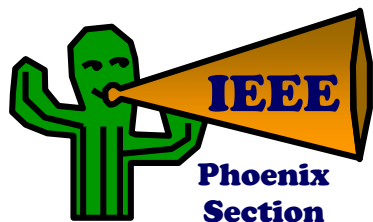


The Valley Megaphone

Newsletter of the
**Institute of Electrical and
Electronics Engineers, Inc.,
Phoenix Section**
September, 2015
Volume XXIX, Number 9



Executive Committee 2015

Chair

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bruceladewig@ieee.org

Vice Chair

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Secretary

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

Treasurer

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mkshah@ieee.org

Past Chair

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barbara.mcminn@aps.com

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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

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Awards

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480-227-8411
vpatluri@ieee.org

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Webmaster

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that page)

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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
brettg@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
shamala.chickamenahalli@intel.com

Young Professionals

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

U – News (for Student Members)

Updates of Student Advisors and Committee Members

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

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

Update from DeVry Phoenix-Engineering Student Branch

DeVry University is reestablishing the student branch after a long dormant period. We are holding one meeting a month for general business and would like to have one meeting a month with a guest speaker. Any suggestions or volunteers for guest speakers would be greatly appreciated. This month we are responsible for facilitating and judging the Engineering Competition at the Arizona Championship of SkillsUSA. This has been a great opportunity for our members to learn about the competition process and give back to the community.

Hannah Sprague
Chair, IEEE DeVry Student Branch
hspragueIEEE@gmail.com

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 Polytechnic

Chair: Josh Carrol
jkarrol@asu.edu
Advisor: : Dr. John M. Parsey, Jr.,
480-727-5279
John.Parsey@asu.edu

DeVry, Phoenix – Computer Society

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

DeVry, Phoenix – Engineering

Chair: Hannah Sprague
602-749-4518
hspragueIEEE@gmail.com
Advisor: Deanna Davis
602-749-4500
ddavis1@devry.edu
Advisor: Roger S. Gulledge
602-749-4586
rgulledge@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

The Department of Computer, Electrical, and Software Engineering at Embry-Riddle Aeronautical University in Prescott, AZ invites applications for a faculty position (tenure-track or tenured) at the assistant or associate professor level. The successful candidate should have a Ph.D. in Computer Science, Software Engineering, Computer Engineering or a related field at the time of employment. Preferred areas of expertise for this position include network, cyber, or computer system security and defense, computer forensics, information security, cyber-physical and trustworthy systems, and net-centric computing, embedded systems, autonomous systems, and physical computing. Significant industrial, entrepreneurial and/or teaching experience would strengthen a candidate's credentials, but recent graduates are encouraged to apply.

Apply online at www.erau.edu/jobs and search for positions at Prescott.
Contact Professor Post at john.post@erau.edu for further information.

Update from DeVry Phoenix-Engineering Student Branch

The DeVry University IEEE Student Branch was happy to host the IEEE Computer Society Phoenix Chapter bi-monthly meeting in August. We look forward to hosting more of these meetings in the future. If any IEEE group would like to utilize the space available at DeVry, please feel free to contact one of the officers or the Faculty advisor. The student branch is in full swing planning an exhibition for the 2015 Arizona State Fair. This will be a S.T.E.M. display and series of workshops, sponsored by the Student Branch and DeVry University. We are tripling the size of the exhibit we had at last year's Fair. 2014 focused on projects from DeVry's Senior Project Fair and grade school through high school student projects. This year we will add several hands-on workshops that will run Friday-Sunday every weekend while the fair is open. Currently there are five workshops planned: PC Maintenance & Repair, Game-simulation Programming, Hackfest, Cyber security for the home user, and Basic Electronic circuit builds. We hope to draw attention to the S.T.E.M. disciplines and encourage young adults to pursue education and careers in these expanding fields. If any IEEE group or individual would like to offer advice, resources or display materials, please contact Hannah Sprague. This month is also election time at DeVry and we look forward to Diego Hernandez taking the reigns as Chair of the Student Branch.

Hannah Sprague
Past Chair, IEEE DeVry Student Branch
hspragueIEEE@gmail.com



Arizona State Fair 2014 S.T.E.M. Display

Update from Embry-Riddle Student Branch

The Embry-Riddle Aeronautical University IEEE Student Branch would like to send an update of their activities in the month of April. Our chapter hosted a SPAX on April 14th, focusing on career development. About twenty students and several faculty members were in attendance at the event. Two professors from the university spoke about their experiences in industry and gave advice on how to have successful careers. At the last meeting of the year students received the polos they had ordered. The new officers were also introduced to the rest of the members in attendance.



