

THE REPORTER

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



ENGINEERS WEEK® 2006
February 19-25

National Engineers Children's Day Saturday, February 18th, 2006 The Children's Museum of Indianapolis

The IEEE Central Indiana Section would like to invite you and your family to join us at [The Children's Museum of Indianapolis](http://www.cis-ieee.org) on Saturday, February 18th from 10:00 am - 4:00 pm., as we kick off **National Engineers Week**. Children will get the chance to meet and talk with engineers and explore the many opportunities that engineering offers. Several hands on activities will give children the chance to think and act like an engineer. Visitors to the museum will be given a "schematic" upon entering the museum. After successfully visiting all of our engineering stations and turning in their schematics, the visitors will be eligible for prizes to be given away through a drawing at 3:00 pm. For details see <http://www.cis-ieee.org/>

The 11th Annual Bridge Design Competition is Sunday, February 26, 2006 on the [IUPUI Campus](http://www.iupui.edu). The contestants are 6th, 7th, and 8th graders. IUPUI, American Society of Civil Engineers, the Indiana section of the American Council of Engineering Companies, and the National Society of Professional Engineers are sponsors of the contest.



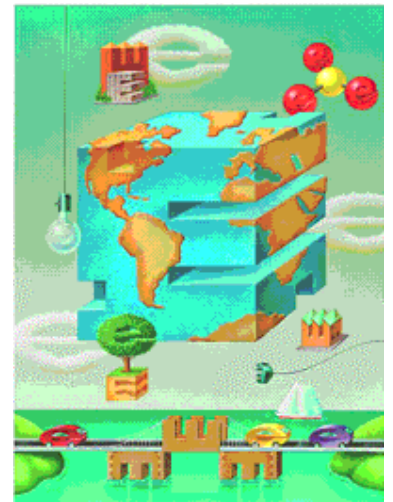
For time and location, see <http://bridge.engr.iupui.edu>

Art Auction

**Proceeds to Benefit Louisiana National Engineers Week
Future City Competition Schools Affected by Hurricane Katrina**

Original Painting Created by Theo Rudnak

Natural disasters in 2005 affected hundreds of thousands of lives. Global relief efforts and local heroism aid reconstruction projects large and small. In January 2005, Engineers Week spotlighted the role of engineers in tsunami relief work. This year, Engineers Week is narrowing its focus to a group of dedicated teachers, engineers, and middle school students. All proceeds from this auction will go to the middle schools competing in the 2005/2006 National Engineers Week Future City Competition – Louisiana region. See <http://www.eweek.org/> for details.



Upcoming Events

- | | |
|--------------|--|
| Wed. Feb. 15 | PES-IAS Seminar, Bill Williams of IEEE-USA, Energy Policy Bill of 2005 |
| Sat. Feb. 18 | National Engineers Week Event at Indianapolis Children's Museum |
| Sun. Feb. 26 | 11th Annual Bridge Design Competition at IUPUI |
| Thur. Mar. 2 | CIECN, Paul Bhe, Fidelity Investment, Retirement Plans for Consultants & Small Biz |
| Tues. Mar. 6 | IEEE PES-IAS, Start of the Spring Course, Smart Control, Relays and Meters |
| Thur. Apr. 6 | CIECN, Ron Reiss, Techpoint, Membership in Techpoint |

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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 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 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.

The Chairs' Corner

Friday, February 10, 2006
John A. Kassebaum, Chair



Dear CIS-IEEE Colleagues:

As I begin writing my first *Chair's Corner* of my term, I am reminded of how I began my journey and service to IEEE. It began with my attendance at an IEEE sponsored event: a presentation by Dr. Gary Blank of the Rockford Illinois Section to the Central Indiana Section on consulting. The event was particularly well attended and in addition to the great instruction, I met and formed relationships with a number of my engineering peers. We realized at that time that there was a vacuum in our Section of support for consultants, but there was also quite a lot of interest and activity going on. As a result, several of the attendees resolved to form an affinity group to create that missing support for ourselves. That group became the Central Indiana Engineering Consultants' Network. My involvement in creating that group and the resulting interaction with the Section's Executive Committee, led me to become involved in the Section itself, serving last year as the Section's Vice-Chair and now as its Chair. I want to emphasize to all of you that my service to you has been extremely well compensated by the opportunity to meet both peers and prospective clients whom I would never have otherwise had the opportunity to interact with. I highly recommend the same course of action to every one of you who wish to advance your careers – begin by public service to your community and profession.

