systems Division, Farmingdale, NY. In this position, he is responsible for overseeing the engineering activities on the Secure Digital Intercom System (SDI) product line. The SDI system handles all interior communications among operators and communications to/from onboard radios and data links. Telephonics' SDI systems are in use on a wide variety of platforms throughout the world.

At Telephonics, Mr. Cachules was previously the Sr. Engineering Manager of the Analog Engineering Group. He was responsible for managing the engineering staff that develops all analog designs in the Communications Systems Division. In this position he led and developed innovative process improvements to enhance design quality and reduce costs. This included development of a new electrical engineering design review process as well as a new audio quality test standard. Prior to this position, he was Sr. Engineering Manager, Carbone Transit Programs, where he was responsible for all engineering activities on 6 different communications/diagnostic, systems for the rail (mass transit) industry. These systems are currently in use in 6 cities throughout the US.

Mr. Cachules team developed the R142 Subway Car Transit Communication/Trainline Multiplexer System. This was an innovative audio multiplexing system for transit applications, resulting in several patentable designs that extended E1/T1 technology to meet the unique requirements posed by a railcar voice/data communications system. These systems are currently in operation on over 1000 subway cars in New York City.

Mr. Cachules is a member of the American Radio Relay League as a licensed Extra Class Amateur Radio Operator (N2AMC). Gary Cachules is a Senior Member of the IEEE and is a member of ETA KAPPA NU and TAU BETA PI.

---



## Region 1 Award For Electrical Engineering Management

### Mr. Stanley Zoubek, Jr.

*“For contributions defining and designing requirements for advanced Hawkeye Weapons Systems.”*

Stan Zoubek was awarded a Bachelor of Science in Electrical Engineering by Rensselaer Polytechnic Institute in 1984. He began his career at the Grumman Corporation in the E-2C laboratory as an assistant engineer in the radar group, contributing to the development of the AN/APS-139 and AN/APS-145 radar systems and versions of the AN/APS-125 and AN/APS-138 modified for foreign military sale. As a result of the development of the LJF (least-jammed frequency) system incorporated into the AN/APS-125 for an overseas customer, Stan was awarded US patent 5,017,921 as co-inventor of a “Radar System and a Method of Operating a Radar System” in 1991. Through the 1990s, he became an important member team developing the Adaptive Detection System (ADS) radar, an electronic scan, space-time adaptive processing system that would eventually become the basis for the Advanced Hawkeye upgrade to the E-2. Through the summer of 1999, Stan co-led a team in successfully conducting a ground-based demonstration of this radar system at a US Navy facility, enabling the development to proceed to the next phase. He served the Advanced Hawkeye program as Avionics IPT Leader before becoming its Chief Engineer in July of 2003. In that role, Stan holds the overall technical responsibility for the development of the Advanced Hawkeye system, a major upgrade to the Hawkeye aircraft's mission system and air vehicle, which will be designated as the E-2D when deployed to the US Navy fleet.





## Region 1 Award For New Technical Concepts in Electrical Engineering

### Mr. Mark Zuchowski

*“For Application of Adaptable Digital Signal Processing to Reconnaissance Systems”*

Mr. Zuchowski was awarded a B. S. in Electrical Engineering (Cum Laude) and a M. S. in Electrical and Computer Engineering from the University of Massachusetts at Amherst.

Upon completion of his graduate work he joined Kollmorgen Corporation as an Independent Research and Development Engineer. In this capacity he successfully designed, developed, tested and demonstrated an electro-optical commutator and phase-lock-loop based controller for scanner motors employed in Micro-FLIR. As a Principal Fiber Optics Engineer he performed systems level design tradeoff studies, including system architecture and flux budget analysis, for fiber optic communication systems with simultaneous video, data and control signal transmission capability. As a Senior Systems Engineer he was

the lead on major electro-optical systems employing dual axis, inertial and servo, line of sight (LOS) stabilization for FLIR, TV and visual sensing.

