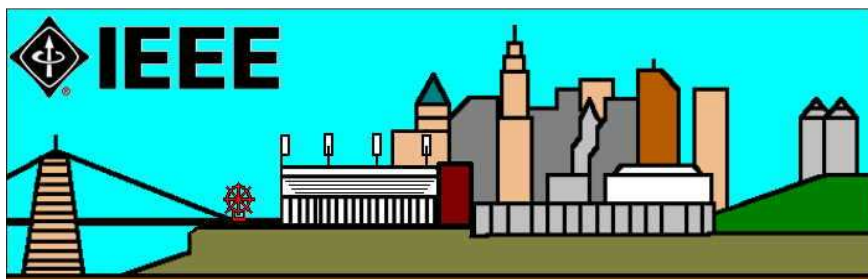


**IEEE CINCINNATI
SECTION
NEWSLETTER
JANUARY 2007**



JANUARY MEETING

Systematic Innovation for Breakthrough Solutions

- DATE:** Thursday, January 25, 2007
- PLACE :** Raffel's – 10160 Reading Road (see below for directions)
- TIME :** 5:30 p.m. to 7:00 p.m. - Social Time/Dinner
7:00 p.m. to 8:30 p.m. - Program
- COST FOR DINNER:** \$10.00 per person (with advanced reservation - see below)
\$15.00 per person (at the door)

NOTE: DINNERS ARE ALWAYS OPTIONAL - YOU MAY ATTEND THE PROGRAM ONLY.

MENU SELECTIONS: Baked Cod with Crab Topping, Hot Sliced Roast Beef in Gravy, Roasted Pork Loin with Dressing, Rice Pilaf, Red Skinned Mashed Potatoes, Vegetable Medley, Tossed Salad, Dinner Rolls and Butter, Assorted Cakes, Coffee, Tea, Iced Tea, Soft Drinks. There is also a bar available for the purchase of alcoholic drinks.

LOCATION: Raffel's is located at 10160 Reading Road, south of Glendale-Milford Road on the east side of Reading. Take I-75 to the Glendale-Milford Rd. Exit, go east on Glendale-Milford Road approximately 3/4 of a mile to Reading Rd. and turn right on Reading.

RESERVATIONS: Please call the Cincinnati Section Voice Mailbox at **513-629-9380**, by **Noon, Tuesday, January 23, 2007** if you plan to attend. Please leave your Name, IEEE Member Number, and a daytime telephone number. You can also make a reservation by e-mailing our Arrangements Chair, Ron Harbaugh, at ron.harbaugh@ieee.org.

PE CREDITS: Depending on the subject matter, attendance at IEEE Cincinnati Section Meetings now qualifies the attendee for Professional Development Hours towards renewal of Professional Engineers Licenses. Required documentation will be available following the meeting! The Section Meetings also provide a great opportunity to network with fellow engineers in the area.

ABOUT THE MEETING: This month's presentation, by Sandy Ping and Tom Hortel of VentureForward, is about a systematic approach to innovation: tools and methods that you can use. A complete methodology for defining core needs that focus project teams on tangible solutions that create new intellectual capital.

ABOUT THE SPEAKERS: Sandy Ping and Tom Hortel were key inventors at Proctor & Gamble where they helped develop such product breakthroughs and market changing innovations as Swiffer, Dryel, and Cascade Action Pacs. After taking early retirement in 2001, they formed VentureForward LLC, an innovation firm with a creative flair for thinking outside the box to solve impossible problems and deliver breakthrough solutions to business and technical problems. Tom is also Vice President of the Inventor's Council of Cincinnati.

Please visit these sites: <http://www.wow2now.com> and <http://www.inventcinci.org>

CHAIR'S MESSAGE

by Brian Resnick, Section Chair

In the past two years, I have heard many of my engineering friends say, "My Company is very interested in product development, but we cannot come up with a good idea". Innovation is the key, and our January Section meeting speakers, Sandy Ping and Tom Hortel, will present their "magical" system of systematic innovation. Come. Learn. Prosper.

