The Valley Megaphone

Newsletter of the Institute of Electrical and Electronics Engineers, Inc., Phoenix Section
December, 2015
Volume XXIX, Number 12

Executive Committee 2015

Chair
Bruce Ladewig, 480-620-9291
bruceladewig@ieee.org

Vice Chair
Surinder Tull, 480-287-1437
Surinder.tull@gmail.com

Secretary
Vivek Gupta, 480-734-0266
vmgupta@msn.com

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

Past Chair
Barbara McMinn 602-371-6383
barbara.mcminn@aps.com

Publicity
Wei Xu, 480-296-1116
Wei.Dr.Xu@ieee.org

PACE
TBD

Membership
Vasudeva P. Atluri, 480-227-8411
vpatluri@ieee.org

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

Conferences
Brad Morantz, 480-348-5945
Phx.Conf@yahoo.com

Awards
Vasudeva P. Atluri, 480-227-8411
vpatluri@ieee.org

Inter-Society
Mike Andrews, 480-991-1619
m.andrews@ieee.org

Webmaster
Gopi Krishna 480-552-2566
gkkrishnan@gmail.com

In this Issue of the Valley Megaphone:

Table of Contents
(Please Click on the heading below to go directly to that page)

U – News ......................................................2
Student Branches ........................................2
Upcoming Conferences ....................................7
CPMT Phoenix Chapter ......................................15
Communication Society ....................................18
Computer Society ........................................19
Life Member Affinity Group ..............................22
Young professional Phoenix Section ....................24
IEEE Phoenix Section News ............................25
Phoenix Section Executive Committee Meeting .......28
Phoenix Section LinkedIn Group ........................30
Phoenix Section on Social Media .......................30
IEEE Membership Grade Advancement ..................31
IEEE Member’s Benefit ....................................31

IEEE Phoenix Section on-line updates can be found at http://sites.ieee.org/phoenix/ and on LinkedIn at: http://www.linkedin.com/groups?qid=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
bretta@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 Chickamahalli,
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 Tull 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/
Updates of Student Advisors and Committee Members

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

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

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, pghenson@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 Main, Power and Energy Society**
Chair: Nikita Singhal (nsinghal@asu.edu)
Co-Chair: Deepak Ramasubramanian (dramasu1@asu.edu)
Advisor: Kory Hedman
kory.hedman@asu.edu

**ASU Polytechnic**
Chair: Josh Carroll
jcarrol@asu.edu
Elizabeth Long
Elizabeth.a.long@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
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.
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 Title IX statement.

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 IEEE ASU Polytechnic Chapter

Meeting notes from the fall semester, as well as minutes from a Solidworks tutorial were updated.

August 27, 2015:
- Work out future meeting dates and times
- What projects we want work toward this semester/year

September 22, 2015:
- Discuss how volunteer opportunities will work
- What’s new
- IEEE Phoenix chapter meeting times

October 22, 2015:
- How to engage students more
- Local Motors 3D Printed car

November 13, 2015:
- Introduce attendees to the Solidworks environment and go over the basics

Elizabeth Long
IEEE ASU Poly Chapter - Secretary
Ira A. Fulton School of Engineering
Arizona State - Polytechnic
ealong2@asu.edu

Update from IEEE Power and Energy Society (PES) ASU Student Chapter

Our student chapter was formalized and approved on 10th February 2015 with a geo code of SBC00101A. The members of the executive committee of the student chapter were decided by a vote in the inaugural meeting in March 2015. The executive committee is as follows:

Chairpersons:
Nikita Singhal (nsinghal@asu.edu)
Deepak Ramasubramanian (dramasu1@asu.edu)

Vice-chairpersons:
Shruti Rao (srao12@asu.edu)
Sohom Datta (sdatta9@asu.edu)

Secretaries:
Pranavamoorthy Balasubramanian (pbalasu3@asu.edu)
Mojgan Mehdiabadi (mojgan.hedayatimehdiabad@asu.edu)

Treasurers:
Jonghwan Kwon (Jonghwan.Kwon@asu.edu)
Samet Arda (sarda1@asu.edu)

Social chairpersons:
Mojdeh Khorsand (mojdeh.khorsand@asu.edu)
Chao Li (Chao.Li.cidse@asu.edu)
Networking coordinator:  
Yousef Al-Abdullah (yalabdul@asu.edu)

Faculty advisor:  
Dr. Kory Hedman (kory.hedman@asu.edu)

Including the members of the executive committee, the chapter has 50 members from the student body. The graduate power program at ASU has around 150-200 students.