Our profession and the IEEE are in the midst of major changes in focus and direction. The increasing penetration of high technology into all of our lives and into all productive areas of our industries is changing and broadening the scope of the profession as well as the client base for the IEEE. Although Electrical and Electronics Engineering has been the basis of our society, that has broadened to almost every area of information management and to peripheral fields which use the electronics and information processing capabilities developed and standardized under the IEEE banner. Even now, the Electrical and/or Computer Engineer is only one part of the spectrum of our membership. While it gives me great pride to see the success of our endeavors bearing such fruit, it also represents a significant challenge to the IEEE to serve broadened interests. Although the IEEE is the largest professional organization of its type in the world, we still only serve a tiny fraction of our total constituency and our membership is not increasing except overseas. Our challenge is to serve you and your colleagues in such a way that membership in the IEEE has real perceived value to all. As the chair of your local geographical unit, I hope to do this by creating more opportunities for your involvement in the local community. This includes technically oriented presentations, opportunities for networking, and opportunities to volunteer your special skills in community service. If you take advantage of these opportunities, you will see real dividends in the advancement of your individual careers.

This year we are planning new initiatives to advance this vision. Some examples of these initiatives include:

- We have organized a monthly *IEEE Invited Seminar Series* that will draw from our local technical society chapters and from local technical interests. Anyone is welcome to propose a speaker and topic for this series and those proposals will be vetted and supported by a Steering Committee organized for this purpose.
- We have joined Techpoint in order to further connect with the local technology-dependant marketplace and to improve our community service by adding technical talks to the Techpoint calendar. We are considering joint activities with other groups for the same reasons (IQAA, Indy Chamber, ISA, NDIA). If there are other technology or business-focused groups in our locality that we may be unaware of, please have their leadership contact us and we will explore joint activities.
- Engineers' Week is being supported with a special program at the Children's Museum on Saturday February 18th.
- The Intel International Science and Engineering Fair (ISEF), hosted in Indianapolis this year, is being widely advertised and championed by the Section.
- We hope to help FIRST robotics (For Inspiration and Recognition of Science and Technology) teams by connecting skilled engineers with teams who need technical advisors and help them find new funding sources for the transition from NASA funding that begins in a team's 3rd year.

The Chairs' Corner, (continued)

- Through the IEEE Foundation, we will be hosting a conference in Indianapolis later in the year to train IEEE members to support teachers in conveying science and technology concepts to pre-college students.
- We will begin to plan increased support of our scholarship programs, competitions and awards, and other community initiatives with fund raising.

Finally, I would like to issue a call to all of our membership to become actively involved in the section. Please bring your own vision and interests to the group and let us help you accomplish them. Through public service activities – whether by offering technical talks, providing advice to FIRST, or by networking and participation in our various subgroups and affiliates, you will be able to distinguish yourself in the marketplace and provide real and lasting value to your community. Let us help you do that!

When I began my service to the IEEE, I had no idea where it would lead. What I've learned is that the more I serve, the greater my opportunity becomes to make a difference for our profession and community. Every day, I look forward to this opportunity. It's why I am in business, it's why I am an Engineer, and it's why I will continue to serve you via the IEEE. I hope that I will be even half as good a leader as all of you deserve, and I look forward to hearing your feedback and receiving your help as we go forward.

John A. Kassebaum, P.E.

Chair and Senior Member, Central Indiana Section of the IEEE

* * *

Good Luck Shelly!