We owe a big "thank you" to Russ McMahon for his excellent talk on the History of Computing at the University of Cincinnati. The slides and stories were great. I really enjoyed it, and it was wonderful to have many of the history makers in attendance!

The election results are in; landslide victories for all. Please thank the out-going officers (Jim Everly and Steve Olenick) for their hard work and dedication. Also, please welcome the 2007 Section Officers:

Chair	Brian Resnick
Vice Chair	Randy Restle
Secretary	Ron Harbaugh
Treasurer	Laurie Tappel
Member-At-Large	Marc Bell

We, the Executive Committee, meet periodically to plan programs for the year and operate the Section. We need your help. Besides suggestions for programs and tours, which we are always interested in, we need your time. The Section could undertake many activities if we had more volunteers. If you have some time, please let me know. Write to Brian.Resnick@ieee.org.

As always, we are interested in elevating members to Senior Member status. If you have been an engineer for ten years, please consider becoming a Senior Member. It almost painless, it does not increase your dues, you receive a nice plaque, and it helps the Section. Contact me if you are interested.

Thank you for your support. See you on January 25.

IEEE Honors 2007 Class of Fellows

The IEEE recently announced its class of 2007 Fellows, which consists of 268 members from around the world who have demonstrated an "extraordinary record of accomplishments in any of the IEEE fields of interest." They join a group of thousands of other IEEE distinguished Fellows who have contributed to the advancement or application of engineering, science and technology.

Cincinnati Section Member, Marc Cahay, of The University of Cincinnati, was awarded the honor of Fellow for contributions to theory of charge and spin transport in nanostructures

The IEEE Board of Directors awards the honor of Fellow to no more than 0.1 percent of the voting membership as of 31 December of the preceding year. The full list 2007 Fellows can be viewed at <http://www.ieee.org/web/aboutus/fellows/new-fellows.htm>. To learn more about the IEEE Fellow Program or nominate an individual, please visit <http://www.ieee.org/fellows>.

MEMBERSHIP NEWS

NEW MEMBERS

The following individuals are IEEE members who are new to our Section:

Wade L. Allen	Jack Gibson	Thomas A. Miller
Alan M. Bouchard	Brian Gilligan	John Rau
Bonaventure B. Cahill	Ralph Hyre, Jr.	David D. Rousseau
Weiqun Chen	Pritesh N. Johari	Ashley Rucker
Thomas W. Cunningham	Tae-Sun Lim	Robert T. Snyder
Luis Farfan-Ramos	Robert Lindley	Herschel J. Weintraub
Jon M. Fiorelli	Jeff McDonough	Daniel V. Williams

We wish to welcome these new members to the Cincinnati Section!!!

Scanning the Past: A History of Electrical Engineering from the Past

Submitted by Dick Reiman, Historian

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Radio Broadcasting at 500 kilowatts

Sixty years ago this month, the PROCEEDINGS OF THE INSTITUTE OF RADIO ENGINEERS (IRE) included a paper on station WLW in Cincinnati, OH, USA, which recently had begun broadcasting at the unprecedented output power of 500 kW. The WLW superpower transmitter was interesting technologically but it was also the center of a public policy debate which pitted an interest group favoring a few clear-channel, high-power stations against a rival group favoring a much greater number of lower power stations.

Joseph A. Chambers, Chief Engineer of the Crosley Radio Corporation, which owned WLW, was the lead author of the October 1934 paper, although five other engineers were named as having cooperated in the design of the station and preparation of the paper. Station WLW had been transmitting at 50 kW for some time when it was granted permission by the U.S. Federal Radio Commission in June 1932 to use the existing transmitter as an exciter for the new power amplifiers which employed 12 type UV862 vacuum tubes, each rated at 100 kW. The new amplifier consisted of three units of four tubes each and the transmitter could continue to operate at reduced power with one or two units out of service. Two identical modulator units using eight UV862 tubes in push-pull configurations also were incorporated in the design. The final stage of each modulator was connected to its load using a 180-kVA transformer weighing about 19 tons and with a height of 11 ft. The power tubes were water-cooled, with each 10-kW tube using 20 gallons per minute. The transmitter was linked to the antenna by a concentric aluminum tube transmission line which was 780 ft long and had an outer diameter of 10 in. The vertical tower antenna had a height of 831 ft and rested on a porcelain insulator with a concrete foundation. After the installation and testing were completed, WLW began operating at 500 kW in May 1934 as the highest power broadcasting station in the United States.

