## The Valley Megaphone



Newsletter of the
Institute of Electrical and
Electronics Engineers, Inc.,
Phoenix Section
December 2011,
Volume XXVI, Number 12

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IEEE Phoenix Section on-line updates can be found at <a href="http://ewh.ieee.org/r6/phoenix/">http://ewh.ieee.org/r6/phoenix/</a> 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/AnnualBanquet.ht m

## **Chapters**

Signal Processing & Communications

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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: <a href="http://ewh.ieee.org/r6/phoenix/">http://ewh.ieee.org/r6/phoenix/</a>

## 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 <u>sdianesmith@computer.org</u> Student Activities Chair

#### **Student Branches**

ASU Main, Engineering
Chair: Saurabh Naik,
480-252-0504, svnaik@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: Donovan Benedict
Don4ben5@gmail.com
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 Nick (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 <a href="mailto:sdianesmith@computer.org">sdianesmith@computer.org</a>

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

## Scholarship Applications Deadline is January 15, 2012

Applications due: January 15, 2012 with Awardees to be recognized at the IEEE Phoenix Section Annual Banquet on February 11, 2012. Awards apply to full-time graduate and undergraduate students who are IEEE members in EE, CSE, EET, CET, and CS majors. The application form can be found at the following website: http://ewh.ieee.org/r6/phoenix/Scholarships.htm



## Phoenix Chapter of IEEE Signal Processing Society and Communications Society





Thanks to all of the attendees who have made this year's technical meetings so successful. More to come in the coming months...

Please contact Chapter Chair David Frakes (<u>dfrakes@asu.edu</u>) to volunteer or propose a speaker for upcoming meetings.



#### THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.



## IEEE Components, Packaging and Manufacturing Technology Society Phoenix Chapter

### **TECHNICAL SEMINAR - DECEMBER 14, 2011**

**TITLE: Applying Advanced Technologies for Marketing Across Internet** 

PRESENTER: Ms. Kim Figor and Mr. Mark Bowens, Director/ Analyst of Search Engine Marketing, Local Directive, Tampa, Florida 33609.

#### **ABSTRACT:**

This talk focuses on technological advancements that have dramatically affected online advertising techniques. The focus of advertising is changing from traditional text and image to those containing more recent technologies to effectively engage and connect their audience with their campaigns that seek to shape consumer attitudes and feelings towards specific products and services. In 1996, Internet advertising totaled \$301 million in the U.S; a significant increase over the \$0 dollars spent two years earlier in 1994. However, this figure pales in comparison to the \$175 billion spent last year. Millions of potential customers access the Web every day. While Web sites continue to emerge from companies in nearly every industry, simply creating a Web site isn't enough to create a solid online presence; companies also need to drive traffic to their sites.

#### **BIOGRAPHY:**

Kim Figor is the Director of Search Engine Marketing at Local Directive, and brings over 11 years experience in several marketing disciplines that encompass SEO & Paid Search Online Marketing, Loyalty Marketing, Marketing Communications, and Project Management. She obtained BABM and MBA in Marketing as well as AdCenter and Adwords Certifications. In addition to working at Google, where she assisted thousands of companies succeed online, Kim has been a key player in the start-up and growth of several technology and marketing companies. Kim's has exceptional analytical skills in online marketing which have been instrumental in the success of campaigns for several companies. Mark Bowens is search engine Marketing/Optimization Analyst. In 2006, Mark graduated from California State Long Beach with his Bachelor's degree in information systems. Mark has passion for online advertising and founded the Bowens Internet Group. He was trained by Google in Search Engine Marketing and in 10 months consulted over 500 businesses as an Adwords Marketing Specialist. Mark has built and sold 2 online businesses and trained over 1000 entrepreneurs on the effective internet marketing strategies.

