February 2007 www.cis-ieee.org

# THE REPORTER

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

## **Region 4 2006 Exemplary Section Award Recipient**

The Central Indiana Section was presented the 2006 region 4 exemplary-section award. CIS has five Society Chapters – Computer, Power Engineering/Industry Applications, Engineering in Medicine and Biology, Signal Processing and Education. CIS also has a very active Engineering Consultant's Network Affinity Group. The Section's other activities included an annual scholarship for student branch member; a "Senior Member Rodeo" of which 45 section members obtained Senior Member status in 2006; and an Annual Awards Banquet recognizing Senior Members and Section's Outstanding Member and Outstanding Engineer award.

#### Outstanding Member Award Winner – Robert J. Evanich – Central Indiana

Robert Evanich was nominated for IEEE Region 4 Outstanding Member Award because of exceptional efforts and contributions optimizing communications at the national, section and regional levels. He is particularly recognized for his developing new processes of Region 4 Website, EIT Conference Paper Approval Process, over and above the site development for EIT. His constant improving communications aspects both regionally and locally are tireless and without peer. Robert has held offices or important assignments with Duke Energy, Region 4 and Central Indiana Section webmaster, Engineers Week Coordinator, Region 4 Teacher in Service Program Committee, Children's Museum of Indianapolis, Boy Scout Leader, Soccer coach, working with local schools encouraging a love of math and science to promote engineering and various other civic volunteer activities.

#### Outstanding Engineer Award Winner – Dr. Chunting Mi – Southeastern Michigan

Dr. Chunting Mi was nominated for IEEE Region 4 Outstanding Engineer Award for his technical contributions in Power Electronics and Electrical Drives, research in hybrid vehicles, electric motors, and renewable energy related areas. In addition, Dr. Mi has made contributions in developing PM synchronous motors for textile and petroleum industry applications in China. Dr. Mi serves the industry with accomplishments in teaching, research, and services to the engineering profession in IEEE and other technical societies. He has published over 60 papers. He is an excellent teacher in promoting engineering education, at the undergraduate level, graduate level, and in professional development.

**Harry Bostic** was presented a lifetime achievement award. The award is for: "Outstanding Commitment and Dedicated Service as Regional Advisor to the Volunteers and Members of Region 4 and The Institute".

**Ronald G. Jensens**, was presented an award in "Recognition and Appreciation for Dedicated Services as Director, Region 4, 2005-2006.

### **Upcoming Events**

Tues Feb 13	PES/IAS Monthly meeting, annual elections, and talk on Arc Flash by Dr. Fred Brockhurst
Tues Feb 13	Joint ASHRAE/IEEE Meeting - Variable Frequency Drive Technologies & Harmonics
Sat. Feb 17	National Engineers Children's Day at The Children's Museum of Indianapolis
Feb 18-24	National Engineers Week
Tues Mar 13	PES/IAS short course - Circuit Analysis, Per Unit System, & Transformers (Fred Brockhurst)
March 14-16	IUPUI & Telemagen 3-day short course - Voice over IP - Build a VoIP Telephone System
Tues Mar 20	PES/IAS short course - Power Flow (Clifford Grigg)
Tues Mar 27	PES/IAS short course - Protection (Niusha Rostamkolai)
Tues Apr 03	PES/IAS short course - Stability (Niusha Rostamkolai)
Tues Apr 10	ASHRAE Tour of the Birck Nanotechnology Center at Purdue University
Tues Apr 21	CIS-IEEE PACE - "Stuff You Don't Learn in Engineering School" with Carl Selinger
Tues Apr 24	PES/IAS Student Awards Dinner

#### **Central Indiana Section Active Volunteers**

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

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

**Chair** (317)225-4126

Will Kassebaum Will.Kassebaum@ieee.org

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Karl Huehne k.huehne@insightbb.com

**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

**Engineering in Medicine and Biology Society** 

Jake Chen jakechen@iupui.edu 317-278-7604

317-270-7004

**Central Indiana Engineering Consultant's Network** 

Will Kassebaum @ieee.org

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Duane Mattern @ SampledSystems.com

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Brad Snodgrass bsnodgrass@prodigy.net

IUPUI 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 Wheel

Purdue University Student Branch

Professor Tom Talavage (ECE) and Professor Raji Sundararajan (ECET)

#### **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.

# Power Engineering Society / Industrial Applications Society Activities

(submitted by Earl Hill, PES Member)

