

The Valley Megaphone



IEEE

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of Engineering the Future

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

**March 2009,
Volume XXIII, Number 3**

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

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U – News

(for Student Members)

The IEEE Phoenix Section held its 2009 Annual Banquet Event on Saturday, Feb 7th at the Hilton Phoenix Airport Hotel, bringing together professional members, student members and guests for a great evening with industry colleagues.

During the Banquet, several recipients of the IEEE Phoenix Student Scholarship Awards were named. Congratulations to the following winners:

Ramesh Badakunta - ASU Electrical Engineering
 James Dossett - ERAU Electrical Engineering
 Benjamin Green - ASU Electrical Engineering
 Harshini Yerra - ASU Electrical Engineering
 Nicholas Vaidyanathan - ASU Computer Science

Thank you to all of this year's student applicants for this scholarship program!

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.

Regards,

Nicholas Leonardi

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Student Branches

ASU Main, Engineering

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 Advisor: TBD

DeVry, Phoenix

Chair: Mason Surerus
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 Advisor: Dion Benes

DeVry, Computer Society

Chair: TBD
 Advisor: Diane Smith

NAU, Engineering

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Embry-Riddle, Prescott

Chair: Caleb Young,
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 Advisor: John E. Post
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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 March 2nd for the March 3rd Meeting.
- ✚ **Student Paper Contest submission deadline has been extended to March 20, 2009 (Page 10).**
- ✚ With graduation for some Student Branch Chairs only a few months away, Branch Chair Openings will be posted in Valley Megaphone, including an Application Form for review and submission.
- ✚ The IEEE Computer Society is holding its 2nd Annual Picnic on March 28th at Desert Breeza Park, in Chandler, with Student ticket cost at only \$1 (Page 8).
- ✚ ASU IEEE Computer Society collaborates with Sun Microsystem's Open Source University Meetup (OSUM) Program. Sign-up Today! (Page 14).

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.



IEEE Phoenix Area Consultants Network Meeting announcement

The March '09 meeting of the IEEE Phoenix Area Consultant's Network will be held at the offices of **ETA Engineering, Inc.**, 4040 E Presidio Drive. Mesa Arizona, on **March 12, 2009**. The meeting will start with a board meeting at 5:30 PM, followed by a networking period and a short tour of the PV equipment warehouse, then by dinner at 7:00 PM. The program topic this month will be on **Income Tax Requirements for Consultants**, and will be presented by **David Issac**. Dinner will be a selection of sandwiches and soft drinks.

At the February meeting, we finalized our officers for the year, with the exception of the Advisor Editor. Our officers are:

President	Ronald L. Sprague, P.E.	r.sprague@ieee.org
Vice President	C. Bruce Johnson	cbj@johnsonscientific.com
Treasurer	Bill Morgan	bill.morgan@cox.net
Secretary	Ed Mischen	ed.mischen@cox.net
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Member at Large	Ed Bawolek	bawolek@ieee.org
Website		www.ieeepacn.com

The following is the tentative schedule of programs for the rest of the year, so that we can all plan for future attendance.

April	PACN Picnic
May*	Professional Liability (Errors and Omissions) Insurance for Consultants*
June - Aug	Summer Break
September	Renewable Energy - Lane Garrett, P.E.
October	IEEE National Consultant's Network Programs - C Bruce Johnson
November	How to Conduct an Assignment - Jim Soudriette, Tom Funk
December	Annual business meeting and election of Officers

* To be Confirmed

Mike Pyska will be looking for other locations for meeting places. Harvey Alstadter has made an excellent suggestion in light of the current recession, (AKA depression) that the PACN check with IEEE USA to see if there is an Employment Assistance Program that has been or can be established for the Phoenix area similar to one that had been formed in the Long Island Section some 10+ years ago after the aerospace bust.

We invite any of the IEEE Phoenix Section members and student members to attend our meetings, and we would like some inputs on program topics. Some of the topics we are considering for future meetings are:

SCORE assistance for Small Business Startups
The State of Arizona Mechanic's Lien Laws and their application to consultants
Engineering Registration requirements for offering Professional Engineering services

We will be happy to add any new topics, if they are of interest to the Phoenix Section Membership.



THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.



