The Valley Megaphone

Newsletter of the

Institute of Electrical and Electronics Engineers, Inc. Phoenix Section

February 2009,
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IEEE Phoenix Section Executive Committee meeting minutes can be found at:
http://www.ieee.org/phoenix

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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 Sam Karikalan 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

U – News

(for Student Members)

For Student Branch members, this "U-News" (University News) page will be a regular feature in Valley Megaphone. Student feedback will continue to be requested related to all aspects of membership, improving participation and for ways to enhance IEEE Regional Committee support to Student Branches.

The U-News Page lists Student Branch Chairs and Advisors in the column to the right. Each Student Member should take the opportunity to meet with the Chair of their Branch and give input or make recommendations on the best ways to improve communication or potential student participation activities. The Branch Chairs interface with the Phoenix Section Executive Committee, which is an excellent opportunity for exposure to industry contacts and in building relationships that will continue beyond graduation and into careers. With graduation for some Chairs only a few months away, I will be posting Branch Chair Openings and an Application Form for review and submission.

PS: Looking forward to seeing you at the Annual Banquet on Feb 7th.

Regards,
Nicholas Leonardi
Student Activities Chair – IEEE Phoenix Section
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Student Branches

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U-Newsbytes

- Monthly Student Branch Reports should now be sent directly to Nick Leonardi (nleonardi@ieee.org). Reports due end of day Feb 2nd for the Feb 3rd Meeting.
- Student Paper Contest submissions are due end of day February 13th (Page 8). These papers and student authors will have excellent visibility in the IEEE Region.
- Student Scholarship Applications have been received and the Committee is currently completing review. Recipients will be announced in the next few weeks.
- ASU IEEE Computer Society collaborates with Sun Microsystem's Open Source University Meetup (OSUM) Program. Sign-up Today! (Page 11).

IEEE – EDS Masters/Ph.D Student Fellowship

The IEEE Electron Devices Society has established the Masters and Ph.D. Student Fellowship Programs to promote, recognize, and support advanced degree study and research within the Electron Device Society's fields of interest. The application deadline is May 15, 2009. Please contact Chuck Weitzel, the Publicity Chair of the IEEE Phoenix – Waves Devices Chapter, at E-mail: c.weitzel@ieee.org for more details.

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

WAVES AND DEVICES
PHOENIX CHAPTER
http://ewh.ieee.org/r6/phoenix/wad/

Meeting Open to Non-IEEE Members
February 2nd 2009 MTTS Meeting

Engineering Your Retirement

Dr. Mike Golio
Web Editor, IEEE MTT-Society

Abstract
Engineering Your Retirement is designed to help technical professionals (engineers and scientists) develop a plan for their safe and successful retirement. The presentation examines important questions such as: How much money will I need to retire?, How long will it take for me to accumulate it? and many others. The audience will be informed of free tools and information needed for someone to answer those questions and to achieve a comfortable retirement on their own schedule. Issues that must be considered to achieve a successful retirement including health care, budgeting, inflation, portfolio requirements, investment allocations, selecting a place to live, mortgage payoff, wills, powers of attorney, etc. are examined.

Biography
As a teenager, Mike Golio worked in coal mines, on road crews, clearing brush, and in a wide variety of other manual labor positions. As an undergraduate, he worked part-time in a dormitory dish room and at the University of Illinois bookstore. He spent two years as a microwave design engineer before earning enough money to return to school and complete his MSEE and PhD studies in 1980 and 1983. During his career as a technical contributor, Dr. Golio published hundreds of technical papers and served as editor for eight books. He has held a variety of volunteer positions in both IEEE Microwave Theory and Techniques Society and IEEE Electron Device Society. Working over 31 years in the electrical engineering field, Dr. Golio designed and built electronics hardware, developed models for microwave transistors, managed both small and large engineering organizations, and directed corporate research and development strategies. In 1990, he took a job working for Satan and by 1995 had become seriously interested in planning for early retirement. His book, Engineering Your Retirement, is a product of that planning.