The PES-IAS has started another year of monthly seminars and meetings. On January 23<sup>rd</sup>, the section held a meeting on "Wind Power Generation And Integration With Electric Utility Systems" by Niusha Rostamkolai. At February 13<sup>th</sup> meeting, the PES-IAS has planned elections. Per CIS-IEEE bylaws, the Nominations Committee announced a slate of candidates and sent all members an email. Here is the slate: Chairman: Earl Hill, Loma Consulting, Vice-Chair: Ben Huckaba, Alpha Engineering; Treasurer: Jerry Hohn, Indianapolis Power and Light Co.; Secretary: Gary Rhodes, Advanced Technical Sales

Members of PES/IAS may make additional nominations from the floor prior to a vote of the members present at the next regularly scheduled meeting on Tuesday, February 13, 2007 at Indianapolis Power and Light Co., 1230 West Morris St., at 6:30pm. This meeting will include a brief meeting of the PES-IAS planning committee. Also, the February 13<sup>th</sup> meeting will also include a discussion of Arc Flash by Dr. Fred Brockhurst, Professor Emeritus of Rose-Hulman Institute of Technology. Dr. Brockhurst will review the basic concepts of the arc flash issue and some of the rules, review the analysis techniques, and look at some of the hardware based remedies. He will also address common design issues that affect the arc flash hazard. Dr. Brockhurst is a noted industry expert in this field, and has offered similar seminars at many locations across the Midwest.

In March, the section plans its annual spring short course. This year, the subject will be power system engineering. The following seminars are planned (with presenter):

- 1. 3/6 Circuit Analysis, Per Unit System, and Transformers (Fred Brockhurst)
- 2. 3/13 Power Flow (Clifford Grigg)
- 3. 3/20 Fault Analysis (Clifford Grigg)
- 4. 3/27 Protection (Niusha Rostamkolai)
- 5. 4/3 Stability (Niusha Rostamkolai)

The sessions are held weekly, starting on Tuesday, March 6<sup>th</sup> through April 3<sup>rd</sup>. The short courses will be held at the Indianapolis Power and Light Co., 1230 West Morris St., starting at 6:30pm. The short course price is \$25 for PES-IAS members, \$30 for other IEEE or professional society members, and \$35 for all others. Students pay \$6. Proceeds go toward scholarships, the annual PES-IAS banquet, (which will held on Tuesday April 24), and other section activities. PES-IAS is also planning a short course for the autumn, in October and November, on Predictive Maintenance for power delivery equipment.

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#### Small Business Innovation Research Workshop

Are you interested in: \$\$\$ R&D funds; developing and commercializing cutting edge technologies; funding for proposal preparation and the research and development? Then this seminar is for you!

Omni Severin Hotel, 40 West Jackson Place, Indianapolis, IN 46225

	March 27 & 28, 2007,	\$25/day or \$4	10 for both
	Agenda, Day 1		Agenda, Day 2
7:45-8:00	Registration	7:45-8:00	Registration
8:00-8:30	Welcome, Intro	8:00-8:15	Welcome, Intro
8:30-10:00	SBIR/STTR Overview	8:15-9:15	Government Accounting
10:00-10:15	Break	9:15-9:30	The FAR
10:15-12:00	Proposal Strategy: Part 1	9:30-10:15	Cost Proposal Format
		10:15-10:30	Break
		10:30-11:15	Expenses & Costs
12:00-1:00	Lunch	11:15-12:00	Cost Proposal Formats
1:00-1:30	Proposal Strategy: Part 2	12:00-1:00	Lunch
1:30-3:30	Proposal Draft	1:00-2:00	Preparing a Cost Proposal
3:30-3:45	Break	2:00-2:30	SBIR/STTR Project Audits
3:45-4:30	Critique of SBIR Proposal	2:30-2:45	Break
4:30-5:00	Final Q & A	2:45-4:30	Overview

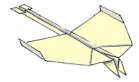
For more information contact the Indiana Economic Development Corporation by calling (812)384-3283/3530 or email Kelly: kbryant@iedc.in.gov or Amanda: ablair@iedc.in.gov

Engineers Week / February 18-24, 2007

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



Date: Saturday, February 17, 2007 Time: 10 am - 3 pm 3000 N Meridian St, Indianapolis, 46208 (317) 334-3807



Join members of the Central Indiana Section of the Institute of Electrical and Electronics Engineers (IEEE) to celebrate the beginning of National Engineers Week, (Feb. 18-24). This special event was created to generate interest in the field of engineering among children.