#### DATE: Wednesday, December 14th, 2011

LOCATION: Group Conference Room, Freescale Semiconductor, Inc., 2100 E. Elliot Rd. Tempe, AZ. Enter the facility through the Main (South) lobby in building 94, 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 will be provided by the IEEE CPMT Phoenix Chapter)

NOTE: IEEE members and non-members are all 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 any of the following CPMT officers: Vivek Gupta (480) 413-5849 Vasu Atluri (480) 227-8411 Surinder Tuli (480) 554-8275 Mahesh Shah (480) 544-9438"

## **IEEE CPMT Society Phoenix Chapter is seeking volunteers**

IEEE CPMT Society Phoenix Chapter is seeking volunteers to serve as officers for 2012. Please contact Chapter Chair, Dr. Vasudeva P. Atluri, at <a href="mailto:vpatluri@ieee.org">vpatluri@ieee.org</a> for additional information and if interested in serving as an Chapter Officer.

## **EMC Society Technical Meeting Announcement on EMI Filters**



Date: Thursday, January 19<sup>th</sup>, 2012

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 (order off the menu),

7PM Meeting in Embassy Suites Junior Ballroom (upstairs)

Title: Understanding and Using EMI Filters

Speaker: David Stanis, Retired General Manager Filter Division, WEMS

**Electronics** 

**Abstract:** This talk will address the various types of industry wide custom EMI filters both single circuit components and multi-circuit filter assemblies. Discussion will include Common Mode and Differential Mode interference and filtering techniques, MIL-PRF-28861 "S" Level requirements and problems and a review of EMI Filter Source Control/Specification Control Drawings.

**Biography:** David Stanis has over forty years experience encompassing all aspects of EMI/EMC. After receiving his BSEE from Southern Massachusetts University in 1972, David went on to work for various companies involved in both commercial and military EMI/EMC testing and filter design. David returned to California in 1973 and held the position of EMC Test Engineer at NASA's Jet Propulsion Laboratory in Pasadena California working on the Viking spacecraft mission to Mars and the Voyager spacecraft mission to Jupiter and Saturn. Upon conclusion of the Voyager program David left JPL and went on to work for Cornell-Dubilier Electronics Filter Division, San Fernando Electric Filter Division, AVX / US Microtek Filters and the Filter Division of WEMS Electronics. Positions included Engineering Manager, Manager of New Product Development, Operations Manager and Division Marketing Manager. This vast experience provides David with a broad in-depth knowledge of EMI/EMC Requirements, EMI filter design and EMI filter manufacturing. David retired in 2008 after sixteen years as General Manager of the Filter Division at WEMS Electronics. Although retired, David continues to provide consulting services to WEMS Electronics.

**Reservations:** To help us get an accurate headcount, please send an email to Harry Gaul (harry.gaul@ieee.org). There is no charge for meetings, but you pay for your own meal and drinks. Since we order off the menu, we do not need an exact number, so 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.



# **IEEE Power and Energy Society**



## **Phoenix Chapter**

## **News and Announcements:**

- IEEE PES Phoenix Chapter was awarded the Outstanding Chapter Award for 2010 at the IEEE Phoenix Section Annual Banquet.
- Want to know more about IEEE PES? Watch this video: http://www.youtube.com/watch?v=BRKM4lpo\_tk
- IEEE PES Scholarship Plus Initiative: Scholarships for undergraduates pursuing electric power and energy: <a href="http://www.ee-scholarship.org/">http://www.ee-scholarship.org/</a>
- Have you considered becoming a Senior Member of IEEE? It's not as difficult as you think. Basically, you need ten years of professional experience, and your bachelor's degree counts for three of those years. Find out more at the <a href="IEEE Senior Member Program">IEEE Senior Member Program</a> website.
- In 2011, the PES Phoenix chapter has supported:
  - The TISP/EIC Program with \$3,000
  - The Future City Competition with \$1,000
  - Two EE College Students with \$1,000 Scholarships

## **Schedule of Upcoming Events:**

The next PES Luncheon and Seminar will be held on Thursday, January 19<sup>th</sup>.