Mike and his wife, JJ, have published articles in archaeology volumes about their investigations of prehistoric cultures of the Southwest, and have co-written two children's books. In 2003, at the age of 49, he and his wife achieved their goal of financial independence and disengaged themselves from full-time engineering work. They remain very active -- volunteering at community functions, working for their county election board, and serving as liaison to the city for their neighborhood. Financial independence has also provided them the opportunity to travel, visit family, and pursue interests outside of electrical engineering. The Golio's enjoy the outdoors and hike over 40 miles each week. Although mostly retired, Dr. Golio still enjoys spending time participating in professional activities. He currently serves as volunteer Web page editor for the IEEE MTT-Society, and is a reviewer for several professional journals, IEEE conferences, and book publishers.

Date: February 2, 2009
Location: Freescale Semiconductor, 2100 E. Elliot Rd., Tempe, AZ "Group" Conference Rm, Bldg 94.
Time: 4:00-5:00 PM *Presentation*. Pizza will be served following the Seminar

For more information, please call:
Steve Rockwell (Chapter Chair) at (480) 413-5235 steve.rockwell@ieee.org
Chuck Weitzel (Chapter Publicity) at (480) 413-5906 c.weitzel@ieee.org

IEEE PHOENIX SECTION ANNUAL BANQUET

Saturday, February 7th, 2009

at

Hilton Phoenix Airport Grand Ballroom

2435 South 47th Street
Phoenix, Arizona 85034
Tel: (480) 894-1600

Program:

6:00 PM – 7:00 PM Registration and Social Hour with Cash Bar
7:00 PM – 8:30 PM Dinner and Keynote Presentation
8:30 PM – 9:30 PM Section Awards Program

Keynote Speaker: **Ms. Barbara D. Lockwood,**
Manager, Renewable Energy,
Arizona Public Service Company

Keynote Presentation: "**Arizona: The Solar Capital of the World**"

SECTION AWARDS PROGRAM

Member
Young Engineer of the Year, Engineer of the Year

Advance Member Grade
Fellows, Senior Members

Chapter/Society
Individuals, Teams, Organizations, Best Society Chapter

Non-IEEE Member
Contributions to the Engineering Profession

Corporate
Large Company of the Year, Small Company of the Year

Education
Outstanding IEEE Student Branch & Student Branch Leader
Outstanding Faculty & Pre-College Educator
Phoenix Section Student Scholarships

Special Chair
Chair Special Recognition, Phoenix Section 2008 Officers

Future Cities Competition
Phoenix Section Communication Award

IEEE Phoenix 2009 Annual Banquet Organizing Committee:

Dr. Vasudeva P. Atluri	(480) 227-8411	Dr. Henning Braunisch	(480) 552-0844
Dr. Keith E. Holbert	(480) 965-8594	Mr. Jim Hudson	(602) 236-6459
Mr. Nicholas Leonardi	(480) 720-1435	Mr. Debendra Mallik	(480) 554-5328

Please contact Jim Hudson at jim.hudson@srpnet.com for registrations.

For more information visit our web page: http://www.ieee.org/phoenix

Phoenix Chapter of the IEEE Computer Society

February 2009 Meeting Announcement

Date: **February 11, 2009**

Venue: **Intel Corporation, Chandler, AZ** (see below for detailed directions)

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

Presentation: Cognitive Ubiquitous Computing

By Prof. Panch Panchanathan of ASU

Dr. Sethuraman "Panch" Panchanathan is responsible for conceptualizing, promoting and implementing strategic research initiatives at Arizona State University (ASU). He oversees the strategic investment of TRIF/Proposition 301 funds, the indirect cost return funds and the Promoting Research Identification, Development and Execution (PRIDE) team. He is a foundation chair in Computing and Informatics in the School of Computing and Informatics and the director of the Research Center for Cognitive Ubiquitous Computing (CubiC) at ASU. He is also an associate professor in the Department of Basic Medical Sciences at the University of Arizona College of Medicine-Phoenix in partnership with ASU, and an affiliate professor in the Department of Electrical Engineering. Panch's research interests are in the areas of Human-centered Multimedia Computing, Content-based and Compressed Domain Indexing and Retrieval of Images and Video, Multimedia Communication, Face/Gait Analysis and Recognition, Haptic User Interfaces, Confidence Measures for Medical Decisions, Medical Image Processing, Genomic Signal Processing, Media Processor Designs and Ubiquitous Computing Environments for Individuals with Disabilities. CUbiC's flagship project CARES designs diagnostic rehabilitative assistive technologies for individuals with physical, cognitive and neural impediments. The flagship iCARE project for individuals who are blind and visually impaired won the Governor's Innovator of the Year-Academia Award in November 2004.