Learn about the wide variety of jobs in the engineering field through hands-on experiences throughout the museum. Fun, engineering-related activities will include: building a simple flashlight; studying blueprints; building bridges; and building/flying paper airplanes to name a few. Volunteers will be available to talk with visitors, answer questions about engineering, and to handout materials. Visitors to the museum will be given a "schematic" upon entering the museum. After successfully visiting all of the engineering stations and turning in the schematics, visitors will then be eligible for prizes to be given away at a drawing to be held at 3:00 pm that day.

The Children's Museum of Indianapolis is located at 3000 N Meridian St, Indianapolis, 46208 and will be open for this Saturday even from 10 a.m. to 5 p.m. One-day admission is \$7.50 (Youth ages 2-17), \$12.50 for adult (ages 18-59), and \$11.50 for Seniors (60+). Group rate are available, but advanced reservations are required. Groups save 20% (Youth \$5.50, Adults \$9.50, Seniors \$8.75). Groups must have a minimum of 20 people to qualify for reduced admission. One chaperone is required for every 10 youth.

For more information contact the Customer Service Center at 800-820-6214 or 317-334-4000. The museum accepts Visa, Mastercard, Discover and American Express, as well as cash, check and traveler's checks. Admission tickets can be purchased through the Customer Service Center at 1-800-820-6214 and online at: <a href="http://www.childrensmuseum.org/catalog/catalog.asp?C=183">http://www.childrensmuseum.org/catalog/catalog.asp?C=183</a>

Visit <a href="http://www.cis-ieee.org/eweek/">http://www.cis-ieee.org/eweek/</a> for more information about the events. If you would like to volunteer for the event, please fill out the online volunteer form. Those who volunteered last year had a lot of fun! For more information, contact Bob Evanich (b.evanich@ieee.org, 317-838-2268), or Alan Stillerman (astiller@ieee.org, 317-263-8888).







# Central Indiana Section announces Essay Contest for IndianaFIRST FRC Teams



The FIRST Robotics Competition (FRC) is challenging Central Indiana high school students, (as well as students all over the nation and the world), to solve a common problem in a six-week timeframe using a standard "kit of parts" and a common set of rules. Teams build robots from the parts and enter them in a series of competitions designed by Dean Kamen, Dr. Woodie Flowers, and a committee of engineers and other professionals. (http://www.usfirst.org). FIRST Robotics Competition (FRC) is a unique varsity sport of the mind designed to help high-school-aged young people discover how interesting and rewarding the life of engineers and researchers can be. For a list of the FIRST teams in Indiana, visit the usfirst.org website.

IndianaFIRST (http://www.indianafirst.org) provides a forum for Indiana's Teams to plan local events, support Indiana FIRST teams, and provide promotion for FIRST within the state of Indiana.

Central Indiana Section is pleased to announce an Essay Contest for eligible IndianaFIRST FRC Teams. Winning entries will earn a \$500 Sponsorship by submitting a one-page essay describing how IEEE areas of interest have been applied to the design and construction of their robot. Eligible Teams must either be located within CIS boundaries or have an adult mentor who is a CIS Member. Three Sponsorships will be awarded. Winning Teams are required to display the CIS Logo on their robots at all competitions. Complete guidelines will be sent to all IndianaFIRST Teams. Submissions are due by February 17, 2007. For more details contact Brad Snodgrass at to bsnodgrass@ieee.org.

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#### **NSI** "Automate Your Small Business Finances"

Wednesday, February 21, 2007 6:30pm-8:30pm

English Foundation Building 615 N. Alabama Street, Indianapolis IN phone: 917-3266

The **N**eighborhood **S**elf-Employment Initiative (NSI) and the Central Indiana Women's Business Center presents "Automate Your Small Business Finances" Wednesday, Feb. 21 from 6:30-8:30 p.m. The workshop is designed to help small business owners examine the features and benefits of QuickBooks accounting software and decide whether computerized accounting is right for their business. The workshop is part of the series "Simple Steps to a Profitable Business: Financial Workshops for the Small Business Owner. Cost: is \$10 and pre-registration is required. For more information or to register for the orientation session or the Business Beginnings course, call (317)917.3266 or email information@nsibiz.org. For more information visit online at http://www.nsibiz.org/index.php?id=116.