(Continued on Page 5)

ECE & CS Graduate Students Association
In collaboration with
IEEE Student Branch & Eta Kappa Nu, Tau Chapter

Organizes

ECECS Poster Symposium
April 6th 2007, 11am - 5 p.m.

**4th Floor Engineering Research Center &
427 ERC Auditorium**

Highlights

- **Graduate poster competition**
- **Under graduate poster exhibition**
- **Keynote address by distinguished guest**
 - **Talk by invited speaker**
- **Certificates to selected posters**
 - **Best poster awards**

For more information:

Call 513-556-3025

or

Email: gsaadm@ececs.uc.edu

UNIVERSITY OF

Cincinnati

Region-2 Student Activities Conference (SAC) to be held the weekend of April 14th, 2007

On the weekend of April 14th, the student branch of the IEEE at the University of Cincinnati will host this year's Region-2 Student Activities Conference (SAC). This is very exciting because the SAC is the biggest event in the region's budget each year and will draw much positive attention to the local IEEE and UC's departments of Electrical and Computer Engineering and Computer Science. The purpose of this entirely student run conference is to promote ethics and leadership among future engineering and computing professionals. Between 150 and 200 motivated and bright students will take part in a leadership workshop and exercise their communication, ethics, research, and hardware design skills in various competitions. There is no cost to the students and advisors that attend; we provide lodging, food, and funds for travel. Monetary prizes will also be awarded to the top three teams in each competition. The conference will culminate in an awards banquet held in the Kingsgate Marriot's Grand Ballroom. During the banquet, there will be a keynote address focusing on ethics given by Scott Donnelly, CEO of GE Aviation.

Because of the size of this event, there are many opportunities for companies to gain exposure to outstanding students from the best universities in the region while supporting an extremely worthwhile event. Tax deductible sponsorship opportunities range from a spot on the sponsors page of the conference's website to a recruitment booth in a high traffic area during the competitions.

There is also a need for three experienced engineers to judge one of the competitions – the research paper presentation. During this competition, teams will make a five minute presentation based on undergraduate research papers they have submitted. The responsibility of the judges is to become familiar with all of the roughly 10 papers that will be submitted and to judge each team based on the quality of their paper and presentation. The presentations will take place in the afternoon on Saturday April 14th.

For this event to be a great success, the students coordinating this event need some help from local IEEE members and their employers. Anyone interested in the many sponsorship opportunities or in being a judge for the research paper competition, please contact the chairperson of UC's student branch of the IEEE, David Renz, at david.renz@gmail.com.

Radio Broadcasting at 500 kilowatts

(Continued from Page 3)

Chambers and his coauthors reported that the station's performance had shown that the increased power was the "most effective static eliminator yet devised." The station also produced interference which was especially bothersome to listeners to station CFRB in Toronto, Canada, which operated at a frequency 10 kHz away from the frequency of WLW. In May 1935, it was reported that the WLW engineers had installed a "suppressor antenna" designed to reduce radiation toward Toronto. The modification was in response to complaints from the Canadian government and involved the addition of two vertical elements with a height of 326 ft each. The new towers were installed while the station was operating and it was found necessary to hoist the steel elements with rope and to make sure the metal was well grounded before it was touched by construction workers.

In November 1936, the U.S. Federal Communications Commission (FCC) convened hearings to consider the pros and cons of clear-channel, superpower broadcasting. Powell Crosley, Jr., owner of WLW, was the chief witness in favor of high power. He argued that stations such as WLW could afford better programming and provided better service to rural audiences. He stated that mail received from listeners had increased about 400% after the increase to 500 kW. At the time there were 13 pending applications from stations wanting to increase power to match WLW, but opponents predicted that permitting this would be ruinous to the lower powered local stations.

