# The Valley Megaphone



Newsletter of the **Institute of Electrical and Electronics Engineers, Inc., Phoenix Section** November, 2015 Volume XXIX, Number 11

# **Executive Committee**

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TBD

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IEEE Phoenix Section on-line updates can be found at http://sites.ieee.org/phoenix/ and on LinkedIn at: http://www.linkedin.com/groups?gid=2765918 and on Facebook at:

https://www.facebook.com/IEEEPhoenixSection

Please send announcements for the Valley Megaphone to Wei Xu at Wei.Dr.Xu@ieee.org for inclusion in the Section Calendar.

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

#### **Computer Society**

Jerry Crow jerry.crow@computer.org

#### **CPMT Society**

Mahesh Shah 480-544-9438 mkshah@ieee.org

#### **Education Chapter**

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

> **EMBS Chapter** TBD

#### **EMC Society**

Brett Gassaway, 480-926-3100 brettq@compliancetesting.com

#### Power & Energy Society

Ken Brown

Ken.Brown@srpnet.com

#### **Solid State Circuits**

Mirembe Musisi-Nkambwe Mirembe@ieee.org

#### Teacher-In-Service

Rickie Currens

Rickie.Currens@att.net

#### **Waves & Devices Society**

Steve Rockwell steve.rockwell@ieee.org

#### Life Members

Les Daviet II

lesdavietii@cs.com

#### Women In Engineering

Shamala Chickamenahalli, 480-704-4186 shamala@cox.net

#### **Young Professionals**

Jennifer Taggart, 928-581-5198 jennifer.taggart@asu.edu

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 advertisements is the third Friday of the month prior to publication. Advertising Rates: Full page: \$200, 3/4page: \$125, ½ page: \$75, 1/3 page: \$50, 1/4 page: \$25. Change of address/email? Call toll free 1-800-678-IEEE. Please allow 6-8 weeks. Section Web Page is http://sites.ieee.org/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 <u>sdianesmith@computer.org</u> Student Activities Chair

#### **Update from DeVry Phoenix-Engineering Student Branch**

The IEEE Student Branch and Computer Society at DeVry University, Phoenix are co-sponsoring and co-managing with the University a Science Technology Engineering and Math (S.T.E.M.) exhibit at the 2015 Arizona State Fair. We have a 24 x 48 foot space that will house various high school and collegiate STEM projects often representing Capstone activities. In addition, four STEM workshops will be conducted by the students: Cyber Security ("Can You Hack It?"); personal computer repair ("DIY Computer Fixes"); beta-test student designed simulations ("Would you like to play a game?"); and breadboard kit building ("Make your own Night Light" and "Hidden Buzzer"). The static displays will be visible the duration of the Fair. The workshops are scheduled and published and will occur on the four weekends of the Fair. Section members and their families and friends are invited to stop by the exhibit and join us in the fun at the Arizona State Fair!

Roger S. Gulledge Counselor, IEEE Student Branch DeVry University rgulledge@devry.edu

## Student Branches

#### **ASU Main, Engineering**

Chair: Phoebe Henson 480-888-6396, pqhenson@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: Josh Carroll ikcarrol@asu.edu Elizabeth Long

Elizabeth.a.lonq@asu.edu Advisor: : Dr. John M. Parsey, Jr., 480-727-5279

### John.Parsey@asu.edu

DeVry, Phoenix - Engineering
Chair: Diego Hernandez
dhernan249@gmail.com
Advisor: Roger S. Gulledge
602-749-4586
rgulledge@devry.edu
Advisor: Deanna Davis
602-749-4500
ddavis1@devry.edu

#### DeVry, Phoenix – Computer Society Chair: TBD

Past Chair: Zak Burgess Advisor: Roger S. Gulledge 602-749-4586 rgulledge@devry.edu Advisor: Deanna Davis 602-749-4500 ddavis1@devry.edu

#### **NAU**, Engineering

Chair: Jeremy Johnson Advisor: Niranjan Venkatraman v.niranjan@ieee.org

#### **Embry-Riddle, Prescott**

Chair: Lisa M. Ferguson
FERGUSL2@my.erau.edu
Advisor: John E. Post
postj@erau.edu

# **U - Newsbytes**

# ADVANCED MANUFACTURING SYSTEMS (11362)

The Ira A. Fulton Schools of Engineering at Arizona State University (ASU) is hiring faculty to support a broad initiative in advanced manufacturing. We are particularly interested in expanding our capabilities in the research areas that lie between the areas of basic research in the physics/materials/chemistry aspects of manufacturing processes and applied research at the production system and supply chain levels.

Specific areas of interest include, but are not limited to: multi-material manufacturing systems; hybrid additive-subtractive manufacturing process integration; scalable manufacturing at the limits of size, temperatures and material properties; product design strategies for additive manufacturing systems; non-destructive testing-manufacturing integration; automation strategies and technologies for hybrid manufacturing; modeling of advanced manufacturing systems and processes.

We seek applicants who will contribute to our academic programs, promote transdisciplinary teaching and research, and help the University to achieve its aspirations, including enabling student success, transforming society, valuing entrepreneurship, and conducting use-inspired research.

Faculty members are expected to develop an internationally recognized and externally funded research program, adopt effective pedagogical practices in the development and delivery of graduate and undergraduate courses, advise both undergraduate and graduate student research and projects, and undertake service activities.

#### Required qualifications:

Required qualifications include an earned doctorate in Manufacturing Engineering, Materials Science and Engineering, Mechanical Engineering, Industrial Engineering, or a related field, along with demonstrated evidence of research and teaching excellence as appropriate to the candidate's rank.

#### **Desired qualifications:**

Desired qualifications include a demonstrated commitment to a collaborative approach to research and the use of modern pedagogical practices in teaching.

Appointment will be at the *Assistant, Associate, or Full Professor* rank commensurate with the candidate's experience and accomplishments, beginning August 2016.

While the faculty appointment may be in any of the six Fulton Schools of Engineering, The Polytechnic School, located at ASU's Polytechnic campus in Mesa, Arizona, is currently the most involved in the search. The Polytechnic School offers related degrees at the bachelor's level in Engineering and Manufacturing Engineering, at the master's level in Engineering, and at the Ph.D. level in Systems Engineering. Additionally, the Polytechnic School houses the premier additive manufacturing and research center in the Southwest, providing strong support for the advancing ASU's research and development in Advanced Manufacturing. The facility features over \$2M in state-of-the-art polymer, metal, and composite materials 3D printing equipment as well as advanced materials processing and analysis capabilities.

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#### How to apply:

To apply, please submit a single PDF file to advanced.manufacturing.faculty@asu.edu that includes:

- Cover letter.
- Current CV.
- Statement describing research interests (two pages maximum).
- Statement describing teaching interests and philosophy (two pages maximum).
- Contact information for three references.

Review of applications will begin November 16, 2015; if not filled, reviews will occur on the 1st and 15th of the month thereafter until the search is closed.

For more information or questions about these positions, please contact the search committee chair, Jennifer Bekki (jennifer.bekki@asu.edu).

Arizona State University is a VEVRAA Federal Contractor and an Equal Opportunity/Affirmative Action Employer. All qualified applicants will be considered without regard to race, color, sex, religion, national origin, disability, protected veteran status, or any other basis protected by law. See ASU's full non-discrimination statement (ACD 401) at \_and the <u>Title IX statement</u>.

ASU offers applicants an opportunity to voluntarily disclose information for the University's affirmative action plan; applicants may complete an EEO survey for the position they are applying for online.

#### Information you'll need to complete the survey:

Job Number: 11362

Job Title: POLY Advanced Manufacturing

Department Name: Engineering

#### **Update from DeVry Phoenix-Engineering Student Branch**

The DeVry University IEEE Student Branch was very fortunate to construct a S.T.E.M exhibit at the 2015 Arizona State Fair. We had a variety of S.T.E.M displays, and multiple workshops for fairgoers to participate in. The Student branch has been all hands on deck with this assignment throughout the final weeks of October and the first week of November; volunteering to run workshops in the following areas: PC Maintenance & Repair, Game-simulation Programming, Hack-a-thon, Cyber security for the home user, and Basic Electronic circuit builds. We reached out to hundreds of people over the course of the fair and instilled a growing interest in S.T.E.M. Planning ahead; we are starting discussions on our participation in the SkillsUSA event next March. Our IEEE Student Branch will be in charge of the Engineering Technology Competition and our IEEE Computer Society will be in charge of the Information Technology Services Competition. On a final note, our IEEE Student Branch welcomed along Oscar Jaquez as our new vice chair.