### **Central Indiana Section 2006 Annual Awards Banquet**



Will Kassebaum and Leah H. Jamieson



On Tuesday Nov. 7, CIS-IEEE hosted its fifth annual awards banquet at the Ritz Charles in Carmel, Indiana. As a major banquet bonus, this years keynote speaker was IEEE President-Elect Dr. Leah Jamieson. CIS-IEEE is energized and driven by the people. Some of outstanding volunteers are pictured below.



Jennifer Morrison and Leah H. Jamieson



Pictured from the left are: John Kassebaum, Alan Stillerman, Earl Hill, Will Kassebaum, Bob Evanich, Brad Snodgrass, Dan Allison, Dr. Ilya Pollak, Karl Huehne, Jennifer Morrison, Tom Bishop, Dick Hildreth, and Rich Pfile.



Damon Holladay. is CIS IEEE 2006 Outstanding Engineer.

Damon helped optimized Hoosier Energy maintenance practices, presented a paper at the IEEE ESMO conference, and interfaced with reliability compliance organizations and regulatory authorities regarding industry standards for compliance of the transmission system under the new Electric Reliability Organization requirements.



Will Kassebaum presents the awards for the 2006 "Co" - Outstanding Members to **Bob Evanich** and **Brad Snodgrass**. Bob Evanich is responsible for the CIS-IEEE website year-round, and Bob organized the 2006 Engineer's Week event at the Children's Museum. Brad Snodgrass has organized and led the Teacher In-Service Program (TISP).



Members who achieved "Senior Member" status in 2006 are: Balakrishnan Venkataramanan, Berry Frederick, Evans Jeffrey, Evans Barbara, Huehne Karl, Janik Raymond, Jiao Dan, Jones Stephan, Katorgi Maher, Kumar Koh, Cheng-Kok, Owens Brian, Shalaev Vladimir, Tan Hong, Utter Mark, Wood Gregory, Janik Raymond (Fox Valley section), Katorgi Maher, Mary Comer, and Reinhold M. Strnat. (Karl Macdorman in Jan, 2007)



Dan Allison chair Computer Society



Dick Hildreth, chair Power Engineering & Industrial Applications Society



Jennifer Morrison GOLD coordinator Graduates Of the Last Decade



Fred Brockhurst accepting scholarship check on behalf of Rose Hulman ECE



Rich Pfile Chair of the ECE IUPUI accepting scholarship



Dr. Reza Raeisi accepting scholarship on behalf of ISU ECT



Dr. Robert Herrick
Chair of Purdue ECET
accepting scholarship for Purdue ECET



Dr. Ilya Pollak (Chair - Signal Proc.) accepting scholarship for Purdue ECE



Karl Huehne Incoming Secretary CIS - IEEE

### **Central Indiana Engineering Consultants' Network (CIECN)**

Steering Committee: Earl Hill, Will Kassebaum, Duane Mattern, Richard Pfile, Brooks Reed, Ken Shafer

#### **Future Meetings**

Mar 1 to be determined

Apr 5 to be determined

May 2 Tentatively schedule as a "Wednesday" meeting, this will be an overview of Purdue's Office of Engagement and the Technical Assistance Program (TAP). Details to be announced. Check the CIS-IEEE or Indy-Engineer.net websites for details.

#### **Past Meeting**

Feb 1 Steve Oschman presented an introduction to and overview of Voice Over Internet Protocol, VoIP. Steve talked about the evolution of telephony, and about Asterisk® as an open source instance of VoIP for the Linux OS. Asterisk® is a complete IP PBX (private branch exchange) in software. Steve is instructing the VoIP workshop to be held March 14-6, 2007. He is also owner and founder of Oschman & Associates, LLC, a consulting business that provides practical business advice for small enterprises.



Jan 4 Elaine Cooney, Professor of Electrical and Computer Engineering Technology, gave a presentation, entitled, "RFID: Technology and Applications", to a packed house of 50+ people. She summarized the current state of RFID technologies, including tags, hardware, and software. She also described a variety of applications, including inventory control and logistics, asset management, security and payment systems.

