The Valley Megaphone



Newsletter of the Institute of Electrical and Electronics Engineers, Inc. Phoenix Section

December 2007, Volume XXI, Number 12

Executive Committee

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IEEE Phoenix Section Executive Committee meeting minutes can be found at: <u>http://www.ieee.org/phoenix</u>

Please send announcements for Valley Megaphone to Eric Palmer: <u>ecpalmer@ieee.org</u>.

Chapters

Communication & Signal Processing Gang Qian gang.qian@asu.edu

> Computer Society Joy Shetler jsshetler@juno.com

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CPMT Society Victor Prokofiev victor.prokofiev@intel.com

Education Chapter Martin Reisslein, 480-965-8593 reisslein@asu.edu

> EMBS Chapter Ahmed Abdelkhalek <u>ahmed_a@acm.org</u>

EMC Society Harry Gaul, 480-441-5321 harry.gaul@ieee.org

GOLD Mike Poggie Mike.Poggie@ieee.org

Power Engineering Society Jim Hudson jhhudson@srpnet.com

> Solid State Circuits Bertan Bakkaloglu <u>bertan@asu.edu</u>

Waves & Devices Society Chuck Weitzel, 480-413-5906 Chuck.weitzel@freescale.com

The Valley Megaphone is the newsletter of the Phoenix Section of the Institute of Electrical and Electronics Engineers. It is published monthly and reaches about 4000 members. Submit articles, advertisements, and announcements to Eric Palmer at the above email address. Deadline for announcements and advertisements is the third Friday of the month prior to publication. Advertising Rates: Full page: \$200, 3/4page: \$125, ½ page: \$75, 1/3 page: \$50, 1/4 page: \$25.

Change of address/email? Call toll free 1-800-678-IEEE. Please allow 6-8 weeks. Section Web Page is: http://www.ieee.org/phoenix

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Student Branches	Phoenix Section Executive Committee Meeting – First	
ASU Main, Engineering Chair: Cory P. Murphy jeeeasuchair@gmail.com	Tuesday of the month.	
Advisor: Cihan Tepedelenlioglu, (480) 965-6623, <u>Cihan@asu.edu</u>	Time:	6:00 pm to 8:00 pm
ASU Main, Computer Society Chair: Luis Tari <u>luis.tari@asu.edu</u> Advisor: Joseph Urban, 480-965-3374, joseph.urban@asu.edu	Place:	Phoenix Airport Hilton, 2435 South 47th Street Phoenix, AZ, 85034 Phone: 480-804-6017
ASU Polytechnic Chair: Brian Siskoy bsiskoy@gmail.com	Directions:	From 143, exit University Ave, go west, turn right on 47 th street.
Advisor: Barbara Rempel Barbara.Rempel@asu.edu DeVry, Phoenix Chair: Richard Taylor <u>RLTaylor@ieee.org</u>	More Info:	Meetings held first Tuesday of month. No meetings in July and August. All interested IEEE members are welcome to attend.
DeVry, Computer Society Chair:	Contact:	Rao Bonda, Phoenix Section Chairman, r.bonda@ieee.org
NAU, Engineering Chair: Advisor: Phil Mlsna, 928-523-2112 <u>Phillip.Mlsna@nau.edu</u> Embry-Riddle_Prescott		
Chair: Maria Nzmebi Ngomba <u>ngomb7db@erau.edu</u> Advisor: John E. Post <u>postj@erau.edu</u>		
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Life Members Chapter in Phoenix Section

A petition to form Life Members Chapter in Phoenix section has been submitted and approved by the Section executive Committee and Region 6 Director Loretta Arellano.

As of last month there are 435 Life Members in IEEE Phoenix Section. Life Members have long IEEE experience and can contribute significantly to the Section. Life Members Chapter like GOLD Members Chapter, and Consultants Network is an affinity group recognized and supported by the IEEE.

If any Life Member is interested in becoming Chapter Executive Committee Chair, Vice Chair, Secretary, Treasurer or Program Committee Chair, please contact Rao Thallam: Phone (602) 236-8064, Cell: (602) 818-0549, e-mail: thallam@ieee.org

NSF Scholarships in Electrical & Computer Engineering at Embry-Riddle Aeronautical Univ., Prescott, AZ

Embry-Riddle Aeronautical University is offering individual student scholarships funded through a grant provided by the National Science Foundation of up to \$10,000 per academic year (up to four years with qualifying criteria) to academically talented and financially challenged students accepted into either the Electrical Engineering or Computer Engineering degree programs offered at the Prescott, Arizona Campus.

For more information visit http://www.erau.edu/pr/news/1007nsf.html or email john.post@erau.edu

http://ewh.ieee.org/r6/phoenix/



Phoenix Section

Components, Packaging and Manufacturing Technology Society Chapter

& Waves and Devices Chapter



present an all-day workshop on

Registration and Continental Breakfast

Keynote: A Nanotechnology Value Proposition Dr. Herb Goronkin, IEEE Follow and President, Technology Acceleration Associates, Inc.

Power Efficient, Multi-gigabit I/O Design for Terascale Microprocessor Platforms Mr. Randy Mooney, Intel Fellow, Intel

Dr. Steve Voldman, IEEE Follow & Distinguished Lecturer

ESD and Latchup In RF and Power Technologies

10:00AM - 10:30AM The Limits of the Continuum Dielectric Model

Workshop Welcome Dr. Vasu Afturi, Workshop Cheirman, IEEE Senior Member and Program Manager, Intel

EMERGING DEVICE AND PACKAGING TECHNOLOGIES

AGENDA

8:00AM - 8:10AM 8:10AM - 8:40AM

8:40AM - 9:10AM

9:10AM - 9:40AM

9-40AM - 10-00AM Break

Morning Session 7:00AM - 8:00AM

ABSTRACT

The semiconductor industry is entering an era with bemendous opportunities to exploit emerging technologies for the banefit of diverse markets. Moore's Law requires intensive materials introvations to maintain far momentum. New markets in the anals of bioletechorics and sensors are twentiging the existing manufacturing infrastructure while incorporating new materials and processes. This one-day workshop will bring together experts from industry, academia, research tabs, and consorties to share bechnology visions and dacuas technical opportunities for both Moore's Law and More-Than-Moore.