Shelly Born, currently one of The Reporter's editors, will be leaving our Section to pursue other opportunities in Phoenix, Arizona. Shelly first became active with our section in 1994 as the CIS-IEEE PACE Chair. Besides being active with our Section, Shelly was very active with IEEE USA as follows. At the 1995 PACE conference, Shelly participated on the Ad Hoc Committee on Young Professional Participation; this was the start of the affinity group, Graduates Of the Last Decade, GOLD. After the group was started, she started a GOLD affinity group with our section and was chair of it. She was also the GOLD representative for Region 4. In 1996, Shelly participated at the IEEE-USA Communications Summit. Shelly was on the PACE Planning Committee as the GOLD Subcommittee Chairperson. She was the Chairperson for the Mentor/Protégé Session. From 1998-2000, she was a member of the Career Maintenance & Development Committee and was the Session Chairperson for the 10th Biennial Careers Conference. In 2000, Shelly was elected to the IEEE-USA Board of Directors as 2001-2002 Member-at-Large. Although we'll miss Shelly, we wish her and her family the best of luck!

* * *



2006 Intel International Science and Engineering Fair, May 7-13, 2006

The [Intel International Science and Engineering Fair](#) is coming to Indianapolis. CIS-IEEE member Brad Snodgrass will serve as the Lead Judge and CIS-IEEE will provide additional judges for the IEEE Presidents' Scholarship presentation. The judging process will require 15-20 volunteer judges from CIS who can commit up to two days to the competition. Anyone interested in judging should contact Brad by email at bsnodgrass@prodigy.net.

PES-IAS Spring Course
Smart Control, Relays and Meters
 Indianapolis Power & Light's office on Morris St.
 Tuesdays in March at 6:30pm

The PES-IAS is pleased to announce its Spring 2006 Short Course on Smart Control, Relays and Meters. The electric utility industry currently undergoing a significant change in how it controls and monitors its equipment, based on new technologies developed in the computer field. In the past, electric utilities controlled and monitored much of their equipment and their systems based on older style electromechanical equipment that involved springs and other moving parts that responded to changes in the electric system. However, the industry now has access to microprocessor-based equipment that provides significant advantages over the older electromechanical equipment, such as the following:

- Microprocessor based equipment uses computer chips to monitor electrical performance and has no moving parts. This significantly reduces maintenance costs, while improving reliability.
- Microprocessor based equipment is driven by software; therefore, significantly more functionality can be added to a microprocessor based unit than could be employed with electromechanical equipment. This added functionality can include self-checking and diagnosis, under which the microprocessor based equipment, tells the operator when it is degraded or failed.
- Microprocessor based equipment also includes memory features that allow the user to refine equipment settings plus provide assistance in performing root cause analyses of events.

The prices of microprocessor-based equipment are continuing to come down as the market expanded. Nearly all electric utilities install microprocessor-based equipment exclusively for new equipment and many have programs to retrofit older equipment. The Spring 2006 Short Course will discuss the applications of microprocessor-based equipment to the electric utility gear. The following areas are proposed as topics for the short course. Once finalized, the syllabus will be published on the [CIS-IEEE](http://www.cis-ieee.org) website.

- Smart Relays for Distribution & Transmission Breakers;
- Stability & Control of Power Flow in Transmission Systems
- VAR (Reactive Power) Controls for Distribution and Transmission.
- Microprocessor Controls for Regulators, Reclosers & Revenue Meters.

The short course will be held at the Safety Room at Indianapolis Power & Light, off Morris Street from 6:30PM to 8:30PM on the following Tuesdays: Mar. 7, 14, 21, 28. The fees for the presentation will be \$25 for PES-IAS members, \$30 for CIS-IEEE, \$35 for all others. Students will be charged \$6. Please visit the CIS-IEEE website at <http://www.cis-ieee.org> for the final syllabus, more information, and to register if you plan to attend. This short course promises to be interesting and of value to anyone in the electric utility industry.