More information regarding the IEEE PES Phoenix Chapter can be found at: <a href="http://ewh.ieee.org/soc/pes/phoenix/index.php">http://ewh.ieee.org/soc/pes/phoenix/index.php</a>



## **Phoenix Section Life Member Affinity Group**

## **December 6, 2011 Meeting News**

Next Meeting - Tuesday, December 6, 2011, 11:00am - 1:00pm Luncheon \$10

**Officers Election** – December 6<sup>th</sup>, nominations for officers may be submitted at this time or at the meeting. To nominate please insure they are willing to serve and send the nominations to Barry Cummings – Chairman <u>Barry.Cummings@srpnet.com</u>.

As of this time nominations are as follows:

Barry Cummings - Chairman, Vice Chair - Michel Ebertin, Secretary – Thomas Lundquist, P.E., Treasurer - Leslie Daviet II, Program - Ronald L. Sprague, P.E., Past Chair - C Bruce Johnson

**RSVP:** Please respond to Program Chair, Ronald Sprague by email by December 2nd: <a href="mailto:rlsprague@q.com">rlsprague@q.com</a>

**Technical Meeting Topic December 6th –** CLOUDS What is it? How does it work? Public and Private clouds presentation by John Lundquist

John Lundquist is an experienced Solution Architect and Technical Project Manager. His primary focus area has been CRM (customer relationship management) delivery. His primary efforts have been in the Sales Force and Call Center spaces. He has lead and managed multiple teams through Global CRM implementations including Application Development, EAI (enterprise application integration), Hardware and Network Infrastructure, and Database Management. John specialize in out of the box thinking, and cutting edge technical implementations. He has experience with Motorola, Price Waterhousecoopers Consulting, IBM, Charles Schwab, AAA, and Salesforce.com. He holds a BS degree in MIS and in Operations Management from the University of Arizona.

Where: SRP's PERA Club Bighorn Room,

1 East Continental Drive, Tempe, AZ

West of 68th St., 1/2 mile south of McDowell Road

Either MapQuest or Google maps can help you if needed.

### **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 speakers are encouraged. Contact any Officer.

## **Future Technical Meetings:**

Tuesday, December 6, 2011 SRP PERA CLUB
Tuesday, February 14, 2011 SRP PERA CLUB
Tuesday, May 15, 2011 SRP PERA CLUB
Tuesday, October 16, 2011 SRP PERA CLUB
Tuesday, December 6, 2011 SRP PERA CLUB

#### Officers:

Chair A. Barry Cummings Barry.Cummings@srpnet.com

Vice Chair Michel Ebertin Michel@ebertin.net

Secretary Tom Lundquist <u>Tom.Lundquist@ieee.org</u>

Treasurer Leslie Daviet II <u>lesdavietii@cs.com</u>
Program Chair Ronald L. Sprague, P.E. <u>rlsprague@q.com</u>

Past Chair C Bruce Johnson <a href="mailto:cbj@johnsonscientificgroup.com">cbj@johnsonscientificgroup.com</a>



## IEEE Phoenix Section Women in Engineering Affinity Group



The IEEE Phoenix Section **Women in Engineering (WIE) Affinity Group** held its December meeting last week (12/1/11, 5:30 – 7 pm) at the SRP building in Tempe. We welcomed Carol Popovich, from Microchip Technology Inc., who spoke about her involvement with FIRST. FIRST is a program whose mission is to inspire young people to be science and technology leaders, by engaging them in exciting mentor-based programs that build science, engineering, and technology skills.

Our group's Chair is Shamala Chickamenahalli (<a href="mailto:shamala@ieee.org">shamala@ieee.org</a>), and the other members of our organizing committee are:

Lesley Polka (<a href="mailto:lesley.a.polka@intel.com">lesley.a.polka@intel.com</a>)
Diane Watkins (<a href="mailto:diane.watkins@srpnet.com">diane.watkins@srpnet.com</a>)
Joy Harris (<a href="mailto:jharris@exponent.com">jharris@exponent.com</a>)
Barbara McMinn (<a href="mailto:barbara.mcminn@aps.com">barbara.mcminn@aps.com</a>)
Audrey Skidmore (<a href="mailto:ASkidmore@azmag.gov">ASkidmore@azmag.gov</a>)

We are presently planning our 2012 activities. If you would like to be added to our distribution list for information about future events, please contact Lesley Polka (lesley.a.polka@intel.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 organizing committee members.

