The Valley Megaphone

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

January 2013, Volume XXVII, Number 1

Executive Committee 2013

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IEEE Phoenix Section on-line updates can be found at http://ewh.ieee.org/r6/phoenix/ and on LinkedIn at: http://www.linkedin.com/groups?gid=2765918 Please send announcements for the *Valley Megaphone* to Surinder Tuli at surinder.tuli@gmail.com and to Russ Kinner at r.kinner@ieee.org for inclusion in the Section Calendar.

The IEEE Banquet pictures are up, see http://ewh.ieee.org/r6/phoenix/index.php

All meetings announced in the Phoenix Section Megaphone or on the Phoenix Section Calendar are open to everyone (IEEE members and non-Members)

Chapters

Signal Processing & Communications
Pavan Turaga
pturaga@asu.edu

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jerry.crow@computer.org

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TBD

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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 Surinder Tuli at the above email address. Deadline for announcements and dvertisements 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://ewh.ieee.org/r6/phoenix/

U – News

(for Student Members)

Updates of Student Advisors and Committee Members

Each Student Branch noted on the right side of this page should review current information on Advisors and Student Committee Members and forward to my attention within this week, as we are reviewing contacts for reporting and activities including Student Monthly Meetings.

S. Diane Smith
602-749-4601
sdianesmith@computer.org
Student Activities Chair

Student Branches

ASU Main, Engineering
Chair: Ahmet Durgun,
480-371-7743, **adurgun@asu.edu**
Advisor: Cihan Tepedelenlioglu,
480-965-6623, **cihan@asu.edu**

ASU Main, Computer Society
Chair: TBD
Advisor: Guoliang Xue
480-965-6218, **xue@asu.edu**

ASU Polytechnic
Chair: TBD
Advisor: TBD

DeVry, Phoenix
Chair: Lori Renaldi
lorirenaldi@computer.org

Advisor: Diane Smith
dsmith2@devry.edu

DeVry, Computer Society
Chair: TBD
Advisor: Diane Smith
dsmith2@devry.edu

NAU, Engineering
Chair: TBD
Advisor: Niranjan Venkatraman
v.niranjan@ieee.org

Embry-Riddle, Prescott
Chair: Tim Lemm
timothy.lemm@erau.edu
Advisor: John E. Post
postj@erau.edu

U – Newsbytes

ASU Polytechnic is currently seeking Advisor for the Student Branch. Please email Diane (at email address above) with Recommendations.

Start your own MicroMouse and compete for cash prizes!

The Section has a full tournament sized MicroMouse maze. Funding for your project may be available. For details contact the Section Student Activities Chair, S. Diane Smith sdianesmith@computer.org

- View pictures from the MicroMouse contest at the Southwest Area Spring 2010 meeting at http://picasaweb.google.com/ieeegoldphx/2010IEEESWASpringMeeting (photography by David Huerta, GOLD Affinity Group Chair)

PHOENIX SECTION ANNUAL BANQUET 2013

IEEE PHOENIX SECTION ANNUAL BANQUET

Saturday, February 9, 2013

Hilton Phoenix Airport
2435 South 47th Street,
Phoenix, Az 85034-6410
Tel: 1-480-894-1600
Telephone: (602) 273-7373

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: **Dr. Gary Dirks - Director, ASU LightWorks**
Julie Wrigley Chair of Sustainable Practices and Professor of Practice
in the School of Sustainability
Distinguished Sustainability Scientist, Global Institute of Sustainability
Arizona State University

Keynote Presentation: Lightworks, Light Inspired Research, Solar Energy, BioEnergy, Energy's Future

SECTION AWARDS PROGRAM

Member
Young Engineer of the Year, Engineer of the Year

Advanced Member Grades
Fellows, Senior Members

Society Chapters & Affinity Groups
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 Student Branch & Student Branch Leader
Outstanding Faculty & Pre-College Educator
Phoenix Section Student Scholarships

Special Chair
Chair Special Recognition, 2012 Section Officers

Future City Competition
Phoenix Section Best Communications System Award

IEEE Phoenix Section 2012 Annual Banquet Organizing Committee

Vasudeva P. Atluri	(480) 227-8411	Bruce Ladewig	(480) 620-9291
Ralph Hogan	(480) 774-8227	Jim Hudson	(602) 236-6459
Charles Weitzel	(480) 292-0531		