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CIS-IEEE and PES-IAS Seminar
Energy Policy Bill of 2005
Bill Williams of IEEE-USA
Indianapolis Power & Light's office on Morris St.
February 15th , 6pm

The last three years have seen significant events in the energy industry. In 2003, a large portion of the Northeastern United States experienced a major blackout. In 2004 and 2005, the price of oil and gasoline skyrocketed due to world demand increases and the effects of Gulf Coast hurricanes. Partially in response to these events, Congress passed and President Bush signed into Law the Energy Bill of 2005. This bill radically overhauled the US electric utility industry and its regulation. Portions deal with almost every aspect of the generation and transmission of power, and how the federal government will regulate the industry. This is the first significant modification in US energy policy in 13 years. The Act has hundreds of provisions - the complete text consists of over 1700 pages. Major items of interest to Indiana residents include:

- Provides a tax credit of up to \$3,400 for owners of hybrid vehicles;
- Authorizes loan guarantees for "innovative technologies" that avoid greenhouse gases, which might include advanced nuclear reactor designs (such as PBMR) as well as clean coal and renewable energy;
- Increases the amount of biofuel (usually ethanol) that must be mixed with gasoline sold in the United States to triple the current requirement (7.5 billion gallons by 2012);
- Seeks to increase coal as an energy source while also reducing air pollution, through authorizing \$200 million annually for clean coal initiatives, repealing the current 160-acre cap on coal leases, allowing the advanced payment of royalties from coal mines and requiring an assessment of coal resources on federal lands that are not national parks;
- Extends Daylight Saving Time by approximately four weeks (see below);
- Requires that no drilling for gas or oil may be done in or underneath the Great Lakes;
- Sets federal reliability standards regulating the electrical grid (done in response to the Blackout of 2003);

The IEEE, through its lobbying arm IEEE-USA, was a contributor to the bill. One key provision recommended by the IEEE is the adopting of IEEE Standard 1547 "Standard for Interconnecting Distributed Resources with Electric Power Systems", as the national technical standard for interconnecting distributed energy resources to the electric power grid. IEEE 1547 will facilitate the development of distributed energy generation technologies such as fuel cells, photovoltaics and wind turbines. The standard's criteria and resources also address product quality, interoperability, design, engineering, installation and certification.

The IEEE also recommended legislation to empower the Federal Energy Regulatory Commission (FERC) to create an Electric Reliability Organization (ERO) to establish and enforce mandatory reliability standards of the North American electric system, including elements in Canada and Mexico.

While parts of the Bill have been publicized, a comprehensive overview is hard to obtain without payment. Therefore, the PES/IAS and the CIS-IEEE are pleased to provide a seminar on the Bill to be conducted by Mr. Bill Williams of the IEEE-USA. Bill serves as Legislative Representative for Technology Policy Activities. Bill works with IEEE-USA's Aerospace Policy, Energy Policy, Intellectual Property, and R&D Policy Committees. He joined IEEE-USA after four years of Hill experience as a legislative assistant to Reps. Charles Norwood (R-GA) and Jim Ryun (R-KS), where he specialized in energy and environmental issues. A Navy vet, Bill is a graduate of the Naval Nuclear Power School and served as a Nuclear Power Technician (1981-1987) in the surface fleet before accepting a position with GTB Electric in San Diego. He went back to school for a bachelors degree in political science from San Diego State so that he could pursue his interest in public policy.

The seminar will be held at the Safety Room at Indianapolis Power & Light, off Morris Street on February 15th at 6PM. The presentation is free to all CIS-IEEE members and their guests. Please visit the CIS-IEEE website at <http://www.cis-ieee.org/> for more information, or to register if you plan to attend. This seminar promises to be interesting and of value to anyone in the energy industry.