Upon joining BAE Systems in 1993, Mr. Zuchowski became a Senior Staff Engineer. He was the lead servo engineer on camera systems for military aerial reconnaissance and surveillance incorporating multiple, LOS, stabilization and control loops under processor control.

He was the recipient of the 2002 BAE Innovation Award for Integrated Camera Motor Design and the 2002 BAE Innovation Award for Integrated Camera Digital Servo System Design.

---



## Region 1 Award For New Technical Concepts in Electrical Engineering

### Mr. Richard Clouse

*“For significant contributions to Microwave and Millimeter-wave Integrated Circuit technology”*

Rich received his BSEE ('83) from Northeastern University and his MSEE ('88) from Polytechnic University. He will complete his MBA at Stern School of Business at New York University in June '05.

Rich is Manager of the Microelectronics Department of EDO Corporation where he is responsible for the development and production of microwave and millimeterwave hybrid microelectronic designs. Previously, as Section Manager of RF Component Engineering, he oversaw the design of components and sub-systems in support of EDO's Defense Products and Technologies Division.

Rich's technical interest includes all hybrid and MMIC design covering the entire microwave and millimeterwave spectrum. He has been involved in designs of low noise amplifiers for the Space Shuttle and TDRS programs; power amplifiers for the F22 IFDL system, phased array modules for the HRUPAA program incorporating EDO designed MMIC phase shifters and power amplifiers. He is also interested in the design of many types of microwave filters and other passive microwave circuits as well as millimeter wave frequency transition designs for HTCC and LTCC packages, waveguide to microstrip transitions and waveguide spatial power combiners.

Rich has authored or co-authored several technical papers on millimeter wave MMIC receiver protection and transmit module design. He holds a patent, and was awarded the Eugene Fubini award in 1998 for technical excellence.

Rich is a member of the IEEE-MMT and Engineering Management Societies

Rich is married and resides in Huntington, New York.

# IEEE Medal



## Dennis J. Picard Medal for Radar Technologies and Applications

### Dr. William Caputi, Jr.

*“For conception and development of innovative range and Doppler bandwidth reduction techniques used in wideband radars and high resolution synthetic aperture radars”*

William J. Caputi, Jr. was born in Brooklyn, New York on March 17, 1936. He received the bachelor's of science degree from Cooper Union in New York in 1958, the masters of science degree in physics from Adelphi college in Garden City New York in 1963, and a doctorate in electrical engineering from the University of Michigan in August of 1972.

From 1958 to 1969 he was employed by Airborne Instruments Laboratory (AIL) (now EDO), in Deer Park New York where he specialized in high-resolution radar and synthetic aperture radar and processing systems. From 1969 to 1972 on leave from AIL, he pursued his doctorate degree at the University of Michigan and also held a position at the University of Michigan Willow Run Labs. (now ERIM), where he ran the Radar Techniques section which included the electronics laboratories, two aircraft instrumented with state of the art radar imaging systems, and a target and systems properties group. In December 1972 he returned to AIL as a consultant, continuing his work on synthetic aperture radar but also working in low probability of intercept and passive surveillance, particularly the exploitation of jammer radiation in bistatic surveillance systems. In 1994 he retired from AIL and is presently an independent consultant working for several clients, primarily with the Telephonics- Lockheed team developing the Navy lamps helicopter APS 147 radar which has ISAR imaging capability, and with AIL and Syracuse Research Corp. in the design for the DARPA Forester foliage penetration radar.

Dr. Caputi has pioneered many new signal-processing techniques for radar imaging. Most well known is his invention and development of stretch and spotlight radar. Since their demonstration in the early 1980s these techniques have been incorporated into many ultra high-resolution synthetic aperture radar systems and continue to be employed in state-of-the-art systems to this day.

Dr. Caputi is a life fellow of the IEEE. He holds 9 patents or copyrights and has published several technical papers. He has served on the defense science board task force on synthetic aperture radar and has been a consultant on several classified programs. He was listed in Who's Who in technology today in 1985.