For more information visit our website at ewh.ieee.org/r6/phoenix

IEEE PHOENIX SECTION ANNUAL BANQUET

Saturday, February 9, 2013

Hilton Phoenix Airport
2435 South 47th Street,
Phoenix, Az 85034-6410
Tel: 1-480-894-1600
Telephone: (602) 273-7373

Registration Form

Banquet Fees:

IEEE Members and Guests	$35.00
IEEE Student Members	$25.00
IEEE Student Member Guests	$35.00
IEEE Society Chapter Table	$350.00*
Corporate Sponsorship	$500.00**

*Table sits 10 persons.
**Sponsorship includes recognition at program, table of ten for dinner, and space for a display.
For additional information please visit ewh.ieee.org/r6/phoenix.

Please mail the completed registration form along with your check, payable to **IEEE Phoenix Section**, to:

Bruce Ladewig
7237 South Golfside Lane
Phoenix AZ 85042
Tel.: 480-620-9291
E-mail: bruceladewig@ieee.org

The deadline for receiving the registration fee is **February 1, 2013.**

Banquet Schedule:

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

Social Hour Hors D'Oeuvres:
Fajita Station — International & Domestic
Assorted Sushi Station — Cheese Display

Cash Bar:
Sodas and Alcoholic Beverages

Dinner Choices:
1) Sliced Medallions of Beef served Wild Mushrooms & Pearl Onion Glaze, Tricolor Fingerling Potatoes & Grilled Seasonal Vegetables
2) Cous Cous, Raisins & Cranberries Stuffed Breast of Chicken served over White Wine Sauce with Vegetable Rice Pilaf & Seasonal Vegetables
3) Portobello Mushroom Napoleon: Stuffed with Mushrooms, Tomatoes, Edamame Confetti over Buerre Blanc Sauce

Dinners include: Baby Greens Mixed Salad with choice of dressings Warm Dinner Rolls with Butter.

Dessert:
Four Layer Dark Chocolate Cake

Please limit registration to two persons per form; attach multiple forms if necessary. Detach below and mail with check.

IEEE PHOENIX SECTION ANNUAL BANQUET – 2013 Registration

(Please complete all sections of the form by typing or printing in bold and capital letters)

Name:

Guest Name:

Address:

Telephone Number: **E-mail:**

IEEE Member: **Yes** ☐ **No** ☐ **Student** ☐ **Membership #**

Dinner Choice (please select one per person):

(1) ___ Sliced Medallions of Beef
(2) ___ Cous, Cous Stuffed Chicken
(3) ___ Portobello Mushroom Napoleon

IEEE Phoenix Sections Awards-Submit by January 13th

Phoenix Section Awards Submissions due: Sunday, January 13, 2013

Awardees to be recognized at the Annual Banquet on February 9, 2013

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

Society Chapter/Affinity Group

Non-member

Corporate

Educational

Section Chair

Student Scholarships

As per tradition, the IEEE Phoenix Section will be presenting these awards at the Annual Banquet on Saturday, February 9th, 2013. The section is seeking nominations for the awards and student scholarships.

Section members are requested to consult nomination guidelines and submit the filled out nomination form.

For further information and to submit applications, please contact:

Dr. Vasudeva P. Atluri
IEEE Phoenix Section
Awards Committee Chair
E-mail: vpatluri@ieee.org

IEEE-PHOENIX Section Scholarships

IEEE

IEEE Phoenix Section Scholarships

- In 2013 the IEEE Phoenix Section will award $1000 scholarships to three qualified applicants.
- Detailed information and the scholarship application form can be found at http://ewh.ieee.org/r6/phoenix/Scholarships.htm
- Application deadline is January 13, 2013

Dr S. Diane Smith
IEEE Phoenix Section
Student Activities Chair
sdianesmith@computer.org

Phoenix Section Student Paper Contest

- **Undergraduate students can win cash prizes and top entrants are eligible to present their paper at the IEEE Region 6 Southwest Area later in Spring 2013 .**
- **Detailed information can be found at http://ewh.ieee.org/r6/phoenix/StudentPaper.htm**

The submission deadline is March 2, 2013

Dr S. Diane Smith
IEEE Phoenix Section
Student Activities Chair
sdianesmith@computer.org

Signal Processing & Communications Society

Phoenix Chapter of IEEE Signal Processing Society and Communications Society

Upcoming events

This is to wish everyone a Happy New Year 2013. We thank everyone for the support for the chapter events last year, and we look forward to more informative and exciting activities for the upcoming year.

