May 2006 www.cis-ieee.org

THE REPORTER

Journal of the Central Indiana Section • The Institute of Electrical and Electronics Engineers, Inc.



"Super size" your IEEE Membership SENIOR MEMBER RODEO Upgrade to Senior Member Status

Do you have 10 years of professional experience? Are you just a little bit proud of your accomplishments? Then why not become a Senior Member of the IEEE? The Central Indiana Section of the IEEE will help you get this done. Just come and attend our annual Senior Member Round-Up planned for early June. We will match you up with volunteer Senior and Fellow members to provide the required references. Complete upgrade information, including requirements can be found at IEEE Senior Member Program

Why would you want to be come a senior member? There are several benefits:

- Professional recognition from your peers for technical and professional excellence.
- An attractive wood and bronze engraved Senior Member plaque to proudly display.
- Up to \$25.00 gift certificate toward one new Society membership.
- A letter of commendation to your employer on the achievement of Senior member grade (upon the request of the newly elected Senior Member.)
- Announcement of elevation in Section newsletters, newspapers and notices.
- Eligibility to hold executive IEEE volunteer positions.
- Can serve as Reference for Senior Member applicants.
- Invited to be on the panel to review Senior Member applications.

All elevated Senior Members will receive a beautiful plaque from IEEE and notification to your employer upon request. It's a great way to recognize your achievements and you deserve it! Please join us for this summer's Senior Member Round-Up.

Important items you will need: (Electronic format required): IEEE member number, degrees, schools and dates, current position, company and title, list of professional experience, list of achievements demonstrating significant performance, copy of a recent resume (to be attached to the application). Plan to join us and UPGRADE YOUR MEMBERSHIP. For more information, contact Will Kassebaum at Will.Kassebaum@IEEE.org or check the cis-ieee.org.

Upcoming Events

May 7 - 13	2006 Intel International Science and Engineering Fair		
	Public visitation Thursday May 11 (9am-9 pm) and Friday May 12 (9am-noon		
May 8	ScienTech Club, Michael Sarasin, Ricoh Philosophy of Sustainability of the Planet		
May 9	Indiana Biomedical Entrepreneur NetworkNetworking 101 at IUPUI		
May 12-14	IEEE Swarm Intelligence Symposium 2006, Hilton Indianapolis Hotel		
May 15	ASM meeting, Barbara Stratton - Rolls- Royce AE 3007 Turbofan Engine:		
	Reliable Power for the Global Hawk UAV and EMB 145 Special Versions		
May 17	IUPUI 2006 Solutions Conference		
May 19	Techpoint Mira Awards Gala, Indiana Roof Ballroom		

The Reporter

Central Indiana Section Active Volunteers

Director (317) 274-0044 Jose Ramos jaramos@iupui.edu

Chair (317)293-1242

John Kassebaum John.Kassebaum@ieee.org

Secretary (317)306-2677 Tom Bishop tnbishop@ieee.org

Treasurer

Jim Brown lin@engr.iupui.edu

Director (317)263-8888 Alan Stillerman astiller@ihets.org

Power Engineering/Industry Applications Society

Dick Hildreth dhildreth@cityofanderson.com

(745)648-6589

Computer Society (317)808-4221 Dan Allison dallison@ieee.org

Signal Processing Society (Purdue)

Ilya Pollak ipollak@ecn.purdue.edu

Signal Processing Society (Indianapolis)

Wei Wang ww3@iupui.edu

Engineering in Medicine and Biology Society

Jake Chen jakechen@iupui.edu

317-278-7604

Central Indiana Engineering Consultant's Network

Will Kassebaum Will.Kassebaum@ieee.org

(317)299-0557

John Kassebaum John.Kassebaum@ieee.org

(317)293-1242

Membership Development

Earl Hill eshill@starpower.net

Professional Activities (317)879-1561

Al Razban al.razban@roche.com

Newsletter Editor

Communications Information Officer

Pam May (317)274-2363

may2@tech.iupui.edu

Central Indiana Section Active Volunteers (cont'd)

