March 2014 www.cis-ieee.org

THE REPORTER

Journal of the Central Indiana Section • IEEE

Call for Volunteers The Central Indiana Section is recruiting volunteers for 2014!

Executive Committee positions available include:

Finance Committee Chair GOLD Chair Student Branch Chair Life Member Chair

If you would like to receive additional information on the above positions or are interested in volunteering, please contact David Koehler (David.Koehler@ieee.org) and/or Earl Hill (eshill.loma@gmail.com).

New IEEE Fellows

The CIS-IEEE has always looked to facilitate members advancing to higher levels of membership.

Congratulations to our newest fellow member

Matthew Ohland

New Senior Members

Congratulations to our newest senior members!

Marco Amrhein Lingxi Li

Biographies of newly elevated members follow when available. Please submit additional biographies to mcnallyh@purdue.edu

Dr. Matthew Ohland Professor of Engineering Education, Purdue University, and Professorial Research Fellow in Engineering Education, Central Queensland University. Dr. Ohland received a Ph.D. in Civil Engineering from the University of Florida in 1996. Previously, he earned an M.S. in Materials Engineering in 1992 and an M.S. in Mechanical Engineering in 1991 from Rensselaer Polytechnic Institute and a B.S. in Engineering and a B.A. in Religion from Swarthmore College. He has had previous appointments as Associate Professor of General Engineering at Clemson University, Assistant Director of the NSF-sponsored SUCCEED Engineering Education Coalition, and an NSF Postdoctoral Fellow for Science, Mathematics, Engineering, and Technology Education.

Dr. Ohland's research has been supported by over \$13 million from the National Science Foundation and the Sloan Foundation. Along with his research partners, he has been recognized for his work on longitudinal studies of engineering students with the William Elgin Wickenden Award for the best paper published in the Journal of Engineering Education in 2008 and 2011, the best paper in IEEE Transactions on Education in 2011, and Best Paper awards at multiple conferences. Software for team formation and peer evaluation developed under Dr. Ohland's leadership was recognized with the 2009 Premier Award for Excellence in Engineering Education Courseware. He is a Fellow of the American Society for Engineering Education and a co-recipient of the Betty Vetter Award for Research from the Women in Engineering Proactive Network and the Maryellen Weimer Scholarly Work on Teaching and Learning Award. He received the Byar's Prize for Excellence in Teaching Engineering Fundamentals from Clemson in 2006 and the Best Teacher Award from Purdue's School of Engineering Education in 2007, 2008, and 2012.

Dr. Ohland was the 2002–2006 President of Tau Beta Pi, the national engineering honor society, and has delivered over 100 volunteer seminars reaching over 2000 students through the Association's award-winning Engineering Futures

program. He is an ABET Program Evaluator, the 2009-2011 Chair of the Educational Research and Methods division of the ASEE, a member of the Board of Governors of the IEEE Education Society from 2008-2012, and the Chair of the Steering Committee of IEEE Transactions on Learning Technologies from 2009-2011. He is currently the Chair of the IEEE Curriculum and Pedagogy Committee.

Dr. Lingxi Li received the B.E. degree in Automation from Tsinghua University, China, in 2000, the M.S. degree in Control Theory and Control Engineering from the Institute of Automation, Chinese Academy of Sciences, China, in 2003, and the Ph.D. degree in Electrical and Computer Engineering from the University of Illinois at Urbana-Champaign, in 2008. Since August 2008, he has been with Indiana University-Purdue University Indianapolis (IUPUI) where he is currently an Assistant Professor in Electrical and Computer Engineering. Dr. Li's current research focuses on modeling, analysis, and control of complex systems; fault-tolerant systems; discrete-event systems; intelligent transportation systems; intelligent vehicles; active safety systems; and human factors. Dr. Li received Remarkable Paper Recognition at ACM ICUIMC conference in 2011, Indiana University Trustees Teaching Award in 2012, Outstanding Editorial Service Award for IEEE Transactions on Intelligent Transportation Systems in 2012, and IUPUI Prestigious External Awards Recognition (PEAR) in 2013. Dr. Li has served as Program Chair of 2011 and 2013 IEEE International Conference on Vehicular Electronics and Safety (ICVES 2011, ICVES 2013), Program Co-Chair of 2010 IEEE International Conference on Vehicular Electronics and Safety (ICVES 2010), and has been serving as an Associate Editor for IEEE Transactions on Intelligent Transportation Systems since 2009.

APPLAUDING 50 YEARS OF FELLOWS

By Rosann Marosy

In 2014, IEEE will mark its 50th Fellow Class. It represents decades of honoring IEEE Fellows whose extraordinary accomplishments have changed the world.

The IEEE grade of Fellow was born in 1964 out of the merge of the American Institute of Electrical Engineers (AIEE) and the Institute of Radio Engineers (IRE). The emphasis on the elevation was and still is reserved for select IEEE members who have contributed importantly to the advancement of engineering, science, and technology, bringing the realization of significant value to society. Only one-tenth of one percent of the total voting membership can be elevated in any one year. Over the last fifty years, IEEE has elevated roughly 10,000 members to this honor. This is a very small percentage compared to the total membership. Unquestionably, Fellows are the crown jewels of the organization. One can only imagine what the next fifty years will bring, and the new technology that will be developed, discovered, or taught, and what new IEEE Fellows will be recognized for their achievements.