Sectional opportunities for bain wooks a Law and server-intervedow. We are excited to present morning and aftermon keynobe addresses, by two indeworthy authorities. Dr. Hieb Goronkin, IEEE Felow, Will give the keynobe 'A Namodenholdgy Wake Propesiation'. Dr. Goronkin served as Vice President and Director of Motorola's Physical Research Laboratories until 2003. The is presently addive in the nanotechnology field as President of Technology Academistion Associates, Inic: as a vertilery partner in Lux Capital, co-cheir of the Nandbuanesa Atlance; and a member of the Governing Board of the Center for Integrated Nandechnology initiative for Defense and arreas on numerous compression in New Medico. He is also involved with the California Nanotechnology Initiative for Defense and arreas on numerous compress and adheave boards. serves on

serves on numerous company and advisory boards.			Dr. Mark Van Schäfgaarde, Professor, ASU School of Materials
The legence The Big Integration - Academisted Supply Chain and SP Technology Integration' will be presented by D: Ho-Ming Tong, IEEE Fellow & Datinguished Lecturer, and OM & Chief R&D Officer at the ASE Group. D: Tong has had key advanced package development management positions at both ASE and BM. The has authored or co-authored over 70 patents, more than 300 technical publications, and three bools on electronic packaging.		10:30AM - 11:00AM	Impact of Micro and Nano Scale Devices in Chemical and Biological Applications Dr. Samhta Dasgupta, Managar, Davice Integration Lab, Micro & Nano Studure Technology, GE Global Research
		11:00AM - 11:30A M	Reliability Challenges for Active Implantable Medical Devices Dr. David Brhart, Director of Reliability & Product Analysis, Meditonic
		11:30AM - 1:00PM	Lunch
COMMITTEE MEMBERS		Afternoon Session	
Workshop Chair Dr. Vaaudeva P. Adud (480) 554-0360 vpadud@lees.org	Workshop Co-Chair Dr. Charles E. Weitzel (480) 413-5906 chut k weitzel@freezosis.com	1:00PM - 1:30PM	Keynots: The Big Integration - Accelerated Supply Chain and SiP Technology Integration Dr. Ho-Ming Tong, IEEE Follow & Dislinguished Lecturer, GM& Chiel R&D Officer, ASE
Technical Program Committee	Registration Committee Chair: Dr. Viadimir Noveski	1:30PM - 2:00PM	Technologies Enabling 3D Integration - Thru-Silicon Via Focus Mr. Paul Siblend, VP ElectroChemical Deposition, Semibol
Chair: Mel Miller Co-chair: Debendra Malik	Co-chair: Dr. Sergio Pacheco Arrangements Committee	2:00PM - 2:30PM	Opportunities and Challenges for Use of Nanotechnology & Nanomaterials - A Speculative Perspective
Vendor Committee Chair Steve Rockwell	Chair: Dr. Shane Johnson Co-chair: Victor Prokofley		Technology Development, Intel
Co-chair: Dr. Aleksandar Aleksov	Publicity Committee	2:30PM - 2:50PM	Break
Electronic Media Committee Chair: James E. Drye	Chair: Dr. Anisir Agrawal	2:50PM - 3:20PM	Flexible Displays and Flexible Electronics Dr. David Allee, Assoc Prdessor of Electrical Engineering & Backplane Electronics; R&D Director, Flexible Display Center, ASU
For additional information	and vendor registration	3:20PM - 3:50PM	Active Matrix Backplane Technologies for Flexible Displays and Electronics Dr. Kalluf Sarma, IEEE Senicr Member and Senicr Research
Online Registration			Fallow, Honaywall
www.ecteve.com/go/leeeph/secv	ionkahop.2007	3:50PM - 5:00PM	Panel Discussion: Future Challenges and Opportunities for Emerging Technologies
(DMT)	TIAD		Chair: Dr. Steve Goodnick, IEEE Fellow and Assoc. VP for Research, ASU
	ATTIN - CARL AND - CARLS	ALL DAY VE	NDOR DISPLAYS

ALL DAY VENDOR DISPLAYS

http://ewh.ieee.org/r6/phoenix/

IEEE Computer Society - Phoenix Chapter December 2007 Meeting Next meeting is February 6, 2008 (due to the holidays)

Speakers: Taylor Leaming & Zhu Zhou Date: 6:00 P.M., Wednesday, December 5, 2007

Location: DeVry University, 2149 West Dunlap Ave, Phoenix, AZ 85021 (1 mile east of I-17 on Dunlap, SE corner of 22nd Ave and Dunlap).

Networking will be in the Courtyard (6-7PM with light meal) Presentation at 7PM

Free, everyone is welcome. Please tell others about this meeting.

Electronic System Level (ESL) Modeling and Methodologies

The field of Electronic System Level (ESL) continues to grow and build momentum, as the array of vendor offerings continues to grow in response to emerging industry standards and a widening variety of challenges.

With the establishment of the IEEE-1666 ESL Language Reference Manual (LRM), and the release of the TLM 2.0 (Transaction Level Modeling) Draft 2 by OSCI, the industry stands poised on the threshold of a new level of interoperability between vendor tools, third-party IP, and Customer's needs.

The opportunities for application of ESL methodologies are many, ranging from architectural exploration to power estimation, software development, models and IP, early RTL verification, pre-silicon validation, higher-level synthesis, improved operability between abstraction levels, and more.

This talk will present a high-level overview and historical perspective on the evolution of System Level Design, including an introduction to SystemC and TLM. We will discuss some of the key challenges and opportunities facing the industry as it evolves to adopt and integrate ESL design methodology in order to manage increasing complexity, reduce costs, and shorten TTM (Time to Market) for today's products.

About the Speakers

Taylor Leaming

Taylor Leaming, an IEEE member since 1996, serves as a senior engineer in Intel's DEG Advanced Development Operations Group, where he is focused on development of ESL models, System Level Design tools, flows and methodologies, and Virtual Platforms. In addition to his development activities, he serves as chair for several ESL-related venues.

Prior to Intel, Taylor worked in Europe and the U.S. as a senior staff engineer at STMicroelectronics, where he and his team designed and introduced the world's first fully-integrated dual-mode USB/ISO Smartcard chip, authored numerous patents and publications, and developed a validation architecture for the Trusted Platform Module.

Earlier, he served in several roles as senior staff engineer and manager while at Motorola, where he was involved in the development of the 68060 and ColdFire microprocessors, and later in System-on-Chip design tools and methodologies. Taylor began his career developing board-level designs for high-end real-time computer graphics systems used in aircraft simulators and other training, while working at Evans & Sutherland Computer Corporation. He holds five patents related to USB and Smartcards, with ten others pending. His other interests include travel, personal computing and home improvement projects with his wife.