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: <a href="http://www.ieee.org/membership\_services/membership/women/women\_about.html">http://www.ieee.org/membership\_services/membership/women/women\_about.html</a>.



## **Phoenix Chapter of the IEEE Computer Society**

## December, 2011

### <u>News</u>

- The November meeting was a success with attendance higher than average. Kristy Westphal's presentation on mobile device forensics was well received.
- Chapter elections for officers for 2012 were held at the November meeting. The IEEE Computer Society Phoenix Chapter officers for 2012 are

Chair: Jerry Crow
Vice-chair: Brad Morantz
Secretary: Audrey Skidmore
Treasurer: Diane Smith

• The officers and chapter welcomed Indradeep Dasgupta as publicity and membership coordinator.

## **Future Events**

• January 11 – Chapter meeting, DeVry University; speaker Austin Appel, "The Four Types of Locks"

This presentation covers a broad range of topics in order to give the security professional a basic understanding of locks in the workplace. This is essential when attempting to apply a holistic security model to the workplace, one's data, and one's computer hardware – be it desktop devices or server farms. It will assess the differences between basic, commercial, high security, and nearly unpickable locks and proposes a security framework around these categories. An overview of the function of multiple types of locks is presented with a key focus on what may differentiate higher security systems from a more basic system. Additional concerns with large facilities are also discussed.

Austin Appel is a nationally known expert on all aspects of physical locks and associated security. He has delivered this presentation, along with others related to locks, to numerous audiences locally and nationally.

 March 7 – Chapter meeting, DeVry University; speaker Paul Crowley, "Advanced Topics on Optical Media"

Paul Crowley is President and Founder of InfinaDyne, a Chandler-based consulting enterprise focused on optical media issues. Paul is a computer professional with over 25 years experience in programming computers of all types producing commercial products for embedded systems, mainframe and PC's Since 1994, Paul has focused on PC and embedded system software development, specifically related to CD and DVD technology. This has included CD recording, accessing CD-ROM data for PC and Playstation games and in-vehicle navigation systems.

### IEEE Phoenix Valley Megaphone December 2011

InfinaDyne also performs optical media forensic work for law enforcement nationwide. Paul is an expert on all aspects of optical media and will discuss various topics including optical media physical characteristics, reading marginal discs, and reading cracked/broken discs.

- May 2 Chapter meeting, DeVry University, speaker TBD
- July 11 Chapter meeting, DeVry University, speaker TBD

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: <a href="http://ewh.ieee.org/r6/phoenix/compsociety/">http://ewh.ieee.org/r6/phoenix/compsociety/</a>. 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)



## IEEE Phoenix Waves and Devices Chapter 2012 Technical Workshop on



# Millimeter Wave to Terahertz Devices and Technologies

## **Call for Papers**

This one-day workshop will focus on devices and technologies for emerging applications in the upper millimeter wave and lower terahertz (submillimeter) electromagnetic spectrum, and will include invited experts from industry and academia as well as submitted contributions. Abstracts are requested for consideration on any of the represented topics.