By 1936, a more efficient power amplifier invented by William H. Doherty was available for superpower broadcast transmitters. The Doherty amplifier was used in a transmitter made by the Western Electric Company for WHAS in Louisville, KY. and which was intended to operate at 500 kW if authorized by the FCC. However, the FCC decided to restrict U.S. broadcast stations to a maximum power of 50 kW, and WLW was required to cut back to that level. Papers on the Doherty and its application to radio broadcasting appeared in the PROCEEDINGS of September 1936 and September 1939. A 500-kW transmitter using the Doherty design was installed in Mexico. where it was not subject to the FCC power restriction.

*James E. Brittain
School of History, Technology, and Society
Georgia Institute of Technology*

IEEE NEWS

IEEE-USA APPROVES 2007 ENGINEERING PUBLIC-AWARENESS PROGRAM TO ENHANCE THE OF IMAGE OF ENGINEERS, ENGINEERING

WASHINGTON (29 November 2006) -- As part of its ongoing effort to enhance the image of engineers in the United States, IEEE-USA volunteer leaders have endorsed a 2007 IEEE-USA public-awareness program that reaches out to youngsters, adults and the public at large. At its meeting on 17 November in New Orleans, the IEEE-USA Board of Directors approved \$65,000 in unbudgeted expenditures, plus \$63,000 in already budgeted expenses for the 2007 IEEE-USA public-awareness program.

The public-awareness program includes six components:

- Adding IEEE technologies to TV engineering news spots developed through the American Institute of Physics (AIP) "Discoveries & Breakthroughs" syndication service
- Helping print and broadcast journalists communicate authoritatively to the public about engineering and science through the selection of two IEEE-USA Engineering Mass Media Fellows as part of the AAAS program; and recognizing journalists for furthering the public understanding of the engineering profession
- Launching an engineering film festival with the American Film Institute, or similar body, and U.S. IEEE sections to help highlight engineering as it is presented in popular media
- Backing engineering reconstruction efforts in and outside of the United States by recognizing accomplishments of students in the non-profit humanitarian organization, Engineers Without Borders-USA
- Introducing youngsters to basic engineering concepts and communicating engineers' support for local community activities through National Engineers Week 2007 Discover Engineering Family Day in Washington, D.C.
- Informing younger students, 9-to-13-years-old, about careers in engineering through a brochure distributed to a cross-section of children's museums nationwide

The program components are detailed below:

TV ENGINEERING NEWS SPOTS: For a third consecutive year, the IEEE-USA Board backed the AIP "Discoveries & Breakthroughs" TV news spots, continuing its contribution of \$25,000. In 2005-2006, IEEE-

USA participated in the development of some 300 news stories about engineering and science sent to 66 U.S. TV stations -- with a potential audience of 75-million viewers.

IEEE-USA participation ensured that more engineering stories were part of news broadcasts, especially IEEE technologies, in such news features as: "Predicting Surgery"; "Wind Farms and Weather"; "Producing Speech"; "New Generation Fire Sensors"; "Fuel-Efficient Cars"; "High-Tech Citations"; "Robotic Bugs"; "Longer Battery"; and "Future Screens." IEEE-USA's Precollege Education Committee has also pursued a program with teachers using "Discoveries & Breakthroughs" DVDs in classrooms -- collaborating with students to produce their own versions of the TV spots -- further expanding the reach of the AIP/IEEE-USA service.

For more information, go to <http://www.aip.org/dbis/>.

ENGINEERING MASS MEDIA FELLOWS: Beginning in 2007, for the eighth consecutive year, IEEE-USA continues its support of the AAAS Science & Engineering Mass Media Fellows program -- for the second time choosing two IEEE-USA Fellows -- representing a \$17,000 contribution. Since 2000, IEEE-USA has backed eight U.S. IEEE student members, who have worked for 10 weeks at such media outlets as: "Scientific American"; WNBC-TV, in New York City; "Popular Science"; WOSU-AM, in Columbus, Ohio; the "St. Louis Post-Dispatch"; the "Richmond Times-Dispatch"; the "Sacramento Bee"; and the "Chicago Tribune."