Upcoming Conferences in Region 6

Hello IEEE Student Members!

[Region 6 Global Humanitarian Technology Conference in Seattle](#) will be held on October 8 to 11, 2015

[2015 37th Electrical Overstress/Electrostatic Discharge Symposium \(EOS/ESD\)](#) will be held on Sep 27-Oct 2, 2015

[2015 IEEE 61st Holm Conference on Electrical Contacts \(Holm 2015\)](#) will be held on Oct 11-14, 2015

[2015 IEEE 24th Electrical Performance of Electronic Packaging and Systems \(EPEPS\)](#) will be held on Oct 25-28, 2015

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

[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

Message from the Director: Your Investment in IEEE Region 6 by Tom Coughlin, IEEE Region 6 Director

At a recent IEEE Board of Directors meeting an increase of the member assessment for Region 6 members was approved. The assessment will increase from \$1 per member to \$3 per member (a \$2 per member dues increase for Region 6 IEEE members) starting with the 2016 IEEE membership year. I wanted to let you know why we have taken this step and what we plan to do with the additional Region 6 money that this increase will provide.

IEEE Region 6 was for several decades supported by very successful industry conferences, in particular the annual Wescon (Western Electronics Show and Convention), which provided connections between component and system manufacturers and design engineers. Region 6, in combination with the Los Angeles IEEE Council and the San Francisco Bay Area IEEE Council were the owners of Wescon. Wescon provided money not only for Region 6 and the two councils, but for all the sections throughout Region 6. This was a rich source of funding for all types of IEEE activities in our region. The last Wescon was held in 2005.

In 2004 the IEEE approved a \$1 assessment for IEEE members in Region 6. There was no assessment before that date. Region 6 has had the lowest assessment of any of the 10 IEEE regions for many years. This assessment money provided funding to partially replace the much larger influx of money that Wescon used to provide and to fund that various activities we have in Region 6 to develop technology for the benefit of humanity as well as promote the value of the IEEE and IEEE membership.

Region 6 has embarked on a number of activities to add value to our members and to create technology for the benefit of

humanity. These include our conferences: the annual Global Humanitarian Technology Conference, the Sustainable Technologies Conference, the Rising Stars Conference for young engineers and our new on-line Career and Talent Expo, now underway. We have also embarked on a chapter meeting recording initiative, including training and hosting the presentations in a searchable web site and we have been funding more PACE activities in Region 6 than every before in the recent history of the Region. We think these activities are investments in our members that will eventually pay for themselves, but it can take a bit of time to get these activities off the ground.

So your \$2 membership dues increase for Region 6 will help us to create more value for you and other IEEE members and create opportunities to create a better world. We welcome any thoughts or suggestions that you may have and if you would like to work with us on any of our projects please let us know. The real value that our members contribute is their time, in the end this is a much greater investment than their membership dues. If you wish to contact me my email is tom@tomcoughlin.com.



THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.



IEEE COMPONENTS, PACKAGING AND MANUFACTURING TECHNOLOGY SOCIETY

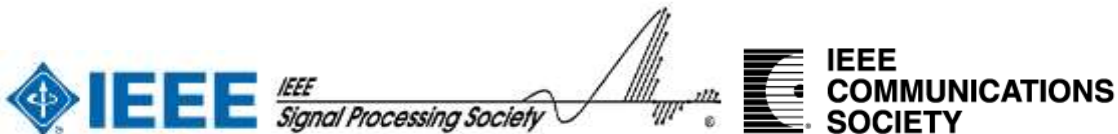
IEEE Components, Packaging and Manufacturing Technology Society Phoenix Chapter

2015 Executive Committee for CPMT Chapter for IEEE-Phoenix Section

Position	Name	Phone Contact	Email 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 & Publicity	Dr. Vasudeva P. Atluri	(480) 227-8411	vpatluri@ieee.org
Website Co-Chair	Bharat Penmecha	(480) 552 2511	bharat.penmecha@ieee.org
Website Co-Chair	Huiyang Fei	(480) 552 4966	Huiyang.H.Fei@ieee.org