For the spring 2016 semester, we have tentatively invited four speakers from the industry to give a one-hour long technical talk each. In addition, we plan to hold another social meet-and-greet towards the end of the semester. Further, as a social outreach to the community, members from the chapter would be volunteering for workshops organized by the Arizona Science Lab.

We can be reached on Facebook, LinkedIn or email:  
Facebook: https://www.facebook.com/ASUIEEEScienceLab/  
LinkedIn: https://www.linkedin.com/groups/8437949  
Email: iepes.asu@gmail.com

Nikita Singhal  
Deepak Ramasubramanian  
Co-Chairs, IEEE PES ASU Student Chapter

Update from IEEE ASU Student Branch

IEEE held its 9th IEEExtreme Competition on October 24th. This global programming competition spanned 24 hours featuring 2317 teams worldwide, with more than 220 from the United States. The ASU Student Branch participated in the competition for the first time, and brought two teams to compete. Digital Devilz was led by Chinedum Robert-Maduekwe with teammates Ian Mitchell and Gene Silva, and Zero Buggz was led by Allen Kawanzaruwa collaborating with teammates Zeyu Zhang and Christine Lam. Proctors were Carole Mars, Ronnie Litchfield, Joshua Colvin, and Phanindra Babu Guthi, as well as multiple members of ASU’s IEEE student chapter, who provided moral support. Congratulations to team Zero Buggz that finished 26th in the United States, and in the top 200 in the world!

Ngoni Mugwisi  
Chair, IEEE ASU Student Branch  
ieeasuchair@gmail.com
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

The second annual IEEE Rising Stars Conference 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

2016 IEEE International Conference on Image Processing (IEEE ICIP) 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
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: http://www.nuxlabs.com 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.
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 Valley Megaphone December, 2015

IEEE PHOENIX SECTION

Annual Banquet - Saturday, February 13th, 2016
Hilton Phoenix Airport, 2435 South 47th Street, Phoenix, Arizona 85

Banquet Agenda
Registration / Social Hour: 5:30 PM – 6:30 PM
Sit-Down Dinner: 6:30 PM – 7:15 PM
Section Program: 7:15 PM – 8:00 PM
Keynote Presentation: 8:00 PM – 8:30 PM
Awards Presentation: 8:30 PM – 9:15 PM
Change 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 47th 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
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.

CAREER FAIR
CORPORATE MIXER
“THE NEXT BIG THING”
2016 STORAGE VISIONS RECEPTION
RISING STARS PANEL

Discounted Rate until 12/4!
- IEEE STUDENT MEMBER $199
- IEEE MEMBER $349
- Non-IEEE MEMBER $449
- Special 1 day Storage Visions Registration

JANUARY 2 – 4, 2016
EXCALIBUR HOTEL
LAS VEGAS, NV

HELD IN CONJUNCTION WITH THE
STORAGE VISIONS CONFERENCE
AND THE
CONSUMER ELECTRONICS SHOW (CES)

SPEAKERS:
- Jamie Garcia, IBM
- Karen Panetta, Dean of Tufts University
- Kate Jenkins, Ejeta, 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?
PARTICIPATE AS A CORPORATE SPONSOR!
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.
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
- Video Processing and Analytics
- Restoration, Enhancement, Super-Resolution
- Authentication and Biometrics
- Computer Vision Algorithms and Technologies
- Biological and Perceptual-based Processing
- Compression, Transmission, Storage, Retrieval
- Visual Quality Assessment
- Computational Imaging
- Scanning, Display, and Printing
- Color and Multispectral Processing
- Document and Synthetic Visual Processing
- Multi-View and Stereoscopic Processing
- Applications to various fields
- Multi-Temporal and Spatio-Temporal Processing

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 updated information 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 Sessions 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
- Visual Innovation Award Nomination: March 31, 2016
- Visual Technology Showcase Submission: May 15, 2016
- Revised Paper Upload Deadline: May 15, 2016
- Authors’ Registration Deadline: May 15, 2016
Call for Nomination: The Award recognizes pioneers of transformative technologies and business models that have had great impact on human experiences or are anticipated to do so in the near future. The Award Committee consists of well-known industrial executives, visionary entrepreneurs, and scholars. Nominations are to be submitted online no later than 31 March 2016. The nominations will be forwarded to the Award Committee for selection of finalists who will be presented with their award at IEEE ICIP 2016. Please visit 2016.ieeeicip.org for more information and for the online submission form.