Diego Hernandez Chair, IEEE DeVry Student Branch <u>Dhernan249@gmail.com</u>

#### **Update from Embry-Riddle Student Branch**

October update for the Embry-Riddle Aeronautical University IEEE chapter in Prescott, Arizona. This past month the IEEE chapter at ERAU had three students participate in the IEEE X-Treme challenge held on the 24thof October. The chapter also had Dr. Siewert speak about multispectral cameras at the monthly meeting on the 26th of October. Dr. Siewert gave a presentation about his joint project research with the University of Alaska Anchorage, University of Colorado- Boulder and the Department of Homeland Security. Dr. Siewert explained how thermal imaging cameras operate and possible future uses and research to the twenty students that attended the meeting.





## **Upcoming Conferences in Region 6**

#### **Hello IEEE Student Members!**

2015 IEEE Workshop on Automatic Speech Recognition and Understanding (ASRU) will be held Dec 13 to 16, 2015

<u>The second annual IEEE Rising Stars Conference</u> will be held in Las Vegas, Nevada at the Excalibur Hotel & Casino on January 2-4, 2016

2016 IEEE 66th Electronic Components and Technology Conference (ECTC) will be held on May 28-Jun 5, 2016

2016 15th IEEE Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems (ITherm) will be held on May 31 – Jun 3, 2016

<u>2016 IEEE International Conference on Image Processing (IEEE ICIP)</u> will be held at the Phoenix Convention Center, Phoenix, AZ on September 25-28, 2016.

## **Recognizing Our Members**

by Tom Coughlin, Region 6 Director

One of the best ways to retain IEEE members is to recognize them for their service to society and the profession. IEEE members who are elevated to senior membership are much more likely to remain IEEE members for an extended period.

The IEEE Senior membership recognizes members for their contribution to society and to the profession over a long period of time. Many IEEE members qualify for this recognition (they have 10 or more years of useful activity and/or contribution to the profession) but a minority of these folks so qualified, are actually senior members.

Earlier this year I was involved in elevating Steve Wozniak (the Woz) to be a senior member—you would be surprised to find out who isn't yet a senior member. If you aren't a senior member yet, you are the majority of members, but you can be a senior member and receive benefits from this status.

One of the best things that we can do for fellow members of our IEEE community is to recognize them for their efforts and achievements. For this reason we need to do more to help members that qualify become senior members. The goal for IEEE Region 6 is 340 senior member advancements in 2015 and we have reached 74% of that goal. How can we increase the number of senior member elevations in our region? First, review the senior member information on the web site at:

http://www.ieee.org/membership\_services/membership/senior/index.html

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If you or someone you knows meets these qualifications submit them to be a senior member. Note the big issue is that 3 IEEE senior members or fellows need to provide the nomination or recommendations to have a valid senior member submission. Getting 3 senior members or fellows to be part of the submission is usually the biggest issue.

Sections can help with these elevations by organizing events bringing together senior members and fellow and senior member candidates to sit together and fill in the on-line forms to submit people to be senior members. It is amazing how many of these can be done in an hour or two with a number of senior members connected to the internet. These sort of Senior Member Rodeos or Round Ups can really help to increase the number of senior members. In addition Sections can keep a list of senior members that potential candidates can contact to submit for senior members.

In addition to senior member elevations each section probably has a number of members who are "associate" members. These people pay the same membership fees as full members but they are not able to vote in IEEE elections, serve IEEE volunteer offices and are not recognized as full members. Most of these associate members are eligible to be full members but unless someone investigates and starts this process they will remain as associate members. Elevating someone from an associate to a full IEEE member is a much simpler process than a senior member elevation and all sections should contact their associate members and see if they can be made full members.

Let's help our fellow members get recognized for their experience and talents. As a community we need to help each other and recognize our good efforts and successes. If you are a senior member, IEEE fellow or section officer please help your fellow members become senior members.

## **Recording Technical Meetings**

by Tom Coughlin, Region 6 Director

Going further along the lines of what we can do for each other, I urge you to look at and contribute to our technical chapter-recording project. This is an IEEE NIC funded activity that is going between IEEE Region 4 and 6 this year to train and equip our section chapter leaders to capture their technical chapter meetings and submit them to a web site where these can be viewed for free by IEEE members.

With this capability technical chapter meetings can be shared with IEEE members all over the world and if you happen to miss an interesting meeting you can still listen to what was presented.

We urge you to get your local chapters involved in recording their meetings. You can find more information on this on the Region 6 web site under 2015 Opcom meeting at:

#### http://ieee-region6.org/category/region-meetings/

and also from the chapter recording viewing and access site at: <a href="http://www.nuxlabs.com">http://www.nuxlabs.com</a> where you can create an account and view, search and comment on existing recordings as well.

If you are ready to start recording in your section chapters please contact Scott Tamashiro < tamashiro@ieee.org> who can get you the latest material and also help you with resources such as a microphone set and Techsmith Camtasia software that you can use to start recording your chapter technical meetings.



## **IEEE PHOENIX SECTION**



# Annual Banquet - Saturday, February 13th, 2016

Hilton Phoenix Airport, 2435 South 47th Street, Phoenix, Arizona 85034

### **Keynote Presentation**

Title: Are there plenty more fish in the sea?

Speaker: Dr. David A. Demer

Senior Scientist and Leader, Advanced Survey Technologies Program
National Oceanic and Atmospheric Administration
8901 La Jolla Shores Drive
La Jolla, CA, 92037

### **Abstract**

Most people are consuming more fish and are paying more for it. Less of it is wild caught and more is from aquaculture. Wild fish populations depend on ecosystem productivity, which is effected by a variety of forces such as El Niño, the Pacific Decadal Oscillation, climate change, ocean acidification, pollution, and fishing. These factors can change fish distributions, damage habitats, and alter biodiversity and ecological functions. In this context, we will explore the living resources in two of the most productive ecosystems on Earth: the Scotia Sea in the Southern Ocean, off the Antarctic Peninsula; and the California Current off the west coast of North America. We will learn how a variety of optical and acoustic instruments, and manned and autonomous vehicles are used to probe these remote and often inaccessible regions. In the process of counting and mapping exploited fish, we will touch on the complex interactions of climate, weather, seabed and oceanographic environments, avian and marine prey and predators, and fishers. We may enhance our appreciation for the effect the world ocean has on humanity, and vice-versa.

## **Speaker Biography**



Dr. David A. Demer earned a B.S. in Electrical and Computer Engineering (ECE) from University of Arizona in 1986, worked as a Product Engineer for Intel Corporation from 1986 to 1989, received a Hertz Foundation Fellowship in 1989, and was awarded a Ph.D. in Applied Ocean Science / ECE from Scripps Institution of Oceanography (SIO), University of California at San Diego in 1994. He began his career with the National Oceanic and Atmospheric Administration at the Southwest Fisheries Science Center (SWFSC) as a Research Engineer with the Antarctic Ecosystems Research Division in 1990. He became

the Leader of SWFSC's Advanced Survey Technologies Program (AST) in 1999, a Research Associate with the Marine Physical Laboratory at SIO in 2000, a Research Associate with the Integrative Oceanography Division at SIO in 2007, Guest Editor for the ICES Journal of Marine Science (JMS) in 2009, Review Editor for the JMS in 2012, and Senior Scientist at the SWFSC in 2010. Presently, he continues to lead the AST, acoustic-trawl surveys of fish and zooplankton, and the development and application of new marine and riverine sampling instruments and techniques. Over the last 25 years, Dr. Demer has designed and conducted investigations of zooplankton and fish stocks, predator-prey interactions, and ecosystems along the west coast of North America from the Sea of Cortes to the Bering Sea; along the east coast from the Gulf of Mexico to the Gulf of Maine; in the Irish, Ligurian, and Red Seas, off South Africa, and in the Southern Ocean.