## April 27, 2012 8:00 am to 5:00 pm University Club Arizona State University

General Co-Chair: Steve Rockwell

steve.rockwell@ieee.org

General Co-Chair:

Robert Anderson robert.j.anderson@q.com

Phoenix IEEE Waves & Devices Chapter: http://ewh.ieee.org/r6/phoenix/wad/

## DEVICES COMPONENTS Semiconductors

Semiconductors
Vacuum Tubes
Simulation & Modeling
PACKAGING

KAGING APPLICATIONS
Waveguide Communications
Integrated 60 GHz Indoor Radio
Interconnects 70/80 GHz Point to Point

**Workshop Topics** 

SYSTEMS

Antennas Architectures

Spectrom Spectroscopy & Bio-Medical **Abstract Submissions**: Two pages (topic, summary of significant results and conclusions – WORD or PDF files only). Abstract must include author names, affiliations,

addresses, and e-mail address of lead author.

Submission Deadline: Submitting Address: Acceptance Notification:

February 17, 2012 Michael.Goryll@asu.edu March 5, 2012

Sensors

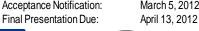
Sources

**Passives** 

Sensing

77 GHz Auto Radar

Radio Astronomy















## Run Ahead of the Curve

## **IEEE Communications Society**

Global Community of Communications Professionals



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The Institute of Electrical and Electronics Engineers, Inc.



## Components, Packaging and Manufacturing Technology Society Orange County Chapter

Presents an All-Day Workshop on

## 3D Integrated Circuits: Technologies Enabling the Revolution

Friday, December 9, 2011

Jazz Semi Auditorium, Conexant Systems, Inc. 4321 Jamboree Road, Newport Beach, CA 92660 Location:

#### Program Agenda

09:00 - 09:05am: Welcome & Introduction

Session – 1: Market, Architecture & Design

09:05 – 09:35am: "Opportunities and Challenges for 3D Integrated Heterogeneous Electronic Systems" - Prof. Muhannad Bakir, Integrated 3D Systems Group, Georgia Tech, Atlanta, GA

09:35 - 10:05am: "Economics to Drive 3D Stacking" -Dr. Phil Garrou, Microelectronic Consultants of North Carolina, Research Triangle Park, NC

10:05 - 10:35am: "Stack Silicon Interconnect Development and Key Role of Supply Chain Collaboration" - Dr. Suresh Ramalingam, Sr. Director, Xilinx, San Jose, CA

10:35 - 10:45am: Break

10:45 - 11:15am: "Emerging Challenges for Power, Signal, and Reliability Verification on 3D-IC/Silicon Interposer Designs" - Dr. Norman Chang, Co-Founder, Apache Design Systems, Ansys, San Jose, CA

11:15 - 11:45am: "3D IC Test Challenges and Solutions" -Dr. Stephen Pateras, Product Marketing Director, Silicon Test, Mentor Graphics, San Jose, CA

11:45 - 12:15pm: "<Presentation Title to be announced>" - A. La Manna, K. Rebibis, Dr. Eric Beyne, Dr. B. Swinnen, IMEC, Leuven, Belgium

12:15 - 01:15pm: Lunch

Session – 2: Manufacturing Technologies & Materials

01:15 - 01:45pm: "Cost-Effective 3D Semiconductor Packaging Solutions Based on Embedded Die in Laminate Technology" – Ted Tessier, Senthil Sivaswamy, Flip Chip International LLC, Phoenix, AZ, Dr. Kazuhisa Itoi, Fujikura Ltd, Tokyo, Japan

01:45 – 02:15pm: "Challenges and Solutions in Mid-end and Back-end Processes for 2.5D and 3D TSV - an OSAT Perspective" - Dr. Yeong Lee, Product and Tech. Marketing Director, STATS ChipPAC, Fremont, CA

02:15 - 02:45pm: "Advanced Underfills for 2.5D and 3D Applications" - Dr. Rose Guino, Dr. Betty Huang, Dr. Kevin Becker, Dr. T. Takano, Henkel Electronic Materials, LLC, Irvine, CA

02:45 - 03:00pm: Break

03:00 - 03:30pm: "3D TSV Interposer and its Applications" - Dr. GS Kim, Founder & CEO, EPWorks, Ltd. Seoul, Korea

03:30 - 04:00pm: "Via Reveal - High rate Si Thinning and Low Temperature Dielectrics for Post-TSV Processing" -David Butler, Vice President – Marketing, SPTS Technologies, Newport, UK