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For immediate release

# **EMC By Your Design**A new Approach to Learning EMC Design Techniques

An EMC Practical Applications Seminar/Workshop with take-home computer programs

April 26, 27, 30 and May 1, 2007... Hilton Hotel, Northbrook, IL

D.L.S., an EMC and Product Safety Test Lab, is offering a four-day seminar/workshop that applies EMC design fundamentals to real-life situations. It teaches how to design your product to pass compliance testing, thereby eliminating costly last-minute changes. Donald L. Sweeney and Roger Swanberg, both with over 75 combined years of experience in the field of EMC, now bring these EMC design fundamentals to life through hands-on, practical application to real-life products. Participants will receive a free copy of the proprietary

computer program designed by the instructors to solve the most complex EMC issues. Participants may bring a product of their choice for a free 45-minute individual consultation, during which they will have the opportunity to apply the concepts they have just learned. If you cannot attend this class, the next "EMC By Your Design" class will be held in October 2007

To register email Carol Gorowski at cgorowski@dlsemc.com or call her at (847)537-6400. For more information visit the DLS website at: http://www.dlsemc.com/class301.htm .



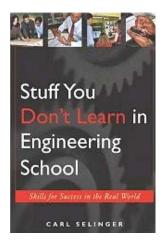
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#### **CIS-IEEE PACE PRESENTS**

# "Stuff You Don't Learn in Engineering School"

#### **Carl Selinger**

Saturday April 21 on the campus of IUPUI, room ET202





On Saturday April 21, CIS IEEE will be hosting Carl Selinger for a Professional Activities Committees for Engineers (PACE) event on Saturday April 21st. Carl originated a unique seminar - "Stuff you don't learn in engineering school" - to help engineers learn non-technical soft skills that are important to be more effective and happier in the "real world". These skills include decision-making, setting priorities, negotiating, teamwork, running meetings, and better writing and speaking. Carl has given this seminar to several thousand engineers during the past dozen years. He has also authored the book "Stuff You Don't Learn in Engineering School: Skills for Success in the Real World" (Wiley-IEEE Press, 2004). The planned seminar costs are \$95 for non-member, \$65 for member, \$55 for student non-members, and \$20 for IEEE student members. You can get the member price by joining the IEEE at http://www.ieee.org/join.

Carl Selinger is an independent consultant in aviation, transportation planning, and strategic business planning. During his 31-year career at The Port Authority of NY&NJ, Mr. Selinger rose to Manager of Aviation Business Development. He spent 27 years teaching at such respected institutions as The Cooper Union, SUNY Maritime, Pace University, NJIT, and City College of New York. Mr. Selinger is currently an active member of the Airports Council International, Business Information Technologies Committee, American Society of Civil Engineers, Institute of Transportation Engineers, American Society for Engineering Education, and the Women's Transportation Seminar, which honored him as its Greater NY Chapter's 1998 Member of the Year. For more background information, see his website at: http://www.carlselinger.com

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# IEEE/ASHRAE Joint Dinner Meeting Emerging Variable Frequency Drive VFD Technologies and Advancements in Addressing Harmonics Ron Ray, Ronald Ray & Associates, Inc

Date: Tuesday, February 13th, 2007

Place: Marten House – next to St. Vincent 's Hospital on 86th Street

Time: 5:30 p.m. Tech Session

6:30 p.m. Dinner

7:00 p.m. Meeting Program Theme: System Harmonics

Cost: \$20 per person, Includes dinner and the program. Students free. Cash Bar is available.

For reservations, please call Jan Dubbs whose phone number is 819-2083, or Email: jdubbs@bsalifestructures.com by Friday, February 9th. If you receive Jan's voice mail, please leave a message stating your name, company, the number of reservations required, and your phone number.



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March 26, 2007

## **Central INdiana Linux Users' Group (CINLUG)**

Glendale Branch, 6101 N Keystone Ave Indianapolis, Marion County Public Library

Central INdiana Linux Users' Group (CINLUG.org) meetings are held on the first Wednesday of each month at 6:30pm. They are FREE and OPEN to the public. Feb. 7, 2007 meeting was entitled Intermediate/Advanced Samba and was presented by Tom Lapp, Server Partners, LLC.