In 2006, 14 AAAS Mass Media Fellows produced 180 news stories about science, technology and engineering. IEEE-USA is the only engineering organizational sponsor in the AAAS program and one of only three sponsoring organizations to support more than one media fellow.

For additional information, go to <http://www.ieeeusa.org/communications/massmedia.asp>.

ENGINEERING JOURNALISM AWARD: In a related activity, IEEE-USA presents an annual award for distinguished literary contributions furthering the public understanding of the profession. Past literary award recipients include NPR's Richard Harris, "The Wall Street Journal's" G. Pascal Zachary and Author Jon Katz.

For details on the literary award, see <http://www.ieeeusa.org/volunteers/awards/award8.html>.

ENGINEERING FILM FESTIVAL: In 2007, IEEE-USA will seek to enter into a partnership with the American Film Institute, or similar body, and subsequently with IEEE Sections nationwide to produce an engineering film and discussion series. The IEEE-USA Engineering Film Festival will be open to the public and is intended for a broad range of individuals who enjoy the cinema and have an interest in engineering and technology. The films are expected to be shown without charge and to as many as 400 Washington-area residents once a week for six weeks.

After each film, a speaker or panel with knowledge of the film's subject area will be called on to provide commentary on the engineering and to take questions from the audience. Films to be considered include: "Edison the Man" (1940), starring Spencer Tracy; "Fantastic Voyage" (1966); "The Right Stuff" (1983); "Apollo 13" (1995); "Infinity" (1996), about the Nobel Prize-winning physicist Richard Feynman; and "Primer" (2005). With \$20,000 in funding, the program will be patterned after the National Institutes of Health's successful "Science in the Cinema."

For more information, go to <http://science.education.nih.gov/cinema>.

ENGINEERS WITHOUT BORDERS-USA STUDENT RECOGNITIONS: In 2007, for the second time, IEEE-USA is sponsoring five \$1,000 recognition awards for college students who distinguish themselves in volunteer reconstruction efforts for Engineers Without Borders (EWB)-USA, the non-profit humanitarian organization. The achievement awards will be presented at the EWB-USA international conference, 12-14 April 2007, at the University of Massachusetts, Amherst.

For details, go to <http://www.ewb-usa.com/index.php>.

EWeek 2007 DISCOVER ENGINEERING FAMILY DAY: For the fourth consecutive year, IEEE-USA is cosponsoring the EWeek Discover Engineering Family Day, on Saturday, 17 February 2007, at the National Building Museum in Washington, D.C. The hands-on opportunity helps youngsters grasp fundamental engineering principles. With 7,000 attending, the 2005 Family Day produced the second-largest turnout in the history of the National Building Museum -- exceeded only by the 2004 Family Day. Some 6,000 adults and youngsters participated in the 2006 event.

In 2007, at EWeek Family Day, the high-school cast and young engineers from the new WGBH-PBS "Design Squad" engineering reality competition TV program will demonstrate how to engineer an innovative product. IEEE-USA assisted with the proposal that led to the IEEE becoming a sponsor of "Design Squad."

For details on "Design Squad," go to <http://pbskids.org/designsquad/>.

2007 marks the 14th year of the EWeek Family Day, a premier engineering and science outreach program in Washington, which serves as a model for similar family programs conducted nationwide. During EWeek in 1993, IEEE-USA helped launch the first Family Night at Intelsat in Washington, the model for the Family Day event.

For more information, go to <http://eweekdcfamilyday.org>.