Please contact Chapter Chair Pavan Turaga (pturaga@asu.edu) to volunteer or propose a speaker for upcoming meetings.

CPMT Phoenix Chapter

CPMT- Packaging and Manufacturing Technology Society

New Updates coming soon

IEEE CPMT Society Phoenix Chapter is seeking volunteers to serve as Chapter Officers for 2013.

IEEE CPMT Society Phoenix Chapter is seeking volunteers to serve as Chapter Officers for 2013. One has to be a member of IEEE CPMT Society to serve as the IEEE CPMT Society Phoenix Chapter Officer. If interested, please contact Dr. Vasudeva P. Atluri, Chair, IEEE CPMT Society Phoenix Chapter, by sending an email to vpatluri@ieee.org.

Power & Energy Society

IEEE Power and Energy Society
Phoenix Chapter

http://ewh.ieee.org/soc/pes/phoenix/

New Updates coming soon

Solid State Circuits Society

INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS

IEEE SOLID-STATE CIRCUITS SOCIETY

New Updates coming soon

EMC Society

Technical Meeting

New Scanning Tools for EMC Investigations

Date: Thursday, February 7th, 2013
Place: Garcia's Mexican Restaurant at Embassy Suites Hotel
Address: 4400 South Rural Road, Tempe, Arizona
Address: Just South of U.S. 60 on West side of Rural Rd.
Time: 5:30PM Social in Garcia's, 6PM Dinner in Garcia's, 7PM Meeting in Embassy Suites Junior Ballroom (upstairs)

Title: New Scanning Tools for EMC Investigations

Speaker: Michael Hopkins, Amber Precision Instruments

Abstract: New scanning technologies have been developed that can provide a great deal of information about circuit sensitivities, emissions sources, board resonances and even the effectiveness of protection devices and current paths taken by ESD or Surge currents in a circuit. Identification of problems is especially difficult for "soft" failures where systems become upset due to an EMC event but there is no damage, arcing or other evidence to tell the engineer how the problem occurred. Compliance testing at commercial labs can be very time consuming and expensive, and when a test fails little or no information regarding the root cause of the failure is available. New scanning technologies can reduce the risk of problems during compliance testing and can help pin down root cause of both immunity and emissions failures when they do occur.

Biography: Michael has over 30 years of experience with EMC and ESD as an independent consultant, an employee of Thermo Fisher Scientific working with the KeyTek product lines, EM Test USA, and Amber Precision Instruments. He has worked closely with manufacturers and laboratories world-wide providing training, applications help, and assistance with the development of interpretation of test standards. He is the author of several papers and articles on ESD and other system level EMC phenomena and has participated in numerous national and international seminars as author, speaker, and panelist. Michael has served with several committees developing standards for industry including the IEC as a former working group convener, the ESD Association, IEEE, SAE and is a member of the U.S. Technical Advisory Group for EMC for the development and maintenance of basic EMC standards.

Reservations: To help us get an accurate headcount, please send an RSVP email to Harry Gaul (harry.gaul@ieee.org). There is no charge for meetings, but you pay for your own meal and drinks. If you decide at the last minute, please come anyway. You don't need to be an IEEE or EMC Society member to attend -- all are welcome.

Life Member Affinity Group

IEEE Phoenix Section Life Member Affinity Group

Celebrating 125 Years of Engineering the Future

Technical Meeting February 12, 2013

Topic: TBD
When: Tuesday, February 12, 2013 11:00am – 1:00pm, Registration fee is $15. This fee will include lunch provided by the PERA Club.

AFFINITY GROUP MEETING

Results of Election of Officers:

December 4th election results were:

Chair: Vacant
Vice Chair/Acting Chair: Michel Ebertin
Secretary: Tom Lundquist
Treasurer: Leslie Daviet II
Program Chair: Ronald L. Sprague, P.E.

Where: SRP's **PERA Club** Bighorn Room,
1 East Continental Drive, Tempe, AZ
West of 68th St., ½ mile south of McDowell Road

RSVP: Please respond to Program Chair, Ronald Sprague by email:
rlsprague@q.com (Q.com) at least 5 days before the meeting.

The Program Chair is seeking suggestion from members for future technical presentations. Any ideas of interest are open for consideration. Please contact Ronald Sprague Program Chair at rlsprague@q.com or any officer with ideas.