Zhu Zhou

Zhu Zhou has been working on various System Level Design methodologies/tools for more than ten years. As senior performance architect at Intel, Zhu Zhou develops standard-based transaction level modules for architectural exploration, defines and evaluates ESL design flows, and investigates power modeling methodology at the transaction level. Prior to Intel, he served as a staff principal engineer in Freescale Semiconductor's Wireless and Mobile System Group, where he established high-level system design methodology using an internal SystemC-based tool for architectural exploration in terms of performance and power. Earlier, he spent more than six years as an applications engineer in the system level design group at Cadence Design Systems. He holds bachelor's and master's degrees in electrical engineering from Tong Ji University, Shanghai, PRC, and a Ph.D. in electronic engineering from Jiao Tong University, Shanghai, PRC.

For more information about this meeting, contact <u>joy.shetler@computer.org</u> Would you like to be a speaker at this or future meetings? We are always looking for interesting speakers to cover computer related topics. Contact <u>C.Vasquez-Carrera@computer.org</u> for more information on becoming a speaker today.

Call for Papers GENSIPS'2008



IEEE International Workshop on Genomic Signal Processing and Statistics

Phoenix, Arizona June 8–10, 2008 http://gsplab.tamu.edu/gensips2008

Recent advances in genomic studies have stimulated synergistic research in many cross-disciplinary areas. Genomic data, especially the recent large-scale microarray gene expression data, present enormous challenges for signal processing and statistics, which has led to the development of the new field of Genomic Signal Processing (GSP). This workshop is the sixth in a series of international scientific meetings devoted to the area of GSP and its applications in biology and medicine. The workshop addresses the emerging need for demonstrating to the signal processing community the potential for using signal-processing and statistical tools to uncover complex biological phenomena. The scientific program will include invited talks, tutorials, contributed papers and poster presentations. Participants will have the opportunity to be exposed to the most recent developments in the field and meet colleagues from all around the world.

AREAS OF INTEREST

Topics of interest to the conference include, but are not limited to:

- Signal processing and statistical approaches for functional genomics problems
- Statistical inference of biological networks from experimental data
- Pattern recognition methods for functional genomics
- Control theory and systems theory techniques for systems biology
- Models for cellular metabolism and intercellular signaling
- Modeling and simulation of biological regulatory networks
- Novel architectures and implementation methods for large-scale functional genomics
- High-throughput hardware and software approaches to genome-scale network modeling
- Integration of heterogeneous data
- Microarray image and data analysis
- Signal processing methods in sequence analysis
- Computational methods for modeling and simulation of biological regulatory networks

SUBMISSION PROCEDURES

Prospective authors are invited to submit contributions using the electronic procedure described on the conference website. All submissions must follow the formatting instructions specified on the website. Acceptance of papers will be based on appropriateness of the topic, quality, novelty, and clarity of exposition. Each paper will be reviewed by at least two referees appointed by the Program Committee. At least one author of each accepted submission must be prepared to register and attend the conference.

IMPORTANT DATES

Dec 22, 2007	Two to four-page summaries due
Feb 22, 2008	Accept/reject notifications sent out
Apr 1, 2008	Final two to four-page camera-ready papers due
Jun 8-10, 2008	Workshop

VENUE

GENSIPS'2008 will be held at the Embassy Suites Biltmore, in Phoenix, Arizona, which is located in the Biltmore area of Phoenix, home of fine dining, shopping, and other attractions, all within walking distance of the hotel.

ORGANIZING COMMITTEE

General Chair: Aniruddha Datta, Texas A&M University, College Station
 Technical Program Chairs: Paola Sebastiani, Boston University
 Gustavo Stolovitzky, IBM T.J. Watson Center
 Ciprian Doru Giurcaneanu, Tampere University of Technology
 Tutorial Chair: Ilya Shmulevich, Institute of Systems Biology
 Plenary Speaker Chair: Ioan Tabus, Tampere University of Technology
 Special Session Chair: Tewfik Ahmed, University of Minnesota
 Finance Chair: Ranadip Pal, Texas Tech University
 Publication Chair: Yufei Huang, University of Texas at San Antonio
 Local Arrangement and Registration: Jianping Hua, Translational Genomics Research Institute
 Publicity Chairs: Ulisses Braga-Neto, Texas A&M University
 Seungchan Kim, Translational Genomics Research Institute and Arizona State University

PROGRAM COMMITTEE

Tatsuya Akutsu, Kyoto University Gil Alterovitz, Massachussetts Institute of Technology Junior Barrera, University of São Paulo Michael Bittner, Translational Genomics Research Institute Xiaodong Cai, University of Miami Yidong Chen, National Cancer Institute, NCI/NIH Paul Dan Cristea, University of Bucharest, Romania Nevenka Dimitrova, Philips Research Simon Godsill, University of Cambridge, UK John Goutsias, The Johns Hopkins University Arjang Hassibi, University of Texas at Austin Robert S. H. Istepanian, Kingston University, UK Ivan Ivanov, Texas A&M University Stephen Marshall, University of Strathclyde, UK Lijun Qian, Prairie View A&M University Gail Rosen. Drexel University Dan Schonfeld, University of Chicago Chao Sima, Translational Genomics Research Institute Anne Stomp. North Carolina State University Qi Tian, University of Texas at San Antonio Xiadong Wang, Columbia University Z. Jane Wang, University of British Columbia Stephen Wong, The Methodist Hospital Research Institute Rui Yamaguchi, University of Tokyo Byung-Jun Yoon, Texas A&M University Xiaobo Zhou, Harvard Medical School

Engineering and the Environment Conference and Exhibition

For additional information, contact Michael Andrews, <u>m.andrews@ieee.org</u>, (602) 368-6013

Volunteers are needed to serve on the Organizing and Technical Committees for the first Engineering and the Environment Conference and Exhibition planned for March 2009.

The ENGINEERING AND THE ENVIRONMENT CONFERENCE AND EXHIBITION offers engineers and technical professionals the opportunity to:

- Share experience, concepts, innovations and technologies that address various environmental issues
- Demonstrate constructive concern from a global technical community
- Promote public awareness of engineering solutions to environmental issues
- Involve and inspire students, both university level and K-12, by including them in discussions, demonstrations and exposure to emerging technologies
- Provide a public event that will enhance the public image of the engineer and technical professional
- The event that is politically supportive/neutral and represents an untapped, unbiased knowledge base

The ENGINEERING AND THE ENVIRONMENT CONFERENCE AND EXHIBITION is designed to provide an opportunity for the engineering and technical community to address environmental issues of concern by the engineering community and design considerations that address sustainability. The Exhibition will provide an opportunity for organizations to spotlight emerging technologies and create innovative solutions for a number of environmental concerns.