Panch has published over 300 papers in refereed journals and conferences and has mentored over 100 graduate students, post-docs, research engineers and research scientists who occupy leading positions in academia and industry. Panch was the founding director of the School of Computing and Informatics and instrumental in founding the Biomedical Informatics Department at ASU. He was also the chair of the Computer Science and Engineering Department. He was a member of the Electronic Health Steering Committee appointed by the Governor of Arizona. He is the editor-in-chief of IEEE Multimedia Magazine and associate editor of seven other journals. He has been a chair of many conferences, program committee member and organizer of special sessions in several conferences, invited speaker and panel member in conferences, universities and industry. He is a fellow of the Institute of Electrical and Electronics Engineers (IEEE) and the Society of Optical Engineering (SPIE). Panch earned his Ph.D. from University of Ottawa, Canada, in 1989, after obtaining a B.E. degree in Electronics and Communication Engineering from Indian Institute of Science, followed by a M.Tech. degree in Electrical Engineering from Indian Institute of Technology.

Directions to the February and April 2009 Meeting Location:

Intel Corporation, 5000 W. Chandler Blvd, Chandler, AZ can be reached via I10, the 202 or the Loop 101 (SE Valley).
I10 route – Take Chandler Blvd exit, head west (past N. Kyrene Rd.). Take left hand turn at Intel Way.
202 route – Take N. Kyrene Rd. exit, take a right hand turn (west) at Chandler Blvd. Take a left hand turn at Intel Way.
101 Loop – Take Chandler Blvd exit, head east (past Rural Rd), Take a right on Intel Way.
Once on campus: Proceed north along the campus, taking left hand turns. You will see a building with a large C4. You can park in visitor or employee spaces in any parking lot or the parking garage. Meet at the C4 lobby for check-in and escort to the patio and/or conference room. There's a small patio area where we can have the light dinner and socialization before proceeding to the ADT meeting and conference room.

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

Phoenix Chapter of the IEEE Computer Society

2nd Annual Picnic Meeting

Date: Saturday, March 28, 2009
Time: 10:30 am until 2 pm
Venue: Palo Verde Pavilion, Desert Breeze Park, Chandler, AZ

Everyone is welcome. Please tell others about this meeting.

$1 for in-advance* student purchase
$3 for in-advance* member and/or at-event student purchase
$5 for in-advance* non-member, at-event member purchase
$7 for at-event non-member purchase
* in-advance purchase means purchased at meeting or from an officer

We will be selling tickets wherever you happen to find an officer present.
View the photos from last year's event on our web site:
http://ewh.ieee.org/r6/phoenix/compsociety/photo_gallery/photo_gallery.htm

More details about Desert Breeze Park:
The BBQ/picnic is at the Palo Verde Pavilion on the Southwest side of the park. There are several family friendly activities at the park. A fantastic place to spend family time, Desert Breeze Park is chock full of fun things to do. Children especially like the splash pad, along with a playground, ball fields, rides on Desert Breeze Railroad (a 16"-gauge train), a carousel, and a lake for fishing. Grown-ups favor walking trails, tennis courts, a hummingbird habitat, and a demonstration garden that features Southwestern plants. Restrooms and picnic facilities are available.
Railroad - http://www.arizonaandpacificrr.com/spot/desertbreeze/newdesertbreeze.html
Hummingbird Habitat – http://www.chandleraz.gov/default.aspx?pageid=679
Fishing Lake – http://www.azgfd.gov/h_f/urban_lake_desert_breeze.shtml