About IEEE Phoenix Section Life Member Affinity Group:

The IEEE Phoenix Section Life Member Affinity Group was organized 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.

An IEEE member automatically becomes an IEEE "Life Member" status when at least 65 years of age and the sum of your current age and years of membership is 100. For more details use the link
http://www.ieee.org/web/volunteers/mga/home/life_members_committee/index.html

Activities: Annual technical meetings scheduled in February, May, October, and December. Elections are held at the December meeting.

Technical meeting topics and suggested speakers are encouraged. Contact any Officer.

Future Technical Meetings:

- Tuesday, February 12, 2013 SRP PERA CLUB

- Tuesday, May 14, 2013 SRP PERA CLUB
- Tuesday, October 15, 2013 SRP PERA CLUB
- Tuesday, December 3, 2013 SRP PERA CLUB

Officers:

Chair	Vacant	
Vice Chair	Michel Ebertin	*Michel@ebertin.net*
Secretary	Tom Lundquist	Tom.Lundquist@ieee.org
Treasurer	Leslie Daviet II	*lesdavietii@cs.com*
Program Chair	Ronald L. Sprague, P.E.	rlsprague@q.com
Past Chair	A. Barry Cummings	Barry.Cummings@srpnet.com

Women in Engineering Affinity Group

IEEE Phoenix Section
Women in Engineering
Affinity Group

The IEEE Phoenix Section **Women in Engineering (WIE) Affinity Group (AG)** held our last meeting of the year at Salt River Project in Tempe, Arizona on December 3rd. LeeAnn Torkelson, Principle Engineer in the Transmission Analysis department at Salt River Project, spoke on the process for planning high-voltage electric transmission lines in Arizona. Ms. Torkelson's presentation was very informative and highly enjoyed by all eight attendees.

On December 6th, three **WIE** volunteers supported the Arizona Science Lab (ASL) by volunteering to help students in grades 4 through 9 learn about rockets. The volunteers had a lot of fun helping the students build a variety of rockets. All the rockets launched successfully, and one group even set a new record for height! More information about ASL can be found on their website at www.azsciencelab.org.
If you would like to be added to our distribution list for further information about this and future events, please contact Diane Watkins (diane.watkins@srpnet.com).

If you would be interested in helping to organize any of our activities or have suggestions for other activities or speakers for future events, please feel free to contact any of our Executive Committee members:

Chair: Shamala Chickamenahalli (Shamala.Chickamenahalli@intel.com)
Vice-Chair: Joy Harris (joyelle.j.harris@intel.com)
Secretary / Publicity: Diane Watkins (diane.watkins@srpnet.com)
Treasurer: Diane Smith (diane@web-oasis.com)
Web Master: Audrey Skidmore (ASkidmore@azmag.gov)
Membership: Lesley Polka (lesley.a.polka@intel.com)
Region 6 Liaison: Barbara McMinn (barbara.mcminn@aps.com)

The IEEE WIE Affinity Group's mission is to inspire, engage, encourage and empower IEEE women worldwide with a vision of creating a community of IEEE women and men innovating the world of tomorrow. More information about IEEE WIE can be found at: http://www.ieee.org/membership_services/membership/women/women_about.html.

Computer Society

Phoenix Chapter of the IEEE Computer Society

January, 2013

News

- Our January 9th meeting will feature Michèle Stuart, PI, JAG Investigations, speaking on the topic of the Internet and its perils and pitfalls. Michèle is a nationally recognized expert on open source investigations and locating evidence on the Internet. She teaches classes to law enforcement personnel nationwide and has taught numerous classes to various law enforcement entities at the FBI academy in Quantico, VA.

Future Events

- January 9, 2013 – Chapter meeting, DeVry University, speaker Michèle Stuart, PI, JAG Investigations, "Internet Evidence Searching and Open Source Investigations".

Chapter meeting dates for 2013 are shown below so you can save the dates; all dates are Wednesdays and all meetings will be held at DeVry University unless announced otherwise:

- March 6th
- May 1st
- July 10th
- September 4th
- November 6th

Meetings start at 6:00 pm with networking and light refreshments followed by the presentation at 7:00 pm. DeVry University is located at 2149 W Dunlap Avenue, Phoenix.