Throughout the year, various celebrations will take place to honor those who have achieved this distinction. If you know an IEEE Fellow, congratulate him/her again for receiving this honor. You can recognize them personally, or you can acknowledge them publicly at region meetings, society meetings, section meetings, and/or conferences.

NEW FELLOWS DIRECTORY

By Rosann Marosy

New to the Fellow Web Site is the redesigned Fellows Directory. It is the most comprehensive online search and networking tool available to members. If you need to complete an IEEE Fellow Nomination, gather information for a region, section, or society, it's now easy to accomplish.

The information in the directory can be accessed by six categories: alphabetical by last name, year elevated, gender, IEEE region, IEEE society, and deceased. Within these categories, members can search, sort, or run a filter. For example, a report can be compiled on all Fellows within a specific region elevated in a particular year. The directory allows members to view the profiles of Fellows plus the ability to network with the Fellows. If you are not an IEEE member, you will have limited access to certain information.

Check it out today. The directory works on handheld devices and computers. To access the directory, go to www.ieee.org/fellows, then click the Fellow Directory icon.

Power & Energy / Industry Applications / Power Electronics Society News

Earl Hill, Chair, PES/IAS/PELS
Ben Huckaba, Vice-Chair, PES/IAS/PELS

The PES/IAS/PELS has started another year of well-attended monthly seminars and meetings. In January the section held a meeting on <u>GIS Integrated Analytics for Preventive Maintenance and Storm Response</u>, presented by John Lauletta of Exacter, Inc. The February meeting was held on <u>Recent Advances in Power Electronics Semiconductors</u>, presented by Dave Peter of TriCord Innovations. The March meeting is planned for the 18th, with an all-day Short Course on <u>Smart Grid: Concepts</u>, <u>Solutions</u>, <u>Standards</u>, <u>Policy</u>, <u>Recent Deployments and Lessons Learned</u>, presented by John McDonald of General Electric.

The section has an active and educational spring planned, with the April meeting on Photovoltaic Materials, Electrical Characteristics, and Systems for Power Generation, presented by Dr. Niusha Rostamkolai of Rose-Hulman Institute of Technology. The May meeting will be a tour of the Battery Innovation Center located outside the Crane Naval Base. Further details and registration for all planned activities are available at the CIS-IEEE homepage.

2013 marked the first full year for the PELS as a joint society with the PES and IAS in the Central Indiana Section. The PELS is considering separating from the PES and IAS to stand alone, but would need officers to do so. Anyone interested in serving in a leadership position for the PELS should contact one of the Section officers.

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Latest EMC Book

Design Techniques for Controlling Radiated Emissions, 3rd Edition contributed to and edited by Donald L. Sweeney, including the latest digital technology, published 2014

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An EMC Practical Applications Seminar and Workshop

using the most recent EMC Design Book plus take home proprietary computer program, expanded section on filter design, signal integrity, and signal return currents on PCB's and a free 45 min. individual product design evaluation

April 8 - 10, 2014 (Tues. - Thurs.) Hilton Hotel, Northbrook, IL



\$300 discount if you register by March 16, 2014.

We are also offering a special 50% discount on the April seminar to attendees of previous D.L.S. seminars who used the 1st or 2nd edition.

Classes fill quickly so register early email cgorowski@dlsemc.com or call 847-537-6400 www.dlsemc.com/emcdesignseminar

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For Immediate Release

D.L.S. Expands Environmental Testing By Marilyn Sweeney



Altitude Testing at D.L.S. Wheeling East Campus

D.L.S. Electronic Systems, Inc. is proud to announce their expansion of in-house MIL STD 810 and DO-160 Environmental Testing Services. They have extended their capabilities to include Sand and Dust Testing, as well as Vibration and Shock Testing. They also test for Temperature, Humidity, Altitude, Acceleration and Salt Spray. For further information email Jack Black black@dlsemc.com or call him at 847-537-6400. Also click on www.dlsemc.com/environmental-testing

D.L.S. is a full service Compliance Laboratory for military, aerospace and avionics testing.

Central Indiana Section News

Meetings to be supported in the near future include
Power Electronics Society – Chair Annual Meeting
IEEE-USA Annual Meeting
IEEE Sections Conference

Plans are underway for the next CIS section conference with the goal of radically increasing the number of participants.

Membership development is of importance. Please see the CIS webpage for membership incentives.

The CIS webpage is being updated. A Facebook page is available, as is a Women In Engineering webpage for the section.

An Information Theory Society is being formed. The possibility of a life affinity group is being discussed.

The next Indians Baseball Picnic is scheduled for July 13, 2014.

The 2014 budget was approved. The PES budget may integrate with the CIS budget. The 2014 budget for PES will be provided but maintained separately as an ad-hoc basis.