ENGINEERING CAREERS BROCHURE: Additionally, in 2007, IEEE-USA will continue distributing a precollege education brochure designed primary for youngsters in fourth to eighth grades. Some 20,000 copies of "My Science, My Math, My Engineering! How Am I Ever Going to Use This Stuff in the Real World?" were distributed in 2006 to more than two-dozen U.S. children's museums and to organizations with K-12 student sci-tech enrichment programs. The brochure complements an earlier brochure available from IEEE-USA aimed at high-school students.

The new brochure can be downloaded at <http://www.ieeeusa.org/communications/ia/ia-06-23-06.asp>.

IEEE-USA PR Director to Begin Transition to Retirement in 2007

WASHINGTON (30 November 2006) -- Pender M. McCarter, IEEE-USA's director of communications & public relations, is retiring from his full-time position at the end of the year, and will begin consulting for IEEE-USA on engineering public awareness programs in January 2007.

McCarter has served the IEEE for 25 years: as IEEE public relations manager (1981-1994); IEEE-USA public relations manager (1994-1999); and IEEE-USA associate director/director of communications & public relations (1999-2006). During this time, he helped fashion a new image and identity for IEEE-USA to communicate to the organization's publics, both in and outside of government. He also promoted technological literacy, public understanding of engineering and diversity in the engineering profession. Under his leadership, IEEE-USA won two international public relations awards in public affairs and public awareness.

McCarter is active in the Public Relations Society of America, as an accredited Fellow; and the International PR Association, as a United Nations NGO (non-governmental organizations) representative. His career encompasses 38 years in association management, high-tech PR, journalism and education. For details, go to <http://www.ieeeusa.org/communications/notable/11-03-06.asp>.

THE LATEST ISSUE OF IEEE'S "THE INSTITUTE" IS NOW AVAILABLE AT

<http://www.ieee.org/theinstitute>

Included in this issue:

- High-Tech Methods to Cut Medical Costs: As medicine and medical research go increasingly high tech, patients, physicians, and insurance companies all see the cost of health care skyrocketing. But through engineering, high tech can also be used to lower costs. Find out how at <http://bmsmail3.ieee.org:80/u/4908/04824637>
- Steve Perlman: Getting Real With Animation: Steve Perlman was just a teenager when he realized his true calling in life: creating artificial worlds with technology. It's a goal that has led this IEEE member to invent something that's changing the face of digital reality as we know it--literally. Read more at <http://bmsmail3.ieee.org:80/u/4910/04824637>
- Talk Time for Portables People: No matter how many portable information and communications devices an IEEE member might carry, there's still a need to meet face-to-face. For those who design, make, and use portable devices and their related infrastructures, that time will come in March at the Portable 2007 Conference in Orlando, Fla. Read on at <http://bmsmail3.ieee.org:80/u/4912/04824637>
- The Institute Wants to Know: How Do Techies Work?: Do you spend half your day in meetings, use e-mail as your main form of communication, or turn first to your co-workers to get help with a problem? The Institute's editors want to know if you agree with these results from an IEEE survey commissioned to find out how today's technology professionals work, for possible use in an upcoming article. E-mail the editors at institute@ieee.org
- IEEE Medical Plan Suffers Benefit Cuts: In November, CIGNA, the health insurer, mailed certified letters to all participants in the IEEE's group comprehensive health care insurance plan (available only to U.S. members), informing them that effective 1 January 2007, it will cut benefits and raise rates once again. The IEEE is working to find new health-insurance options for members and their families. Find out more at <http://bmsmail3.ieee.org:80/u/4916/04824637>
- Middle East's First Computer Named History Milestone: Built in 1954 in Rehovot, Israel, the Weizmann Automatic Computer (WEIZAC) became the Middle East's first computer and put Israel in the global technology loop. That's why WEIZAC was recognized with an IEEE Milestone in Electrical Engineering and Computing on 5 December, at the place where it was built. Read on at <http://bmsmail3.ieee.org:80/u/4917/04824637>
- Serious Conference Offers Chip Thrills: The 54th International Solid-State Circuits Conference, to be held 11 to 15 February 2007 in San Francisco, is one of the most important conferences for presenting cutting-edge integrated circuit design. To learn more, go to <http://bmsmail3.ieee.org:80/u/4918/04824637>