## **IEEE PHOENIX SECTION**



# Annual Banquet - Saturday, February 13th, 2016

Hilton Phoenix Airport, 2435 South 47th Street, Phoenix, Arizona 85034

## **Banquet Agenda**

Registration / Social Hour: 5:30 PM - 6:30 PMSit-Down Dinner: 6:30 PM - 7:15 PMSection Program: 7:15 PM - 8:00 PMKeynote Presentation: 8:00 PM - 8:30 PMAwards Presentation: 8:30 PM - 9:15 PMChange of Section Officers: 9:15 PM - 9:30 PM

Business Attire is recommended

### **Banquet Web Links**

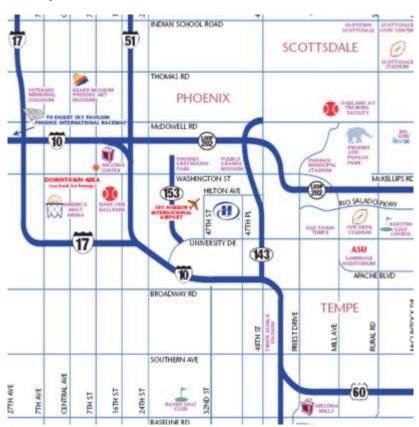
Complete Banquet Information along with Banquet Registration: http://sites.ieee.org/phoenix/ Banquet Registration Direct Link: https://meetings.vtools.ieee.org/m/36447

## **Banquet Venue**



2435 South 47<sup>th</sup> Street Phoenix, Arizona 85034 (480) 894-1600

West of Hohokam (143) Freeway and North of University Drive



# **IEEE Phoenix Section Information**

Please Support the IEEE Phoenix Section by Joining as Volunteer in Section Committees, Society Chapters, Affinity Groups, and Student Branches

IEEE Phoenix Section Executive Meeting on First Tuesday of the Month at Hilton Phoenix Airport IEEE Phoenix Section Executive Committee Meeting is Open to Section Members Visit the Section website at sites.ieee.org/phoenix/ for additional information

## \*2015 Phoenix Tech-Security Conference\*

Place: Phoenix Marriott Mesa

200 North Centennial Way Mesa, Arizona 85201

<u>Date</u>: Thursday, November 19<sup>th</sup>, 2015

8:15am-5:00pm

Click on the following link to register for your free VIP pass: http://phoenixtechsecurity2015.eventbrite.com/?aff=np

- VIP passes include Breakfast, Lunch, Conference materials and Entrance into conference sessions and exhibit areas.
- This conference qualifies for CPE credits and Certificates of Attendance.
- Gift Cards, iPads, Kindles and many other door prizes and give aways.
- Featuring (11) IT Security speakers and over 30 exhibits!!

For full conference agenda click on:

http://dataconnectors.com/upcoming-events-and-agendas/15-phoenix-tech-security-conference-2015 or call Stephanie Lange at 636-778-9495 for more information.

slange@DataConnectors.com

To join our mailing list, click on:

http://dataconnectors.com/mailing-list-signup



# Where Students and Young Professionals Come to Connect and be Inspired

# THE PREMIERE EVENT IN THE WESTERN UNITED STATES!

The IEEE Region 6 Rising Stars Conference is designed to Inform, Excite, Enthuse, and Enlighten the top engineering students and young professionals of IEEE. The program includes interactive events, introductions to new technical innovations, networking opportunities, and professional development.

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- IEEE STUDENT MEMBER I \$199
   IEEE MEMBER I \$349
   Non-IEEE MEMBER I \$449
- Special 1 day Storage Visions Registration

# JANUARY 2 – 4, 2016 EXCALIBUR HOTEL

LAS VEGAS, NV

HELD IN CONJUCTION WITH THE

STORAGE VISIONS CONFERENCE

CONSUMER ELECTRONICS SHOW (CES)

#### SPEAKERS

- ★ Jamie Garcia, IBM
- ★ Karen Panetta, Dean of Tufts University
- \* Kate Jenkins, Ejenta, Inc.
- ★ Monica Giffin, Raytheon
- \* Tiffany Finley, Southwest Research Institute
- ★ Joey Yang, Google
- \* Patrick Griffins, Dolby
- \* whurley (William Hurley), Happy Dollar
- ★ Michelle Yung, Orbital ATK
- Karen Bartleson, Synopsys

#### TOPICS:

SPACE TECHNOLOGY
NINJA POLYMERS
INTERNET OF THINGS
WEARABLE DEVICES
ENTERTAINMENT TECHNOLOGY
POWER SYSTEMS AND STORAGE
CLOUD COMPUTING
UNLEASHING YOUR INNER ENTREPRENEUR
PROFESSIONAL NETWORKING

\_\_\_\_\_\_\_

MARKETING AND SELLING YOURSELF

WANT TO REACH THE BEST AND THE BRIGHTEST YOUNG ENGINEERS?

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### 2016 IEEE International Conference on Image Processing (IEEE ICIP)

Phoenix Convention Center, Phoenix, AZ, 25-28 September 2016.

Website: 2016.ieeeicip.org

IEEE ICIP 2016 is the event for researchers, developers, product creators, educators and students who want to share, learn about, and advance the state-of-the-art in the areas of image/video processing, image/video communications, computer vision, computational imaging, and visual technologies based applications.

IEEE ICIP attendees include more than 1000 experienced researchers/developers including educators, engineers, computer scientists, and students, providing great networking and recruiting opportunities.

#### **Important Dates:**

Special Session and Tutorial Proposals: November 16, 2015

Paper Submissions: January 25, 2016

Visual Technology Innovation Award Nomination: March 31, 2016

Visual Technology Showcase Submission: May 15, 2016

#### **IEEE ICIP 2016 highlights:**

- nominate an individual or team for the Visual Innovation Award by 31 March 2016: This Award was created to recognize pioneers of transformative technologies and business models in areas within the technical scope of IEEE ICIP. The Award showcases innovations that have had great impact on human experiences with technology or are anticipated to do so in the near future. The Award Committee consists of well-known industry executives, visionary entrepreneurs, and scholars.
- maximize the visibility of your work via free open preview: Papers accepted to ICIP 2016 will (upon author approval) be available in their final accepted format on IEEE Xplore, freely accessible and downloadable by all in their final format from Aug 20,2016 through September 30, 2016.
- maximize your networking and career connections: attendees will be given the opportunity to upload their CVs to be shared among interested recruiters for full-time, part-time, and consulting job opportunities. These CVs will be made available through a password-protected searchable platform to ICIP 2016 supporters/recruiters.
- experience state-of-the-art visual technology products and prototypes at the ICIP'16 Visual Technology Showcase. IEEE ICIP 2016 will feature a Visual Technology Showcase where technology creators and developers can present live demos of recent visual technologies and prototypes. *Participants who are interested in demoing their technology should submit a description of the technology at the IEEE ICIP 2016 website by 15 May 2016.*
- attend presentations, tutorials, and training courses by experts in the areas of image/video processing, image/video compression, computer vision, computational imaging, biomedical imaging, and other topics within the scope of IEEE ICIP 2016.



General Chair Lina Karam

Arizona State University

Vice-General Chair Aggelos Katsaggelos Northwestern University

**Technical Program Chairs** Fernando Pereira

Instituto Superior Técnico Gaurav Sharma University of Rochester

Innovation Program Chairs

Haohong Wang TCL Research America

BDTI & Embedded Vision Alliance Khaled El-Maleh Qualcomm Technologies Inc.

Finance Chair Sohail Dianat

Rochester Institute of Technology

Plenary Chairs

Michael Marcellin University of Arizona Sethuraman Panchanathan Arizona State University

Special Sessions Chairs

Dinei Florencio Microsoft Research Chaker Larabi Poitiers University Zhou Wang University of Waterloo

Challenge Sessions Chair

Dinei Florencio

Microsoft Research

**Tutorials Chairs** Ghassan AlRegib Georgia Tech Rony Ferzli

**Publicity Chair** 

Michel Sarkis Qualcomm Technologies Inc.

Paper Awards Chairs Vivek Goyal Boston University

Ivana Tosic Ricoh Innovations

Exhibits Chair

**David Frakes** Arizona State University & Google

**Publication Chairs** 

Patrick Le Callet Nantes University

Baoxin Li Arizona State University

Local Arrangement Chair

Pavan Turaga Arizona State University

Registration Chair

Ricardo De Queiroz Universidade de Brasilia The 23rd IEEE International Conference on Image Processing (ICIP) will be held in the Phoenix Convention Centre, Phoenix, Arizona, USA, on September 25 - 28, 2016. ICIP is the world's largest and most comprehensive technical conference focused on image and video processing and computer vision. In addition to the Technical Program, ICIP 2016 will feature an Innovation Program focused on vision technologies and fostering innovation and networking. The conference will feature world-class speakers, tutorials, exhibits, and a vision technology showcase.