04:00 - 04:05pm: Vote of Thanks

Early-Bird Registration Fees: IEEE Members - \$40; Non-Members of IEEE - \$30; Students - \$20 (includes lunch & parking) Prices will go up by \$20 for each category, after November 25, 2011. Registration Instructions at http://meetings.vtools.ieee.org/meeting\_view/list\_meeting/8019

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#### eral Chair

Dr. Lawrence Williams, ANSYS Corporation, Lwilliams@ieee.org Technical Program

Dr. Donald Frye, Henkel Electronics Materials LLC, don3569@yahoo.c Robert Warren, Conexant Systems, Inc. Robert Warren@conex Sam Karikalan, Broadcom Corporation, samkarikalan@ieee.org Vendor Exhibits:

Mark Kuhlman, Semtech Corporation, Mkuhlman@semtech.co

#### Workshop Organizing Committee

Publicity & Local Arrangements:

Jaydutt Joshi, Skyworks Solutions, Inc., involutt@smail.co Aaron Edwards, ANSYS Corporation, aaron.edwards@ansys University Relations:

Prof. Mark Bachman, Univ. of California - Irvine, mbachman@uci.edu Registration & Finances:

Melissa Lau, Broadcom Corporation, melissa@broadcom.co

Vendor Exhibits and Sponsor Displays!



## 15 Years of AZ Region Future City Competition

Phoenix, AZ: It's *back to the future* for middle school students! Since 1997, the region competition has asked 7<sup>th</sup> and 8<sup>th</sup> graders, working in teams of three, to design a city of the future. Students will use problem solving skills, team work, research and presentation skills, practical math and science applications, computer software and skills, etc. to meet this challenge.

The competition engages students by challenging them with real-world engineering problems. The topic of interest for the 2011-2012 competition is *Fuel Your Future*. Students are asked to imagine new ways to meet our energy needs, maintain the health of the earth or other planets, and incorporate these innovative design features into their future city.

Members of the Phoenix engineering community came together 15 years ago to identify more creative options to increase student participation and interests in science, technology, engineering, and math (STEM). The real challenge was to get students interested in STEM subjects while creating a fun and exciting educational experience for young minds at the same time. IEEE's Phoenix Section has supported the competition over the years with a society sponsored award, volunteers, financial sponsorship, and other in-kind contributions.

A 15<sup>th</sup> anniversary celebration is also planned. The theme is *Back to the Future*. We are inviting schools that have participated in a previous competition(s) as well as student alumni, teachers, engineers, and other volunteers who have worked with the competition over the years to join us in several special events to be hosted during the week of January 23, 2011.

Competition day is Saturday, January 28, 2012. The event will be held at the ASU Preparatory Academy (formerly Phoenix Preparatory Academy) in Phoenix, AZ (7<sup>th</sup> Street and Fillmore). More information will be provided on upcoming events.

For information regarding this news release, contact Vi Brown at 480.205.2616 M or <a href="mailto:v.brown@futurecityarizona.org">v.brown@futurecityarizona.org</a>.

About the Future City Competition: The Future City Competition is a national program sponsored by the engineering community to promote technological literacy and engineering to middle school students. The program fosters an interest in math, science, and engineering through hands-on, real world applications. The competition is open to all public, private and parochial schools. The National Finals of the Future City Competition are a featured event during National Engineers Week with students from across the country competing in Washington, D.C. The Future City Competition offers students a fun way to learn about engineering and cities of the future.