Future Technical Meetings

- **April 1, 2009 - Chat Localization: Developing Applications for 26 Different Languages, Highland Mary Mountain of Intel, *Venue: Intel Corp***
- **May 4, 2009 – Emerging Trends for Security and Technology Careers in the Coming Decade, Debbie Christofferson, CISSP, CISM**
- **October, 2009 Advances in Digital Image Processing, Jorge Caviedes, Intel Corp**
- **November, 2009 – TBA**
- **December, 2009 - TBA**

Would you like to be a speaker at a future meeting? We are always looking for interesting speakers to cover computer related topics. Contact joy.shetler@computer.org OR Jon.Candelaria@motorola.com for more information on becoming a speaker today.

Phoenix Chapter of the IEEE EMC Society

March '09 Meeting Announcement

Date: Friday, March 20th

Place: Hilton Mesa, 1011 W Holmes Avenue, Mesa, AZ (Near Alma School Rd and the US60)

Time: 5:30PM Social (on the Terrace by the pool), 6:15PM Buffet Dinner (Terrace)

7:15PM Meeting and Presentation (Fiesta Room, check TV screens in case of change)

Title: **The Ground Myth**

Speaker: **Dr. Bruce Archambeault,** IBM Distinguished Engineer, Research Triangle Park, NC

Abstract: The term "ground" is probably the most misused and misunderstood term in EMC engineering, and in fact, in all of circuit design. Ground is considered to be a zero potential region with zero resistance and zero impedance at all frequencies. This is just not the case in practical high-speed designs. The one thing that should be remembered whenever the term "ground" is used, is that "Ground is a place where potatoes and carrots thrive"! By keeping this firmly in mind, many of the causes of EMC emissions problems would be eliminated. The term "ground" is a fine concept at DC voltages, but it just does not exist at the frequencies running on today's typical boards. All metal has some amount of resistance, and even if that resistance was near zero ohms, the current flowing through a conductor in a loop creates inductance. Current through that inductance results in a voltage drop. This means that the metal ground plane/wire/bar/etc. has a voltage drop across it, which is in direct contradiction with the intention and definition of ground. This presentation discusses the origin of the word "ground", what we really mean when we use the term "ground" and how to optimize our designs to achieve the over all goals for our reference strategy.

About the speaker: Dr. Bruce Archambeault is an IBM Distinguished Engineer at IBM in Research Triangle Park, NC. He received his B.S.E.E degree from the University of New Hampshire in 1977 and his M.S.E.E degree from Northeastern University in 1981. He received his Ph. D. from the University of New Hampshire in 1997. Dr. Archambeault has authored or co-authored a number of papers in computational electromagnetics, mostly applied to real-world EMC applications. He is currently a member of the Board of Directors for the IEEE EMC Society and a past Board of Directors member for the Applied Computational Electromagnetics Society (ACES). He has served as a past IEEE/EMCS Distinguished Lecturer and Associate Editor for the IEEE Transactions on Electromagnetic Compatibility. He is the author of the book "PCB Design for Real-World EMI Control" and the lead author of the book titled "EMI/EMC Computational Modeling Handbook".

Reservations: To help us get an accurate headcount, please send an email to Harry Gaul (harry.gaul@ieee.org). There is no charge for the meetings and you do not need to be an IEEE or EMC Society member to attend -- all are welcome. This meeting is being held in conjunction with the EMC Society's Board of Directors meeting so this is an excellent opportunity to meet and chat with the world's experts on EMC!

IEEE Phoenix Section
Student Paper Contest 2009

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 http://www.ewh.ieee.org/reg/6/MemberStudentActivities/IEEERegionalStudentPaperContestGuidelines.doc . 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 nleonardi@ieee.org by 6 p.m. on **February 13, 2009**.

The oral presentations are 15 minutes plus a 5-minute question & answer period. The oral portion of the contest will be held the morning of Saturday, **February 28, 2009**. A computer with projector will be provided for the contestants to use, since PowerPoint slides are the recommended approach.