Topics in the ICIP 2016 Technical Program include but are not limited to:

Filtering, Transforms, Multi-Resolution Processing Restoration, Enhancement, Super-Resolution Computer Vision Algorithms and Technologies Compression, Transmission, Storage, Retrieval Computational Imaging

Color and Multispectral Processing Multi-View and Stereoscopic Processing Multi-Temporal and Spatio-Temporal Processing Video Processing and Analytics Authentication and Biometrics Biological and Perceptual-based Processing Visual Quality Assessment Scanning, Display, and Printing Document and Synthetic Visual Processing Applications to various fields

#### New initiatives at ICIP 2016 include:

1) Open preview for accepted papers on IEEE Xplore; 2) Visual Innovation Award (individual or team nominations due by 31 March 2016 at conference website); 3) Support for reproducible research; 4) Support for CV uploads on the ICIP site for full-time, part-time, and consulting job opportunities; 5) Visual Technology Showcase (submission due by 15 May 2016). For more details on these and other new initiatives at ICIP 2016, visit 2016.ieeeicip.org and connect now on the ICIP 2016 social media to get automatic updates about the various deadlines, sessions and events.

#### Paper Submission:

Prospective authors are invited to submit full-length papers at the conference website, with up to four pages for technical content including figures and references, and with one additional optional 5th page for references only. Submission Instructions, templates for the required paper format, and information on "no show" policy are available at 2016.ieeeicip.org.

#### Tutorials, Special Sessions, and Challenge Sessions Proposals:

Tutorials will be held on September 25, 2016. Tutorial proposals should be submitted at the conference website and must include title, outline, contact information, biography and selected publications for the presenter(s), and a description of the tutorial and material to be distributed to participants. For detailed submission guidelines, please refer to the tutorial proposals page. Special Sessions and Challenge Session Proposals should be submitted at conference website and must include a topical title, rationale, session outline, contact information, and a list of invited papers/participants. For detailed submission guidelines, please refer the ICIP 2016 website at 2016.ieeeicip.org.

#### Important Deadlines:

Challenge Session Proposals: October 30, 2015

Special Session and Tutorial Proposals: November 16, 2015

Notification of Special Session and Tutorial Acceptance: December 18, 2015

Paper Submissions: January 25, 2016

Notification of Paper Acceptance: April 30, 2016 Visual Inovation Award Nomination: March 31, 2016 Visual Technology Showcase Submission: May 15, 2016

Notification of Visual Technology Showcase Acceptance: May 30, 2016

Revised Paper Upload Deadline: May 15, 2016 Authors' Registration Deadline: May 15, 2016

















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



# IEEE Components, Packaging and Manufacturing Technology Society Phoenix Chapter

# 2015 Executive Committee for CPMT Chapter for IEEE-Phoenix Section

Position	Name	Phone	Email Contact	
		Contact		
Chair	Dr. Mahesh K. Shah	(480) 544-9438	mkshah@ieee.org	
Asst. Chair	Mr. Vivek Gupta	(480) 734-2366	vmgupta@msn.com	
Secretary	Dr. Rao Bonda	(480) 786-7749	r.bonda@ieee.org	
Treasurer	Dr. Vasudeva P. Atluri	(480) 227-8411	vpatluri@ieee.org	
Program Chair	Mr. David Dougherty	(480) 245-8099	david.dougherty@freescale.com	
Asst. Program Chair				
Tutorial Chair	Dr. Shawn Shi	480-929-5614	Songhua.Shi.2011@ieee.org	
Asst. Tutorial Chair				
Workshop Chair &	Dr. Vasudeva P. Atluri	(480) 227-8411	vpatluri@ieee.org	
Publicity				
Website Co-Chair	Bharat Penmecha	(480) 552 2511	bharat.penmecha@ieee.org	
Website Co-Chair	Huiyang Fei		Huiyang.H.Fei@ieee.org	

**Tentative Schedule for Monthly Seminars** 

Date	Topic	Speaker
Feb. 18, 2015	Packaging & Failure Analysis Challenges in Advance 3D	Dr. Deepak Goyal
	packages	
Mar. 18, 2015	High Spatial Resolution Strain Mapping in TEM using	Dr. Amith Darbal
	Precession Electron Diffraction	
April 22, 2015	Seminar Cancelled	
May	No Seminar due to IMS-2015 in Phoenix	
June 17, 2015	Materials Characterization: A Model for Open Access	Leroy Eyring Center, ASU
July 22, 2015	In Preparation for Retirement: Plan Early and Plan	Gregory Wojak
	Often!	
August	No seminar for August	
September 23,	HDI Routing & Construction Design Strategies	Terry Regan,
2015	From 1.27 mm to 0.4 mm	TTM Technologies
October 21st,	Details to be Announced Later	Dr. Hans Stork, CTO
2015		ON Semiconductor
November 18,	Film Assisted Molding	John Crane,
2015		<b>Boschman Technologies</b>
December 9 <sup>th</sup> ,	Heterogeneous Integration of Microdevices by Micro-	Dr. Christopher Bower,
2015	Transfer Printing	CTO, X-Celeprint Ltd.
January 20 <sup>th</sup> ,	Understanding and Managing the Key Cost drivers in	Marc Licciardi, Founder
2015	PCB design to optimize performance and Cost	DFX Engineering
February 27 <sup>th</sup> ,	Details to be Announced Later	Dr. Bill Bottoms
2016		



# IEEE Phoenix Section – CPMT Society Chapter Nomination of Officers

The IEEE Phoenix Section, CPMT Society Chapter is seeking nominations for the following elected Section officer positions for the 2016 term:

- Chair
- · Asst. Chair
- Secretary
- Treasurer

Additionally, the Nominating Committee is seeking candidates for some of the following non-elected appointed standing committee Chair positions for the 2016 term:

- Program Chair
- Tutorial Chair
- Workshop Chair
- Publicity
- Web Master

Society officers must be IEEE and CPMT members. Self-nominations are acceptable.

Please send nominations or any questions to any member of the Nomination Committee via an email.

Dr. Mahesh Shah (Current Chair): <a href="mailto:mkshah@ieee.org">mkshah@ieee.org</a>
Dr. Vasudeva Atluri (Past Chair): <a href="mailto:wpatluri@ieee.org">wpatluri@ieee.org</a>

**Deadline for Nominations is December 11, 2015.** 





# IEEE Components, Packaging and Manufacturing Technology Society Phoenix Chapter

Wednesday, November 18th, 2015 at 5:30 PM
Film Assisted Molding: An Enabling Technology
for Encapsulation of Advanced Packages

John Crane
JH Crane & Associates
Scottsdale, AZ 85266 USA
ihcrane@earthlink.net

#### **ABSTRACT**

The use of film in the transfer molding process, called Film Assist Molding (FAM), enables repeatable and high volume packaging for surfaces that must be kept free of mold compound, such as for Sensor/MEMS applications. Moreover, this encapsulation technology has provided the pathway for ever-increasing complex packages that are smaller and thinner, while compatible with superior mold compounds to meet the most stringent, cost effective customer device and package performance requirements. This presentation will introduce FAM, explore the possibilities and benefits of FAM to semiconductor encapsulation and explore implemented FAM solutions showing that it is possible to economically manufacture advanced packages of Sensors and MEMS in high volume production while achieving high device reliability.

#### **BIOGRAPHY**

**John Crane** is the Boschman Technologies and Advanced Packaging Center North America Sales Representative. His firm, JH Crane & Associates, has represented suppliers of semiconductor packaging equipment and materials for more than 21 years.

John earned a BS degree in Mathematics from Villanova University in 1978 and a MS degree in Systems Management from the University of Southern California in 1985. After serving seven years as a nuclear submarine officer, he entered the electronics field. John is currently the vice mayor of Carefree, AZ.

Boschman Technologies is a leading supplier of automatic transfer molding systems that use film for the encapsulation of Sensor and MEMS devices. This process, called Film Assist Molding, is ideal for applications where sensing surfaces or bond pads or heat sinks must be exposed and free of mold compound bleed and flash. Advanced Packaging Center offers research, development, qualification, prototyping and small volume production services focusing on MEMS, Sensor and advanced IC and wafer level packaging realized through Film Assist Molding.

Date: Wednesday, October 21st, 2015

Location: Group Conference Room, Freescale Semiconductor, Inc., Discovery Business Center, 2100 E. Elliot Rd. Tempe, AZ.

Enter the facility through the Main (South) Lobby in building 94 and sign in with Security (Photo ID required) BEFORE

6:00 PM. You will be escorted to the meeting room. The presentation promptly starts at 6:00 PM.

**Agenda:** 5:30–6:00 PM: Social/Refreshments, 6:00–7:00 PM: Presentation, 7:00 PM: Dinner

(Pizza and Soda will be provided by the IEEE Phoenix Section CPMT Society Chapter)

IEEE members and non-members are all welcome to attend. Please arrive at the facility entrance no later than 5:45 PM.