IEEE Components, Packaging and Manufacturing Technology Society
Phoenix Chapter

March 18, 2009 Meeting

Design and Development of Microwave Connectors. How mmWave Connectors differ from RF connectors

David H. Shaff

General Manager, Microwave Products Division
Southwest Microwave, Inc. (Tempe, AZ)

Abstract

Design and use of connectors for microwave and millimeter wave frequencies requires different approaches to design, production and installation. The presentation discusses design of connectors as transmission line devices, from Omni Spectra's first precision OSM/SMA to latest 0.9mm connectors, and from field-replaceable designs to solder-free End Launch test connectors. Presentation will cover testing, board launch considerations, packaging accessories (such as hermetic seals for MMIC housings), mounting (grounding), and differences in design/technology applicable for different frequency requirements.

Biography

Mr. Shaff received his engineering degree from the Georgia Institute of Technology, with graduate studies at the University of Wisconsin and earned the MBA degree from Nova Southeastern University. His career has focused on interconnect components including design, manufacturing, and operations, with management positions at ITT Cannon, NEC, SV Microwave/Amphenol, Avnet (overseeing all Hi-Rel/MIL interconnect lines), and Southwest Microwave. His work includes chairing the Card (Mechanical) Standards Committee for PCMCIA, membership in ANSI X3T9 for SCSI, and SAE Standards Committees. Memberships include IEEE (EMC & CMPT), EuMA, SAE and IICIT.

Date: Wednesday, March 18, 2009

Location: Freescale Semiconductor, 2100 E Elliot Rd. Tempe, AZ (Group Conference Room)
Enter the facility through the Main (South) lobby, by the flag poles; you will be escorted to the meeting venue.

Time: 5:30-6:00 Social/Refreshments, 6:00-7:00 Presentation, 7:00 Dinner
(Pizza and Soda are being provided by the CPMT Phoenix Chapter)

IEEE members and non-members all are welcome to attend. Those who plan to attend should be at the facility entrance no later than 6:00 pm, as there will be no escorts available after that.

For more information, please contact:
Samir Pandey (Chapter Chair) at samir.pandey@intel.com or
Sunit S Mahajan (Technical Program Chair) at sunit.s.mahajan@intel.com



Power & Energy Society Announcements

March 2009 Technical Meeting

Date & Time: **Thursday, March 19, 2009 – 12 Noon**

Location: **APS Deer Valley Building N-1 Conf.Room E,**
Map - <http://ewh.ieee.org/soc/pes/phoenix/images/APS-DV-map.pdf>

Speaker: **Steve Cobb, Salt River Project**

Topic: **FERC/NERC Compliance.** See PES website for more information as it becomes available <http://ewh.ieee.org/soc/pes/phoenix/>

Abstract: The Energy Policy Act of 2005 mandated that all “operators, owners, and users” of the bulk power system must comply with Federal Energy Regulatory Commission approved mandatory electric reliability Standards. This presentation will provide a perspective on how the Standards were developed, their impacts, and what is required to have a successful compliance program

Bio: Mr. Cobb has twenty-nine years of experience in all aspects of electric system operation. He currently manages SRP’s Electric Reliability Compliance group which was formed in December 2007. Prior to that, he managed the Transmission Services group for 10 years. Transmission Services administers the sale of SRP’s transmission resources and provides engineering, analytical, scheduling, and training support for SRP’s Transmission and Generation Operations group.

Mr. Cobb has participated and provided leadership in a number of industry organizations. These organizations include the Western Electricity Coordinating Council (WECC) where he served as Operating Committee Chair. He is currently the Chair of the WECC Reliability Coordination Committee. He has also been a member of the North American Energy Standards Board (NAESB) Executive Committee. He has provided testimony at various hearings at the Federal Energy Regulatory Commission.

April 2009 Technical Meeting

Date & Time: **Thursday, April 16, 2009 – 12 Noon**

Location: **SRP PERA Club,** Map - <http://ewh.ieee.org/soc/pes/phoenix/images/PERAMAP.pdf>

Speaker: **Peter Heiman, Western Area Power Administration**

Topic: **Introduction to Blackstart.** See PES website for more information as it becomes available <http://ewh.ieee.org/soc/pes/phoenix/>



Phoenix Chapter of the IEEE EMC Society

March '09 Meeting Announcement

Date: Friday, March 20th

Place: Hilton Mesa

Address: 1011 West Holmes Avenue, Mesa, AZ (Near Alma School Road and the U.S. 60)

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 Life Members Affinity Group, Phoenix Section

MEETING NOTICE

This luncheon meeting of the Life Members Affinity Group of the IEEE Phoenix Section will be held on Wednesday, **March 25, 2009**. The meeting will be held at SRP's PERA CLUB's Big Horn Terrace Room, at; *1 East Continental Drive, Tempe*, located west of 64th street, ½ mile south of McDowell Road.