Presentations can be a combination of technical track presentations, forums and tutorials. The **technical program** would be organized and managed similarly to other IEEE technical conferences with Track/Program Chairs, formal call for papers and refereed papers. The **forum** will be hosted by the conference with speakers invited based on a specific area of expertise or field of interest. **Tutorials** would be classroom-based presentations that provide conference attendees and the general public with implementable solutions to specific problems.

Technical Tracks

• Energy

- Energy conservation, building materials, lighting systems and controls, low voltage, starters, thin film, etc.
- Renewable power generation, biomass, building materials, fuel cells, geothermal, hydrogen, nanomaterials and nanocells, nuclear, solar, wind, etc.

• Green Materials

- Standards
- Consumer and Industrial Electronics
- Building and construction materials
- Integrated elements
- Infrastructure elements

• Impact of Emerging Nations

- Use of natural resources
- Design of new manufacturing and distribution facilities
- Pollution control systems
- Regulations and self-regulated development

• Nanotechnology

- Nanotoxicology
- Nanopollution
- Nanosensors and control systems

• Manufacturing

- Consumer electronics
- Emerging economies
- New manufacturing and distribution facilities, processes and systems
- Sustainability
 - Green engineering (process, building and infrastructure improvements)
 - Industrial Ecology (improved operating efficiency and waste reduction)
 - Ecological Engineering (systematic resource restoration)
 - Earth Systems Engineering (mitigation systems)
 - Energy systems
 - Water use, reclamation and reuse
 - Buildings
 - Transportation systems

Forum:

In addition to the technical tracks identified, the conference could host a forum(s) that specifically address:

- A specific environmental issue
- National initiatives
- Funded research initiatives
- Transferable or repeatable approaches in manufacturing that positively impact the environment
- Award winning systems



IEEE PHOENIX SECTION ANNUAL BANQUET Saturday, February 9th, 2008



Hilton Phoenix Airport - Grand Ballroom, Phoenix, Arizona

AWARD NOMINATION INSTRUCTIONS

- 1. This Awards Guide lists the awards along with the selection criteria that will be implemented for selecting the award recipient.
- 2. Please read through this awards guide to help you in selecting the award category for nomination.
- 3. Complete the award nomination form given at the end of this document and submit ONLY as an email attachment to the IEEE Phoenix Section Annual Banquet Organizing Committee member responsible for the award category along with a copy to Dr. Vasu Atluri, Awards Committee Chair. Dr. Vasu Atluri's email address is <u>vpatluri@ieee.org</u> and telephone number is (480) 227-8411. The list of contacts is as follows:

For Member Category Nominations, please send the form along with supporting documents to Dr. Rao Bonda, Chair, at <u>r.bonda@ieee.org</u>. He can be reached by telephone at (602) 413-6121.

For Chapter / Society Category Nominations, please send the form along with supporting documents to Dr. Rao Bonda, Vice Chair, at <u>r.bonda@ieee.org</u>. He can be reached by telephone at (480) 413-6121.

For Non-Member Category Nominations, please send the form along with supporting documents to Dr. Keith Holbert, Secretary, at <u>keith.holbert@asu.edu</u>. He can be reached by telephone at (480) 965-8594.

For Corporate Category Nominations, please send the form along with supporting documents to Dr. Vasu Atluri, Awards Committee Chair, at <u>vpatluri@ieee.org</u>. He can be reached by telephone at (480) 554-0360.

For Educational Category Nominations, please send the form along with supporting documents to Mr. James E. Drye, Student Activities Coordinator, at <u>jdrye@ieee.org</u>. He can be reached by telephone at (480) 650-8826.

- 4. Nominator can submit a form for self or for others. All sections of the form should be completely filled by typing in bold and capital letters. If needed, submit additional documents such as resume in support of the nomination.
- 5. Deadline for submission of the nomination form is Friday, January 4th, 2008. Awards Banquet Committee will review the forms and inform the selected candidates and nominators by Friday, January 18th, 2008.

If you have any additional questions, please contact Dr. Vasu Atluri, Awards Committee Chair, at (480) 227-8411 or by email at <u>vpatluri@ieee.org</u>.



IEEE PHOENIX SECTION ANNUAL BANQUET



Saturday, February 9th, 2008 Hilton Phoenix Airport - Grand Ballroom, Phoenix, Arizona

AWARDS GUIDE

(UPDATED OCTOBER 2007)

The scope and purpose of the Section Awards program is to plan, promote and implement award and recognition programs that recognize outstanding performance in furthering the objectives and professional aims of the IEEE Phoenix Section, the IEEE and the IEEE-USA, and to stimulate others to pursue such achievements of excellence.

The Phoenix Section has established the following general award and recognition categories:

- Member
- Chapter/Society
- Non-member
- Corporate
- Educational
- Special Chair

AWARD AND RECOGNITION CATEGORIES

A. Member:

The Section recognizes individual members in two categories:

- Young Engineer of the Year
- Engineer of the Year

The **Young Engineer of the Year** award is offered to recognize an individual of Member Grade in the section with 10 years or less experience in the profession. Ten years include graduate degree study period. Nominations for this award may be offered by individuals, by a company or by a Society Chapter. Qualifications for the award must satisfy at least one of the following criteria:

- Be recognized by his/her employer for important contributions to a project or company mission
- Made important contributions to the Section/Chapter/Conference, profession or the community through leadership activities related to an event(s)
- Publish at least one refereed technical paper
- Hold at least one U.S. patent

The **Engineer of the Year** award is offered to recognize an individual of Member or Senior Member Grade in the section with over 10 years experience in the profession. Nominations for this award may be offered by individuals, by a company or by a Society Chapter. Qualifications for the award must satisfy at least one of the following criteria:

- Be recognized by his/her employer for important and significant contributions to the organization projects or towards the company mission
- Publish at least two refereed technical papers

- Hold at least two U.S. patents
- Made significant contributions to the community or profession

The Section also recognizes members who attain advanced member grade levels including Fellow and Senior Member. Criteria are established by the IEEE.

Fellow recognizes unusual distinction in the profession and is conferred only by invitation of the Board of Directors upon a person of outstanding qualifications and experience in IEEE designated fields. It is conferred to a person who has made important individual contributions to one or more of the IEEE designated fields The Fellow Grade is the highest membership grade which can be achieved within IEEE. Total number selected in any one year does not exceed one-tenth percent of the total voting institute membership.

Senior Member Grade is the highest for which application may be made and requires experience reflecting professional maturity. Candidate should be an engineer, scientist, educator, technical executive, or originator in IEEE designated fields. Candidate should have shown significant practice for at least ten years and significant performance over a period of at least five of those years.

B. Chapter/Society:

The Chapter/Society may provide one award to recognize individual, team or organization using a variety of criteria including technical, professional, chapter / society contribution or other special category. Awards should recognize specific contributions, achievements and efforts (individual or team) in the development and implementation of the criteria used for the award.