For more information, please contact any of the following CPMT officers:

(480) 227-8411 Vasu Atluri Rao Bonda (480) 786-7749 David Dougherty (480) 413-6923 Vivek Gupta (480) 734-0266 Bharat Penmecha (480) 552-2511 Mahesh Shah (480) 544-9438 Shawn Shi (480) 929-5614 Huiyang Fei (480) 552-4966



HE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.



# IEEE Components, Packaging and Manufacturing Technology Society Phoenix Chapter

Monday, December 14th, 2015 at 5:30 PM

# **Heterogeneous Integration of Microdevices by Micro-Transfer Printing**

Dr. Christopher (Chris) A. Bower
Chief Technology Officer
X-Celeprint

3021 Cornwallis Rd., Research Triangle Park, North Carolina, USA <a href="mailto:cbower@x-celeprint.com">cbower@x-celeprint.com</a>

#### **ABSTRACT**

Micro-Transfer-Printing is a broadly applicable and practical micro assembly technology that was originally conceived and developed at the University of Illinois over a decade ago. In Micro-Transfer-Printing, an elastomeric stamp is used to transfer devices from their native semiconductor wafer onto non-native substrates such as glass, plastics, ceramics or other semiconductors. The transfer process relies on reversible, differential, and/or switchable adhesion to manipulate arrays of many small and fragile devices. The elastomer stamp based transfer process is deterministic, accurate, occurs at room temperature and requires no liquids or solvents.

In this work, we will present results from recent development programs aimed at using Micro-Transfer-Printing to heterogeneously integrate microscale compound semiconductor devices. We will describe the processes used to make a diversity of printable microscale devices, including devices made from Gallium Arsenide, Gallium Nitride and Indium Phosphide. The devices presented are typically thin, generally less than 10 microns, and have lateral dimensions less than 100 microns. We will show Micro-Transfer-Printing process yields and accuracy for a variety of device classes, including LEDs, lasers and transistors. The work will include an analysis of the process throughput and cost effectiveness in a variety of applications. Finally, we will discuss some emerging applications that are expected to leverage micro assembled compound semiconductors.

#### **BIOGRAPHY**



**Dr. Christopher (Chris) A. Bower** is the Chief Technology Officer at X-Celeprint Limited, a company founded to develop and commercialize advanced micro assembly technologies. He was formerly a Technical Manager at Semprius, Inc., where he led the team responsible for micro-transfer-printing and wafer-level packaging of advanced microscale solar cells. His past experience includes three years of research and development on three-dimensionally integrated circuits at RTI International and four years of research on nanotechnology and photonics devices at Bell Labs and InPlane Photonics, Inc. Chris received a Ph.D. degree in physics from the University of North Carolina, Chapel Hill, in

2000, where his graduate studies focused on the synthesis and novel properties of carbon nanotubes. His interests include three dimensional integration of integrated circuits, heterogeneous integration of compound semiconductors onto non-native substrates and the fabrication of low-cost, large-format electronics using novel assembly methods.

Date: Wednesday, October 21st, 2015

Location: Group Conference Room, Freescale Semiconductor, Inc., Discovery Business Center, 2100 E. Elliot Rd. Tempe, AZ.

Enter the facility through the Main (South) Lobby in building 94 and sign in with Security (Photo ID required) BEFORE

6:00 PM. You will be escorted to the meeting room. The presentation promptly starts at 6:00 PM.

Agenda: 5:30–6:00 PM: Social/Refreshments, 6:00–7:00 PM: Presentation, 7:00 PM: Dinner

(Pizza and Soda will be provided by the IEEE Phoenix Section CPMT Society Chapter)

IEEE members and non-members are all welcome to attend. Please arrive at the facility entrance no later than 5:45 PM.

For more information, please contact any of the following CPMT officers:

Vasu Atluri (480) 227-8411 Rao Bonda (480) 786-7749 David Dougherty (480) 413-6923 Huiyang Fei (480) 552-4966 Vivek Gupta (480) 734-0266 Bharat Penmecha (480) 552-2511

Mahesh Shah (480) 544-9438 Shawn Shi (480) 929-5614



# SP-COM Phoenix Chapter

### Please join our Google Group!

Please join our increasingly popular Google group to get the most up-to-date information about the society's activities. We have now over 50 members who are availing of this facility. Email traffic is thin, and used only to send meeting notices. No spam!

https://groups.google.com/d/forum/ieee-sp-com-phoenix-chapter

In addition, we continue to post meeting notices on IEEE vtools at (<a href="https://meetings.vtools.ieee.org/main">https://meetings.vtools.ieee.org/main</a>)



# Phoenix Chapter of the IEEE Computer Society October, 2015

### <u>News</u>

Our final chapter meeting of 2015 will be held on Wednesday, December 2<sup>nd</sup>, at the Phoenix (Central) Campus of the ITT Technical Institute. The campus is located at 10220 N 25th Avenue, Phoenix. The venue is east of the I-17 between Peoria and Dunlap. The speaker will be Mark Goldstein of International Research Corporation. He will speak on the Internet of Things. More details will be published later.

Chapter elections for the 2016 officers will be held at this meeting.

The October meeting featured Schuyler St. Ledger, a young man who has been present at several Computer Society meetings. He spoke on software defined radio.

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:

Chair	Jerry Crow	jerry.crow@computer.org
Vice-chair	Dr. Brad Morantz	bradscientist@ieee.org
Secretary	Audrey Skidmore	askidmore@computer.org
Treasurer	Diane Smith	sdianesmith@computer.org
Webmaster	Audrey Skidmore	askidmore@computer.org



# IEEE Power and Energy Society Phoenix Chapter



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

# IEEE PES NOVEMBER 2015 LUNCH MEETING – PRINCIPLES AND EVOLUTION OF HV (46 KV OR HIGHER) INSULATED CABLES

#### WHEN:

November 19, 2015 @ 11:30 am - 1:00 pm

#### WHERE:

PERA Club

1 E Continental Dr

Tempe, AZ 85281

USA

### **November 2015 Luncheon Meeting**

**Date:** Thursday, November 19, 2015 **Time:** 11:30 – 11:45 am: Registration

11:45 am: Lunch 12:00 pm: Program

**Location:** PERA Club (see location)

Speaker: Mathew Nadakal, VP of Sales, Western region for Marmon Utility LLC (Kerite brand)

Topic: Principles and Evolution of HV (46 kV or higher) insulated cables

**Cost:** \$8.00 (No cost if you are a college student)

**Reservations**: Contact Monica at (602) 470-0400 or click here Reservations deadline is NOON on Monday, November 16, 2015.

If you have already registered for this luncheon but need to cancel, click here.

#### **Abstract/Overview**

- Cable designs and popular configurations.
- HV Cable specifications
- Insulation types, pros and cons
- Voltage stress, corona effect, partial discharge and life expectancy of cables
- Challenges in HV cable installations, splicing and terminations
- Underground vs overhead decisions, dilemmas and economy



#### INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

# WAVES AND DEVICES

## PHOENIX CHAPTER





Chapter Chair: Steve Rockwell

steve.rockwell@ieee.org

Chapter Vice-Chair: Trevor Thornton <u>t.thornton@asu.edu</u>

<u>Date</u>	<u>Venue</u>	<u>Topic / Title</u>	<u>Speaker</u>	<u>Affiliation</u>	<u>IEEE</u> Society
25-Feb	ASU	Thermal Challenges in Mobile Devices and Potential Solutions	Mulugeta Berhe	Henkel	Electron Devices
26-Feb	ASU	Impact of Be-doping on the material properties of InAs/InAsSb type-II superlattices for infrared detection	Elizabeth Steeenberger	Wright- Patterson Air Force Base	Photonics
27-Mar	ASU	Advanced Antenna Systems for Satellite Communication Payloads	Sudhakar Rao	Northrop Grumman	Antennas
20-Apr	ASU	Surface Acoustic Wave Devices  - Challenges for Technology Development in Modern Communication Systems	Richard Gruenwald	Vectron	Ultrasonics
22-May	ASU	Microwave and Millimeter Wave Power Amplifiers: Technology, Applications, Benchmarks, and Future Trends	Jim Komiak	BAE	Microwaves
22-May	ASU	Overview of Different Numerical Solvers for Electromagnetic Applications	Felipe Cátedra	Univ. of Alcalá, Madrid,Spain	Antennas
Aug					
23-Sept	ASU	Modern Methods for Microwave Filter Synthesis	Richard Cameron	MTT Dist. Lecturer	Microwaves
Oct	Freescal e	Free Form Flexible-Stretchable- Reconfigurable Electronics: Tomorrow's Applications Today	Muhammad Mustafa Hussain	IEEE EDS Distinguished Lecturer	Electron Devices Society
Nov					

For more information, contact:

Steve Rockwell (WAD Chapter Chair) (480) 241-9891 Curtis Scott (WAD Chapter Publicity) (623) 703-9177

steve.rockwell@ieee.org curtiscott@gmail.com



# Technical Presentation, Officer Elections and Administrative Meeting Meeting December 15, 2015

#### **Program Presentation: Energy Innovations from Concept to Construction**

Today's energy market is in the early stages of a transition that will unfold over the next few decades. This transition will require innovation in technology, policy, educational strategies, and the integration and management of technical and social systems involved in the new energy era. In this time we must challenge ourselves to explore the systems-level implications of energy options on technical, economic, behavioral, and environmental metrics, and use that understanding to guide our basic research, technology design, and integration and control to achieve the greatest impact. This requires systems thinking joined with detailed technical and scientific evaluation throughout all stages of the engineering design process.