Tentative Schedule for Monthly Seminars

Date	Topic	Speaker
Feb. 18, 2015	Packaging & Failure Analysis Challenges in Advance 3D packages	Dr. Deepak Goyal
Mar. 18, 2015	High Spatial Resolution Strain Mapping in TEM using Precession Electron Diffraction	Dr. Amith Darbal
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 Often!	Gregory Wojak
August	No seminar for August	
September 23, 2015	High Density Interconnect Substrate Design Rules (Abstract & Speaker Information will be posted soon)	Terry Regan, TTM Technologies
October		
November 18, 2015	Film Assisted Molding	John Crane, Boschman Technologies
December		



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
(<https://meetings.vtools.ieee.org/main>)**



Phoenix Chapter of the IEEE Computer Society September, 2015

News

- The chapter meeting dates and venues for the remainder of 2015 are listed below:

I

- October 7th ITT Technical Institute, Tempe campus
Speaker: Schuyler St. Ledger, presentation "Software Defined Radio" (invited; not yet confirmed).
- December 2nd ITT Technical Institute, Phoenix campus
Speaker: Mark Goldstein, presentation "The Internet of Things"

Meetings are held from 6:00 pm to 9:00 pm on the first Wednesday of the even numbered months.

- At our August meeting we heard Dr. Bill Curd, local security teacher and guru, speak on the subject of "Cyber Privacy". The presentation was superb and very well attended. The meeting went beyond our normal time as a result of all of the questions and discussion. We will plan to have Dr. Curd back again at some point in 2016 to speak on another topic.

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:

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/>



September 2015 Luncheon Meeting

Date: Thursday, September 17, 2015

Time: 11:30 - 11:45 am: Registration
11:45 am: Lunch
12:00 pm: Program

Location: Bobby Q's [map](#) (note location)

Speakers: Jill C. Duplessis, Megger

Topic: Insulation Diagnostic Methods (for Transformers and Bushings)

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

Reservations: Contact Monica at (602) 470-0400 or submit your name [here](#).
Reservations deadline is NOON on Monday, September 14, 2015.
If you have already registered for this luncheon but need to cancel, click [here](#).

Abstract:

The primary test methods used to assess the condition of the active insulation components in transformers and bushings, on site, include:

1. Capacitance and power factor/ $\tan \delta$
2. Variable frequency power factor/ $\tan \delta$ (1 - 500 Hz)
3. Dielectric frequency response (DFR) [a dielectric response method]
4. Moisture in oil measurements (for transformers)

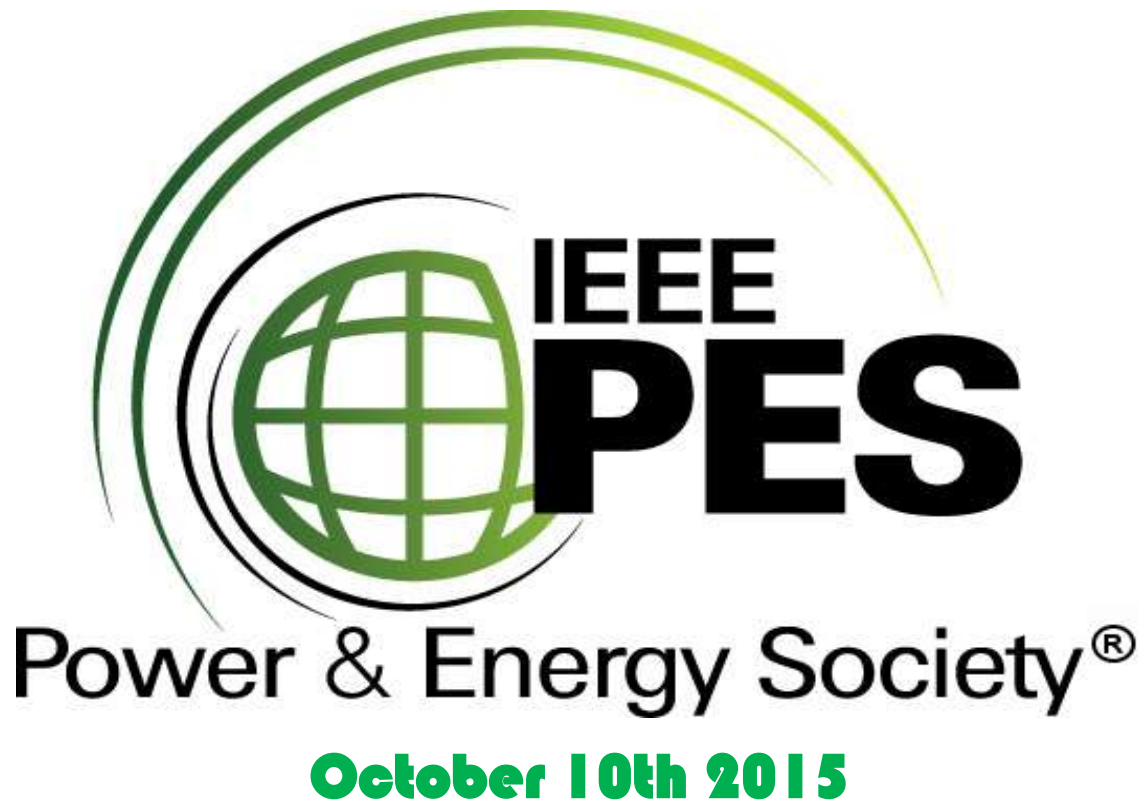
A traditional power factor/ $\tan \Delta$ test provides some useful information for the assessment of insulation but the analysis may be elusive so relying exclusively on this method reduces the success of the test program, in part, to luck. For a far more effective and reliable test program, variable frequency power factor/ $\tan \Delta$ measurements and dielectric frequency response (DFR) tests should be incorporated as well. The former complements the power factor/ $\tan \Delta$ measurement by making the insulation system's unique, or individual, temperature correction (ITC) factor accessible and generally serves as a better screening diagnostic. DFR testing delivers a very reliable and accurate moisture assessment of the insulation and the conductivity of the oil.