## **IEEE Phoenix Section Annual Banquet 2012**

The annual banquet for 2012 is scheduled for Saturday, February 11<sup>th</sup>, 2012 from 6:00 PM to 9:30 PM at Hilton Phoenix Airport, 2435 South 47th Street, Phoenix, AZ 85034 (Tel: 480-894-1600). The program includes:

6:00 PM - 7:00 PM: Registration / Social Hour

7:00 PM - 8:00 PM: Dinner

8:00 PM - 9:00 PM: Program (Keynote Speaker and Awards

**Presentation**)

All members are requested to provide inputs to help with improvement of annual banquet quality. Suggestions for keynote presentation topics and keynote speakers are also requested. Inputs and suggestions should be sent to IEEE Phoenix Section Awards Committee Chair, Dr. Vasudeva P. Atluri, at <a href="mailto:vpatluri@ieee.org">vpatluri@ieee.org</a>.

IEEE Phoenix Section is currently accepting nominations for awards. All are encouraged to submit the nominations.

For awards nomination forms and other information related to the annual banquet, please access <a href="http://ewh.ieee.org/r6/phoenix/">http://ewh.ieee.org/r6/phoenix/</a>

Contact IEEE Phoenix Section Annual Awards Committee Chair, Dr. Vasudeva P. Atluri, at <a href="mailto:vpatluri@ieee.org">vpatluri@ieee.org</a> for more information and clarifications.



## **2011 IEEE Phoenix Section**

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

- December 2011
  - Report of Section activities for 2011
  - Appoint chairs of Section committees
  - Student Scholarship applications due: TBD
  - Annual Banquet: Finalize speaker
  - Annual Banquet: E-mail program



## **♦ IEEE** Phoenix Section Executive Committee **Meeting**

Phoenix Airport Hilton 2435 S 47th St, Phoenix, AZ, 85034 (map) Venue:

Tel.: 480-804-6017

**More Info:** Meetings are held on the first Tuesday of the month, 6–8 PM.

- Except for July & August

All interested IEEE members are welcome to attend.

Contact: Jim Hudson, Phoenix Section Chair

jim.hudson@srpnet.com

## **Special Announcement** Future City Arizona hits its 15<sup>th</sup> Anniversary

The Future City Competition – Arizona Region is celebrating its 15<sup>th</sup> Anniversary this year. As part the celebration, Future City is hosting two special events.

## **Special Evening at the Arizona Science Center**

On Friday, January 27 the Competition is hosting a special Focus to the Future evening at the Science Center, 600 East Washington Street, Phoenix from 6:00 PM until 10:00 PM. All program alumni, teachers, parents, volunteers, supporters, engineering societies and sponsors and special friends are invited to attend. In addition to a great time with the exhibits in the Science Center, we have a very special program planned. To register and for additional information, select the Special Events menu item on the Future City Arizona site: www.futurecityarizona.org

IEEE – Phoenix Section is also having it 70<sup>th</sup> birthday recognition program at the Science Center that evening in the IMAX Theater.

The registration fee includes the cost of admission to the Science Center and food.

### **Eat & Greet**

On Saturday, January 28 immediately following the Region Finals at the ASU Preparatory Academy, 735 E Fillmore, we are hosting a mixer event for all of this year's teams and past competition alumni. All students, teachers, judges and volunteers are invited. The food and fun begins at 5:00 PM.

## Phoenix Section 70<sup>th</sup> Anniversary Event

Arizona Science Center January 27<sup>th</sup>, 2012 6:00 – 10:00 PM

The IEEE Phoenix Section will be celebrating its 70<sup>th</sup> anniversary in the IMAX Theater at the Az Science Center. The program will include IEEE produced videos on a variety of topics (photovoltaics, wind power, robotics, hybrid vehicles, smart grid, biomedical, and more). The program will also highlight important events and contributions of the Phoenix Section over the last 70 years. Watch for the January 2012 issue of the Valley Megaphone for the more information.

## "IEEE Phoenix Section Survey

IEEE Phoenix Section Executive Committee is requesting all IEEE Phoenix Section Members to provide their valuable inputs to help with continuous improvement of section activities. The survey can be accessed at <a href="www.ewh.ieee.org/r6/phoenix">www.ewh.ieee.org/r6/phoenix</a>. Please download the survey and send by email to IEEE Phoenix Section Secretary, Dr. Chuck Weitzel, at <a href="c.weitzel@ieee.org">c.weitzel@ieee.org</a>. Your support in this matter will be greatly appreciated."