Visit the CS Chapter website for the latest information: http://ewh.ieee.org/r6/phoenix/compsociety/.
For brief announcements regarding upcoming events we are also on Twitter: @IEEECS_PHX

If you would like to suggest a topic or speaker for any of our future meetings, please contact one of the chapter officers:

Jerry Crow (jerry.crow@computer.org)
Brad Morantz (bradscientist@ieee.org)
Audrey Skidmore (askidmore@computer.org)
Diane Smith (sdianesmith@computer.org)

Wave and Devices

INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS

WAVES AND DEVICES - Phoenix Chapter

New Updates coming soon

The Arizona Science Lab

The IEEE "Arizona Science Lab" (ASL) was launched in February 2009. It is a volunteer group operating under the management of the IEEE, a 501(c)(3) organization, that engages retired and employed engineers, scientists and teachers, university students and other professionals in enhancing the STEM learning of grade 4 thru' 9 students, stimulating their interest in STEM subjects, and inspiring them to pursue studies and future careers in STEM subjects.

- **ASL workshops are provided free of charge to all public and charter schools in Maricopa County and especially to State Grade "C" and "D" and Federal "non-AYP" and "Title 1" schools. The ASL is supported by the IEEE, Nina Mason Pulliam Charitable Trust, APS, Verizon, and the Tempe Elementary School District No. 3.**
- **The permanent location of the Arizona Science Lab is in the Meyer School Facility in Tempe!**
- **The teachers bring their grade 4 to 9 science class (up to 60 students) to the Arizona Science Lab for a full day immersion in a Science Workshop.**
- **Each Science Workshop, in a lab setting, is supported by expert volunteers who conduct a project-based lesson plan, complete with demonstrations, lecture, experiments, and a construction project in a single 3 - 4 hour session.**
- **Each Workshop is conducted by a group of retired, employed and university student engineers who are highly qualified in math, physics, computers, electronics, power generation & distribution, structures, thermal, chemistry, materials science, and computer software. Our instructional staff has years of real world application experience in the sciences. They relate the theory being taught to everyday applications.**
- **The teachers choose a Workshop from a list of ready-to-run Workshops that support the Common Core and Arizona Science Education Content Standards.**
- **ASL's rigorous Metrics Program, that includes guidance and support from two**
- **shows a 4 to 13% improvement in student STEM knowledge, understanding and motivation after each workshop.**

Each Workshop emphasizes the WOW factor of hands-on construction projects and experiments!!!

Rickie Currens,
Executive Director- Arizona Science Lab

An Excellent article written about ASL from ASU.

http://www.wiete.com.au/journals/GJEE/Publish/current_issues.html

Vol.14, No.3, 2012

THE ARIZONA SCIENCE LAB®

Meyer School Facility, 2615 South Dorsey Ln, Tempe, AZ 85282-2799

www.arizonasciencelab.org

IEEE ASL MEMBER POSITION DESCRIPTION

The primary objective of the IEEE "Arizona Science Lab" program is to encourage grade 4 - 9 students to become interested in science, technology, engineering and math (STEM) and to pursue studies and a career in STEM, and to reverse the widely acknowledged continuous downward trend of the number of students opting for studies and careers in STEM. The secondary objective is to encourage retired engineers and scientists, employed engineers and scientists, retired teachers, university engineering students, and anyone with an interest in science and a practical aptitude to become engaged with the students and share their knowledge, expertise and passion for engineering and science with them.

To accomplish these two objectives ASL uses teams of 6 – 8 volunteers to put on fully provisioned project-based science lesson plans for grade 4 – 9 schools throughout the Phoenix metro area, in our facility in Tempe, with all the volunteers, equipment and supplies being provided at no cost to the teacher or school or students.

See some short videos at this link: http://www.azsciencelab.org/Videos_Photos.php

Position Description:

IEEE ASL Members are volunteers who provide academic and career support to grade 4 thru' 9 students during one day Workshops in the IEEE "Arizona Science Lab." Members teach students science and help them perform experiments and construct projects that reinforce the science they have been taught. Members advise students on studies and careers in science and engineering.