This talk provides a candid overview of the diagnostic capabilities of power factor/ tanDelta testing and its long recognized deficiencies, which collectively result in an analysis that may feel incomplete. Variable frequency power factor/ tanDelta testing is explained, as well as the temperature dependency of insulation and the use of this characteristic to detect problems. Finally, dielectric frequency response (DFR) testing is explained, including why this is the preferred method to perform moisture assessments on a transformer or bushing.

Biography:

Jill Duplessis is the Global Technical Marketing Manager for Megger and member of IEEE. She was previously Director of Power Programs for SmartSenseCom, Inc. where she was responsible for developing, testing and deploying new applications of SmartSenseCom's optical monitoring systems for transmission and distribution utilities. She has over 17 years of experience in the condition assessment of substation assets, first as a Principal Engineer at Doble Engineering Company and following as a Primary Manager and Regional Application Specialist, Transformers, for OMICRON electronics USA. Jill is considered a specialist in power transformer diagnostics, including emerging test technologies, and in addition to a number of papers, is the author of a book titled, "Electrical Field Tests for the Life Management of Transformers". She has prior electric utility work experience, with exposure to a wide breadth of engineering functions. Jill received a BSEE degree from Georgia Institute of Technology in 1991 and has completed extensive studies in electrical power engineering at Rensselaer Polytechnic Institute, Troy, NY.

58th ANNUAL IEEE-PES PHOENIX FUNDRAISING GOLF TOURNAMENT



Be sure to join us at the Legacy Golf Club, located at 6808 South 32nd Street, for a 1:15 PM Shotgun Start. The course is located 10 Minutes south of Sky Harbor Airport.

This is the annual fundraiser for your IEEE-PES Chapter. The fee is \$100 per player or \$400 to sponsor a foursome. Be sure to come early and stay late as there will be free range balls beforehand and dinner afterwards. Cash prizes awarded for first place, second place, and third place teams. There will also be a Raffle, Skills Games, and Giveaways Galore.

Use this sheet to sign up either individually or for your team. You can either:

- Print out and complete, then mail the form with your payment
- Return this form electronically (distribution@gorman-co.com) and then send your payment.
- Send payments to: IEEE-PES
c/o Gorman Company
4819 35th Street
Phoenix AZ 85040

You will be notified via email that your payment has been received and you are registered to participate. If you have any questions, please feel free to call us at (602) 470-0400.

Please provide all requested information, including email addresses for all team members.

TEAM/SPONSOR _____

Player _____ **Dinner?**

Email _____

Player _____ **Dinner?**

Email _____

Player _____ **Dinner?**

Email _____

Player _____ **Dinner?**

Email _____

Additional Dinner Guests: _____

To minimize waste and extra costs, we would like your help getting an accurate dinner count.