The local cash awards for the paper contest winners are (1) First Place – $300, (2) Second Place – $200, and (3) Third Place – $100. The five judges are IEEE members from local industries.

The top entrant from each 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 2009.

If you have any questions, please contact:

Mr. Nick Leonardi
IEEE Phoenix Section
Student Activities Chair
480-736-1970 x 23
nleonardi@ieee.org

Call for IEEE Fellow Nominations

Nominations are being accepted for the IEEE Fellows class of 2010. The rank of IEEE Fellow is the institute's highest member grade, bestowed on an IEEE Senior Member who has had an extraordinary record of accomplishments in any of the IEEE fields of interest. The deadline for nominations is 1 March 2009. Senior Members can be nominated in one of four categories: application engineer/practitioner, research engineer/scientist, educator, or technical leader.

The Fellows Web pages (http://www.ieee.org/fellows) contain information regarding the history of the IEEE Fellows program, the nomination process, access to the Fellows Nomination Kit, lists of Fellows who are eligible to be references and more about the Fellow program.

IEEE Strategies to Help School Science Teachers

The national office of the IEEE has had an active program for a couple of years now to train science teachers in improved ways to teach science and engineering to school children. Called **TISP – Teacher In-Service Program** – the program is a response by the institute to the widely acknowledged appallingly low quality of science and mathematics knowledge among graduating school children, and the rapidly decreasing number of students who opt for a degree and a career in engineering rather than in business management, finance or law. The institute recognizes that a large part of the problem is the lack of knowledge and experience of engineering matters among the science teachers, this leading to a lack of exposure of children at a young age to real science or the encouragement of any child that might have an interest. In fact, studies show if children have not been exposed to science before high school it is really too late for them to get into it. Along with that, by 5th grade students need to know that going to college is a possibility for them.

Hence, a major part of the national IEEE program is the creation of a growing set of teaching modules / lessons plans, each module being structured around a particular engineering problem such as electric motors, structure loads, etc. Each module emphasizes the teaching of the relevant engineering, science and mathematics principles through a practical project performed by the students. These modules are freely available to any teacher on the institute website: www.tryengineering.org/lesson.php.

The TISP program is an effort sponsored and promoted by the national office but run at the local chapter level. The Phoenix Section lead on TISP is Mike Poggie. To further help the process, the national office has been running a series of workshops to train IEEE member volunteers in achieving two goals: to train teachers in better ways to teach engineering and science principles, and to provide in classroom assistance to the science and mathematics teachers. A small group from the Phoenix Section participated in the last session in November held in San Francisco; it was a lot of fun and very inspiring! But it is clear that to manage and implement TISP over the whole Phoenix Section, we have to divide up the tasks into manageable subsets, each subset under a different lead and all the subsets coordinated by Mike Poggie. A subset could be a distinct grouping such as retirees, or a town remote from Phoenix like Flagstaff, or even quite possibly a particular school.

As a first subset we are seeking to enlist the help of the talented retirees in the IEEE. Retirees represent a tremendous pool of engineering talent and knowledge associated with its application in the real world of industry, academia, government, etc. They are very capable of being able to show school children in science classes how what they are being taught relates to the real world and how science and math studies can lead to a fruitful and enjoyable career in engineering. Plus they have more time they can devote to this cause than do our colleagues in full-time employment and with young families. This subset is being organized by John Purchase. So any retiree interested in joining this effort should please email John Purchase at: jpurchase@cox.net. Once he has responses he will organize a meeting in the new year to explain, discuss and plan this outreach effort to help secure a future for our children as engineers and for our nation as a technical leader in the world.

Plus any non-retiree interested in helping the Chapter's TISP effort should get in touch with Mike Poggie at: Mike.Poggie@ieee.org. And the national office continues to run regular TISP workshops (and all travel expenses are reimbursed!); they are well worth attending for anyone interested in working with school children and teachers.