---

# Fellow Award



### Dr. Gregory Belenky

*“For contributions to semiconductor laser technologies”*

Dr. Belenky's theoretical and experimental research into the nature of optical and carrier confinement established that the thermal and operating characteristics of 1.3 and 1.5 micron InGaAsP/InP lasers could be improved significantly with relatively simple changes during laser material growth. As a consequence, these changes were implemented in production devices very soon after the predicted performance improvements were verified. These innovative approaches to laser design and new characterization techniques affected not only telecommunication lasers but also the technology of semiconductor lasers in general. His ideas have found application in the development of continuous wave mid-infrared lasers and laser array with record room temperature characteristics in the 2.3 to 2.7 micron spectral

range. Dr. Belenky's group at the State University of New York (SUNY) is one of the leading research laboratories in the area of laser development and is a recipient of major grants.

Prof. Belenky is the author of more than 120 papers, principal author of four reviews and several patents. His former Ph.D. students are successfully working in the USA, Russia, Japan and Azerbaijan.

(Continued on page 13)

# IEEE-USA Award



## Robert S. Walleigh Distinguished Contributions to Engineering Professionalism Award

### Mr. Charles Rubenstein

*"To honor members of the engineering profession for long term dedicated effort and outstanding accomplishments in advancing the aims of IEEE professional activities in the United States"*

Charles P. Rubenstein is a tenured professor of engineering and information science at the Pratt Institute graduate School of Information and Library Science. He has an earned doctorate in Bioengineering from the Polytechnic Institute of New York and a masters degree in Library and Information Science from Pratt Institute.

Dr. Rubenstein is a senior member of the IEEE. His major service to IEEE has been as a member of the IEEE-USA Board of Directors and Operating Committee (2003), a member of the IEEE-USA PACE Committees 1999-2004 (Vice-Chair 2003-2004), a member of the Technical Activities Board (2003), a Member-at-large of the IEEE Publications Board (2000-2002), a member of the Engineering Management Society Board of Governors since 1988 (acting vice president, conferences: 2005, vice president - member relations: 2000-2004). A candidate for Region Director-elect 2006-2007, he has been a member of the Region 1 Board since 1992 serving on the ExCom and as elected Area B Chair (2002-2003), as Region 1 Conference Coordinator (2004-2005), as Region 1 Electronic Communications Coordinator (1992-2005) and as a member of the METSAC Council (2002-2003). He has served as the Region 1 Chapters Coordinator (1992-1999), and Region 1 Student Activities Coordinator (1982-1984), served two terms on the Electro Board of Directors (METSAC Council representative: 1983-1987 and 1999-2001) and in several New York Section ExCom capacities including member-at-large (1994-present). His leadership service to the IEEE includes a term as IEEE Educational Activities Board Life Long Learning Council member and EAB Society Product Committee Chair. For the past few years he has been an active contributor to the LI Section Executive Committee and is the Conference Chair of the Section's new Long Island Systems, Applications and Technology Conference (LISAT2005).

He has been the recipient of numerous IEEE leadership awards including the Long Island Section's Alex Gruenwald Professional Activities Award (2004) "for fostering a wide variety of professional activities on Long Island and beyond," the IEEE-USA Citation of Honor (2000) "for outstanding leadership of, dedication to, and contributions to IEEE-USA Professional Development programs," an IEEE Third Millennium Medal (2000) "for Distinguished and Outstanding Service to the IEEE Engineering Management Society, the IEEE New York Section, and the Engineering Community," the IEEE U. S. Activities Board Divisional Activities Award (1997) "for development of Internet and HTML education and training sessions for IEEE volunteers," an IEEE Regional Activities Board Innovation Award (1985) "for outstanding leadership and example in integrating student activities with all facets of IEEE activities and for outstanding leadership in the Student-Professional Awareness Conference (S-PAC) Program," the IEEE Centennial 'Keys to the Future' Outstanding Young Engineer Award (1984, IEEE Instrumentation and Measurement Society), and the IEEE Region 1 Award (1983), "for Outstanding Teaching Contributions and Counseling of Student Branches."