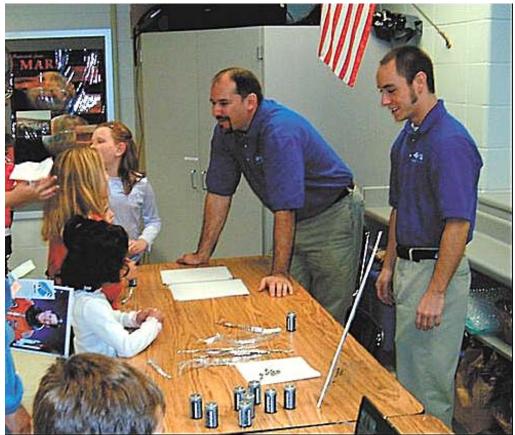
Annual membership dues are \$30 and payment of dues is encouraged to help with funding events and expenses. Just show up and find out more to see if you want to become a member. The February CINLUG meeting is the Annual meeting. Annual dues are collected and the board of directors is elected. Six of the current directors are running again. If you're interested in running for the vacant seat, please volunteer. Qualifications and responsibilities are listed in the CINLUG Bylaws.

The meeting will be held in the Glendale Branch of the Indianapolis Marion County Public Library, which is located on the second floor at the south end of the Glendale mall (6101 N Keystone Ave). Directions to the library are available on the CINLUG website at: http://www.cinlug.org/about/directions/Glendale.

# TISP Volunteers Celebrate Open House at Brownsburg Challenger Center

(submitted by Brad Snodgrass)

On Nov. 11, 2006, IEEE volunteers presented engineering activities to parents and students in support of the Open House at the Brownsburg Challenger Center. Volunteers challenged participants to build a simple flashlight, build and test a paper airplane, build and race rubber band powered spool cars, and build a "mission bag". Students successfully completing a "mission bag" earned a light-up IEEE Yo-yo. This prize proved a popular item and more than thirty "mission bags" were demonstrated. Thanks to CIS-IEEE members Dan Allison, Will Kassebaum, Jennifer Morrison, Blake Buescher, Bob Evanich, and Brad Snodgrass for donating their time. An article in the online version of the Hendricks County Flyer describes all of the Open House festivities. Visit http://www.flyergroup.com and search for "Challenger Center", and select the Nov. 15<sup>th</sup> date.



Pictured in the blue shirts are CIS-IEEE members, Bob Evanich (left) and IUPUI IEEE Student Member Blake Buescher (right), (Jerry Battiste/Flyer photo)

CIS has partnered with the Brownsburg Challenger Center to deliver engineering activities as a part of Teacher In-Service training at the Center. CIS has adapted a popular TISP Lesson Plan for a space theme, challenging students to build a "Mission Bag" from three sheets of plastic and a length of tape.

What is a TISP? The Teacher In-Service Program features IEEE volunteers developing and presenting technologically oriented subject matter to local pre-university educators in an in-service or professional development setting. TISP allows IEEE volunteers to share their technical expertise and to demonstrate the application of engineering concepts to support the teaching and learning of science, mathematics and technology disciplines.

To learn more about TISP, visit: http://www.ieee.org/web/education/preuniversity/tispt/index.html

## Voice over IP - Build a VoIP Telephone System!



IUPUI Campus, Downtown Indianapolis, IN March 14, 15, and 16, 2007



IUPUI and Telemagen, LLC have again made plans to present a VoIP workshop on the IUPUI campus in Indianapolis, IN on March 14,15, and 16th. The workshop will be a "boot camp" for Voice over IP and will allow the participant to setup and configure an actual working VoIP system. Participants will learn the jargon of VoIP, how it works, the benefits of the technology, and how to create a business plan to judge the value of a proposed VoIP project. Along with all of this, the participant will see their efforts come to life before their eyes! The workshop will be held in an engineering laboratory on the IUPUI campus and parking will be provided. Cost is \$1075 and group, academic, and governmental discounts are available. For more details, visit the Telemagen website at: http://www.telemagen.com/documents/VoIPWorkshopMarch07.pdf

**About the Instructor** - The facilitator for this short course is Steve Oschman, Managing Member of Telemagen, LLC, a telecom company dedicated to providing technology value to companies all sizes. Mr. Oschman has over 20 years in the Telecom and has specialized in the convergence of voice. He holds a Masters in Engineering from Purdue University and an MBA from Indiana University and was awarded Outstanding Associate Faculty at IUPUI in 2006.