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 http://www.ieee.org/mentoring 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
Conferences Chair, Phoenix Section

IEEE Computer Society at ASU

Open Source University Meetup

IEEE Computer Society at Arizona State University has a history of dedication to collaboration and innovation, and is a firm believer in the power of open source software. We are also passionate about helping our students network and succeed.

In this spirit, we are proud to announce collaboration with Sun Microsystems and their Open Source University Meetup (OSUM) program!

Sun Microsystems has rapidly emerged as a leader in the open source community, making a large variety of their platforms open including OpenOffice, OpenSolaris, OpenJDK, and even OpenSPARC. You know a company is serious about open source when it makes its hardware open! In their passion for open source, they have created a community called the Open Source University Meetup which exists as a social networking tool for developers to meet others who are passionate about open source and learn more about Sun technologies. Members of the OSUM community include students from all around the world, Sun staff, and any developer who has a passion for expanding his or her own knowledgebase.

Beyond the obvious networking opportunities, members of OSUM also get free, well-written and authoritative training on Sun technologies through the Sun Academic Initiative, and *extremely* reduced-cost sun certification exams! This is an amazing deal for those seeking to enhance their skill-set or prove that they have mastered a particular tool, and the best part is it's free and easy!

So what are you waiting for, an invitation? Well, here it is: go sign up today!
Need more information? Please contact Nicholas Vaidyanathan at Nicholas.Vaidyanathan@asu.edu.

Volunteer needed for the IEEE emeritbadges.org Project

The 100th Anniversary of the Boy Scouts of America will attract 40,000 young people from the USA and several other countries to Ft. A. P. Hill, VA for the 2010 National Scout Jamboree. The IEEE emeritbadges.org Project (www.emeritbadges.org), which started in the IEEE Richmond Section in 1981, is sponsoring the Electricity Merit Badge Booth and the Electronics Merit Badge Booth at the Jamboree. The Jamboree will be held 26 July 2010 – 4 August 2010 at Ft. A. P. Hill, VA.

A volunteer is needed to serve as the Electricity Merit Badge Technical Manager at the Jamboree. If you are interested in this volunteer position, please contact Ralph W. Russell, II at emeritbadges@ieee.org or 804.291.7667.

2008-2009 Arizona Region Future City Competition™

The 12th Annual Arizona Region Future City Competition, conducted by the Arizona Regional Future City Competition Organization (www.futurecity-arizona.org), was held on Saturday, January 24, 2009 at the Phoenix Preparatory Academy. This is part of a national, team-based educational program called "The National Engineers Week Future City Competition™" that is sponsored in part by the National Engineers Week Committee, a consortium of professional and technical societies such as the IEEE-USA and major US Corporations. This competition is designed for 7th and 8th grade students nationwide, to foster an interest in Math, Science and Engineering through hands-on, real world applications and is open to all public, private and parochial schools.

This year's theme of the competition was "**Creating a Self Sufficient System within the Home That Conserves, Recycles and Reuses Existing Water Sources**". Fifty-four teams competed in the Arizona Regional competition that involved design conceptions for a future city, building computer and real world 3D models and presenting them to a team of judges.

The winner of this year's Arizona Regional competition was the team that designed "**The City of Abundaqua**". This team, made up of Veritas Homeschoolers (Phoenix) Middle school students, Noah O.Connor, Joshua Ekstrom and Alex Janss, along with their teacher, Mary Ann Ekstrom, and engineer-mentor, Kenneth Ekstrom, will travel to Washington, DC to compete in the National Future City Competition™, that will be held on February 17-18, 2009, during the National Engineers Week. A total number of 37 awards were handed out this year, in the Arizona Regional Competition, in various categories, including many Society sponsored awards.