---

(Continued from page 12)

Currently Dr Belenky is a professor at the State University of New York at Stony Brook, Department of Electrical and Computer Engineering. Prior to this he worked at Lucent Technologies Bell Laboratories in Murray Hill, NJ, AT&T Bell Laboratories, Murray Hill, NJ, Opto-electrical Device Research Department, University of Maryland, College Park, Department of Nuclear Engineering and Physics Department, the Institute of Solid State Physics, Moscow, the Institute of Physics, Baku and the Institute of Semiconductors of Ukrainian Academy of Sciences, Kiev.

Dr. Belenky holds a MS in Physics from the State University, Baku, USSR, a Ph.D. in Physics and Mathematics from the Institute of Semiconductors, Kiev, USSR and a Doctor of Physical and Mathematical Sciences from the Institute of Physics, Baku, USSR.

In addition to being a newly elected IEEE Fellow, Dr. Belenky was awarded the IBM Faculty Award in 2003 and the State Award for Outstanding Achievements in Studies of Anisotropic Solids in 1989. He has over 120 publications in scientific journals and holds three US patents. He is also the research supervisor for 12 doctoral dissertations.



**BAE Systems Congratulates**

*Mark Zuchowski*

**on Receiving the Region 1 Award  
for Electrical Engineering Management  
and Salutes All of the  
Long Island Section Awardees**

**BAE SYSTEMS**

**Innovating for a safer world.**

**EDO Corporation**  
congratulates our award recipients

*Peter McVeigh*

EDO Electronics Systems  
*Long Island Section Harold Wheeler Award*

*Richard L. Clouse*

EDO Electronics Systems  
*Region I Award for Technical Concepts  
in Electrical Engineering*

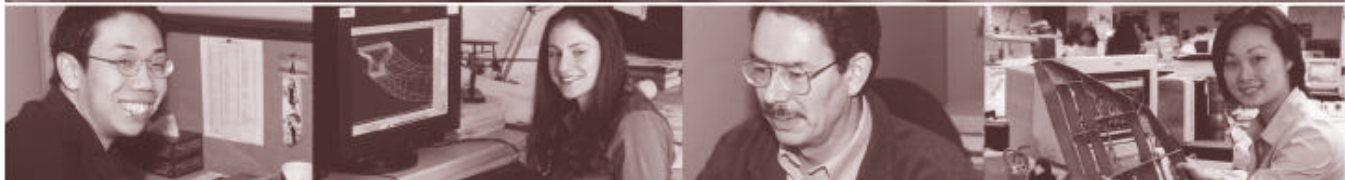
**EDO** corporation  
GLOBAL TECHNOLOGY REACH





*KeySpan Corporation and the  
Electric Business Unit  
Congratulate the  
Long Island Section Recipients  
of the 2005 IEEE Awards*





# David Mesecher Stanley Zoubek, Jr.

Members of our Airborne Early Warning and Electronic Warfare Systems team in Bethpage and recipients of the LI Section Alex Gruenwald Award and the Region 1 Award for Electrical Engineering Management, respectively; and all of this year's IEEE award winners.

**NORTHROP GRUMMAN**

DEFINING THE FUTURE

[www.northropgrumman.com](http://www.northropgrumman.com)  
©2005 Northrop Grumman Corporation



Congratulations  
to the  
2005 IEEE Long Island Section  
Award Recipients  
for their  
Accomplishments and Contributions  
to the  
Engineering Profession.



**STONY  
BROOK**

STATE UNIVERSITY OF NEW YORK

*Stony Brook University*

*and*

*The College of Engineering*

*and Applied Sciences*

*Congratulates IEEE*

*Long Island Section Award Recipients*

*Ken Short, Athanasios Papoulis Award*

*Gregory Belenky, Fellow Award*

*SBU IEEE Students for the Outstanding  
Branch Award*



## About the IEEE LI Section Awards

### **Harold Wheeler Award**

This Award recognizes an IEEE member who has demonstrated outstanding technical and management abilities. Harold Wheeler was a world-famous engineer, who throughout his career at Hazeltine and Wheeler Labs, made many important technical contributions. He was a founding member of the IEEE Long Island Section.