Important Dates:
31 March 2016: Deadline for nominations
15 June 2016: Finalists announced

Awards Committee

Giles Baker
SVP
Dolby Labs

Nikhil Balram
CEO
Ricoh Innovations

Hanno Basse
CTO
20th Century Fox

Achin Bhowmik
VP
Intel

James Brallan
Managing Partner
Karnel Capital

Bill Daly
SVP
nVidia

Robert Gove
VP
Sylantics

Heise Wu
Chairman of ARB
Microsoft

Kevin Jou
CTO
MediaTek

C.C. Lee
SVP
Sony

Matthew Mengerink
VP
Google

Anthony Park
VP
Netflix

Raj Talluri
SVP
Qualcomm

Marte Vettori
President
Swiss NSF NRC

Su-Jee Wee
CTO
Casio

Lia Karan
Professor
Arizona State

Aggelos Kasaggelos
Professor
Northwestern

Haohong Wang
General Manager
TCL

Khaled El-Maeh
Sr. Director
Qualcomm

Jeff Bier
President, Embedded Vision Alliance

2016.ieeeicip.org
IEEE Phoenix Valley Megaphone December, 2015

IEEE Components, Packaging and Manufacturing Technology Society Phoenix Chapter

2015 Executive Committee for CPMT Chapter for IEEE-Phoenix Section

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

Tentative Schedule for Monthly Seminars

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb. 18, 2015</td>
<td>Packaging &amp; Failure Analysis Challenges in Advance 3D packages</td>
<td>Dr. Deepak Goyal</td>
</tr>
<tr>
<td>Mar. 18, 2015</td>
<td>High Spatial Resolution Strain Mapping in TEM using Precession Electron Diffraction</td>
<td>Dr. Amith Darbal</td>
</tr>
<tr>
<td>April 22, 2015</td>
<td>Seminar Cancelled</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>No Seminar due to IMS-2015 in Phoenix</td>
<td></td>
</tr>
<tr>
<td>June 17, 2015</td>
<td>Materials Characterization: A Model for Open Access</td>
<td>Leroy Eyring Center, ASU</td>
</tr>
<tr>
<td>July 22, 2015</td>
<td>In Preparation for Retirement: Plan Early and Plan Often!</td>
<td>Gregory Wojak</td>
</tr>
<tr>
<td>August</td>
<td>No seminar for August</td>
<td></td>
</tr>
<tr>
<td>September 23, 2015</td>
<td>HDI Routing &amp; Construction Design Strategies From 1.27 mm to 0.4 mm</td>
<td>Terry Regan, TTM Technologies</td>
</tr>
<tr>
<td>October 21st, 2015</td>
<td>Details to be Announced Later</td>
<td>Dr. Hans Stork, CTO ON Semiconductor</td>
</tr>
<tr>
<td>November 18, 2015</td>
<td>Film Assisted Molding</td>
<td>John Crane, Boschman Technologies</td>
</tr>
<tr>
<td>December 14th, 2015</td>
<td><strong>Heterogeneous Integration of Microdevices by Micro-Transfer Printing</strong></td>
<td><strong>Dr. Christopher Bower, CTO, X-Celeprint Ltd.</strong></td>
</tr>
<tr>
<td>January 20th, 2015</td>
<td>Understanding and Managing the Key Cost drivers in PCB design to optimize performance and Cost</td>
<td>Marc Licciardi, Founder DFX Engineering</td>
</tr>
<tr>
<td>February 27th, 2016</td>
<td>Details to be Announced Later</td>
<td>Dr. Bill Bottoms</td>
</tr>
</tbody>
</table>
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):  mkshah@ieee.org
Dr. Vasudeva Atluri (Past Chair):  vpatluri@ieee.org

Deadline for Nominations is December 11, 2015.
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
cbower@x-celeprint.com

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.
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

(https://meetings.vtools.ieee.org/main)
News

Our final chapter meeting of 2015 will be held on Wednesday, December 2nd, 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 Center. He will speak on the Internet of Things.

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

Please note: beginning in 2016 we will hold our meetings on the second Wednesday of the even numbered months. Thus, our first meeting in 2016 will be on Wednesday, February 10th.