In each workshop there are two different positions available:

- **Teacher:responsible for giving the lectures and running the demonstrations**
- **Supporter: responsible for working with the students on experiments and the construction projects**

Qualifications & Responsibilities:

- Retired or employed engineer or scientist or teacher, or university engineering or science student, or anyone with an interest in science and an aptitude for hands-on activities
- Enthusiasm for science, technology, engineering and math (STEM)
- Desire to share knowledge and experience with grade 4 thru' 9 students
- Desire to help students learn and enjoy science
- 1 year overall commitment preferred
- Commit one day in a week at least twice a month as a Workshop Teacher or Project Supporter
- Actively participate in IEEE ASL Group meetings to review program status, discuss issues and ideas, review lesson plans, etc.
- Complete Arizona State required criminal background check and Independently Verified Fingerprint (IVP) clearance (processing fee will be paid by IEEE ASL)

TISP/ASL Provided Training and Orientation:

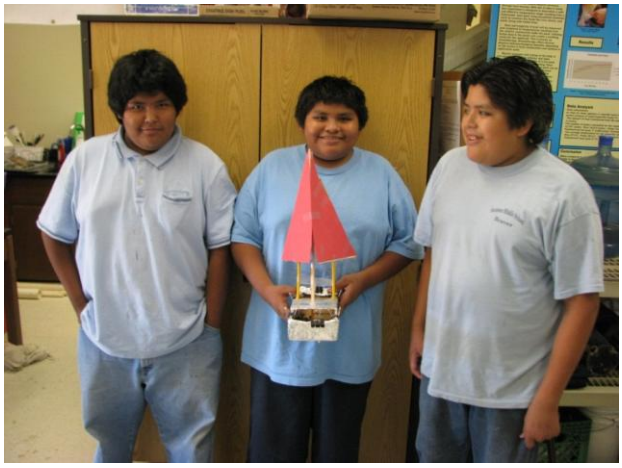
- Understand how IEEE ASL operates
- Deepen your teaching skills
- Expand your tutoring and support techniques
- Increase your sensitivity to different cultures and age groups

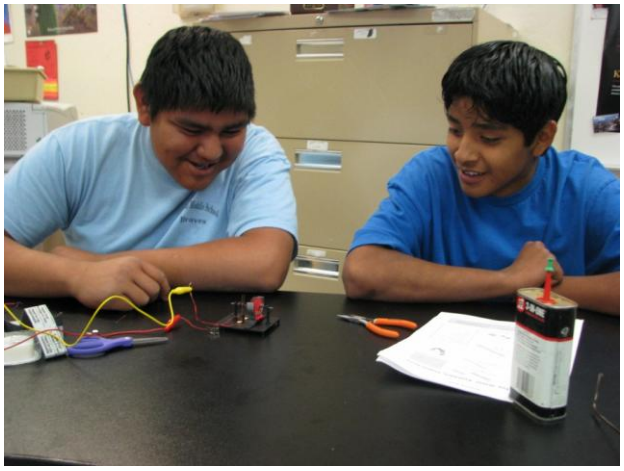
Benefits:

- Access to free trainings and workshops
- Opportunity to make a difference in a child's life and in your community

- Share the excitement and "Wow Factor" the students have when they complete and test their project
- Be a small part of helping create a better world for tomorrow — students will remember these workshops and your help and advice for a very long time!

The "Wow!" Factor In The IEEE ASL Lessons





Contact Information:

Michel Ebertin ASL Director of Volunteer Recruitment mebertin@azsciencelab.org
Stuart Wecker ASL Executive Director swecker@azsciencelab.org

An Excellent article written about ASL from ASU.

http://www.wiete.com.au/journals/GJEE/Publish/current_issues.html

Vol.14, No.3, 2012

2013 IEEE

Phoenix Section Calendar

The calendar is updated by the Vice Chair on a rolling basis.
TBD

You may access the IEEE Phoenix Section Calendar of Events at:

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

For inputs and updates to the Calendar, please contact the IEEE Phoenix Section
Charles Weitzel, 480-292-0531 c.weitzel@ieee.org

January 2013
o

- Student Scholarship applications due: January 13, 2013
- Section Award Nominations due: January 13, 2013
- Annual Banquet: Finalize speaker
- Annual Banquet: E-mail program

Volunteer Needed to fill the position of Publicity Chair for Phoenix Section, if interested Please contact Charles Weitzel, 480-292-0531 c.weitzel@ieee.org or Surinder Tuli 480-554-8275 surinder.tuli@gmail.com

Executive Committee Meeting

Phoenix Section

Tuesday, January 8, 2013, 5:45 – 8:00 PM
Monti's La Casa Vieja
100 South Mill Avenue, Tempe, Arizona

Please attend this month's Executive Committee meeting (click on link above for map). In addition please send a brief report by e-mail to Secretary Barbara McMinn and myself before Tuesday. If you should be unable to attend this time please arrange for coverage, such as attendance by the Vice Chair.