WAVES AND DEVICES

PHOENIX CHAPTER

<http://ewh.ieee.org/r6/phoenix/wad/>
2015 Event Calendar



Chapter Chair: Steve Rockwell steve.rockwell@ieee.org
 Chapter Vice-Chair: Trevor Thornton t.thornton@asu.edu

<u>Date</u>	<u>Venue</u>	<u>Topic / Title</u>	<u>Speaker</u>	<u>Affiliation</u>	<u>IEEE Society</u>
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 Steenberger	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					
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

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
WAVES AND DEVICES - Phoenix Chapter



Meeting Free & Open to Non-IEEE Members
6:30 to 8:00PM, Wednesday, September 23, 2015
Arizona State University
Goldwater Center, GWC487
650 E. Tyler Mall, Tempe, AZ



Modern Methods for Microwave Filter Synthesis

Richard Cameron

IEEE MTS Distinguished Microwave Lecturer

Abstract

Up until the early 1970s, nearly all filter synthesis techniques were based upon the extraction of electrical elements (lumped capacitors and inductors, transmission line lengths) from the polynomials that represented the filter's electrical performance in mathematical terms. This was perfectly adequate for the technologies and applications that were current at the time, and many important contributions were made to the art of advanced filter transfer and reflection polynomial generation, and then their conversion to electrical component values corresponding to the filter technologies that were then available.

In the early 1970s a revolution in telecommunication systems and available technology was taking place. The first satellite telecommunication systems were in operation and demand for their services was growing enormously. The crowding of the available spectrum meant that the specifications on channel filters in terms of in-band linearity (group delay, insertion loss) and out-of-band selectivity (high close-to-band rejection, and for transmit filters lowest possible insertion loss), were getting ever more demanding.

Important advances were made in the art of filter network synthesis. Central to these was the coupling matrix representation of the microwave filter electrical network. The coupling matrix synthesis method offers some important advantages over the classical synthesis methods - one of these is the one-to-one correspondence between the elements of the coupling matrix and the individual physical components of the filter. The coupling matrix will naturally accommodate asymmetric characteristics, and those incorporating special features such as transmission zeros or group delay equalization, or both. All these features are critical for meeting the stringent specifications of today's microwave systems.

This lecture will focus on the coupling matrix and the many opportunities for advanced microwave filter design that it opens up and will aim at bringing these state-of-the-art filter synthesis methods to microwave equipment designers, presenting the possibilities that have now become available for meeting the very stringent specifications that are demanded by modern telecommunication, broadcast, radar and scientific/earth observation satellite systems. The lectures will be presented in a style that minimizes mathematics and jargon as far as possible in order to appeal to multi-discipline audiences.

Biography



Richard Cameron gained his BSc in Electronics with Telecommunications at the University of Loughborough in 1969. He subsequently joined the Marconi Space and Defense Company to begin a career devoted to the design and R&D of microwave equipment and systems for spacecraft and associated ground stations.

In 1975 Professor Cameron joined The European Space Research and Technology Establishment (ESTEC), the technical branch of the European Space Agency (ESA). Here he was involved in the development of software for the design of advanced microwave equipment for space application, particularly microwave filters.

In 1984 Prof. Cameron joined the ComDev company of Canada to assist in the establishment of the European branch of ComDev based near London, England. This involved laying down the design foundations for the production of passive microwave devices and sub-systems for space application, and later for cellular communication systems.

Prof. Cameron retired from CDE in 2005, but retained a consultancy role with the Company on an ad hoc basis. He has also been appointed a Visiting Professor at the University of Leeds. During his career Prof. Cameron has filed 8 patents and has authored or co-authored many papers for technical journals and conferences. He is also the co-author of a technical book, Microwave Filters for Communication Systems - Fundamentals, Design and Applications.

For more information, contact:

Steve Rockwell (WAD Chapter Chair) (480) 241-9891 steve.rockwell@ieee.org

Curtis Scott (WAD Chapter Secretary) (623) 703-9177 curtis.scott.us@ieee.org



Phoenix Section Life Member Affinity Group

Technical & Administrative

Meeting October 20, 2015

Program Presentation: Patent Basics for Engineers

The business model behind the genius of the patent concept will be discussed and a short history of the United States Patent and Trademark Office will be provided as background. A patent will be defined and a discussion of who can write patents, and an explanation of the distinction between a patent agent and a patent attorney. Next, a discussion of the key parts and types of patents with emphasis on utility patents. Examples will be provided to explain some of the legal jargon such as enabled disclosure, indefinite language, obviousness and prior art. Finally, a short survey of the patent prosecution process and who is an inventor and the duties of the inventor.