An "Outstanding Society Chapter Award" for the IEEE Phoenix Section may also be awarded each year. The Section shall solicit and qualify chapters for the Outstanding Society Chapter Award. Nominees are either provided by the Society Chapters or decided by awards committee. The Section may recognize a Society Chapter using a variety of criteria including technical, professional or other special category. Awards should recognize specific contributions, achievements, and efforts including the number of meetings, workshops, etc. consistent with membership size of the Society Chapter, in the development and implementation of the criteria used for this award.

The Chapter/Society award nominations should be approved and submitted by the Chapter Chair or a Chapter Officer assigned by Chapter Chair. The assigned officer name should be informed by Chapter Chair by email in advance to both Dr. Rao Bonda, Annual Banquet Organizing Committee Member responsible for Chapter / Society Category Nominations, and to Dr. Vasu Atluri, Awards Committee Chair.

C. Non-Member:

The Section may recognize non-IEEE members for exemplary contributions (technical and/or professional) to the engineering profession through their efforts within their company, the community or for the Section.

D. Corporate:

The Section recognizes companies in two categories:

- Large Company of the Year
- Small Company of the Year

The companies are recognized for their outstanding technical and / or professional contributions in furthering the objectives and professional aims of the IEEE Phoenix Section, the IEEE, the IEEE-USA and the field of Electrical Engineering. The Technical Contributions should include significant contributions or advancements in technology or the application of technology in the electronics or electro-technology fields. The specific area of technology is not restricted and may include, but is not restricted to, design and manufacturing processes, new products or creative applications to existing technologies. The Professional Contributions include significant contributions made to further the professional goals and programs of IEEE. Companies may be recognized for specific contribution, achievements and efforts that promote the professionalism goals of the section and IEEE. Nominations may be for a variety of professionalism related areas including support of IEEE members, employee development and training initiatives, community involvement or other programs that improve the general image of the engineer or engineering profession. Companies with less than or equal to 500 employees are considered Small Companies and those with greater than 500 employees are considered Large Companies during the award selection.

E. Educational:

The Section recognizes educational institutions and educators in the following categories:

- Outstanding IEEE Student Branch
- Outstanding Pre-college Educator
- Outstanding Faculty

The Section shall solicit and qualify award candidates for the Student Branch award. Nominees are provided by the student branch, branch advisor, administrators or Society Chapters. The Section may recognize a Student Branch using a variety of criteria including technical, professional or other special category. Awards should recognize specific contributions, achievements and efforts (individual or team) in the development and implementation of the criteria used for this award.

Nominations for Outstanding Pre-college Educator and Outstanding Faculty may be submitted by any member of the Section. Awards should recognize specific contributions, achievements, programs and efforts completed by an individual who promotes technical literacy, or the technical or professional goals of the Section, the IEEE or the IEEE-USA.

The section also recognizes student scholarship winners selected during the year by a committee consisting of section officers. The criteria for selection are based on academic excellence, participation in IEEE activities, contributions to IEEE and financial need.

F. Special Chair:

The Section Chair may wish to provide up to three special awards to recognize individuals or organizations for activities that support the goals of the Section that are not specified within the above categories, such as public service. The Section Chair may solicit inputs and recommendations from the Awards Committee, Section Officers, and Members of the Section.

The Section Chair may recognize IEEE or Non-IEEE members for contributions to IEEE, the engineering profession, and volunteer work. The section chair also recognizes current section officers for their contributions for advancement of the section.



IEEE PHOENIX SECTION ANNUAL BANQUET



Saturday, February 9th, 2008

Hilton Phoenix Airport - Grand Ballroom, Phoenix, Arizona

Award Nomination Form

Completely filled form should be submitted as an email attachment ONLY to the appropriate award committee member Award committee chair should be copied on the email – Award committee contact list are listed on first page

Candidate's Name: (including Dr., Mr. and Ms.)	
Address:	
Telephone Number:	Fax Number:
Email:	
IEEE Member: Ye	No Student Membership #
Award Categories: (p	please select one)
A. Member:	Engineer of the Year Young Engineer of the Year
B. Chapter / Society:	Technical Professional Special Category
	Chapter / Society Contribution
	Outstanding Society Chapter
C. Non-Member:	Contributions to the IEEE / Engineering Profession
D. Corporate:	Large Company of the Year
	Small Company of the Year
E. Educational:	Outstanding Student Branch Outstanding Faculty
	Outstanding Pre-College Educator
F. Special Chair:	IEEE / Engineering Contributions Non-IEEE Contributions
Award Citation: (Limit to Maximum Twenty Words)	
	15



IEEE PHOENIX SECTION ANNUAL BANQUET



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Please provide information in support of the nomination in the space provided below – if needed use additional sheets. Submit other documents such as resume in support of the nomination.

Attention IEEE Students and Advisors;

It is time to consider the "2008 IEEE Student Paper Contest," and the 2008 IEEE Scholarships Applications.

<u>Paper Contest:</u> At the Phoenix Executive Committee Meeting on October 2, 2007, we voted to raise the awards for the student paper contest. The cash awards were raised as shown in the forms to: 1st place: \$500 2nd place: \$300 3rd place: \$100

The due dates established for "The Student Paper Contest" are: Written Papers due: March 1, 2008 Oral Presentations: March 15, 2008

<u>Scholarships:</u> There are two \$1000 scholarships available. The due dates for the IEEE Phoenix Section Scholarships are: Applications due: December 22, 2007 Selection and announcement: January 2008

Regards; Jim Drye IEEE Phoenix Section Student Activities Coordinator



IEEE PHOENIX SECTION SCHOLARSHIPS

Applications Due: December 22, 2007 Awardees Announced: January 2008

Institute of Electrical & Electronics Engineers

IEEE Student Member Scholarships

- For full-time undergraduates who are members of IEEE: approved majors are Electrical/Electronic Engineering, Computer Systems Engineering, Electrical Engineering Technology, Computer Engineering Technology, or Computer Science
- Must attend a university in the Phoenix Section during 2006-07 (*i.e.*, ASU, ASU Polytechnic, DeVry, Embry-Riddle, or NAU)

Scholarship Application Requirement

- Application form (attached) with general information and qualifications including:
 - o financial aid statement, and
 - o one-page personal statement of attainments, interests and goals
- Official transcripts of all college work
- Recommendation letters (optional, but helpful to the selection committee)

For any further Information Please Contact:

Jim Drye jdrye@ieee.org (480) 650-8826

Send Completed Application Materials to: Jim Drye Student Activities Chair 705 E. Bates St. Mesa, AZ 85203

IEI SCHO SCHO (I) Networking the World ^{TW}	E PHOENIX SECTION LARSHIP APPLICATION Due: December 22, 2006) r No
Name ,	, First Middla
Last/Faininy	rn st Mildule
Address Number Street	Apt
City	State Zip Code
Telephone No. ()	E-mail
Social Security No.	Date of Birth
Are you an Arizona resident?	Month/Day/Year
Present School	GPA (and scale)
Class (Fr/So/Jr/Sr)	Academic Probation/
Name of Instructor familiar with your qualifications	Her/His Telephone
College Attending Next Year	Expected Graduation Date
College Major	Specialty within Major, if any

Please complete pages 2 and 3 (Financial Aid Statement and Personal Statement), <u>And</u> Attach Official Transcripts from Present School/College.