Past Meetings
CIS-IEEE PES/IAS Autumn 2005 Short Course
Alternative Energy

The PES/IAS presented its annual autumn short course on Alternative Energy. The course was conducted at Indianapolis Power and Light's Morris Street location, from October 18th to November 8th, 2005. The four sessions covered the following topics:

- Nuclear Fusion and Fission – Dr. Rusi Taleyarkhan, Purdue University
- Fuel Cells – Dr. K. S. Rajashekara, Delphi Corporation
- The Future of Coal – Dr. Tom Sparrow, Purdue University
- Indiana Energy Policy – Vince Griffin, Indiana Chamber of Commerce

Nuclear Fusion and Fission

The first presentation covered two areas: nuclear fission and nuclear fusion. Dr. Taleyarkhan discussed the history, types of reactors, extraction, enrichment, and nuclear waste disposal and the future of nuclear fusion and fission, including provisions in the Energy Bill of 2005 related to fission. Dr. Taleyarkhan also discussed advanced designs for fission reactors that might be applied in the future. The second part of the talk covered nuclear fusion. Dr. Taleyarkhan is part of a team that uses acoustic inertial confinement approach to fusion.

Fuel Cells

The second seminar in the series discussed fuel cell applications and was presented by Dr. Kaushik Rahashekara, of Delphi Corporation's Research and Development Center. Dr. Rahashekara covered the history, types, and applications of fuel cells. Dr. Rahashekara explained in some detail the operation mechanism for several types of fuel cells, including a discussion of the associated costs. He then discussed the automotive application of fuel cells, including the Department of Energy's FreedomCar, which is co-sponsored by the big three auto companies and several energy companies.

The Future of Coal

The third seminar in the series dealt with the future of coal in Indiana, with particular emphasis on Integrated Gasification Combined Cycle (IGCC) plants. The speaker was Dr. FT. Sparrow, the director of the Center for Coal Technology Research (CCTR) of Purdue University. Dr. Sparrow group's charter is to "develop technologies that can use Indiana coal in an environmentally and economically sound manner". Dr. Sparrow also discussed the development of technology to convert Illinois Basin Coal (of which Indiana is a part) into Fischer-Tropsch (FT) and other transportation fuels. The 2005 Energy Policy Act includes an amendment providing funds to Purdue, Southern Illinois University, and the University of Kentucky, to conduct research in this area. Dr. Sparrow summarized the presentation by restating the value in promoting the use of Indiana coal in new clean coal applications. Clean coal can provide increased economical development and result in a cleaner environment.

Indiana Energy / Environment Policy

The final presentation covered Energy and Environment, and, to some extent, provided an overview of the entire seminar. Mr. Vince Griffin of the Indiana Chamber of Commerce made the presentation. Mr. Griffin began with a discussion of environmentally related legislation in the General Assembly, and the Chamber's efforts to influence legislation. In 2005, the Legislature covered a wide variety of environmental topics, including: underground storage tanks, Brownfield development, wetlands, clean water Indiana, combined sewage outflows (CSO)/NPDES variances, VX nerve gas disposal by the military, ethanol, and coal gasification. In 2006, the legislature will become more involved in several other environment-related issues, such as: "no more stringent than" (US government regulations); waste tire fee; wetlands; and mercury switch recycling (from cars). Mr. Griffin concluded his presentation with a discussion of how each of us can contact our legislatures to advocate causes of interest, such as those covered in this presentation. Democracy depends on a well-informed and active citizenry.

IEEE-USA's Policy Position on H-1B Visas

Friday, February 10, 2006

John A. Kassebaum, Chair

Last year, there was a call from the IEEE-USA public policy advocacy group for help from the local membership to communicate to our legislative representatives your personal positions and (if you agree with it) the IEEE-USA's position on the H-1B visa situation. That call for participation in our political process caused some consternation in our section because of the diverse views and experiences of our membership. I saw the feedback on this issue as a great opportunity. It is one of our primary duties as good citizens to make our carefully considered opinions known to our legislators – regardless of whether those opinions agree with the position of the IEEE-USA or not. This article is intended to accomplish several things: 1) Describe how the IEEE-USA can and will help you communicate your position on any issue to your legislators; 2) Help you become aware of the IEEE-USA's public policy role and how you can participate; and 3) Communicate to you the IEEE-USA's position on the H-1B issue.