Webmaster (317)838-2268
Bob Evanich b.evanich@ieee.org

GOLD Coordinator Jennifer Morrison

JMorrison@bsalifestructures.com

Constitution and Bylaws (317)274-2362 Ken Reid reid@ieee.org

Historian (317)274-2362 Marv Needler needler@ieee.org

Student Activities

Brad Snodgrass bsnodgrass@prodigy.net

UPUI Student Branch CIS-IEEE representatives

Jose Ramos & Ken Reid

ITT Student Branch CIS-IEEE representative Mohammed Boudia MBoudaia@itt-tech.edu

Rose-Hulman Institute of Technology Student Branch

CIS-IEEE representative Ed Wheeler

Purdue University Student Branch

CIS-IEEE representative Open Position

Editorial Policies

Each issue of The Reporter references three months - the month in which it is published and the following two months. The Reporter is not published in June, July, and August because there are generally fewer meetings held during the summer months.

Material to be included should be submitted midmonth 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 monthly updates. If no update is received for that month, only the mission statement and contact information will be published for that entity.

Copy should be submitted electronically. Photographs are most desirable and may be submitted in electronic format or color, black-and-white glossy, or Polaroid. Please note that black-and-white photographs reproduce best. Advertisements are welcome. Contact the editors for layout sizes and rates.

IEEE Region 4 - Expanding Teacher In-Service Program Participation

As an engineer, are you interested in working with your local pre-university schools, school districts or teachers? Do you want to help improve the level of technological literacy of teachers and their students in your community? Then you should attend IEEE's upcoming Teacher In-Service Program (TISP) Training Workshop in Indianapolis on 16 - 17 June!

Started in 2001, TISP features IEEE volunteers developing and presenting technologically oriented subject matter to educators in a professional development (or "in-service") setting. In the last four years, IEEE volunteers have made more than 35 presentations to over 675 pre-university educators within the United States and South Africa – these educators reach more than 70,000 students.

Now you can be a TISP champion! The IEEE Educational Activities Department and the Central Indiana IEEE Section are hosting a TISP Training Workshop for Region 4 volunteers on 16-17 June at University Place Conference Center and Hotel in Indianapolis, IN.

The workshop will cover how to organize volunteers for TISP and how to bring the program to your local school districts. Thanks to the support of IEEE USA the event is free for all IEEE members. There will be a \$75 fee for non-IEEE members. IEEE will reimburse members for any training-related travel costs incurred. Funding is also available to cover the cost for supplies and materials needed for presentations to educators.

To register for the workshop visit http://www.ieee.org/web/education/preuniversity/tispindy.html.



The event will begin on Friday 16 June at 4:30pm with a 2-hour presentation followed by dinner at 7:00pm.

On Saturday 17 June the event will run from 9:00am to 3:00pm and will include hands-on presentations, a question and answer period, and discussion on numerous topics, such as: program background and scope, getting started, potential costs to sections and educators, suggestions on making contact with your local pre-university community, and the alignment of an activity with education standards. Breakfast and Lunch will be provided for attendees.

The goal of the training session is to impact at least 1000 pre-university educators in Region 4 through this program and to help IEEE volunteers implement TISP in their local pre-university education communities.

During an actual Teacher In-Service Presentation, IEEE volunteers provide teachers with activity materials and then help the teachers as they work their way through the activity. By helping the teachers as they work their way through a technical activity, the teachers get to the point where they feel comfortable enough to present it on their own. The idea is for the teachers to return to their schools and lead the same activity in their classrooms.

For more information on the upcoming TISP training session or TISP participation, please contact: Doug Gorham, Director of Educational Outreach, +1 732 562 5483, d.g.gorham@ieee.org, or Allison Ickowicz, Associate Project Coordinator, +1 732 562 5496, a.m.ickowicz@ieee.org.