ACEC

acecindiana.org

2013 Meeting Calendar					
Date	Host	Subject	Location		
Monthly	CIS	Executive Committee Meetings	Internet/Phone Bridge		
Check the <u>Section web page</u> for details and current information.					

ADVERTISER EVENT

	DLS		NI - whi 1- II
April 8–10, 2014	http://dlsemc.com/	See Advertisements on Pages 3&4	Northbrook, IL

Central Indiana Engineering Web Links

American Council of Engineering Companies, Indiana

ASCE	American Society of Civil Engineers	inasce.org
ASME	American Society of Mechanical Engineers	sections.asme.org/central_indiana
ASM-INDY	American Society for Metals - Indianapolis	asm-indy.org
CIECN	Central Indiana Engineering Consultants' Network	indy-engineer.dnsalias.com
CINLUG	Central Indiana Linux Users Group	cinlug.org
IBEN	Indiana Biomedical Entrepreneur Network	indianabionetwork.org
IHIF	Indiana Health Industry Forum	ihif.org
INCOSE	International Council on Systems Engineering	incose-coa.org
INDSPE	Indiana Society of Professional Engineers	indspe.org
INDYASHRAE	American Society of Heating, Refrigeration, and Air Conditioning Engineers	indyashrae.org
NSBE-IAE	National Society of Black Engineers - Indianapolis Alumni Extension	nsbe-iae.org
PIMCIC	Project Management Institute - Central Indiana Chapter	pmicic.org
SAE	Society of Automotive Engineers, Indianapolis	indianasae.org
Scientech	Scientech Club in Indianapolis	scientechclub.org
SIM	Indianapolis Chapter of Society for Information Management (SIM)	SimNet.org
SWE-CI	Society of Women Engineers - Central Indiana Section	swe-ci.com
Techpoint	A diverse collection of technology-based Indiana industries.	Techpoint.org

Distribution: The Reporter is made available electronically to the approximately 1800 IEEE members within the Central Indiana Section including student members and faculty of Purdue, IUPUI, Rose-Hulman Institute of Technology and ITT Technical Institute.

Central Indiana Section Active Volunteers

Director (1st Year)

Vacant

Director (2nd Year) (812) 223-6520 Phil Walter <u>Phil.Walter@ieee.org</u>

Chair (317) 441-2076 David Koehler <u>David.Koehler@ieee.org</u>

Vice Chair Vacant

Treasurer (317)-230-6287 Tim Alt tim.alt@ieee.org

Secretary (812) 337-4809 Stavan Dholakia <u>stavandholakia@ieee.org</u>

Power & Energy/ (317) 726-1236

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Computer Society
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Engineering in Medicine and Biology Society
Jake Chen (317) 278-7604
iakechen@iupui.edu

Communications Society (812) 237-3451 Xiaolong Li <u>Xiaolong.LI@indstate.edu</u>

Central Indiana Engineering Consultants' Network (CIECN) (317) 679-6194
Brad Snodgrass bsnodgrass@ieee.org

Membership Development (317) 726-1236 Earl Hill <u>eshill@loma-consulting.com</u>

Professional Activities (PACE)

Vacant

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Communications Information Officer

Vacant

Central Indiana Section Active Volunteers (cont'd)

Finance Committee

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Editorial Policies

Each issue of The Reporter typically references three months - the month in which it is published and the following two months. The Reporter is typically published in March, June, September, and December.

Material to be included should be submitted mid-month prior to the month it is to be published. For example, material intended for the September issue should be submitted to the Editor by August 15. The Editor will send a reminder to all IEEE Central Indiana Section entities by the 15th of the month to submit their updates.

Copy should be submitted electronically. Photographs are desirable. Advertisements are welcome. Contact the editor for layout sizes and rates.

How Do You Communicate??

Want to know what is happening in Central Indiana Section? Don't know where to look? Already inundated with E-Notices? Need to ask a question? Want to find an expert? Got a meeting idea?

Here are some of many communication channels available in Central Indiana Section



Find the Central Indiana Engineering Consultants' Network and the Central Indiana Section Communications Society, as well as several other IEEE related organizations on LinkedIn.



Student Branch members are encouraged to join "CIS-IEEE Student Branches" group on Facebook. Several opportunities for students and student branches have been posted there. The Facebook group also provides an opportunity for CIS student members to interact or to make contact with student members outside of Central Indiana. There is no substitute for a good network, but be aware that some hiring managers are also checking these sites.

Communications Society members can find "COMSOC – Central Indiana Section" on Facebook.

CIS Home Pages

Start with the main site. (www.cis-ieee.org) Check out the calendar of events, or link to the many IEEE groups in Central Indiana Section, including all of the Student Branches.

Not getting E-Notices? E-Notices are not only a resource for keeping in touch with the activities throughout CIS, but you will also receive information on topics of interest throughout IEEE

E-Notices

Login to myIEEE from the IEEE Home Page (<u>www.ieee.org</u>) and sign-up! at the main site. (<u>www.cis-ieee.org</u>) Check out the calendar of events,