### **Alex Gruenwald Award**

This Award honors an IEEE member who has made important contributions to our profession on Long Island, and to the IEEE at large. Alex Gruenwald was an IEEE pioneer in the area of professional activities. He was a very active member of the Long Island Section, and went on to be a Region 1 Director.

### **Charles Hirsch Award**

This Award recognizes an IEEE member who has made an outstanding technical contribution that has benefited Long Island. Charles Hirsch was a creative engineer at Hazeltine.

### **Outstanding Young Engineer**

This Award honors a Long Island IEEE member who has made important technical contributions prior to his or her 35th birthday.

### **Athanasios Papoulis Award**

This award is presented to educators in engineering, science, or mathematics, either living or teaching within the boundaries of the Long Island Section of the IEEE, who has demonstrated innovative teaching techniques.

Athanasios Papoulis was a professor at Polytechnic University who was committed to promoting quality technical education on Long Island.

### **Outstanding Student Branch Award**

This award is given to an IEEE student branch that is from one of the Long Island engineering schools. The Award recognizes outstanding activities that encourage student interest in the IEEE.

## About the IEEE Region 1 Awards

### **New Technical Concepts in Electrical Engineering**

For significant patents, for discoveries of new devices or applications, and for significant reductions in components or processes.

### **Electrical Engineering Professionalism**

For personal, high level leadership in research and design performance in support of all phases of the Electrical Engineering Profession.

### **Promotion of Self-Development for Practicing Electrical Engineers**

By arranging courses, seminars, and tutorials to enhance the educational level and the competence of practicing electrical engineers.

### **Enhancement of IEEE in Industry and Community Service**

For outstanding service to the IEEE at the Chapter, Section, Region, and national level, and for major contributions to the industry and to the community.

### **Electrical Engineering Management**

For managerial excellence in organization, leadership, design, and development.

### **Electrical Engineering Support for Student Activities**

For improving communications between the IEEE and a Student Branch or Student Group; for support and service to a Student Branch or Student Group; for service and leadership to the student community.

### **The William Terry Distinguished Lifetime Service Award**

This award is intended to recognize those whose personal efforts have provided leadership, creativity, guidance, hard work, and inspiration in a wide range of IEEE activities over a long period of time.

## About the IEEE Fellow Award

Since 1963, IEEE has acknowledged those individuals who have contributed to the advancement of engineering science and technology.

As it stands today, the IEEE Grade of Fellow is conferred by the Board of Directors upon a person with an extraordinary record of accomplishments in any of the IEEE fields of interest. A brief citation is issued to new Fellows describing their accomplishments and the total number selected in any one year does not exceed one-tenth percent of the total voting Institute membership.

**For information on how to submit an IEEE member for an award, please contact Jesse Taub, the IEEE Long Island Section Awards Committee Chairman at [jtaub@aol.com](mailto:jtaub@aol.com) .**



# IEEE PREVIOUS MEMBER RECOGNITION

Long Island Section Historian, Rod Lowman, has compiled this list of past chairmen, living past awardees and fellows elected to the Section, and others attracted to the Section

## WHEELER AWARD

2004 Arie Kaufman  
 2003 Stanley Oken  
 2002 Edward M. Newman  
 2001 Gary R. Lomp  
 2000 James Smith  
 1999 Yacov Shamash  
 1998 Paul Richman  
 1997 Seymour Okwit  
 1996 Henry Bachman  
 1995 Jerome Swartz  
 1994 William Rubin  
 1993 Alfred Lopez  
 1992 Leonard Kahn  
 1991 Ivan Frisch  
 1990 Peter Hannan  
 1989 Patrick Barry  
 1988 Frederic Salerno