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

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

<table>
<thead>
<tr>
<th>Chair</th>
<th>Jerry Crow</th>
<th><a href="mailto:jerry.crow@computer.org">jerry.crow@computer.org</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice-chair</td>
<td>Dr. Brad Morantz</td>
<td><a href="mailto:bradscientist@ieee.org">bradscientist@ieee.org</a></td>
</tr>
<tr>
<td>Secretary</td>
<td>Audrey Skidmore</td>
<td><a href="mailto:askidmore@computer.org">askidmore@computer.org</a></td>
</tr>
<tr>
<td>Treasurer</td>
<td>Diane Smith</td>
<td><a href="mailto:sdianesmith@computer.org">sdianesmith@computer.org</a></td>
</tr>
<tr>
<td>Webmaster</td>
<td>Audrey Skidmore</td>
<td><a href="mailto:askidmore@computer.org">askidmore@computer.org</a></td>
</tr>
</tbody>
</table>

The IEEE Computer Society Phoenix Chapter Presents:

Internet of Things Innovations & Megatrends

With Mark Goldstein, President, International Research Center

Wednesday, December 2, 2015 from 6:00-9:00 PM

Presentation: Mark Goldstein, President of International Research Center will explore the next Internet wave, the Internet of Things (IoT), expected to connect tens of billions of new sensors and devices in the coming years. Waves of change will roll through home, business, government, industrial, medical, transportation, and other complex ecosystems. Join us as we examine how IoT will be implemented and monetized creating new business models from pervasive sensor deployments and data gathering,
accompanied by new privacy and security risks. Come and explore IoT’s roadblocks and operational challenges, emerging standards and protocols, gateway and wireless integration, and big data strategies and opportunities.

**Speaker:** Mark Goldstein is President of International Research Center (http://www.researchedge.com/), providing consulting, custom research, and strategic support for business, legal and public policy clients across a variety of disciplines and arenas since 1992. IRC concentrates on clients’ needs in the complex worlds of telecommunications, information technology, eCommerce, eContent, eLearning, the Internet, biotechnology and other domains by harnessing global information resources for informed decision making.

Mark is a technophile and technology visionary, activist, advisor, and entrepreneur with extensive experience and connections throughout myriad technology sectors. He is involved with a number of policy, economic development, professional, and trade groups, and a frequent speaker and trainer. Mark previously worked for 18 years in electronic and computer engineering including 12 years managing engineering teams and projects for Medtronic, a Fortune 500 biomedical device manufacturer. He worked in the mid-seventies for MicroAge in R&D at the beginning of the personal computer revolution.
The IEEE Power and Energy Society - Phoenix Chapter is seeking nominations for its 2015 Outstanding Engineer Award. This award recognizes a local engineer for making outstanding contributions to the power engineering profession. For example, past recipients of the award have been recognized for:

- Working on joint industry-academic projects, e.g. APS-ASU
- Volunteering with local schools’ STEM programs
- Serving on IEEE Standards committees
- Working on particularly complex or high-profile projects
- Serving as mentors to other employees

The recipient of the award will receive a $500 check, which will be awarded at the annual IEEE Banquet in Phoenix in February.

If you wish to nominate someone for this award, please email the person’s name and a description of why you feel that person should receive the award to distribution@gorman-co.com. The deadline for the nominations is EOB on Friday, January 8th, 2015. Please note the recipient must be an IEEE PES member.

Ken Brown
2015 Chair, Phoenix Chapter
IEEE Power and Energy Society
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, **December 15, 2015 - 11:00am – 1:00pm,** Registration fee is $15. This fee will include lunch provided by the PERA Club.

**Lunch:** TBD

**RSVP:** Please advise Ronald Sprague r.sprague@ieee.org 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 3rd 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
- Tuesday December 20, 2016