The IEEE Phoenix section sponsored the award for "**Best Communications Systems**", chosen on the criteria of "Best use of communications devices, inter-building and inter-city communications, and use as personal communications, public safety, or business". A team of judges from the IEEE Phoenix section evaluated the projects from all the 54 teams and chose the following team, to receive this year's award, for the use of ELF Radio Communication Systems and Holographic Transport systems:

School: **Cocopah Middle School**

Team: **Titanic City**

Students: **Alex Dahlmann, Matthew Pierce, and Michael Harness**

Teacher: **Janice Speisman** and Engineer Mentor: **Richard Dahlmann**

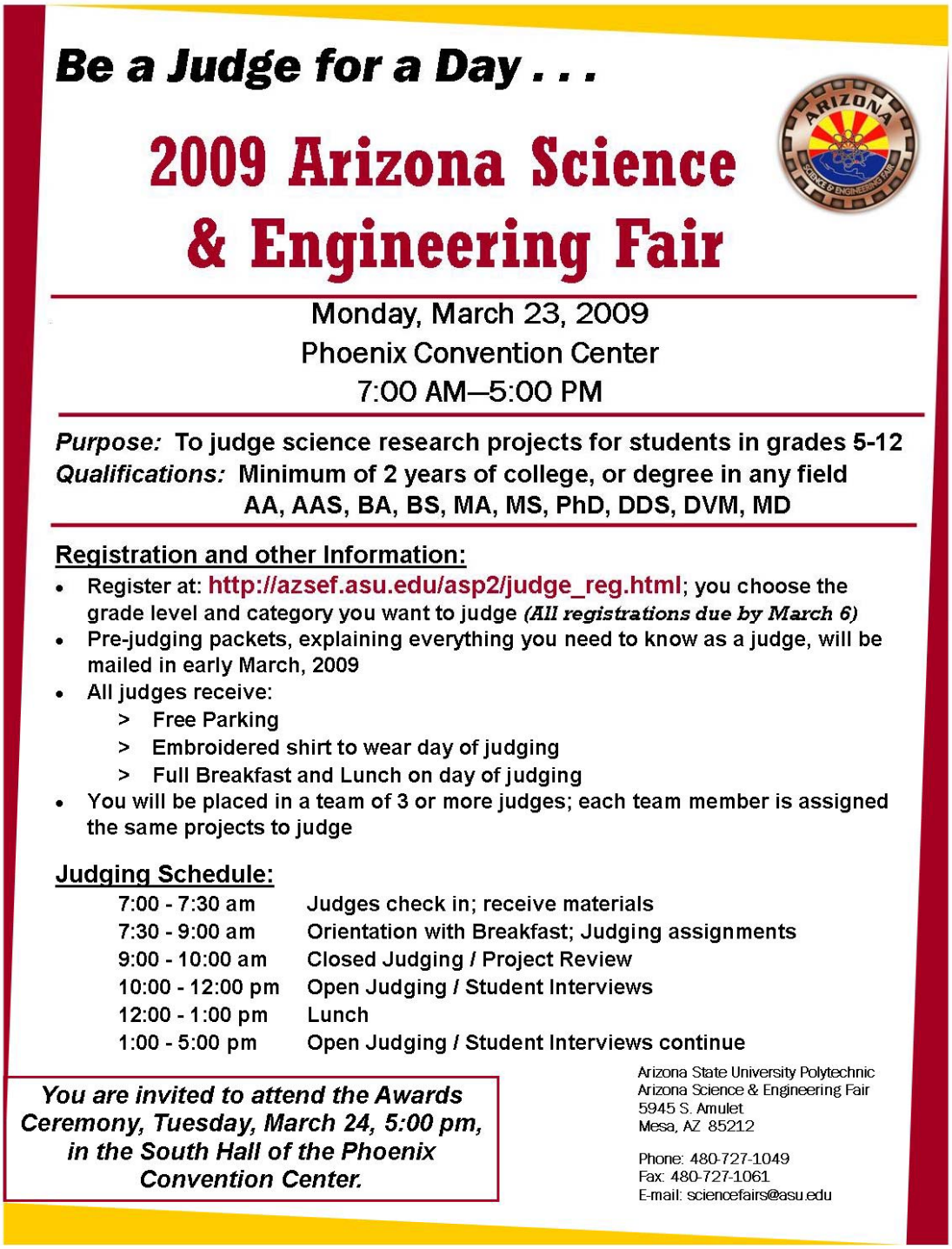
The IEEE Phoenix Section Past chair for the year 2008, Dr. Rao Bonda, presented this award during the award ceremony. This team has been invited to make a presentation on their "Titanic City" project at the 2009 IEEE Phoenix Annual Banquet on Feb 7, 2009.