Phoenix Section January ExCom Meeting - Officer Appreciation Dinner

We will be meeting at Monti's on January 8th at 5:45pm. The section will be paying for Chapter Chairs and Executive Committee Officers. Please register at the following address by January 3, so we will know how many meals will be needed:
https://meetings.vtools.ieee.org/meeting_view/list_meeting/15879

The agenda for the meeting is below.

Regards,
Ralph Hogan
Chair, IEEE Phoenix Section

Agenda

- Chair Report
- Section Officer Reports
  - Vice Chair – Chuck Weitzel: Calendar of Activities
  - Secretary – Barbara McMinn: Meeting Minutes
    - December Meeting Minutes
  - Treasurer – Bruce Ladewig : Monthly report
    - December Monthly Report
    - Proposed Section Budget for 2013
  - Past Chair – Jim Hudson
- Society Chapter and Affinity Group Reports
  - Components, Packaging and Manufacturing Technology (CPMT) – Vasu Atluri
  - Computer Society (CS) – Jerry Crow
  - Education Society (EdSoc) – Martin Reisslein
  - Electromagnetic Compatibility (EMC) – Harry Gaul
  - Engineering in Medicine and Biology Society (EMBS) – TBD

  - Graduates of the Last Decade (GOLD) – Chaturvedi Gogineni
  - Life Members Affinity Group (LMAG) – Barry Cummings
  - Power & Energy Society (PES) – Kory Hedman
  - Signal Processing & Communications (SP/Com) – Pavan Turaga <pturaga@asu.edu>
  - Solid State Circuits Society (SSCS) – Cyndi Recker
  - Waves & Devices (WAD) – Steve Rockwell
  - Women in Engineering (WIE) - Shamala Chickamenahalli
- Student Branch Reports [Advisor]
  - Student Activities Chair – Diane Smith
  - ASU Main, Engineering – Ahmet Cemal Durgun
  - ASU Main, Computer Society – Nicholas Vaidyanathan [Guoliang Xue]
  - ASU Polytechnic – TBD [TBD]
  - DeVry, Phoenix –Diane Smith
  - DeVry, Computer Society – Lori Renaldi

  - Embry Riddle – James Fernando [John E. Post]
  - NAU, Engineering – Kenji R. Yamamoto [Niranjan Venkatraman]
  - NAU, Computer Society – TBD [TBD]
- Standing Committee Reports
  - Awards – Vasu Atluri
  - Inter-Society – Mike Andrews
  - Professional Activities Committees for Engineers (PACE) – Russell Kinner
  - Membership – Vasu Atluri
  - Phoenix Conferences – Guoliang Xue
  - Publicity – Surinder Tuli
  - Teacher In-Service Program – Rickie Currens
  - Arizona Science Lab --
  - Web – Krishna Bharathkrishna
- New Business
- Adjourn

SMART Competition opens for high school students

News and Updates

October 19, 2012

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SMART Competition opens for high school students

The SMART Competition (www.smartcompetition.org) is a STEM and Career and Technology Education (CTE) education program that provides high school students with a practical real-world design challenge that addressed the smart grid, intelligent building design, energy efficiency, localized power generation and green buildings. The students create an innovative solution to a design problem faced by technical professionals everyday as they try to make schools function more efficiently.

According to Mark Schneider, Director of Bentley Systems and co-chair of the SMART design team, *"The competition is an ideal opportunity for students, either in the classroom or in informal learning environments to get hands-on practical experience in engineering design, building information modeling, energy analysis and intelligent design using software tools used by engineering professionals."*

The SMART Competition is a new high school STEM education program designed to challenge students to develop solutions to a real-world campus redesign project. The solution will include elements of localized power generation, the smart grid, power distribution and delivery, electric vehicles, architecture, the environment, community, livability and sustainable technology. The ultimate goal of the program is to create student interest in pursuing STEM related careers, higher education and university studies in a variety of technical disciplines.

As part of the competition, students use commercial software design tools and a global technical support infrastructure. The Competition, by promoting intellectual investigation, promotes academic achievement, career preparation, teamwork and other 21st century skills essential for in-demand occupations within high-growth industry sectors. The computer design and simulation skills give students with the capability to work for engineering and design firms while in school or immediately following graduation.

The competition is open to all high school students who attend public, private, parochial, charter and home-based schools or participate in informal education programs. The competition is designed to attract all students without regard or bias of gender, race, socio-economic or academic performance level.