Dr. Johnson will describe and discuss his research within a larger strategic framework that engages in basic research, systems integration, and deployment of energy innovations from concept to construction across three synergistic areas:

- (1) distributed resource modeling, integration, and control with focus on home energy systems,
- (2) micro-grid design and deployment for on-grid and off-grid applications, and
- (3) off-grid power solutions including solar homes, battery charging stations, and village grids.

Dr. Johnson will also provide educational examples from his in-class and out-of-class activities for training the evolving US energy workforce, and discuss technical initiatives for rural electrification through the IEEE Smart Village, a signature IEEE program.

The Presenter: Dr. Nathan Johnson

Dr. Nathan Johnson is an Assistant Professor in The Polytechnic School of the Ira A. Fulton Schools of Engineering at Arizona State University. He is an active researcher and teacher of sustainable and resilient energy systems. Through his work, Dr. Johnson designs, optimizes, builds, and tests energy innovations to address challenges around the world. This work includes fundamental scientific research and applied engineering projects to help bridge the gap between academic research and commercialization.

Dr. Johnson's research team of 15 people incorporates skillsets from five disciplinary backgrounds. His team actively collaborates with universities, laboratories, industry, and NGOs. Dr. Johnson has been active in IEEE Region 6 through the Global Humanitarian Technology Conference (GHTC) and Rising Stars, and he is recognized by Arizona State University as a Senior Sustainability Scientist in recognition for his globally-focused sustainability efforts.

# **NOTE MEETING STARTS AT 11 AM**

#### **Meeting Agenda:**

11AM: Attendee introductions

11.05 Obtain Lunch

11:20 AM: Program Presentation

12:20 Officer's report

12:25 Nominations Accepted for Officers, presentation of Slate

12:30 Officer Elections

12:35 Election results presented

12:45 Admin. Meeting / New Officers

Where: SRP's PERA Club Bighorn Room,

1 East Continental Drive, Tempe, AZ

Continental is West of 68th St., ½ mile south of McDowell Road

Enter the Private PERA Club and follow drive to large parking lot. Big Horn is small building at South East corner of lot.

When: Tuesday, <u>December 15, 2015 - 11:00am – 1:00pm</u>, Registration fee is \$15. This fee will include lunch provided by the PERA Club.

Lunch: TBD

RSVP: Please advise Ronald Sprague <u>r.sprague@ieee.org</u> if you plan to attend so accounting for lunch is possible.

**Technical Presentations:** The Program Chairs are seeking suggestion from members for future presentations. Any ideas of interest are open for consideration. Please contact Ronald Sprague or Barry Perlman Program Chairs at r.sprague@ieee.org and/or barry.perlman@gmail.com.

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.

*Activities:* Technical meetings scheduled the 3<sup>rd</sup> Tuesday of February, May, October, and December. Elections are held at the December meeting.

**Future Technical Meetings**: All meeting are scheduled at the SRP PERA CLUB. It is suggested you put these dates on your calendar to attend the meetings.

- Tuesday December 15, 2015
- Tuesday February 16, 2016
- Tuesday May 17, 2016
- Tuesday October 18, 2016

#### Officers:

Chair	Leslie Daviet II	<u>lesdavietii@cs.com</u>
Vice Chair	Jim Tang	JFTANG@cox.net
Secretary	Tom Lundquist	tom.lundquist@ieee.org
Treasurer	Leslie Daviet II	lesdavietii@cs.com
Membership	Rao Thallam	Rao.Thallam@gmail.com
Program	Ron Spraque	r.sprague@ieee.org
	Barry Perlman	barry.perlman@gmail.com
Volunteer	Gary Frere	gary.frere@gmail.com
Past Chair	<b>Barry Cummings</b>	abarrycummings@gmail.com



## **IEEE Phoenix Section Awards For The Year 2015**

The IEEE Phoenix Section recognizes the contributions of members, non-members, society chapters, affinity groups, student branches, corporations, and educational institutions at the annual banquet. The next banquet is scheduled for Saturday, February 13th, 2016 at Hilton Phoenix Airport located at 2435 South 47th Street, Phoenix, AZ – 85034 from 5:30 PM to 9:30 PM (Tel: 480-894-1600).

The Section is pleased to issue a call for nominations for this year's Section awards. The scope and purpose of the Section Awards Program is to plan, promote and implement IEEE award 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 categories:

- Member
- Society Chapter/Affinity Group
- Non-member
- Corporate
- Educational
- Section Chair

The Awards Guide lists the awards along with the selection criteria that will be implemented for selecting the award recipient. The Awards Guide can be accessed at http://sites.ieee.org/phoenix.

Please read through the Awards Guide to help you in selecting the award category for nomination.

All sections of the form should be completely filled electronically. Submission of additional documents such as resume in support of the nomination is highly encouraged.

Key dates:

Submission deadline: Sunday, January 3rd, 2016

Awardees and nominators will be informed on: Sunday, January 10th, 2016

Only nomination forms submitted by the deadline will be reviewed by the awards committee consisting of the following IEEE Phoenix Section Officers:

- Awards Committee Chair: Dr. Vasudeva P. Atluri
- Awards Committee Co-Chair: Dr. Charles E. Weitzel
- Past Chair: Ms. Barbara McMinn
- Chair: Mr. Bruce J. Ladewig
- Vice Chair: Mr. Surinder K. Tuli
- Secretary: Mr. Vivek Gupta
- Treasurer: Dr. Mahesh K. Shah
- Student Activities Coordinator: Dr. Diane S. Smith

If you have any additional questions, please contact Dr. Vasudeva P. Atluri, Section Awards Committee Chair, at (480) 227-8411 or by email at vpatluri@ieee.org, and Mr. Bruce J. Ladewig, Section Chair, at (480) 620-9291 or by email at bruceladewig@ieee.org.

### IEEE Phoenix Section Student Scholarships For The Year 2015

The IEEE Phoenix Section awards Student Scholarships to full-time graduate and undergraduate students who are IEEE student members. The applying student must attend a university in the Phoenix Section during 2015. The universities include Arizona State University, Arizona State University Polytechnic, DeVry University, Embry-Riddle Aeronautical University, and Northern Arizona University.

The student should submit a completely filled application along with financial aid statement; a one-page personal statement of achievements, interests, and goals; official transcripts of all college work; and recommendation letters. The scholarships are awarded based on academic achievement, financial need, and service to the IEEE.

The IEEE Phoenix Section will present the following Student Scholarship awards at the annual banquet scheduled for Saturday, February 13<sup>th</sup>, 2016 at Hilton Phoenix Airport located at 2435 South 47th Street, Phoenix, AZ – 85034 from 5:30 PM to 9:30 PM (Tel: 480-894-1600):

"Atluri Award" sponsored by Dr. Vasudeva Prasad Atluri and Dr. Satyavathi Atluri. Total of two award recipients are presented with a plaque and a check for \$1000.00 each. Only graduate students are eligible for these awards.

"Al Gross Award" sponsored by IEEE Components, Packaging, and Manufacturing Technology (CPMT) Society Phoenix Chapter. The award recipient is presented with a plaque and a check for \$1000.00. Graduate and undergraduate students are eligible for this award.

"Irv Kaufman Award" sponsored by IEEE Waves and Devices Phoenix Chapter. The award recipient is presented with a plaque and a check for \$1000.00. Graduate and undergraduate students are eligible for this award.