IEEE PHOENIX SECTION SCHOLARSHIP FINANCIAL AID STATEMENT

Name	
Marital Status: Married Single	
Can anyone claim you as a dependent? Yes	No
Number of dependents you are able to claim	
Who sponsors your education? Yourself Other	(please specify)
Projected College Costs and Financial Resources (for the	he 2006-2007 School year)
Projected Expenses	
Tuition and Fees:	\$
Books and Supplies:	\$
Transportation (Car/Bus/Insurance)	\$
Room & Board (Dorm/Apt/Food/Utilities/Phone)	\$
Personal (Clothes/Insurance/Recreation)	\$
Total Expenses:	\$
Projected Financial Resources	
Education Loans	\$
Government Grants	\$
Federal Benefits (GI Bill/Social Security/etc)	\$
Scholarships	\$
Parent and/or Spouse Support	\$
Employment (your job income)	\$
Total Resources:	\$

I certify that the information in this scholarship application is true to the best of my knowledge.

Signature

IEEE PHOENIX SECTION SCHOLARSHIP PERSONAL STATEMENT

Name

Please provide a one-page statement summarizing your interests, academic accomplishments, school & athletic activities, community service, education and career goals, and employment history (position, company, dates).

IEEE Phoenix Section Student Paper Contest 2008

The IEEE Student Prize Paper Contest offers the undergraduate IEEE Student member opportunities to exercise and improve both written and verbal communication skills. Throughout an engineer's career, (s)he will be constantly called upon to communicate ideas to others. Researching, writing, and presenting a paper provides a student with invaluable early experience in expressing ideas related to engineering. Since the paper contest primary function is to improve the engineering student's communicative skills, no student should be discouraged from entering the contest due to a false requirement of technical sophistication.

This undergraduate student paper contest consists of a written paper and an oral presentation. The written paper should be in the IEEE region 6 standard, which is available at <u>http://www.ewh.ieee.org/reg/6/MemberStudentActivities/IEEERegionalStudentPaperContestGui</u> <u>delines.doc</u>. (note: I have downloaded a copy and it is attached). Briefly, the type-written papers are 15 pages maximum, double-spaced with 12 pt font. The written paper, as either an MS Word or an Acrobat pdf file, should be emailed to jdrye@ieee.org by 6 p.m. on **March 01**, **2008**.

The oral presentations are 15 minutes plus a 5-minute question & answer period. The oral portion of the contest to be held the morning of Saturday **March 15, 2008**, at the ASU Tempe campus in the ASU Memorial starting at 8 a.m. A computer with projector will be provided for the contestants to use, since PowerPoint slides are the recommended approach. The best place to park that day should be the visitor section of Parking Structure 1 which is located near the intersection of Apache Blvd. and Normal St., and which is a short walk to the south of the Memorial Union (see http://www.asu.edu/map/).

The local cash awards for the paper contest winners are (1) First Place - **\$500**, (2) Second Place - **\$300**, and (3) Third Place - \$100. The five judges are IEEE members from local industries.

The top entrant from <u>each</u> Local Student Branch (ASU Main, ASU Polytechnic, DeVry, Embry-Riddle, and NAU) is eligible to present their paper to the IEEE Region 6 Southwest Area contest to be held April 2008 in "Tucson. AZ".

If you have any questions, please contact:

Jim Drye Student Activities Chair Phoenix Section

Voice: (480) 650-8826 Email: jdrye@ieee.org

IEEE Regional Student Paper Contest Guidelines

Purpose

The IEEE Student Prize Paper Contest offers the undergraduate IEEE Student member opportunities to exercise and improve both written and verbal communication skills. Throughout an engineer's career, he will be constantly called upon to communicate ideas to others.

Researching, writing, and presenting a paper provides a Student with invaluable early experience in expressing ideas related to engineering. Since the paper contest <u>primary function</u> is to improve the engineering student's communicative skills, no Student should be discouraged from entering the contest due to a false requirement of technical sophistication.

A. Eligibility

1. The entrant must be an undergraduate student at a school in the Region at which

there is an IEEE Student Branch at the time of entry and presentation at the Branch contest.

2. A Student must complete and submit an application for membership in IEEE prior to entry in the Branch Contest.

3. An entrant may collaborate writing a paper with additional students, all whom meet the above criteria.

B. Number of Entries

1. There shall be no limit of entries in the local Branch contest. If there is only one entry, the Counselor may declare the author submitting the paper the Branch winner.

2. Each Branch normally enters the first place winning paper in the next level contest.

3. No paper may be entered in the Area or Regional contest without the prior approval and certification of the Branch Counselor.

C. Prizes and Travel Expenses

1. The Institute Life Member Fund will provide the funds for the prize money.

2. Additional prize money may be made available at the option of the Chairman of each contest.

3. The schools represented by the winning Regional papers may receive appropriate recognition from their Region.

4. Co-authors shall share equally in the allocation of cash awards.

5. Regional Student Activities Committee budget shall support the Area and Regional contest expenses, including travel, unless other funds are available.

D. Subject Matter

1. Papers should cover technical, engineering, management, or societal aspects of subjects reasonably within or related to the areas with which the author is familiar, either from courses, hobbies, summer work, or other similar experiences.

2. The work need not be original in content since the primary function of the Student prize paper contest is to improve the student=s communication skills. The work should, however, be original in treatment and concise in coverage of the author's contribution to the subject.

E. Written Preparation

1. All papers must be typewritten, double spaced on one side only of eight and one- half by eleven inch paper. An equation or symbol that cannot be typed may be written in.

2. The pages of the paper must be numbered consecutively. The Introduction, Body, Conclusion, Tables, and Diagrams may not exceed 15 pages while the above sections with the Appendices may not exceed 20 pages.