The IEEE-USA is an organization based in the United States that focuses on domestic issues and member benefits. It has its own president and it is NOT the same as the IEEE itself, which is an international body. You are a part of the IEEE-USA if you are a member of the IEEE residing in the United States. One role of the IEEE-USA is to help Congress formulate public policy by advising them on matters of technology, competitiveness, and standardization. You can access the IEEE-USA's public policy advocacy information at <http://www.ieeeusa.org/policy/>. You should also be aware of the CARE (Congressional Advocacy Recruitment Effort) network <http://www.ieeeusa.org/policy/care/default.asp>. CARE actively helps IEEE members who are citizens of the United States provide feedback to their legislators. If you are planning (or willing) to visit Washington D.C., and would be interested in speaking your representatives in congress, I urge you to contact Russ Harrison or the other staff in the IEEE-USA Legislative Action Center. Russ Harrison may be contacted at r.t.harrison@ieee.org or (202) 785-0017. To see what the current issues are at the Legislative Action Center, you should visit this site <https://www.capitolconnect.com/ieee/takeaction.asp>.



A few weeks ago, I had the privilege of meeting with IEEE and IEEE-USA leadership at a Region-4 IEEE meeting in Chicago. At that time, I heard the 2006 IEEE-USA President – Ralph W. Wyndrum, Jr. (pictured on the left) – speak about a number of issues including IEEE-USA's position on the H-1B visa issue. I should also draw your attention to the Legislative Action Center's description on the issue at <https://www.capitolconnect.com/ieee/summary.asp?subject=13&flow=2>. I intend here to describe the IEEE-USA's position, as I understand it.

First, the H-1B visa is a mechanism used by businesses to obtain labor services for various jobs from pools of foreign applicants. Visas are required to enter the United States and to work while here. The ordinary form of immigration is via another form of visa that results in a work permit called a "Green Card". The Green Card form of immigration allows foreign individuals to work in the United States and, if they wish, to eventually become naturalized citizens. The H-1B program is not intended to foster immigration, and is primarily intended for temporary work. Unfortunately, there are big differences in the way these two forms of immigration work. The green card and related immigration visa is 'owned' by the person who holds them, but the H-1B visa is 'owned' and controlled by a corporation who employs the individual. The government also taxes the H-1B visas heavily. The result is that corporations may abuse both the system and the professionals using the visas for their own gain. In doing so, the corporations obtain inexpensive labor from outside the U.S. Labor Market. Obtaining low-cost labor is, of course, both legal and moral, but there is a problem. The problem is that workers utilizing the H-1B do not have the right to change jobs or to negotiate their salaries because they only have the right to stay and work at the pleasure of their current employer. The employer can revoke the H-1B for any reason and at any time. Thus, the H-1B worker is essentially an indentured servant. The result of this imbalance of power speaks for itself: the compensation rates received by H-1B recipients is something like 30% below the rates received by citizens and green card holders elsewhere in the industry.

IEEE-USA's Policy Position on H-1B Visas, (continued)

The strong financial incentives benefiting corporations utilizing H-1B visas results in massive efforts by corporations to utilize this labor pool. These efforts undermine both the original intent and the value of the H-1B system. In addition, it damages the competitiveness of the local labor market for these skills by dumping large amounts of under-valued labor into the labor market. Finally, the ones who suffer most are the recipients of the H-1B's who are not allowed to compete fairly in the marketplace and who, as a result, command much lower wages than they are due. The IEEE-USA's position is that H-1B's should be eliminated and replaced one-for-one with green-card style work-visas. The result would eliminate the state of indentured servitude suffered by the H-1B workers and would allow all of us in the labor market to compete on an equal footing.