For additional information, contact Mike Andrews, m.andrews@smartcompetition.org

IEEE Membership Grade Advancement

IEEE Phoenix Section Executive Committee encourages all to apply for advancement in membership grade to Senior Member and Fellow Grade. Please review the requirements at www.ieee.org. Please contact IEEE Phoenix Section Membership Development Chair, Dr. Vasudeva P. Atluri, at vpatluri@ieee.org for additional information.

Enhanced Senior Member Application Launched

Effective 29 July 2011, IEEE Admission and Advancement launched a new Senior Member Application. The new application includes numerous enhancements, based on feedback from volunteers and members, including:

- New user friendly format / design
- Secure environment (need IEEE Web account)
- Ability to save application in "draft" form
- Ability to upload resume or Curriculum Vitae (up to 3 MB)
- Applicant can view application online
- Applicant can view status of requested reference forms
- References will be notified by email to provide applicant reference
- References will have the ability to view their completed reference form(s)
- Real time application status

The goal is to provide prospective Senior Members with an easy to use and intuitive interface, while streamlining internal operations at the same time. View the new Senior Member application.

IEEE USA E Book on Transition

IEEE-USA E-Book E-Books to Members in September and October Feature Career Survival and Writing for Success: IEEE-USA is offering two free e-books to IEEE members the next two months as a special benefit of IEEE membership. In September members can receive "The Best of IEEE-USA Today's Engineer on Career Survival." In October, the free featured publication will be "Writing for Success -- An Engineer's Guide, Volume 1: Designing for Success." "The Best of Today's Engineer on Career Survival" is a compilation of career-focused articles from "IEEE-USA Today's Engineer" that can help you find success in a challenging job market. We all need the ability to survive in a changing world, and engineers need a better awareness about the evolving business ecosystem and what those changes mean. The articles in this e-book will help to increase your situational awareness of the marketplace, which in turn, can help you with career planning and developing sustainable job skills. You'll also learn how to assess the market and yourself, how to stay competitive, and what steps to take to thrive in the job market. "The Best of Today's Engineer on Career Survival" can be downloaded at http://www.ieeeusa.org/communications/ebooks/files/wisao2sf/Best-of-TE-On-Career-Survival-V1.pdf for free to IEEE members. The nonmember price is $5.99. The purpose of "Writing for Success -- An Engineer's Guide, Volume 1: Designing for Success" is to inspire and help engineers to approach their writing tasks with the same confidence and skill they take to the technical problems that confront them -- so that emails, reports, test-plans, and other documents they write are as useful, successful and valued as their engineering

efforts. “Writing for Success – An Engineer’s Guide, Volume 1: Designing for Success” will be available for members to download in October.

IEEE-USA Government Fellowships:

2013-2014 IEEE-USA Government Fellowships

Each year, IEEE-USA sponsors three qualified IEEE members to serve as government fellows: one Engineering & Diplomacy Fellow and two Congressional fellows. The fellows spend a year in Washington – from September to August each year – serving as advisers to the U.S. Congress or key U.S. Department of State decision-makers. IEEE-USA's Government Fellowships link engineers with government, providing a mechanism for IEEE-USA members to learn firsthand about the public policy process through personal involvement.

The congressional fellowship consists of an appointment to the personal staff of a U.S. Senator or Congressman, or to the professional staff of a Congressional Committee. For an application Kit for the 2013-2014 Congressional Fellowship Program, visit: http://ieeeusa.org/policy/govfel/congfel.asp

The State Department fellowship offers an opportunity for an engineer to provide technical expertise to the State Department, and help raise awareness of the value of engineering input while learning about and contributing to the foreign policy process. For an application Kit for the 2013-2014 Engineering & Diplomacy (State Department) Fellowship Program, visit: http://ieeeusa.org/policy/govfel/state.asp

The postmark application deadline for 2013-2014 Fellowships is 8 February 2013. For more information, visit: http://ieeeusa.org/policy/govfel/congfel.asp

Phoenix Section LinkedIn Group

If you are interested in professional networking and shared Section related updates & discussions join the IEEE Phoenix Section Group on LinkedIn. Signing up only takes minutes and is free. A job board is available as well.

Faculty opening at Embry-Riddle

Electrical Engineering faculty opening at Embry-Riddle, Prescott. For more information, search available positions at Prescott at *www.erau.edu/jobs or contact Dr. Ed Post at postj@erau.edu.*