3. In general, the contents of a Student prize paper shall be organized as follows:

<u>Removable fly-leaf page</u>: Since the judges must handle the papers without knowledge of the identity of the author or his school, it is required that the paper itself show no identification other than the title. The <u>title</u>, name of the author, school and Branch Counselor's name, author's <u>IEEE</u> member number, and his current address must be shown on a fly-leaf which can be removed.
 <u>Title page</u>: On the title page, only the title of the paper should appear. The title should consist of the minimum number of key words necessary to portray accurately the contents of the paper. Reader interest is stimulated by a well-chosen title. The author's name should <u>NOT</u> appear on the title page, nor should any other persons or schools.

(3) <u>Table of Contents</u>: The table of contents should consist of a list of the parts of the paper and the page numbers, in order in which they occur.

(4) <u>Abstract</u>: The abstract should not describe the paper, but should give, in brief, the essential facts of its contents; for example, a brief of the problem or objective and a concise summary of the results or conclusion, touching upon methods or other details only if they are unique or if they are of some particular significance. The abstract should be no longer than 100 words.

(5) <u>Introduction</u>: The introductions should lead to the development of the subject so that the reader may obtain a clear understanding of the significance of the paper or article prepared. This can often be done by briefly giving the state of the art as background and then by bringing out the added advantages of the method of approach and emphasizing the importance of the results or conclusions.

(6) <u>Body</u>: To assist the judges in maintaining objectivity, all mention of the author's name and school should be restricted to a single introductory page. Thus, no mention of the author's name or school should be made in the article. Any references to the author's school should read "the university" without giving the actual name. The main argument of the subject is carried out in the body of the paper, complete with supporting data. The argument should proceed in a logical sequence according to a prepared outline. The writing should be in the third person. Support data and results can be presented most effectively as curves, charts, or tables.

Standard graphical symbols and abbreviations should be used on all drawings. (Ref. Graphic Symbols for Electrical and Electronic Diagrams, IEEE STD 315.) Well known abbreviations may be used in the text but should be defined where used the first time followed by the abbreviation in parentheses. Generally the use of abbreviations should be confined to tables and illustrations. Illustrations and tables should supplement, not duplicate, text materials; likewise, they should complement, not duplicate each other.

(7) <u>Conclusion</u>: The conclusion are often considered the most important part of a paper. They should be stated concisely in a separate section at the end of the paper. If there are three or more conclusions, better emphasis can be obtained by numbering each conclusion and setting it off in a separate paragraph.

(8) <u>Tables</u>: Generally, each table should be typed on a separate sheet and numbered consecutively using Roman numerals: Table I, Table II. Small tabulations or listings may be made in the text where necessary for continuity. Each table should be titled by giving the brief description as a heading following the table number at the top. Ditto marks should not be used in tabled, but brackets may be used to group information on several lines.

(9) <u>Figures</u>: Figures should be numbered consecutively using Arabic numerals: Figure 1; Figure 2, etc. Three types of figures may be used: photographs, oscillogram, and line drawings. The reading material on illustrations should be kept to a minimum. In short, the reading material should be included in the captions. Portions of the illustrations may be identified by letters and explained in the captions. Whenever feasible, several curves should be combined on the same coordinates. Their identifying letters or numbers should be in clear spaces between cross section lines. Readers generally prefer having the figures distributed through the article, although it is also permissible to bind them together at the end.

(10) <u>Appendices</u>: Detailed mathematical proofs, development of equations and examples which are subordinate to the main argument in the body of the paper, but not essential to following the argument, should be treated in the appendices. Main equations as they are developed should be numbered consecutively, with the number in the right margin. The equations, figures, and tables in the Appendices should be numbered consecutively following the numbers used for the equations, figures, and tables in the text (such as, if table IV were last in the text, table V would be first in the Appendices.)

(11) <u>References</u>: To enable the reader to consult important works used by the author incidental to the preparation of his manuscript and other related literature which might be helpful, a suitable reference list should be appended. References should be numbered consecutively and should follow the form shown below:

For a periodical: R.N. Hall, Power Rectifiers and transformers, Proc. IRE, Vol. 40, pp. 1515-1518, November 1952.

For a book: W.A. Edison, Vacuum Tube Oscillators, John Wiley and Sons, Inc., New York, New York, pp. 170-171, 1948.

For an article: B. Lawrence, B.H. Weil, and M.H. Graham, Making online search available in a industrial research environment, Journal of the American Society for Information Science, pp. 364-369, Nov-Dec. 1974.

4. The Contest Chairman of each contest shall determine the number of copies of each paper that shall be submitted for entry in the contest.

5. Regional winners will receive further information form the Manager, Student Services at IEEE Headquarters concerning the required format of papers for publication in IEEE STUDENT PAPERS.

F. Oral Presentation

1. Fifteen (15) minutes shall be allotted for the oral presentation and five (5) minutes for questions from the audience.

2. The paper contest chairman shall arrange a timing system, with the following characteristics:

(1) A Signal will be given at the beginning of the oral presentation.

(2) A warning signal will be given at the end of thirteen (13) minutes.

(3) A stop signal will be given at the end of fifteen (15) minutes.

(4) The contest should cease talking when the stop signal is given. The contest judges will assess penalties for running overtime.

(5) The contestant will be stopped by the judges at the end of twenty (20) minutes if he continues past the stop signal.

(6) In addition to the fifteen and five minutes periods, the judges shall be given up to ten (10) minutes to complete their evaluations between presentations.

3. Individuals asking questions during the discussion period <u>shall state their name and affiliation</u>. If the audience does not present any questions, the judges should do so. Questions will be stopped at the end of five (5) minutes.

4. Demonstration or display apparatus may <u>not</u> be employed as a part of the contest presentation. Visual aids such as slides, placards, charts, view graph pictures and motion picture films may be used.

5. Each contestant is responsible for making arrangements with the paper contest chairman for audio-visual equipment if needed.

G. Judging

1. Papers will be evaluated and judged on the basis of twenty equally weighted judging criteria. Evaluation and judging is based on 55 percent given to the written presentation and 45 percent weight given to the oral presentation. (Note that 65 percent of the judging criteria is related to the

student=s written and verbal skills, emphasizing that the paper contest=s <u>primary function</u> is to improve an engineering student=s communication abilities.)