If you have feedback on this essay, please feel free to discuss it with me, but the most important action you can take is to make your opinion known to the IEEE-USA Legislative Action Center. Most importantly, please take every opportunity you can to communicate with your legislators; the IEEE-USA stands ready to help you do that.

John A. Kassebaum, P.E.
Chair and Senior Member, Central Indiana Section of the IEEE

* * *

past meeting

IEEE Invited Seminar Series

In conjunction with the IUPUI School of Informatics Spring Semester Course
I590 Discovery Informatics in Biomedical Sciences

Dr. Ernst Dow

Sr. Information Consultant
Eli Lilly and Company

From Microarrays to Candidate Biomarkers

Dr. Ernst Dow is a Principle Research Scientist in Bioinformatics. After receiving his B.S. in Chemistry with a Computer Science option from the University of Pittsburgh in 1988, Dr. Dow joined Eli Lilly and Company focusing on computational chemistry. Following an AI Fellowship with Digital Equipment Corporation in neural networks he worked on QSAR and then took an educational leave, obtaining his Ph.D. from the University of Illinois at Urbana- Champaign in Biophysics and Computational Biology under Dr. Thomas Anastasio in 1999. He has been in Bioinformatics leading the effort to gain insight into biology from microarray and other high information content studies. Meeting was hosted by: Prof. Jake Chen, Indiana University School of Informatics, Phone: (317) 278-7604, Email: jakechen@iupui.edu,

Central Indiana Engineering Consultants' Network (CIECN)

Co- Chairmen: John Kassebaum and William Kassebaum

CIECN Future Meeting Topics

Thursday March 2nd 2006.

Paul Bhe
Certified Financial Planner
Fidelity Personal Investments

Paul Bhe will be talking to CIECN about retirement plans for small businesses and consultants. Solo-401(k), SEP IRA's, and Keogh plans will be discussed. The meeting will be held at 6:45pm. Location to be announced on the CIECN website at: <http://www.indy-engineer.net>

Paul Bhe is a regional consultant for Fidelity Investments. Providing onsite financial education on behalf of Fidelity Investor Centers throughout Indiana, Mr.Bhe helps investors understand their income and investment needs and strategies to address them. He joined Fidelity in 1993 and has 13 years of experience in the financial services industry. Mr. Bhe graduated from The University of Cincinnati with a degree in Economic. He has successfully completed the Series 6,63,7 and 65 examinations and holds Indiana insurance licenses.

Thursday April 6th 2006.

Ron Reiss
Director of Member Services
Techpoint

On February 1, 2006, CIS-IEEE joined Techpoint as a nonprofit organization. Techpoint has a lot in common with CIS-IEEE: business networking, economic development, and educational and professional development programs. CIS-IEEE joins Techpoint to further IEEE's efforts these area. Techpoint has a number of peer groups that will be of interest to IEEE members: marketing, IT professionals, open source software, CFO, sales, philanthropy, human resources, and contract administrators.

For details on the meeting time and location see the CIECN website at <http://www.indy-engineer.net>.

Ron Reiss will be talking to CIECN members about Techpoint, who Techpoint is; what Techpoint does; and the benefits of membership in Techpoint. The meeting will begin at 6:45pm. The meeting location will be announced on the CIECN and CIS-IEEE websites.

CIECN Past Meetings

Thursday Feb 2nd

John Layden, President and CEO of Time Compression Strategies
The Future of Manufacturing in North America

John Layden's view of manufacturing is distinctly optimistic. His analysis shows that manufacturing is actually doing very well, but improved business performance will require the ability to be able to quickly adapt to produce a distinct advantage. During his presentation he gave specific examples and talked about the perils of "lean manufacturing". John's company, Time Compression Strategies is a management-consulting firm focused on helping executives to both formulate and implement strategies that emphasize the intersection of customer responsiveness and high velocity operations