## GRUENWALD AWARD

2004 Charles Rubenstein  
 2003 William Rooney  
 2002 Babak Beheshti  
 2001 Thomas A. Campbell  
 2000 Herman Fialkov  
 1999 Eduardo f. Palacio  
 1998 Peter Buitenkant  
 1997 Eleanor Baum  
 1996 Irwin Weitman  
 1995 Stephen Barre  
 1994 Joel Snyder  
 1993 Robert Bruce  
 1992 Robert Barden  
 1991 Sheldon S.I. Chang  
 1990 Donald Christiansen  
 1989 Donald L. Schilling  
 1988 Alexander Schure  
 1987 John Truxal

## HIRSCH AWARD

2004 Raj Bridgelall  
 2003 Bruce Willins  
 2002 Robert H. Pflieger  
 2001 Javed Siddiqui  
 2000 Gary Schay  
 1999 Robert Pang  
 1998 Joseph T. Merenda  
 1997 Donal Neuf  
 1996 Peter McVeigh  
 1995 Christopher Kaiteris  
 1994 Richard Kumpfbeck  
 1993 Zdenek Adler  
 1992 Mathew Dwork  
 1991 Ronald Rudish  
 1990 Sol Greenberg  
 1989 George Sandler  
 1988 Donald Grieco  
 1987 Roderic Lowman  
 1986 Stephen Shapiro  
 1985 Joseph Calviello  
 1984 Richaard Frazzita  
 1983 Prof. E. J. Smith  
 1982 Evelyn Berezin  
 1981 John Stangel  
 1980 Prof. Enrico Levi  
 1979 A.D. Alexandrovich  
 1978 Richard LaRosa  
 1977 Page Burr  
 1976 Patricia Burgmyer

## PAPOULIS AWARD

2004 Peter Voltz

## SECTION IEEE FELLOWS

F. R. Arams  
 E. Aslan  
 H.L. Bachman  
 M.Q. Barton  
 E. Baum  
 H.D. Belock  
 A.J. Bernstein  
 J.P. Blewett  
 L.R. Bloom  
 D.M. Bolle  
 J.J. Bongiorno  
 R.R. Boorstyn  
 J.A. Calviello  
 W.J. Caputi  
 J.H. Chadwick  
 C.T. Chen  
 D. Christiansen  
 J.V. DiFranco  
 J.F. Dopazo  
 A. Dorne  
 C.C. Duncan  
 E.B. Forsyth  
 J.R. Fragola  
 H. Frank  
 R.L. Frank  
 I.T. Frisch  
 R.J. Gambino  
 P. Hannan  
 P.J. Hansel  
 H. Harris  
 S.W. Herwald  
 A. Hessel  
 S. H. Horowitz  
 R.G.E. Hutter  
 L.R. Kahn  
 J. Katz  
 A. Kaufman  
 A. Kershenbaum  
 H.W. Kraner  
 S. Kuo  
 J.B. Horner Kuper  
 R. LaRosa  
 V.R. Learned  
 M.T. Lebenbaum  
 G.B. Litchford  
 P.P. Lombardo  
 A.R. Lopez  
 M. Marcuvitz  
 P.J. Meier  
 G. Merrill  
 W.W. Miehler  
 R. Mohr  
 H.C. Okean  
 S. Okwit  
 K.S. Packard  
 W. Palmer  
 B. Parzen  
 S.T. Peng  
 J.S. Perry

## OUTSTANDING YOUNG ELECTRICAL ENGINEER

2004 Jonathan Garruba  
 2003 Michael Sussich  
 2002 Ronald J. Bajit  
 2001 Fatih M. Ozluturk  
 2000 Scott Weiner  
 1999 Raj Bridgelall  
 1998 Wing C. Kwong  
 1997 Paul Eyring  
 1995 Kenneth Aupperle  
 1994 Ynjuiun Wang  
 1993 Cecelia Jankowski