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# Candidate Petition - Ralph W. Wyndrum Jr. FIEEE IEEE President-Elect, 2008

You are invited to sign the petition to qualify Ralph Wyndrum, Jr. FIEEE as a candidate for 2008 IEEE President-Elect

Info http://www.wyndrum.com/election/

Online Petition http://vision.ieee.org/pls/htmldb/f?p=130:1

Paper Petition http://www.wyndrum.com/election/Wyndrum\_IEEEPresElectPetition.pdf

The petition seeks to add Ralph W. Wyndrum Jr. to the 2007 IEEE annual election ballot for the position of IEEE President-Elect, for the term 2008. If elected, Dr. Wyndrum has agreed to serve. A petition can be signed online using your IEEE account and password. Also, a paper petition can be downloaded in PDF format. Once signed, the paper petition can be mailed to Ralph W. Wyndrum Jr., 35 Cooney Terrace, Fair Haven, NJ 07704-3001, USA.

#### **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/

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

IBEN Indiana Biomedical Entrepreneur Network indianabionetwork.org

IHIFIndiana Health Industry Forumihif.orgINDSPEIndiana Society of Professional Engineersindspe.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 http://www.saesections.org/indiana/ 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

#### **Central Indiana IEEE Related Web Links**

CIECN Central Indiana Engineering Consultants Network 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 ???

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### Survey - CIS-IEEE wants your FEEDBACK

(email suggestions to DMattern@SampledSystems.com)

The Jan. 4<sup>th</sup> RFID presentation by Elaine Cooney was well attended (50+). What other topics are of interest to you? What sorts of meetings would you attend? Overviews? Classes? Will you pay to hear a nationally know figure? Here is a short list of some of the topics that are being tossed around:

**Software**: web application issue - Java, WebSphere, Jboss/Tomcat, AJAX; database design & development - architecture, servers - MS SQL, Oracle, MySQL; the use of open source tools, like Scilab or revision control tools: CVS, Subversion; or Software Quality processes; adaptive filtering, UML, statecharts and the Quantum framework, or Labview.

**Hardware**: board design/layout issues, hardware design; programmable logic devices (PLD, FPGA)

Tours: Manufacturing, labs etc.

Legal: Intellectual Property and Patents;

Business: selecting a business entity, accounting, financing, taxes.

Put in your two cents and tell us what topics are of interest to you!

2007 Meeting Calendar						
Date	Host	Subject	Location			
Tues. Feb. 13	ASHRAE/IEEE	Emerging Variable Frequency Drive (VFD) Technologies and Advancements in Addressing Harmonics, Ron Ray	Martin House			
Feb. 17	CIS-IEEE	Engineers' Week Event at the Children's Museum	Children's Museum			
Feb. 18 - 25	all	National Engineers Week				
Feb. 19	ScienTech	Tour of the Indiana Medical Museum	museum			
Feb. 21st	NSI	Automate Your Small Business Finances	Indianapolis			
Feb. 26	ScienTech	Helicopter Engines and Navy Missiles A review of the Rolls Royce helicopter engine product line	Children's Museum			
March 6	PES/IAS	Power Short course - Circuit Analysis, Per Unit System, and Transformers (Fred Brockhurst)	IPL			
March 13	PES/IAS	Power Short course - Power Flow (Clifford Grigg)	IPL			
March 13	ASHRAE	Panel Discussion - The Perfect Construction Bid Package	Dinner Meeting Marten House			
Mar 14, 15, 16	IUPUI & Telemagen	Voice over IP - Build a VoIP Telephone System	IUPUI			
March 20	PES/IAS	Power Short course - Fault Analysis (Clifford Grigg)	IPL			
March 27	PES/IAS	Power Short course - Protection (Niusha Rostamkolai)	IPL			
Mar 27, 28	IEDC	Small Business Innovation Research Workshop	Indianapolis			
April 3	PES/IAS	Power Short course - Stability (Niusha Rostamkolai)	IPL .			
Tues April 10	ASHRAE	Purdue - Tour of Nanotechnology Facility	Purdue			
Wed. April 18	ASHRAE	Free Web cast - Indoor Environmental Design: Practical Solutions to Everyday Problems	online			
Sat. April 21	CIS-IEEE	PACE: Stuff You Don't Learn in Engineering School	tbd			
Apr 26, 27, 30 May 1	DLS	EMC By Your Design	Northbrook, IL			
Tues. May 8	ASHRAE	Progress of Lucas Oil Stadium / New Airport	to be determined			
June 2-3	ASMS	Mass Spectrometry Short Courses	Indianapolis, IN			
June 3 - 7	ASMS	55th ASMS Conference on Mass Spectrometry	Indianapolis, IN			
Check the Section web page for current information.						

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