**Officers:**

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair</td>
<td>Leslie Daviet II</td>
<td><a href="mailto:lesdavietii@cs.com">lesdavietii@cs.com</a></td>
</tr>
<tr>
<td>Vice Chair</td>
<td>Jim Tang</td>
<td><a href="mailto:JFTANG@cox.net">JFTANG@cox.net</a></td>
</tr>
<tr>
<td>Secretary</td>
<td>Tom Lundquist</td>
<td><a href="mailto:tom.lundquist@ieee.org">tom.lundquist@ieee.org</a></td>
</tr>
<tr>
<td>Treasurer</td>
<td>Leslie Daviet II</td>
<td><a href="mailto:lesdavietii@cs.com">lesdavietii@cs.com</a></td>
</tr>
<tr>
<td>Membership</td>
<td>Rao Thallam</td>
<td><a href="mailto:Rao.Thallam@gmail.com">Rao.Thallam@gmail.com</a></td>
</tr>
<tr>
<td>Program</td>
<td>Ron Sprague</td>
<td><a href="mailto:r.sprague@ieee.org">r.sprague@ieee.org</a></td>
</tr>
<tr>
<td></td>
<td>Barry Perlman</td>
<td><a href="mailto:barry.perlman@gmail.com">barry.perlman@gmail.com</a></td>
</tr>
<tr>
<td>Volunteer</td>
<td>Gary Frere</td>
<td><a href="mailto:gary.frere@gmail.com">gary.frere@gmail.com</a></td>
</tr>
<tr>
<td>Past Chair</td>
<td>Barry Cummings</td>
<td><a href="mailto:abarrycummings@gmail.com">abarrycummings@gmail.com</a></td>
</tr>
</tbody>
</table>
IEEE Young Professionals Phoenix Section Executive Board 2015
Chair: Jennifer Taggart (jennifer.taggart@asu.edu)
Past Chair (till Nov. 30, 2015): Shafiul “Jacky” Islam (shafiul.islam.us@ieee.org)
Vice Chair: Nick Spirakus (nmspirak@asu.edu)
Secretary/Webmaster: Harshad Surdi (hsurdi@asu.edu)
Treasurer: Ngoni Mugwisi (ngoni.mugwisi@asu.edu)

May 19, 2015 International Microwave Symposium (IMS) Young Professionals Special Session and Complementary Reception

IEEE Young Professionals Global, IEEE Young Professionals Phoenix, and IEEE MTT-S Young Professionals teamed up for the Young Professionals Special Session on May 19th at the 2015 International Microwave Symposium (IMS) in the Phoenix Convention Center. The session was sponsored by MTT-19 Business Issues and chaired by Emile Davies-Venn. That night, a Complementary Reception (19:00 to 21:00) was held at Lucky Strike Phoenix. The reception was sponsored by IEEE Young Professionals Global and hosted by IEEE Young Professionals Phoenix Affinity Group.

The Special Session, titled "Young Professional Discussion Forum: Awaken the Entrepreneurial Genius in You! " featured dynamic entrepreneurial speakers and panelists discussing various aspects of entrepreneurship (http://www.ims2015.org/about-microwave-week/young-professionals/youngprofessional-session). There were about 40 attendees, a good number of questions from the audience to the speakers/panelists (and a great discussion).

The Complementary Reception was a great event where about 400 diverse attendees from all over the world were able to network and socialize while enjoying bowling, billiard, and food. The Past Chair (Shafiul “Jacky” Islam) and current Chair (Jennifer Taggart) of IEEE Young Professionals Phoenix were appointed as the IEEE Young Professionals Global Representatives by the Vice Chair of Strategic Relationships (Elie Rosen) of IEEE Young Professionals Global. They communicated to attendees the purpose of IEEE Young Professionals initiative as well as some of the events IEEE Young Professionals engaged in last year e.g. Technical Speakers Events, and the two Annual Career Young Leadership Plans for future Professionals also announced. an IEEE Young presentation/video screens at Lucky Strike. In the spirit of IEEE Young Professionals Global and IEEE Young Professionals this collaborative event time and experimented with it to take the learnings from this event and use it as a model for other subsequent events e.g. other IEEE technical conferences etc. (please find the full GOLDRush article at http://sites.ieee.org/gold/2015/05/).
IEEE Phoenix Section News

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 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):

“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 1st, 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 15th, 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 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 (http://sites.ieee.org/phoenix/about/section-bylaws/), 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 Phoenix Section: Calendar of Activities

For any questions and inputs regarding the calendar of activities, please contact Dr. Surinder Tuli, Vice Section Chair, at Surinder.tuli@gmail.com.