"Dieter Schroder Award" sponsored by IEEE Phoenix Section. The award recipient is presented with a plaque and a check for \$1000.00. Graduate and undergraduate students are eligible for this award.

The checks for these four awards are given out from the IEEE Phoenix Section Student Scholarship Endowment administered by the IEEE Foundation. To learn more about IEEE Foundation, access http://www.ieeefoundation.org/.

Only applications received by the deadline, Friday, January 1<sup>st</sup>, 2016, will be reviewed by the awards committee consisting of the following IEEE Phoenix Section Officers:

Awards Committee Chair: Dr. Vasudeva P. Atluri Awards Committee Co-Chair: Dr. Charles E. Weitzel

Past Chair: Ms. Barbara McMinn Chair: Mr. Bruce J. Ladewig Vice Chair: Mr. Surinder K. Tuli Secretary: Mr. Vivek Gupta Treasurer: Dr. Mahesh K. Shah

Students Activities Coordinator: Dr. S. Diane Smith

Student scholarship winners, upon receiving notification from IEEE Phoenix Section Awards Committee, should send by email completely filled either Form W-9 for US Citizen or Form W-8 for Non-US Resident to Mr. Michael Deering, Director of Development, IEEE Foundation, at m.deering@ieee.org with a copy to Dr. Vasudeva P. Atluri, Section Awards Committee Chair, at vpatluri@ieee.org, by Friday, January 15<sup>th</sup>, 2016.

#### Key dates:

Application submission deadline: Friday, January 1st, 2016

Scholarship recipients will be informed on: Monday, January 11th, 2016

Submit W-8 and W-9 Forms by: Friday, January 15th, 2016

If you have any additional questions, please contact Dr. S. Diane Smith, Section Student Activities Coordinator, at (602) 749-4601 or by email at sdianesmith@computer.org, and Dr. Vasudeva P. Atluri, Section Awards Committee Chair, at (480) 227-8411 or by email at vpatluri@ieee.org.

#### **IEEE Phoenix Section Officer Terms**

At the November 3, 2015 Executive Committee (ExCom) meeting of the IEEE Phoenix Section officers and representatives of the affiliated Chapters and Affinity Groups, a decision was made to change the term of IEEE Phoenix Section Officers from one year to two years in accordance with the bylaws the Phoenix Section operates under. The rationale of this decision included operational efficiency and effectiveness of individuals being in a position for two years and thus more able to implement improvements; program continuity and planning; and improved section operations.

Per the Phoenix Section website (<a href="http://sites.ieee.org/phoenix/about/section-bylaws/">http://sites.ieee.org/phoenix/about/section-bylaws/</a>), the Phoenix Section is "required to operate in accordance with IEEE Constitution, Bylaws, Policies, and the MGA Operations Manual." Per Section 9.4.F.7.b. of the MGA Operations Manual:

• "The term of office for all officers shall be one or two years. A Section must define the officer term as one or two years and record it in its local operating procedures document; if the officer term is not recorded in the local operating procedures document, it shall be two years. An individual may continue in the position until a successor has been duly elected and takes office."

There may be times when an individual is unable to serve for two years in a position so annually the Nominating Committee will confirm with each officer their willingness and ability to serve in the specific position for the second year of their term. If someone needs to drop out after their first year or be replaced, the Nominating Committee will identify replacements and place them on the ballot for election. Typically, the officer succession plan is to request individuals serving as officers to progress through the various positions but this is not a requirement.

The purpose of this notice is to record the decision reached regarding Phoenix Section Officers serving two year terms. Please contact any of the Phoenix Section Officers if you have questions or input. Thank you.

# **Executive Committee Meeting**

## No meeting of Executive Committee in July & August

Normal meetings are on first Tuesday of the month from 6:00 PM to 8:00 PM The Airport Hilton Phoenix,

2435 S 47th St. Phoenix, AZ 85034, (480) 894-1600.

## **2015 Executive Committee**

Chair: Bruce Ladewig
Vice Chair: Surinder Tuli
Secretary: Vivek Gupta
Treasurer: Mahesh Shah
Past Chair: Barbara McMinn

# **Executive Committee Meetings**

**Date:** First Tuesday of every month, except July and August

**Time:** 6:00 - 8:00 p.m.

**Location:** Hilton Phoenix Airport, 2435 South 47th Street, Phoenix, AZ 85034

### **IEEE Senior Member and Fellow Grade**

IEEE Phoenix Section Membership Development would like to nominate eligible IEEE Members from the Section to Senior Member and Fellow Grades. Please review the requirements at <a href="https://www.ieee.org">www.ieee.org</a> for eligibility.

Eligible candidates are requested to send in their resumes to Dr. Vasudeva P. Atluri, Membership Development Coordinator, at <a href="mailto:vpatluri@ieee.org">vpatluri@ieee.org</a> and Dr. Bruce Ladewig, Section Chair, at <a href="mailto:bruceladewig@ieee.org">bruceladewig@ieee.org</a> for consideration.

# **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.

You can also go to IEEE Phoenix Section LinkdIn page by clicking button on the <u>IEEE Phoenix Section home page</u>

# **IEEE Phoenix Section Ventures into Social Media**

You can access the web page three ways:

Use the URL: <a href="https://www.facebook.com/lEEEPhoenixSection">https://www.facebook.com/lEEEPhoenixSection</a>

Click on the Facebook logo link from <a href="IEEE Phoenix section home page">IEEE Phoenix section home page</a>.

Search for IEEE Phoenix Section from your Facebook page.

We need following help.

- 1. Each of you access the IEEE Phoenix Section Web page and click on "Like" hyperlink.
- 2. Go on the Friends section of the page and "Invite Your Friends." Once your click on Invite button, it will get your email contact list. Your facebook contact list will already be populated with your Facebook friends and you can simply click the Invite button next to their name. Please invite as many friends as you can.
- 3. Provide me the contents for posting on a regular basis meeting/ event announcements, Event pictures, Videos.
- 4. Start some discussion topics under Status section.

# **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 the new Senior Member application</u>.

## **IEEE Member's Benefits**



## Connect with other technology professionals

Collaborating with a community that shares similar interests can help you take your career to the next level. That's why we created IEEE Collabratec, an online community where technology professionals are networking, collaborating, and creating globally. Here's some of what you can do on IEEE Collabratec:



- Participate in discussions with other professionals.
- Access interactive communities like these:

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- Cloud Computing, Big Data, Transportation Electrification, Internet of Things, All-Society Tech Forum
- Technology networks in Africa, Asia/Pacific, Europe, Middle East,
   North America, and South America
- Women in Leadership, IEEE Young Professionals, IEEE Author Lab,
   IEEEXtreme, IEEE Day, CareersConnect-USA
- Create Private Groups for research projects or to organize activities.

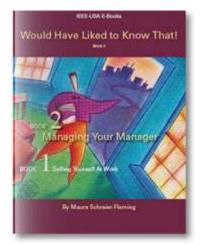
# Free IEEE-USA eBook Offered as Special Benefit to IEEE Members

As a special benefit of IEEE Membership through 15 November, IEEE-USA is offering a free eBook, *Would Have Liked to Know That! Book 2: Managing your Manager*, by Maura Schreier-Fleming.

Managing your Manager Book 2 of this series, Schreier-Fleming writes that managers give clues about how you should work with them. She outlines what those clues are, and also helps you develop effective persuasion strategies for working with your manager. According to Shreier-Fleming, the ultimate goal is to be more productive, have less stress, and be more likely to get what you want, as you work with your manager.

Shreier-Fleming explores many clues that will help you make a decision about the person you are analyzing - from handshakes to facial expressions and body language. Other topics in *Managing the Manager* include:

- How To Build Rapport
- Determine Your Manager's Style
- How To Manage Your Manager: Expressive
- How To Manage Your Manager: Driver
- How to Manage Your Manager: Analytical
- How To Manage Your Manager: Amiable





Members can download *Managing the Manager* for free through 15 November 2015. Sign in with your IEEE Account, add the book to your Cart, and enter the promo code **OCTFREE** at checkout.

In November, the IEEE-USA free eBook will be *The Best of Today's Engineer: On Licensure - Volume 1*, compiled by Georgia C. Stelluto. This free eBook is a compilation of articles that will help the reader understand why one should pursue licensure; the licensure process; exam development and how to effectively study for and pass the licensure exams.

#### **Member Discounts**

#### **GetInsured**

Did you know that as an IEEE member, you now have access to Mercer Marketplace\* powered by GetInsured? Mercer Marketplace is the easiest way to shop for health insurance. It also offers a wealth of entertaining, educational content to help you understand your options.