Topic: "Sustainable Energy Program at SRP"

Speaker: Chico Hunter, Senior Engineer, SRP

AGENDA:

11:00 – 11:30 Registration; 11:30 – 11:00 Lunch; 12:00 - 12:45 Presentation
12:45- 1:00 Question and Answer session; 1:00 PM Adjourn

Cost: \$12.00 per person, includes lunch

RSVP is required by Wednesday, March 18, to the Section Secretary, Michel Ebertin by email michel@ebertin.net . Please try to attend, as the Affinity Group has to pay for lunch for the number reserved. Click on this link for directions to SRP PERA Club: [SRP PERA Club](#)

ABSTRACT

Sustainable energy supply requires continuous increase, over many decades, in energy usage efficiency and in renewable resources such as wind and solar. SRP's Sustainable portfolio program, initiated in 2004, is designed to promote sustainable energy by achieving at least 15% of SRP's retail energy from renewable resources by 2025. You will learn about SRP's progress and plans that use a portfolio of a diverse mix of resources including wind, solar, hydro, landfill gas, geothermal and a variety of energy efficiency programs including residential customer incentives. Specific projects will be presented. Questions from the audience will be encouraged.

ABOUT THE SPEAKER:

Chico Hunter currently works as a senior engineer in SRP's Sustainability Initiatives and Technologies group and manages the SRP EarthWise Solar incentive program for commercial customers. He holds a Bachelor's degree in mechanical engineering and a Master's in manufacturing engineering, both from Arizona State University. Chico has worked at SRP since 2003 and has been involved in a variety of renewable energy projects including biomass, low-impact hydro, solar photovoltaic and solar water heating. Chico also participates in renewable energy policy analysis and has helped develop SRP's solar incentive programs.

ABOUT IEEE LIFE MEMEBERS AFFINITY GROUP:

The Phoenix group was organized in 2008 to enable IEEE Life Members to retain active IEEE associations, contribute to the social good in their communities, advance IEEE's professional interests and enjoy each other's company. IEEE "Life" status is an automatic process when a member is least 65 years of age and has been a member of IEEE or one of its predecessor societies for such a period that the sum of his/her age and his/her years of membership equals or exceeds 100 years. Dues and regional assessments are waived for a Life member. For more information use the link <http://www.ieee.org/portal/pages/committee/lmc/index.xml>

Results of the December 11, 2008 election for 2009 Chapter Executive Committee

Chair	Prof. George Karady	(480) 965-6569	Treasurer	Leslie Daviet II	(602) 525-2377
			Program Chair	A. Barry Cummings	(602) 236-5411
Vice Chair	Bruce Johnson	(480) 759-2826			
Secretary	Michel Ebertin	(480) 991-2136	Past Chair	Dr. Rao Thallam	(602) 236-8064



Phoenix Chapter of the IEEE Computer Society

2nd Annual Picnic Meeting

Everyone is welcome. Please tell others about this meeting.

Please see the website for more details

Date: Saturday, March 28, 2009

Time: 10:30 am until 2 pm

Place: Palo Verde Pavilion, Desert Breeze Park, Chandler AZ

\$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



Phoenix Chapter of the IEEE Computer Society

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.**

Notes on April 1, 2009 Meeting Venue

Intel location: 5000 W. Chandler Blvd, Chandler, AZ

Chandler Blvd can be reached via I10, the 202 or the Loop 101 (SouthEast Valley).

I10 route - Take Chandler Blvd exit; head east (past N. Kyrene Rd.); take left hand turn at Intel Way.

202 route - Take N. Kyrene Rd. exit; take a right hand turn (east) at Chandler Blvd; take a left hand turn at Intel Way.

Loop 101 - Take Chandler Blvd exit; head west (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.

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



IEEE Phoenix Section Student Paper Contest 2009

Deadline for Submission Extended

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 **March 20, 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, **March 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
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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

Don't miss out on the industry's premier event!

The only event that encompasses the diverse world of integrated systems packaging!