Largest, independent EMC & Product Safety test facility in North America

All under one roof

(in Wheeling, Illinois)



PRODUCT SAFETY

Testing Consulting Problem Solving

Streamlined CE Programs

- Medical
- Laboratory
- ITE
- HHA
- · Audio-Video
- Industrial Electronics & Machinery

CE Compliance

- Low Voltage Directive 73/23/EEC
- Medical Device Directive 93/42/EEC
- Machinery Directive 98/37/EEC

Compliance Programs









MIL-STD 461 & RTCA/DO160D

Testing Consulting **Problem Solving**

Three 36' x 25' x 20' Rooms

- 200 V/m, 10 kHz to 18 GHz
- 600 V/m, Pulse Modulation
- Lightning
- (Multiple Burst/Multiple Stroke)

DoD Military/Aerospace Cage Code #OKP98

- E³
- Communications
- Avionics
- Weapon Systems
- Radar
- Security Systems
- Surveillance Guidance Systems

RTCA for Commercial Aircraft

- Avionics
- Communications
- Instrumentation
- Flight Control & Management
- Navigation & Identification
- Power Systems
- Passenger Entertainment

EMC/RFI

Testing Consulting Problem Solving

Three 36' x 25' x 20' Rooms

- NVLAP Accredited
- FCC Listed

Three 36' x 25' x 20' Rooms

- IEC/EN 61000-4-2 ESD
- IEC/EN 61000-4-3 Radiated RF
- IEC/EN 61000-4-4 EFT
- IEC/EN 61000-4-5 Lightning Surge
- IEC/EN 61000-4-6 Conducted CW
- IEC/EN 61000-4-8 Magnetic
- IEC/EN 61000-4-11 Voltage Dips/ Variations
- IEC/EN 61000-3-2 Harmonics
- IEC/EN 61000-3-3 Flicker
- IEC/EN 55011
- IEC/EN 55014

Testing For

- CE EU DoC VCCI ACA
- EC IEC FCC CISPR

Plus...Fully enclosed OATS at Genoa City, WI

Testing Consulting Problem Solving

Three 10-meter Sites

- CAB for European EMC (Competent Body)
- CAB for R&TTE (Notified Body)
- NVLAP accredited FCC listed
- · IC approved and listed
- ACA recognized

Testing For

- - FCC ACA Australia
- CISPR VCCI IC Canada



Call today



D.L.S. Electronic Systems, Inc. 1250 Peterson Drive Wheeling, IL 60090 847-537-6400 (phone) 847-537-6488 (fax) www.dlsemc.com sales@dlsemc.com

Past meeting

IEEE Invited Seminar Series - March 2006
In conjunction with the IUPUI School of Informatics Spring Semester Course
I590 Discovery Informatics in Biomedical Sciences

Dr. Chen Su, Principle Research Scientist, Eli Lilly and Company "Regulation of Gene Transcription in Pharmaceutical Research Knowledge Database and Computational Prediction"

Dr. Chen Su reviewed some of the curated TFBS databases, and computational tools developed at Lilly to identify de novo TFBS from gene expression profiling microarray data. She also showcased some of the utilities of such knowledge database and predictive tools in pharmaceutical research that are of interest to molecular biologists.

Past meeting

Engineering Medicine Biology Society

Bioinformatics Applications in Biomarker Discovery, Dr. Birong Liao Principle Research Scientist, Eli Lilly and Company

Dr. Birong Liao presented a few examples how bioinformatics approach is being used in biomarker discovery will be shown. He used public gene expression repositories to demonstrate that exploitation of the rich biological data requires extensive knowledge about the underlying technologies, and biological experiments.

Past Meetings

PES-IAS Spring Course - Smart Control, Relays and Meters

The PES-IAS had its Spring 2006 Short Course on Smart Control, Relays and Meters at Indianapolis Power & Light. The following topics were covered.