As an IEEE member, you have the freedom to compare available plans and secure a solution that strikes the best balance between coverage and affordability. Plus, you can do this **confidentially and conveniently in minutes**. You pay no additional cost to take advantage of this service.

2016 Open Enrollment for health insurance starts soon! <u>Learn more about the Mercer Marketplace powered by GetInsured.</u>

\* Provided by Mercer Health & Benefits LLC
These individual health insurance plans are not sponsored by IEEE nor the Mercer
Marketplace. Available in the United States.

#### Lenovo

IEEE members can get a discount from Lenovo\*, a global leader in the PC marketplace. Members save up to 30% off the everyday public web price of Lenovo's entire product line of laptops, tablets, desktops, servers, accessories and more! Take advantage of great deals on top products for the home and office, including the award-winning ThinkPad laptops and innovative multimode YOGA tablets.

IEEE members also receive:

- Free ground shipping on all web orders
- Monthly limited-time special offers
- Access to energy-efficient green technologies
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Experience the Lenovo difference today! For more information and easy ordering: Call: 1-800-426-7235, ext. 2157 (M-F: 9am - 9pm EST, Sat: 9am - 6pm EST)

Visit: lenovo.com/ieee \* Available only in the US

\*Where available



#### Plan for the Future and Live for Today

Daydreaming about goals can be exciting. It can also be daunting when we aren't sure how to achieve them. This is where financial wellness comes in. Most financial worries come from lack of planning, not lack of money.

That is why we are pleased to let you know that you have access to My Financial Wellness for IEEE Members, a new program available in the US.

Whether you are well along your financial plan or had some bumps along the way, you still can benefit from financial



planning. At My Financial Wellness for IEEE Members, you can benefit from no-cost educational resources, financial tools, and credentialed financial advisors to help you get your financial plans in shape.

To learn more, visit IEEEFinancialWellness.com.

#### **IEEE-USA Webinars**

#### **Date Revisions for some IEEE-USA Webinars**

IEEE-USA has had to reschedule the webinar *From Page to Stage* originally planned to take place in October. This webinar will now take place on 19 November at 2:00pm EST. IEEE-USA has partnered with the <u>IEEE Professional Communication Society</u> to address a topic that has confounded everyone from students to professionals at one time or another. *From Page to Stage* will discuss how to take the written version of your work from its form in a lab notebook, a report, or a paper and translate it into a presentation or poster. Dr. Julia M. Williams is Executive Director of the Office of Institutional Research, Planning, and Assessment and Professor of English at Rose-Hulman Institute of Technology and the presenter for this webinar. She will offer a clear process for making this transition successfully and she will provide concrete strategies for making the most effective use of presentations. <u>If you haven't registered for this webinar you still have time!</u>

#### Leadership

IEEE-USA has revised its upcoming webinars on leadership. Elizabeth Lions, who earlier this year provided three great webinar presentations on the topic of leadership, will return this fall to IEEE-USA with one more webinar presentation on the topic of leadership and a webinar on emotional intelligence. Situational Leadership is the key to driving teams from being adequate to spectacular. Situations will arise in the office, but as a leader it's your responsibility to get the team headed in the right direction. Emotional Intelligence is the ability to monitor one's own and other people's emotions to discriminate between different emotions and label them appropriately, and to use emotional information to guide thinking and behavior. Elizabeth will explain what emotional intelligence is, why it's important and how to develop the skill. Situational Leadership and Emotional Intelligence will take place onFriday 13 November and 11 December from 1:00pm 2:00pm EST. Again, you can register for both of these webinars

today at the IEEE-USA website.





#### Introducing the Kalman Filter

This tutorial is a guide to how the Kalman Filter works. Dr. Ramsey Faragher explains that even students without a strong mathematical background can understand what the Kalman Filter can do to smooth measurements and fuse data together.



# AuthorLab: Information on the IEEE article processing charges

This video describes the payment options offered by IEEE to pay Article Processing Charges.



#### SIMD Programming in VOLK, the Vector-Optimized Library of Kernels

To improve the speed of signal processing and computation, Tom Rondeau, Nick McCarthy, and Tim O'Shea walk through the VOLK (Vector Optimized Library of Kernels) library for SIMD (Single Instruction Multiple Data) Programming.



## Refer a Colleague, Get Great Merchandise!

In conjunction with IEEE-USA, IEEE is excited to continue this special offer for US members. Refer a colleague to IEEE. If they join before the end of the membership year, they'll get a 50% discount off their first year membership, and you'll get a gift. IEEE-USA gift items you can choose from include:

Cooler backpack
Portable solar battery charger
Portable speaker
Parker ballpoint pen
Golf balls
Golf umbrella

Computer backpack
Tablet case
Parker pen and mechanical pencil set
Travel coffee mug and tumbler set
Baseball hat
Travel umbrella

Members remain eligible to receive incentives through the existing IEEE Member-Get-a-Member (MGM) program. How it works:

- Refer your colleague via the online form.
- Your referral will receive an email inviting them to join at a 50% discount off firstyear membership dues, and will receive benefits through 31 December 2017.
- Your referral will provide your IEEE member number when he or she joins.
- Within 1-2 weeks after your referral joins, you will receive an email confirming your recruiting success, including a link which allows you to select your IEEE-USA merchandise item.
- You will receive a separate email for each new member you recruit.

Please help spread the word and share your IEEE experience - no one knows how beneficial IEEE Membership is to technical and career development better than you, the member. Refer your friends and colleagues today!

#### **IEEE Mentoring Program**

IEEE MentorCentre is the online mentoring platform for IEEE. This is a valuable resource for IEEE members seeking a professional mentoring partnership. That means all the best practices you have come to expect from an IEEE mentoring program are in place, with ample opportunity to enter a unique mentoring partnership not found anywhere else.

What you will find with IEEE MentorCentre:

- The ability to connect with mentors based on specialized areas of practice, experience, IEEE societal affiliation and more
- Opportunities to give back to the profession by registering as a mentor
- Additional fields to narrow down the preferred profile of the mentor
- Improved mentor controls allowing you to control how you are viewed in the system

Participation in the program is voluntary and open to all IEEE members above the grade of Student member.

**Access IEEE MentorCentre** 

#### **IEEE ResumeLab**

IEEE members have a powerful tool to help gain a competitive edge in the employment process. IEEE ResumeLab is an online service thatallows IEEE members to develop a resume or curriculum vitae using specialized tools tailored for each step of



the job seeking process. This product is added to the list of offerings that assist members as they find jobs and develop their careers.

IEEE ResumeLab is designed with a series of modules that assist the member through the employment process. Key modules and features include:

- Resumes Select from a wide array of templates geared toward specific industries, sectors and work experience stages.
- **Letters** From cover letter to post-interview thank you letter, ensure optimal communication throughout the hiring process.
- **Skills Assessment** Highlight the skills you possess, your competency in those skills, and what makes your experience with these skills unique.
- Mock Interviews Prepare for the real thing by selecting an interviewer and the type of questions they'll ask. Choose to record your interview for evaluation and feedback.
- Video Resumes Record custom video messages for potential employers.
- Portfolios Upload and organize your past work to present to potential employers.
- **Share Online** Publish and share everything you create on a publicly viewable website.

Access IEEE ResumeLab

#### **Call for Nominations: IEEE Technical Field Awards**

Nominations are due 31 January annually for the IEEE Technical Field Awards (TFA). IEEE TFAs are awarded for contributions or leadership in a specific field of interest of IEEE and are among the highest awards presented on behalf of the IEEE Board of Directors.

All IEEE members are encouraged to submit a nomination for a worthy candidate within their technical fields. Nomination forms and award-specific criteria can be downloaded.

Since 1917, the IEEE Awards Program has paid tribute to technical professionals whose exceptional achievements and outstanding contributions have made a lasting impact on technology, society, the engineering profession, and humanity. By this means, the image and prestige of the organization, its members, and the profession are all enhanced.

For more information visit the <u>Awards program</u> online or email <u>awards@ieee.org</u>.



## Access GoogleApps@IEEE via myIEEE

#### **Did You Know?**

IEEE members can quickly access their GoogleApps@IEEE service via myIEEE. The GoogleApps@IEEE gadget is visible to all members on the "myDesktop" page in myIEEE. Members can remove, relocate, or add the gadget back at any time. Users will experience:

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- Services and account settings hot-linked to respective locations in GoogleApps (separate window)
- Single sign-on (no need to reauthenticate)

After signing in to myIEEE, select the Customize tab and begin personalizing your myDesktop page.

Go To myIEEE