J. Pierro  
 W.J. Pierson  
 M. Plotkin  
 V. Radeka  
 S.S. Rappaport  
 P. Rehak  
 D. Richman  
 P. Richman  
 A.L. Rossoff  
 L.M. Roytman  
 W.L. Rubin  
 E.W. Sard  
 D.C. Schlerer  
 L.S. Schwartz  
 L. Schwartzman  
 Y. Shamash  
 L.G. Shaw  
 S.M. Shinnars  
 M.L. Shooman  
 M. Simpson  
 R.L. Slevin  
 J.S. Smith  
 E.A. Speakman  
 N.A. Spencer  
 G.W. Stagg  
 G.W. Stroke  
 J. Swartz  
 T. Tamir  
 J.J. Taub  
 D.L. Trautman  
 B.F. Tyson  
 J. Vogelman  
 C.C. Wang  
 D.E. Weissman  
 W. Weng  
 J.J. Whelehan, Jr.  
 G.S. Wickizer  
 D.C. Youla  
 (Others in the Section)

J.E. Boughtwood  
 S.S.L. Chang  
 L.B. Felson  
 R. James  
 H. Kaneko  
 P.M. Lewis  
 A.A. Lundstrum  
 M.W. Migliaro  
 A. Papoulis  
 T. Pavlidis  
 B. Salzberg  
 D.L. Schilling  
 M. Schwartz  
 R.W. Sonnenfeldt  
 J.G. Truxal  
 J. Weinberger  
 A.H. Zemanian

## IEEE-USA

Harvey Altstadter  
 Robert Bruce  
 Charles Rubenstein  
 Lawrence Edelman  
 Thomas Downey  
 Barbara Kent  
 Arthur Rossoff  
 Joel Snyder  
 Jesse Taub  
 Irwin Weitman  
 Victor Zourides

## RAB AWARD

Joel Snyder  
 K. Wendy Tang  
 William Wilkes

## REGION 1 AWARDS

Scott Abrams  
 George Alikakos  
 Harvey Altstadter  
 Richard Augeri  
 Henry Bachman  
 Robert Barden  
 Babak Beheshti  
 Charles Berger  
 John Beukers  
 Stephan Jon Blank  
 Nader Bolourchi  
 Thomas Campbell  
 Frank Cassara  
 Bernard Cheo  
 James Colotti  
 Peter Djuric  
 Melvyn Drossman  
 Matthew Dwork  
 George Eichman  
 Paul M. Eyring  
 Arthur Faverio  
 Joseph Fragola  
 Kenneth Frank  
 Harvey Glass  
 Michael Green  
 Shahe Halajian  
 Richard Hines  
 Robert Hong  
 Ivan Kadar  
 Leonard Kahn  
 Richard Knadle  
 Richard Koch  
 Raymond Lackey  
 Richard LaRosa  
 L.I.F.T.  
 Alfred Lopez  
 Roderic Lowman  
 Peter Lubell  
 Louis Luceri  
 Edward Magill  
 Velio Marsocci

Daniel Mazziata  
 Andrew McNerney  
 Donald Neuf  
 Donald Neuhaus  
 James Onorato  
 Eduardo Palacio  
 J.B. Parekh  
 John Persich  
 Lazaros Pavlidis  
 Bernard Payton  
 John Pedersen  
 John Pierro  
 Walter Poggi  
 Pavel Rebak  
 Paul Richman  
 Ronald M. Rudish  
 Henry Ruston  
 Melvin Sandler  
 Frederick Schuessler  
 Murray Simpson  
 Graham Smith  
 Joel Snyder  
 Martin Somin  
 Jerome Swartz  
 Karl Sygall  
 Jesse Taub  
 K. Wendy Tang  
 Frank Torre  
 Hang-Shen Tuan  
 Charles Verbeke  
 Peter Voltz  
 David Wang  
 Fu-Lin Wang  
 Scott Weiner  
 Irwin Weitman  
 Walt Whipple  
 Bruce Willard  
 Christopher Witt  
 David Wolff  
 Yuanyuan Yang  
 Victor Zourides