Pre-meeting dinner at TGI Fridays



John Layden's Presentation

Press Release

Proprietary Computer Programs to Solve the Most Complex EMC Issues

As part of the curriculum in Donald Sweeney and Roger Swanberg's EMC Practical Applications Seminar/Workshop students will use, and then take home, a copy of the computer program designed by the instructors. It addresses design considerations from component level, through circuit boards, to enclosure level. The seminar/workshop is presented in a practical, hands-on style providing the step-by-step design process to avoid EMC problems. Attendees can then put their acquired knowledge to immediate use in an optional free 45-minute design evaluation of their own product. To register call Carol at 847-537-6400 or email her at cgorowski@dlsemc.com. For more information see <http://www.dlsemc.com/>.



EMC Practical Applications
Seminar/Workshop
April 27-28 and May 1-2, 2006
Hilton Hotel, Northbrook, IL

Submitted by Marilyn Sweeney
D.L.S. Electronic Systems, Inc.
1250 Peterson Drive
Wheeling, IL 60090 847-537-6400

* * *

Job Notice

Electrical and Computer Engineering Technology Part-time Instructors at IUPUI

The Electrical and Computer Engineering Technology department has openings for part-time instructors this fall semester teaching digital electronics and circuits. Courses in other disciplines including programming, microprocessors, industrial controls, and computer networking may also become available in the future. Candidates should have a B.S. degree in related technology or engineering discipline (an M.S. is preferred), good communications skills, a strong interest in teaching, a willingness to make the necessary time commitment, and at least three years of industrial experience. If you have questions regarding this opportunity please email Prof. Rich Pfile (rpfile@iupui.edu) for additional information. Submit your resume to:

Richard Pfile, Chair
Electrical & Computer Engineering Technology Department
ET 209
799 West Michigan Street
Indianapolis, IN 46202

IUPUI is an Equal Opportunity/Affirmative Action educator and employer and affords reasonable accommodations to persons with disabilities.

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
IHIF	Indiana Health Industry Forum	ihif.org
INDSPE	Indiana Society of Professional Engineers	indspe.org
INDYASHRAE	American Society of Heating 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/
Sciencetech	Sciencetech Club in Indianapolis,	scientechclub.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 Section	Rose Hulman Institute of Technology Purdue University, West Lafayette Indiana University/Purdue University at Indianapolis	http://www.rose-hulman.edu/Users/groups/IEEE/ purdueieee.org iupuieee.org

2006 Meeting Calendar

Date	Host	Subject	Location
Feb. 15 Wed	IEEE PES/IAS	Bill Williams, IEEE-USA, Energy Bill of 2005	IPL, Safety Room 6pm - 8:30pm
Feb. 18 Sat.	CIS-IEEE	National Engineers Week event at the Indianapolis Children's Museum	Children's Museum 10am - 4pm
Feb 26 Sun.	IUPUI	11th Annual Bridge Design Contest	IUPUI
Mar 22-24	WHMA	Wiring Harness Manufacturers Association WHMA 2006 Annual Conference	Hilton Indianapolis North
April 21-22	INDSPE	Fundamentals of Engineering and Principles and Practices Examinations	
April 24-29		Fire Engineering - Fire Dept. Instructors Conference	500 Ballroom Indiana Convention Center
May 7-13	Intel	Intel International Science and Engineering Fair	Indianapolis, IN
May 12-14	IEEE	IEEE Swarm Intelligence Symposium 2006	Hilton Indianapolis Hotel
June 14-15	ITEC	Information and Technology Exhibit and Conference	Indianapolis Conference Center
Aug 20	IEEE	Annual CIS-IEEE Victory Field Baseball Outing	Indianapolis, IN
Sept 19-21	PCISHOW.com	Powder Coating 2006	Convention Ctr
Oct 12-13	IQAA	Indianapolis Quality Assurance Association Quality Enrichment Conference	Indianapolis, IN
Nov 16	Ball State	Vision 2006 Tech Summit	Muncie, IN

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

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