Judging Criteria Written Presentation Evaluation

<u>Form</u> - 35%

1) Concise, informative abstract.	1 2 3 4 5 6 7 8 9 10
2) Adequacy of introduction.	1 2 3 4 5 6 7 8 9 10
3) Logical development and analytical treatment in the body.	1 2 3 4 5 6 7 8 9 10
4) Adequacy of conclusion.	1 2 3 4 5 6 7 8 9 10
5) Compliance with paper contest guidelines on format.	1 2 3 4 5 6 7 8 9 10
6) Clarity and direction in exposition.	1 2 3 4 5 6 7 8 9 10
7) Grammar, spelling, style, and choice of words.	1 2 3 4 5 6 7 8 9 10

Score _____

Subject Matter - 20%

8) Originality of ideas, experimental procedures, processes, results, or conclusions due primarily to this author. 1 2 3 4 5 6 7 8 9 10

9) Originality of analysis, interpretation, restatement of inference based upon the work of others. (If the paper and its contents are entirely the work of the author, enter #8 score into #9.)

	1 2 3 4 5 6 7 8 9 10
10) Quality and level of technical, social, or management content.	1 2 3 4 5 6 7 8 9 10
11) Factual and technical accuracy.	1 2 3 4 5 6 7 8 9 10

Written Score_____

Judging Criteria Oral Presentation Evaluation

<u>Form</u> - 30%

12) Organization--has introduction body and conclusions with transitions between each.

	1 2 3 4 5 6 7 8 9 10
13) Logical development.	1 2 3 4 5 6 7 8 9 10
14) Poise, eye contact, and platform manners.	1 2 3 4 5 6 7 8 9 10
15) Grammar, fluency, and choice of words.	1 2 3 4 5 6 7 8 9 10
16) Clarity and directness in exposition.	1 2 3 4 5 6 7 8 9 10
17) Use of graphic aids.	1 2 3 4 5 6 7 8 9 10
Score	

Subject Matter - 15%

18) Apparent technical and factual accuracy and grasp of the subject. 1 2 3 4 5 6 7 8 9 10

 19) Use of examples and analogies.
 1 2 3 4 5 6 7 8 9 10

20) Discussion--judges should be prepared to stimulate discussion. 1 2 3 4 5 6 7 8 9 10

Score

Written Score_____

Total Oral and Written Score_____

3. Each of the twenty categories will be scored between 1 and 10. Accordingly the following guidelines should be helpful:

1) Maybe some one should suggest that he change his major.

2) Did he even think about his point?

3) Two more tries might have helped.

4) Needs some polish to smooth the rough spots.

5) Not bad.

6) What is expected of someone at this level.

7) Very Smooth.

8) The individual must have put special emphasis on the area.

9) So logical and correct that the words seemed to form in your mind as the contestant spoke or wrote them.

10) What Moses felt on Mt. Sinai.

4. There shall be five (5) to seven (7) judges. The use of the same judges for both the Written and Oral presentations is optional but encouraged.

5. The judges shall be selected to represent a cross section of various disciplines in electrical, electronics and related fields of engineering. The Section and Regional SAC should be called on to assist in the selection of judges at all levels of the paper contest.

6. The judges should have a record of experience in written and oral communication of ideas

IEEE Mentoring Connection

IEEE is offering its members the opportunity to participate in an online program which will facilitate the matching of IEEE members for the purpose of establishing a mentoring partnership. By volunteering as a mentor, individuals use their career and life experiences to help other IEEE members in their professional development. I believe this program can be a great tool to provide our newest members of our profession guidance in their careers and provide experienced members a chance to hear first hand from the newly graduated about the latest training the next generation is receiving. This is a program for higher level members and is provided to help ease the transition out of school and into a career.

As a mentee, you lead your partnership by selecting your mentoring partner from among those who have volunteered to serve in this capacity. I ask that you review the time and effort commitment to the program to ensure a successful mentoring partnership. Participation in the program is voluntary and open to all IEEE members above the grade of Student Member.

If you are interested, please go to <u>http://www.ieee.org/mentoring</u> for information on the roles and responsibilities of each mentoring partner. I encourage you to take advantage of the IEEE network of technical professionals or offer your expertise and sign up for the online mentoring program today.

Who can be an IEEE Mentor?

IEEE higher-grade members (above Student Member grade) who are, but not limited to:

- Willing to give time and effort to the mentoring partnership (we suggest minimum of two hours per month)
- Able to communicate effectively with others
- Willing to share some career successes and failures
- Individuals who may be or have been executives, consultants, or in middle or upper management, or in research
- Individuals who may be or have been educators, entrepreneurs, or self-employed
- Individuals who may be or have been proven leaders offering inspiration and insight
- Individuals who may be or have been IEEE officers or volunteers
- Willing to review an orientation session to learn guidelines, tools of program and the mentee and mentor's role and responsibilities

Who can be an IEEE Mentee?

IEEE higher-grade members (above Student Member grade) who are, but not limited to:

- New professionals in their first or second job, or considering entering graduate programs
- Recent graduates entering the professional workforce for the first time
- Professional making a career move or career change
- Passionate for learning
- Willing to give time and effort to the mentoring partnership (we suggest minimum of two hours per month)
- Willing to identify and clarify their developmental goals
- Interested in learning from another professional "who has been there"
- Willing to participate in mentee orientation session to learn guidelines, and tools of program and their role and responsibilities as a mentee

This program deserves your consideration and doesn't require a large amount of time on your part. It can provide of great assistance to the next generation of engineers.

Russ Kinner Membership Chair, Phoenix Section

RE-SEED Retirees Enhancing Science Education through Experiments & Demonstrations

Overview

RE-SEED (Retirees Enhancing Science Education through Experiments and Demonstrations) is a Northeastern University program that prepares engineers, scientists, and other individuals with science backgrounds to work as volunteers, providing in-classroom support to upper elementary and middle school science teachers with teaching the physical sciences.

After completing a comprehensive free training program, participants volunteer in middle school classrooms on the average once a week for at least one year. RE-SEED began in 1991 with six volunteers. To date close to 500 RE-SEED volunteers have worked in schools in about 100 communities throughout the country offering about 500,000 hours of their time.

Nationally, 75 percent of 7th and 8th grade students are taught physical science by teachers who do not have a major or a minor in the subject (The National Science Board, Science and Engineering Indicators 2000). RE-SEED volunteers possess talent and expertise that complement those of science teachers. They bring with them a wealth of knowledge and experience that allows them to make science interesting and relevant to everyday situations.

RE-SEED volunteers work closely with the host science teachers to help them enrich and implement their school curriculum. Overall the volunteers become involved members of their schools' and even their districts' teaching team, sometimes taking part in curriculum adoption decisions.

Please contact us by email at <u>reseed@neu.edu</u> or phone 888-742-2424; Shelia Kirsch at <u>Sheila.Kirsch@asu.edu</u> and / or Deirdre Weedon, <u>d.weedon@neu.edu</u>. if you are interested in learning more about these training programs.