## SPECIAL AWARDS

### 2000 Millennium Awards

Harvey Altstadter  
 Henry Bachman  
 Robert Bruce  
 Thomas Campbell  
 David Doucette  
 Ivan Frisch  
 Alfred Lopez  
 Rod Lowman  
 Velio Marsocci  
 Seymour Okwit  
 Eduardo Palacio  
 John Pierro  
 Paul Richman  
 Jerome Schwartz  
 Joel Snyder  
 Wendy Tang  
 Jesse Taub  
 Irwin Weitman  
 Babak Beheshti

### 1988

George Hachbrueckner

### 1987

Bertram Aaron  
 Robert Hong

### 1986

George Emelio  
 Louis Luceri  
 John Persich  
 Edwin Pillar  
 Donald Schilling  
 Alexander Schure

### 1985

Henry Bachman  
 Angelo Orazio  
 Karle Packard  
**1984 Centennial Award**  
 Henry Bachman  
 Donald Christiansen  
 David Doucette  
 L.B. Felsen  
 F.J. Kosasek  
 Roderic Lowman  
 R.A. Olsen  
 Veljko Radeka  
 Arthur Rossoff  
 J. Gregg Stephenson  
 Jay Stewart  
 Joel Snyder  
 Jesse Taub  
 J.G. Truxal  
 David E. Weissman  
 Victor Zourides

### 1983

Robert L. Wendt  
 Victor G. Zourides

### 1982

Ronald B. Hirsch  
 Louis H. Pighi  
 Arnold Rubin

### 1981

S.J. Nuzzo

### 1980

Henry Blackstone  
 Thomas J. Downey

## SECTION CHAIRS

2004 Chris DeFranco  
 2003 David Mesecher  
 2002 William Rooney  
 2001 Babak Beheshti  
 2000 Babak Beheshti  
 1999 Amnon Gilaad  
 1998 Harvey Altstadter  
 1997 Harvey Altstadter  
 1996 Nader Bolourchi  
 1995 Thomas A. Campbell  
 1994 Eduardo F. Palacio  
 1993 Eduardo F. Palacio  
 1992 John Pierro  
 1991 John Pierro  
 1990 Melvyn M. Drossman  
 1989 Klaus Breuer  
 1988 Velio Marsocci  
 1987 Steven Rebovich  
 1986 Donald Grieco  
 1985 Richard LaRosa  
 1984 Arnold Goldman  
 1983 Robert Barden  
 1982 Louis Luceri  
 1981 Donald Neuhaus  
 1980 Alexander J. Kelly  
 1979 David Doucette  
 1978 Edward J. Fuller  
 1977 Victor Zourides  
 1976 Peter D. Lubell  
 1975 Roderic V. Lowman  
 1974 Thomas Schulkind  
 1973 Frank H. Williams\*  
 1972 Joel Snyder  
 1971 Joel Snyder  
 1970 Arthur Rossoff  
 1969 Saul W. Rosenthal\*  
 1968 Henry W. Redlien\*  
 1967 Irwin Vogel  
 1966 Henry L. Bachman  
 1965 Richard C. Price  
 1964 Harold Brownman  
 1963 Murray Simpson  
 1962 William T. Cooke\*  
 1961 Joseph Kearney\*  
 1960 Henry Jasik\*  
 1959 J. Gregg Stephenson  
 1958 R.K. Hellmann\*  
 1957 Eugene G. Fubini\*  
 1956 David Dettinger  
 1955 Paul G. Hansel  
 1954 Wm. F. Bailey\*  
 1953 Vincent Learned  
 1952 Charles J. Hirsch\*  
 1951 Hugh E. Webber\*  
 1950 John Dyer\*  
 1949 Orville M. Dunning\*  
 1948 Harold A. Wheeler\*  
 1947 Eric Isbister\*

\*Deceased

## IEEE MEDALISTS

Henry Bachman  
 William Caputi, Jr.  
 Leopold Felsen  
 Ivan Frisch  
 George Litchford  
 Nathan Marcuvits  
 Anthony Papoulis  
 Mischa Schwartz  
 Jerome Swartz  
 John Truxal