- March 14 Smart Relaying, Mr. James R. Buff, P. E., Field Application Engineer for SEL
- March 21 Voltage Regulation with Capacitors, John Harder, Retired, ABB
- March 28 Recloser Applications and Control, Minimizing blinks, strategies to reduce Customer outage minutes, Automation Schemes, Don Wareham, Regional Power Systems Engineer for Cooper Power Systems
- April 11 Annual Awards Banquet at Indianapolis Power & Light Company

Past Event

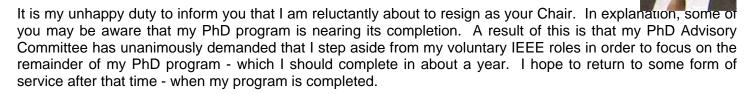
National Engineers' Children's Day The Children's Museum of Indianapolis

On Saturday Feb. 18, the Central Indiana Section of the IEEE celebrated National Engineers Week with a special event at the Children's Museum. The event generated interest in engineering among children who had the opportunity to learn about a wide variety of jobs in the engineering field through hands-on experiences throughout the museum. Fun, engineering-related activities included building a simple flashlight, studying blueprints, building structures from playing cards and demonstrating flight/distance at a number of stations throughout the museum. Children that completed all of the activities were entered into a drawing. Awards were handed out late on Saturday afternoon. Thanks to Bob Evanich who organized the event and more than 20 volunteers.

The Chairs' Corner

Friday, May 5, 2006 John A. Kassebaum, Chair

Dear CIS-IEEE Colleagues,



My service to you ends far too soon - sooner than I expected - but I believe I have put in place most of the initiatives necessary to smoothly complete the year. This includes plans for our Senior Member Rodeo in June, our baseball game activity in August, and our fall awards banquet in November. The executive committee is large and enthusiastic, so I think my early demise will not significantly affect the rest of the year's IEEE activities. Regardless of my departure, I will remain accessible to the new leadership team to make sure that there is continuity and that the institutional memory I hold is not lost. I am more worried that the loss of my service in my secondary role, as Co-Chair of the Central Indiana Engineering Consultants' Network (CIECN), will cause a reduction in useful activities and services. If the CIECN is of interest to you, I therefore call on you to volunteer at a re-organization meeting of the CIECN on the first Thursday of June.

By the end of May, I will be replaced as CIS-IEEE Chair by Will Kassebaum, who is the current section Vice-Chair and also a Co-Chair of the CIECN. Of course, the post of Vice-Chair will be vacant when he steps up to Chair. Will will need your help and support both in the executive committee and in the CIECN. If you are willing to help or serve in the section leadership, I invite you to consult with Will and the executive committee.

In Service, John A. Kassebaum, P.E., Ph.D. Candidate Chair and Senior Member, Central Indiana Section of the IEEE

* * *

Central Indiana Engineering Consultants' Network (CIECN)

Co- Chairmen: John Kassebaum and William Kassebaum

CIECN Past Meetings

May 4th, Larry Grogan, Grogan Advisory Services, IEEE Financial Advantage Larry Grogan talked about effectively use current tax laws to your advantage and avoid those that will hurt you. He discussed how professional financial planning will help you to put your retirement goals on track and guide you to the dreams you have for you and your family.

April 6th 2006 Ron Reiss, Director of Member Services, Techpoint Ron Reiss talked to CIECN members about Techpoint, who Techpoint is; what Techpoint does; and the benefits of membership in Techpoint

March 2nd 2006 Paul Bhe, Certified Financial Planner, Fidelity Personal Investments
Paul Bhe talked to CIECN about retirement plans for small businesses and consultants, including the Solo-401(k), SEP IRA's, and Keogh plans.

www.cis-ieee.org

The Reporter

Central Indiana Engineering Web Links

ACEC American Council of Engineering Companies, Indiana acecindiana.org ASCE American Society of Civil Engineers sections.asce.org/indiana **ASME** American Society of Mechanical Engineers http://sections.asme.org/central indiana/

American Society for Metals - Indianapolis asm-indy.org ASM-INDY Central Indiana Linux Users Group CINLUG cinlug.org