The Arizona Region Future City Coordinator, Mike Andrews, who is also a very active IEEE Phoenix section volunteer, said, "We are very proud of all the teams that made it to today's competition. Seeing a student get excited about solving a current problem, or having the ability to impact the future is both refreshing and rewarding for the members of the local committee, members of the engineering community, as well as their teachers and parents."

Mike could be contacted at (602) 368-6013 or e-mail: m.andrews@ieee.org, for information on the upcoming National Finals of this competition or all upcoming Future City Competitions.

500+ Volunteers Needed for 2009 Arizona Science and Engineering Fair

All IEEE Phoenix Members and Student Members are invited to volunteer as a judge or event volunteer for the 2nd annual Arizona Science and Engineering Fair (AzSEF), during March 21-24, 2009. More than 700 students of grades 5-12 from around Arizona will showcase their talents in science, technology, engineering and math, and hundreds of volunteers are needed to help make this a positive and quality experience for student participants. Please contact Katherine Princic at Katherinex.princic@intel.com to schedule a visit to a group meeting to talk about volunteer/judging opportunities.



Be a Judge for a Day . . .

2009 Arizona Science & Engineering Fair

Monday, March 23, 2009
Phoenix Convention Center
7:00 AM–5:00 PM

Purpose: **To judge science research projects for students in grades 5-12**
Qualifications: **Minimum of 2 years of college, or degree in any field**
AA, AAS, BA, BS, MA, MS, PhD, DDS, DVM, MD

Registration and other Information:

- Register at: **http://azsef.asu.edu/asp2/judge_reg.html**; you choose the grade level and category you want to judge ***(All registrations due by March 6)***
- Pre-judging packets, explaining everything you need to know as a judge, will be mailed in early March, 2009
- All judges receive:
  - > Free Parking
  - > Embroidered shirt to wear day of judging
  - > Full Breakfast and Lunch on day of judging
- You will be placed in a team of 3 or more judges; each team member is assigned the same projects to judge

Judging Schedule:

7:00 - 7:30 am	Judges check in; receive materials
7:30 - 9:00 am	Orientation with Breakfast; Judging assignments
9:00 - 10:00 am	Closed Judging / Project Review
10:00 - 12:00 pm	Open Judging / Student Interviews
12:00 - 1:00 pm	Lunch
1:00 - 5:00 pm	Open Judging / Student Interviews continue

You are invited to attend the Awards Ceremony, Tuesday, March 24, 5:00 pm, in the South Hall of the Phoenix Convention Center.

Arizona State University Polytechnic
Arizona Science & Engineering Fair
5945 S. Amulet
Mesa, AZ 85212

Phone: 480-727-1049
Fax: 480-727-1061
E-mail: sciencefairs@asu.edu

Phoenix Section Executive Committee Meeting

– First Tuesday of the month.

February '09 Meeting:

No Meetings in July and August

Date: February 3, 2009, Tuesday

Time: 6:00 pm to 8:00 pm

Place: Phoenix Airport Hilton, 2435 S 47th Street, Phoenix, AZ, 85034 Tel.: 480-804-6017

Directions: From the Hohokam Expressway (AZ 143), exit University Ave, go West and turn right on 47th Place.

More Info: Meetings are held on the first Tuesday of the month. All interested IEEE members are welcome to attend.

Contact: Debendra Mallik, Phoenix Section Chairman, dmallik@ieee.org

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IEEE Phoenix - Calendar of Events for February 2009:

You may access the IEEE Phoenix Section Calendar of Events at

http://www.mynetcalendar.com/calendar.php?month=2&year=2009&calendarid=2400

For inputs and updates to the Calendar, please contact the IEEE Phoenix Section Conferences Chair, Russ Kinner at 602-997-2353 or e-mail: r.kinner@ieee.org