The Presenter: Gary Malhoit

Gary is a Senior Engineer in the Power Quality Group of SRP. Prior to coming to SRP, Gary's career included working in various engineering positions at NCR, Bechtel and Motorola. While at Motorola nearly 20 years, he wrote numerous technical articles for Motorola's Silver Quill program and was on the original working group of SEMI F47 for voltage sag immunity. Gary is currently a member of the IEEE 1668 working group for testing electrical equipment. Gary has a BS in electrical engineering from the University of Tennessee and an MBA from the University of Memphis. He is a registered electrical engineer in Arizona and licensed to prosecute patent cases before the United States Patent and Trademark Office.

NOTE MEETING STARTS AT 11 AM

Meeting Agenda:

11AM: Attendee introductions

11:15 AM: Program Presentation

New officer's report.

Program chairs will review the results of survey taken to determine LM interests for technical presentations.

Continued discussion of LMAG program for student assistance and possible scholarship program for HS students.

Administration Meeting.

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 Room is the most South east building off parking.

When: Tuesday, **October 20, 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 to LM 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 October 20, 2015
- Tuesday December 15, 2015

Officers:

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



Come join fellow Phoenix YP engineers for game nights!

Whether you are interested in team trivia nights or stealing your fellow engineer's resources in Catan, come join us after work! Socialize with fellow young engineers and expand your social and professional network while attempting to remember the name of the fourth U.S. state capital in alphabetical order. Check out our Facebook page for a schedule of events. Like our page to be notified of future events!

<https://www.facebook.com/phxieeyyp>

Looking for small business owners who want to connect with ASU students

ASU will be hosting their annual engineering career fair the week of October 5th. Last year YP Phoenix and the ASU Student Branch organized a dinner that connected ASU engineering students with hiring managers at Intel, Chrysler, Texas Instruments, EII, and Kimley-Horn. This year we are looking for small businesses interested in hiring ASU students. The dinner/mixer will be held on ASU campus prospectively on Oct. 9th at around 5 pm. We ask that those interested contact Jennifer Taggart (Jennifer.taggart@asu.edu) for more information.

Phoenix YP Executive members:

Chair: Jennifer Taggart (jennifer.taggart@asu.edu)
Vice Chair: Nick Spirakus (nickspirakus@gmail.com)
Secretary: Harshad Surdi (hsurdi@asu.edu)



2014 IEEE Phoenix Section News

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 Annual Banquet 2014 Photos are Posted at:

<http://sites.ieee.org/phoenix/2014/03/03/pictures-from-the-2014-annual-banquet/>

IEEE-Phoenix Section Annual Banquet 2015 Photos will be Posted soon.

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. Charles E. Weitzel, Section Chair, at c.weitzel@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 LinkedIn 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 you 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

Member Discounts

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 announce that you now have access to **myFinancial Wellness for IEEE Members**, a new program available in the U.S.

Whether you are well along your financial plan or had some bumps along the way,



you still can benefit from financial planning. At *myFinancial 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 about *myFinancial Wellness*, and how it can help you, register today for an upcoming webinar:

- Inside *myFinancial Wellness*
30 July 2015 at 3:00 P.M. EST
- WealthView: Your Personal Financial Web site
26 August 2015 at 3:00 P.M. EST

Visit IEEEFinancialWellness.com to learn more.

Save on Shipping

Did you know that IEEE members who used their IEEE UPS discounts saved an average of US\$94.18 in Q1 2015? Don't have your own discount UPS account? Solve that problem and register now. Discounts apply to new or existing UPS customers.

- Members in the US, enroll now
at savewithups.com/ieee
- Members in Canada, sign up today
at membersbenefitprogram.com/ieee



Car Rental Discount

Before hitting the road on your summer vacation, find out how you could save on car rental from Alamo Rent A Car® and National Car Rental®. Through this program, IEEE members can save up to 20% and enjoy additional offers.*



Visit [Alamo Rent A Car](http://AlamoRentACar.com) or [National Car Rental](http://NationalCarRental.com) to book a car now.