December 2015

Declare Election of 2016 Officers
2016 Budget Development
Report of Section activities for the year
Appoint chairs of Section committees
Annual Banquet:
  • Finalize speaker
  • Email program
  • Section Award Nominations Due
  • Student Scholarship applications due January

END OF CALENDAR YEAR 2015
January 2016

Annual Banquet: Awards selection and notification
Officer’s Appreciation Dinner
Finalize Section committee Chairs and Chapter chairs and updated website
Scholarship Applications due
Scholarship Awards announced
Concentration Banking Account year end statements available
Future City competition:
Regional final: TBD
Judges to review: TBD
Coordinator: TBD
Deadline for submission of 1099 reports and bank account disclosure form

The Rising Stars conference
The Rising Stars conference brings together the most promising students and young professionals from within the region to network and be inspired by each other and the top tech companies from around the world. It will be taking place the first week in January, 2016 at the Excalibur in Las Vegas, Nevada.
http://sites.ieee.org/risingstars/

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 www.ieee.org for eligibility.

Eligible candidates are requested to send in their resumes to Dr. Vasudeva P. Atluri, Membership Development Coordinator, at vpatluri@ieee.org and Dr. Bruce Ladewig, Section Chair, at bruceladewig@ieee.org for consideration.
Phoenix Section LinkedIn Group

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

You can also go to IEEE Phoenix Section LinkdIn page by clicking button on the IEEE Phoenix Section home page.

IEEE Phoenix Section Ventures into Social Media

You can access the web page three ways:
Use the URL: https://www.facebook.com/IEEEPhoenixSection
Click on the Facebook logo link from IEEE Phoenix section home page.
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 www.ieee.org. Please contact IEEE Phoenix Section Membership Development Chair, Dr. Vasudeva P. Atluri, at vpatluri@ieee.org for additional information.

Enhanced Senior Member Application Launched

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

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

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

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

IEEE-USA’s Free E-Book to Members in December Examines “Building a Culture that Develops Leaders and Managers”

WASHINGTON (1 December 2015) -- Beginning today, IEEE members can download a free copy of the IEEE-USA E-Book “Leading and Managing Engineering & Technology -- Book 3: Building a Culture that Develops Leaders and Managers.”

Author Gus Gaynor shares that developing an organization that fosters leadership is both simple and complex, depending on what's involved.

Among the topics are “The Basic Organizational Culture,” “Building a Leadership Culture,” and a “Case Study: IBM’s Silverlake Project.”

The case study provides an example of how an entire culture can be transformed, and what happens when a project manager takes personal initiative, asks questions, listens to the responses and builds trust among team members. Gaynor cautions that making such a transformation happen takes hard work and cooperation from many people.

From 1 December to 15 January, you can get your free e-book by going to http://shop.ieeeusa.org/usashop/product/careers/74735. Log in with your IEEE Web account, add the book to your cart and use promo code DECFREE at checkout.

In January, IEEE-USA E-Books will offer Book 4 in the series, “What it Takes to be A Manager-Leader.” Gaynor offers that, "It is impossible to manage without leading" and "lead without managing."

CALL FOR AUTHORS

IEEE-USA E-BOOKS seek authors to write an individual e-book, or an e-book series, on career guidance and development topics. If you have an idea you think will benefit members in a particular area of expertise, please email your proposal to IEEE-USA Publishing Manager Georgia C. Stelluto at g.stelluto@ieee.org and IEEE-USA E-Book Chair Gus Gaynor at g.gaynor@ieee.org.

IEEE-USA serves the public good and promotes the careers and public policy interests of nearly 200,000 engineering, computing and technology professionals who are U.S. members of IEEE.

Web: www.ieeeusa.org
Facebook: www.facebook.com/ieeeusa
Twitter: www.twitter.com/ieeeusa
Join IEEE: www.ieee.org/join

Contact: Sharon C. Richardson, Coordinator
IEEE-USA Communications & Publishing
Phone: 1 202 530 8363
E-mail: s.richardson@ieee.org
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! [Learn more about the Mercer Marketplace powered by GetInsured.](#)

* 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
- Award-winning service and support before, during and after your purchase

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](http://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 IEEE Professional Communication Society 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. If you haven’t registered for this webinar you still have time!

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 on Friday 13 November and 11 December from 1:00pm to 2:00pm EST. Again, you can register for both of these webinars.
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 first-
year 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.

**IEEE ResumeLab**

IEEE members have a powerful tool to help gain a competitive edge in the employment process. IEEE
ResumeLab is an online service that allows IEEE members to develop a resume *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.

---

**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 [Awards program](#) online or email [awards@ieee.org](mailto:awards@ieee.org).

---

**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:
• 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.