Indiana Biomedical Entrepreneur Network indianabionetwork.org **IBEN**

IHIF Indiana Health Industry Forum ihif.org INDSPE **Indiana Society of Professional Engineers** indspe.org American Society of Heating and Air conditioning Engineers **INDYASHRAE** indyashrae.org National Society of Black Engineers - Indianapolis Alumni Extension nsbe-iae.org **NSBE-IAE PIMCIC** Project Management Institute - Central Indiana Chapter pmicic.org

http://www.saesections.org/indiana/ SAE Society of Automotive Engineers, Indianapolis Scientech Scientech Club in Indianapolis, scientechclub.org

Indianapolis Chapter of Society for Information Management (SIM) SimNet.org SIM

Society of Women Engineers - Central Indiana Section SWE-CI swe-ci.com A diverse collection of technology-based Indiana industries. Techpoint.org Techpoint

Central Indiana IEEE Related Web Links

Central Indiana Engineering Consultants Network **CIECN** Indy-engineer.net Student Sections Rose Hulman Institute of Technology http://www.rose-hulman.edu/Users/groups/IEEE/

Purdue University, West Lafayette purdueieee.org

Indiana University/Purdue University at Indianapolis iupuieee.org

2006 Meeting Calendar				
		2000 Meecing Calendar		
Date	Host	Subject	Location	
May 7-13	Intel	Intel International Science and Engineering Fair	Indianapolis, IN	
May 8 11:30am	ScienTech Club	Michael Sarasin, Ricoh Philosophy of Sustainability of the Planet, 11:30 am with a buffet luncheon (\$9.00)	Children's Museum	
May 9, Tuesday 5 - 7:30pm	IBEN	Indiana Biomedical Entrepreneur Network Networking 101	IUPUI	
May 12-14	IEEE	IEEE Swarm Intelligence Symposium 2006	Hilton Indianapolis Hotel	
May 15 5pm	ASM	Barbara Stratton - The Rolls- Royce AE 3007 Turbofan Engine: Reliable Power for the Global Hawk UAV and EMB 145 Special Versions.	St. Vincent Marten House, 1801 W 86th, Indianapolis,	
May 17 8am-4pm	IUPUI	IUPUI 2006 Solutions Conference	IUPUI	
May 19 6 pm - 10 pm	Techpoint	Mira Awards Gala	Indiana Roof Ballroom	
June 12-15	IUPUI	TeraGrid '06 - is a forum for those interested in building and using cyber infrastructure.	University Place IUPUI	
June 14-15	ITEC	Information and Technology Exhibit and Conference	Indianapolis Conference Center	
June 16	IHIF	Indiana Health Innovention 2006	Indianapolis Convention Ctr	
July 10-14	ASM	Welding Workshop - Specific hands-on topics and laboratory welding experiences (\$300.00)	Ball State Univ.	
Aug 20	IEEE	Annual CIS-IEEE Victory Field Baseball Outing	Indianapolis, IN	
Sept 19-21	PCISHOW.com	Powder Coating 2006	Convention Ctr	
Oct 6	PMICIC	4th Annual Professional Development Day and Vendor Fair, PMI Central Indiana Chapter, (\$99 - \$149)	UAW/Rolls Royce training center	
Sept. 23	PMICIC	Joseph Philips The Project: Life, A Presentation for International Project Management Day, (8 PDU)		
Oct 12-13	IQAA	Indianapolis Quality Assurance Association Quality Enrichment Conference	Indianapolis, IN	
Nov t.b.d.	CIS-IEEE	CIS-IEEE Annual Award Banquet	Carmel, IN	
Nov 16	Ball State	Vision 2006 Tech Summit 2007 Meeting Calendar	Muncie, IN	
June 3 - 7	ASMS	55th ASMS Conference on Mass Spectrometry	Indianapolis, IN	
Check the Section web page for current information.				

Distribution: The Reporter is distributed to approximately 1900 IEEE members within the Central Indiana Section including student members and faculty of Purdue, IUPUI, Rose-Hulman and ITT Technical Institute. The Reporter may be selectively distributed to non-members when it serves the aims of the Section. Examples include public, industrial, and school libraries, and other engineering societies and professional organizations. Inquiries for complimentary subscriptions should be made to the Editor.