## **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 <a href="www.ieee.org">www.ieee.org</a>. Please contact IEEE Phoenix Section Membership Development Chair, Dr. Vasudeva P. Atluri, at <a href="wpatluri@ieee.org">vpatluri@ieee.org</a> for additional information.

## **Enhanced Senior Member Application Launched**

Effective 29 July 2011, IEEE Admission and Advancement launched a <u>new Senior Member Application</u>. 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. <u>View</u> the new Senior Member application.

## **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, 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. The Fellow along with the Congressional sponsor and IEEE-USA, negotiates a starting date, although IEEE-USA recommends that Fellowship terms run from January 1st to December 31st. For an application Kit for the 2013 Congressional Fellowship Program, visit:

http://ieeeusa.org/policy/govfel/documents/cfappkit13\_000.doc

The State Department fellowship begins in January of each year and 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 Engineering & Diplomacy (State Department) Fellowship Program, visit: <a href="http://ieeeusa.org/policy/govfel/documents/Stateappkit13.doc">http://ieeeusa.org/policy/govfel/documents/Stateappkit13.doc</a>

The postmark application deadline for 2013 Fellowships is 16 March 2012. For more information, visit: http://www.ieeeusa.org/policy/govfel/default.asp

## Washington Internships for Students of Engineering (WISE)

SUMMER 2012 PROGRAM Monday, 4 June - Friday, 3 August:

WISE seeks applications from outstanding engineering students who display evidence of leadership skills and have a keen interest in public policy. Minority students are encouraged to apply.

Applicants should select a sponsoring society(s), fill out an application form, write two (2) brief essays in response to questions, arrange for two (2)faculty references, and forward an official transcript. The deadline for Summer 2012 applications is December 31, 2011. For more info and application forms, please visit: <a href="http://wise-intern.org/application/index.html">http://wise-intern.org/application/index.html</a>

"...one of the best summers of my life. One which truly transformed my dreams and goals. ....when I left D.C. I really wanted to instill in my fellow engineers the appreciation of the interaction between public policy and engineering." -- Marc Canellas, WISE 2011

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IEEE - Advancing Technology for Humanity

## IEEE-USA E-Book on Transition from School to Work to be Offered Free as Special Benefit to IEEE Members

WASHINGTON (31 October 2011) -- As a special benefit of IEEE membership for November, IEEE-USA is offering a free e-book, "Engineer's Guide to Lifelong Employability: The Transition from School to Work." This e-book, prepared by the IEEE-USA Employment and Career Services Committee, provides a road map for the student preparing to enter the job market -- what employers are looking for, how they can best find a job and what career paths are open to a new grad. Topics include:

- \* Finding a Job the Old-Fashioned Way
- \* Networking
- \* The Campus Interview
- \* Making up Your Mind
- \* Four Career Paths
- \* Business -- Big or Small?
- \* A Non-Technology Company

"Demand for new BSEEs may be soaring, but so are employer's standards and expectations," writes Jean Eason, IEEE-USA Employment and Career Services Committee member. "Good grades and technical expertise aren't enough anymore."

From Nov. 1 through Nov. 30, "Engineer's Guide to Lifelong Employability: The Transition from School to Work" can be downloaded at www.ieeeusa.org/communications/ebooks for free to IEEE Members. The nonmember price is \$5.99. Members can purchase other IEEE-USA E-Books at deeply discounted prices and download other free e-books. In December the free publication will be book three in the "Engineer's Guide to Lifelong Employability" series: "What Are You Worth?"

## **IEEE Phoenix - Calendar of Events**

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 Treasurer, Russ Kinner at 602-997-2353 or e-mail: <a href="mailto:r.kinner@ieee.org">r.kinner@ieee.org</a>

## **Phoenix Section LinkedIn Group**

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