

THE REPORTER

Journal of the Central Indiana Section • IEEE

Central Indiana Section Annual Conference 2014 IEEE EnCON



Dr. Gerhard Klimeck presents
The Single-Atom Transistor: How it was Created and What it May Mean for the Future
at the 2014 IEEE EnCon

The Central Indiana Section Annual Conference was held November 7-8, 2014 at the Indianapolis Marriot North. Presenters included industry leaders within the Computer, Information Theory, Signal Processing, and Communications Societies. These presentations were aimed at keeping attendees informed of the latest trends in technology. The program also gave the attendees the skills necessary to find a job or help keep them competitive in today's ever changing business world. Presentations were provided by the following Affinity Groups: Central Indiana Engineering Consultants' Network (CIECN), Professional Activities Committee for Engineers (PACE), Women In Engineering (WIE) and Graduates of the Last Decade (Young Professionals). Congratulations to everyone for a very successful event!



IEEE Engineering in
Medicine & Biology Society

The Engineering in Medicine and Biology Society would like to thank Dr. Iyad Obeid for his talk at the 2014 IEEE EnCON.

Dr. Obeid also joined in an event at the IU School of Medicine in Indianapolis to speak to the Technology in Medicine Special Interest Group.

For those who missed his talk on “Big Data Challenges in Biomedical Engineering and Neuroscience”, a recording from the School of Medicine is available at the QR code below.

The EMBS Society hopes next year will bring more exciting events to the Central Indiana Section, and welcome any suggestions at dchartas@ieee.org



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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 had an active second half of 2014, beginning with its September meeting on utility distribution system Volt-Var Optimization. Speakers from Conrad Technical Services and IP&L addressed how to improve system performance while reducing peak demand and saving energy. The section held a four week fall short course on Variable Frequency Drives taught by industry vendors and one large industrial user. Topics included an introduction of the basic VFD design and operation, history of the devices, presentation of advance functionality from advances in processing, programming, and communication technologies, and finally, how to apply the new technologies in a large industrial facility.

The PES-IAS-PELS plans to hold many educational and informative meetings again in 2015. Anyone interested in serving in a leadership position for the PES-IAS-PELS should review the following vacancies.

PES-IAS-PELS Officer Vacancies

The PES-IAS-PELS Joint Society is in need of volunteers to fill some officer positions. In particular, the following positions need to be filled:

Society Chair – this person will be responsible for the following: attending Section Executive Committee meetings (usually virtual), and coordinating Society activities, and miscellaneous duties, such as representing the Society in IEEE and other meetings. This person will also have a role in organizing Society meetings.

Meeting Coordinator – this person will organize the Society's meetings, in particular the two Short Courses conducted each year. The short course consists of four sessions on a common topic over four consecutive weeks. The Short Course is the leading revenue generator for the PES-IAS-PELS and the Section itself (after the IEEE National Organization rebates).

The Society Chair and the Meeting Coordinator have an opportunity to shape the direction of the Joint Society and the Section. The meetings are a mix of cutting edge topics and refresher courses. Last year, the Society held short courses on Smart Grid Applications, and Variable Frequency Drives, plus seven individual meetings. The PESL-IAS-PELS Joint Society is the largest part of the Central Indiana Section, has the most meetings, and has won several awards in the past. This organization is key to the success of our section. The two positions each require about 5 hours per month (in addition to attending the meetings, which is optional, although typically the Chair introduces meeting speakers).

Anyone interested in either of these positions should contact Earl Hill at eshill@loma-consulting.com or 317-726-1236. These positions are to be filled as soon as possible, to begin planning for the 2016 meetings.

2015 Meeting Calendar

Date	Host	Subject	Location
Monthly	CIS	Executive Committee Meetings	Internet/Phone Bridge
November, 2015	CIS	Section Conference	Indianapolis Marriott North

... Check the [Section web page](#) for details and current information.

ADVERTISER EVENT

N/A	DLS dlsemc.com	See Advertisement on Page 2	N/A
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Central Indiana Engineering Web Links

ACEC	American Council of Engineering Companies, Indiana	acecindiana.org
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
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-ip.org
PIMCIC	Project Management Institute - Central Indiana Chapter	pmicic.org
SAE	Society of Automotive Engineers, Indianapolis	saeindiana.org
Sciencetech	Sciencetech 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

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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.

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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 (www.ieee.org) and sign-up! at the main site. (www.cis-ieee.org) Check out the calendar of events,