* Terms and conditions apply. Where available.

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	Computer backpack
Portable solar battery charger	Tablet case
Portable speaker	Parker pen and mechanical pencil set
Parker ballpoint pen	Travel coffee mug and tumbler set
Golf balls	Baseball hat
Golf umbrella	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 e-mail inviting them to join at a 50% discount off first-year membership dues, and will receive benefits through 31 December.
- 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 e-mail confirming your recruiting success, including a link which allows you to select your IEEE-USA merchandise item.
- You will receive a separate e-mail 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!](#)

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

As a special benefit of IEEE membership through 15 August, IEEE-USA is offering a free eBook, ***The Best of Backscatter from Today's Engineer – Volume 3***, by Donald Christiansen.

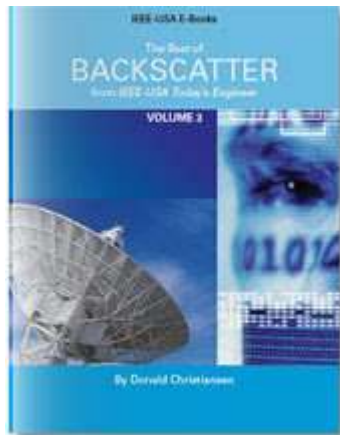
The Best of Backscatter eBooks are composed of articles that were originally published in the *IEEE-USA Today's Engineer Online*.

In Volume 3, Christiansen covers topics that have concerned (and sometimes perplexed) engineers for years, if not decades. Among them are how to manage careers, the future of the profession, and how the general public sees the role of engineers.

Some of the article titles included are:

Make or Buy, which discusses some of the factors an engineering team may face when deciding what hardware and software it will recommend making or developing in-house, as opposed to outsourcing it.

Math...What Good Is It? probes the question many grade-school kids are said to be asking. Unlike students of an earlier generation, Christiansen writes, "they find math exercises boring, because they see no connection to the real world."



The Mouse that Wouldn't Quit recounts the story of *IEEE Spectrum's* Amazing MicroMouse Maze Contest. It originated in 1977, and has since given rise to an international phenomenon.

In his own "Andy Rooney"-like way, Donald Christiansen brings life to his Backscatter articles with eye-catching titles and humorous quotes. The columns are informative, and most of all, thought-provoking.



Members can download *The Best of Backscatter from Today's Engineer – Volume 3* for free through 15 August 2015. Sign in with your IEEE Account, add the book to your Cart, and enter the promo code **JULYFREE** at checkout.

In August, the IEEE-USA free eBook will be *Work-Life Balance – Book 2*, written by Peggy Hutcheson. This free eBook explores work-life balance, with regard to career stages -- young professional, mid-career and late career.

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 them to control how they 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 that allows 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 Web site.

[Access IEEE ResumeLab](#)

IEEE in 2030 Challenge Seeks Proposals for Innovative Projects

IEEE has launched the IEEE in 2030 Challenge with the goal of finding innovative, creative, and potentially disruptive approaches that will help engineers and technical professionals working in industry. The IEEE New Initiatives Committee will be awarding small seed grants (US\$40,000 or less) to those projects that are selected.

Applications may be submitted by one or more IEEE members or organizational units, individually or in cooperation with an IEEE staff group. The proposals will be based on their potential to lead to new IEEE products, services and communities, and have a significant impact on the overall organization.



The deadline for receiving proposals is 1 p.m.

EDT (17:00 GMT) on 24 August 2015. Notification of the proposals' acceptance or rejection will be made on 6 October (IEEE Day).

[Find out more information or submit a proposal.](#)

Get Access to the Research you Need with the IEEE Member Digital Library

As an IEEE member, you know the importance of having high quality research information at your fingertips. Access IEEE research conveniently and quickly with the IEEE Member Digital Library and get a free trial!

The IEEE Member Digital Library provides full-text access to any IEEE journal article or conference paper in the IEEE *Xplore*® digital library. There are two great options designed to meet the needs-and budget-of every IEEE member:

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Designed for the power researcher who needs a more robust plan—access all the IEEE content you need to explore ideas and develop better technology with 25 article downloads every month.

IEEE Member Digital Library Basic

Created for members who want to stay up-to-date with current research—receive three new article downloads every month, plus rollover unused downloads for 12 months.

Find the research you need to stay current in technology with the IEEE Member Digital Library and [get a free trial!](#)



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.