ECTC 2009

The 59th Electronic Components and Technology Conference

May 26 - May 29, 2009
Sheraton San Diego Hotel & Marina
San Diego, California USA

Highlights

- 38 technical sessions, including 2 poster sessions
- 16 CEU-approved professional development courses
- Technology Corner Exhibits, featuring approximately 70 industry-leading vendors
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More than 300 technical papers covering:

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For more information, visit:
www.ectc.net

CONFERENCE SPONSORS:





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 to <http://osum.sun.com> to sign up. 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.

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 Prinic at Katherinex.pricinc@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



News from 2008-09 Future City Competition™

(from the News Release of AZ Regional Future City Competition Organization)



Arizona Team Wins Prestigious Bentley Systems Award In National Future City Competition™

Team Abundaqua, from Veritas Home Schoolers in Phoenix and first place winner of the 2009 Arizona Region Future City Competition, walked away with the prestigious special award: **Best Management of Water Resources**, at the National Future City Competition™, in Washington, DC, earlier this week.

After arriving at Reagan National Airport on Saturday, February 14th, the Arizona entourage boarded Washington's Metro Rail for a trip to their hotel on Capitol Hill. With not much time for rest or relaxation, the three member team began unpacking their model on Sunday, February 15th. Fortunately for Team Abundaqua, the model made the trip across country mostly in one piece.

Team members Noah O'Connor, Joshua Ekstrom, and Alex Janss had to be on their game on Monday, February 15th. As a part of the special awards program, they met with 27 different judging groups. These groups included representatives of professional engineering societies or private firms, and each was interested in different aspects of the City of Abundaqua's design. Some of the judges came back to take pictures of the model and an NBC cameraman shot footage of the team members.

Team Abundaqua presented at 10:45 a.m. EST as a part of the preliminary judging program on Tuesday, February 16th. Although the Arizona team did not make it to the national finals competition on Wednesday morning, February 17th, they learned that afternoon that they were the recipients of the much sought after Bentley Systems Award: **Best Management of Water Resources**. The criteria for this award are efficient design of water treatment and distribution for human consumption, agriculture, industry, recreation, and fire protection. Design elements should include responsible sewage collection and treatment for environmental protection and community aesthetics as well as innovative storm water collection, treatment, and discharge back into the environment. Bentley Systems is also a major sponsor of this national student competition. Team members indicated that one of their biggest challenges in designing the city was the living systems that were incorporated atop of the homes. Calculating the volume of water that could be collected, filtered, and reused was very challenging for these middle school students.

About the Competition: The National Future City Competition™ is held annually during National Engineer's Week in Washington, DC. Students create cities on computers using the *SimCity 4 Deluxe* software, provided by Electronic Arts, and then build three-dimensional, tabletop models to scale. To ensure a level playing field, models must use recycled materials and can cost no more than \$100 to build. Students must present and defend their designs at the competition before a panel of engineer judges who test the depth of the teams' knowledge. Students also write a 300-500 word abstract and a 500-700 word essay describing their city. This year's topic was Creating a Self Sufficient System within the Home Which Conserves, Recycles and Reuses Existing Water Sources. In addition to the grand prize of a trip to Space Camp in Huntsville, Alabama, the second place team receives a \$2,000 scholarship for their school's technology program. Third place receives a \$1,000 scholarship for their school's technology program. For more information, visit www.futurecity-arizona.org or contact the Arizona Regional Coordinator Mike Andrews at m.andrews@ieee.org.

About Engineers Week: The National Engineers Week Foundation, a formal coalition of more than 100 professional societies, major corporations and government agencies, is dedicated to ensuring a diverse and well-educated future engineering workforce by increasing understanding of and interest in engineering and technology careers among young students and by promoting pre-college literacy in math and science. Engineers Week also raises public understanding and appreciation of engineers' contributions to society. Founded in 1951, it is among the oldest of America's professional outreach efforts. Co-chairs for 2009 are Intel Corporation and the National Society of Professional Engineers. For more information, visit www.eweek.org.

Phoenix Section Executive Committee Meeting – First Tuesday of the month.

March '09 Meeting:

No Meetings in July and August

Date: March 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

IEEE Phoenix - Calendar of Events for March 2009:

You may access the IEEE Phoenix Section Calendar of Events at

<http://www.mynetcalendar.com/calendar.php?month=3&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