- Nominations Due Soon for IEEE Tomiyasu Award: The deadline to nominate a colleague for the IEEE Kiyo Tomiyasu Award is 31 January 2007. The award is given to individuals or teams of up to three people for outstanding contributions made in early or mid career that laid the groundwork for innovative applications in the IEEE's fields of interests. Read more at <http://bmsmail3.ieee.org:80/u/4919/04824637>
- Let Us Recognize Your Achievement: Has your company, government, or a volunteer organization recognized you with a promotion, appointment, or award? Every month, The Institute publishes the names of members who've received such recognitions. Send the editors your name and a brief description of your accomplishment to institute@ieee.org
- Engineering Education Gets Its Own Reality Show: Reality television has exploded in popularity over the past few years, introducing everything from survival on a deserted island to ballroom dancing. But can reality TV boost the popularity of engineering? Some believe it can, and to prove that point the IEEE is providing some of the funds for "Design Squad," a new half-hour weekly television program. Learn more at <http://bmsmail3.ieee.org:80/u/4972/04824637>
- Corporate Aid Speeds Up Standards Process: More than two years have passed since the first IEEE standard was produced by a working group that welcomed companies as voting members. Previously, only individuals could draft and vote on standards. But the new approach is going gangbusters: new standards are being hammered out in two years or less, compared with the four years needed previously. Read on at <http://bmsmail3.ieee.org:80/u/4975/04824637>
- Valparaiso Wins Region 4's First Ethics Competition: To judge by recent headlines, we live in a world increasingly troubled by unethical behavior. That's all the more reason to applaud Region 4 (central United States) for sponsoring a competition to promote awareness of ethical concepts and challenges among engineering students. For more on the competition, visit <http://bmsmail3.ieee.org:80/u/4977/04824637>
- Webinar Focuses on Challenges in Battery Standards and Safety : The recent recall of millions of laptop batteries has prompted the IEEE to revise its guidelines for the design, manufacture, and testing of lithium-ion batteries and packs. On 25 January, hear industry experts speak about how this will impact future product designs at the Tech Insider Webinar: Challenges in Battery Standards and Safety. Sign up now at <http://bmsmail3.ieee.org:80/u/4978/04824637>
- Marketplace of Ideas: Borrowing Internet Access: Cellphone manufacturers have begun selling phones specially equipped for making free calls using wireless Internet networks, including any unprotected networks owned by your unknowing neighbors. While critics say tapping into someone else's unprotected network is unethical, supporters say that because the calls are free, no harm, no foul. How would you feel about someone using the Internet service you pay for to make free calls? Weigh in at institute@ieee.org

Also, read responses to October's question on whether BMW and other technology companies that have a mandatory retirement age of 60 should raise it higher. Answers range from flat-out calling the rule idiotic to saying that age is nothing but a number if a worker is still in the technology loop. See members' responses at <http://bmsmail3.ieee.org:80/u/4979/04824637>

- Teaching Teachers a Smidgen of Engineering: In 2006, the IEEE Teacher In-Service Program (TISP) expanded beyond the United States to Malaysia and South Africa, and this year the program has its sights set on Argentina, Kenya, and Peru. But before the volunteers can begin work, they need a little

help themselves on how to inject engineering principles into lesson plans. Read on at <http://bmsmail3.ieee.org:80/u/4981/04824637>

- Tips for Working in Global Teams: Do you work in a global technical team? Have you only met your colleagues over the phone or by video? Are time zones a primary concern when scheduling meetings? If you answer "yes" to these questions, then you're likely to be working on a team requiring communication skills unimaginable 20 years ago. Find out more at <http://bmsmail3.ieee.org:80/u/4983/04824637>
- IEEE Spectrum Online Rolls Out New Tech Alert: IEEE Spectrum Online has created a new Tech Alert for both members and non-members who want to receive groundbreaking news on technology and science. The alert features exclusive online interviews, articles, podcasts, and Web events with leading technology innovators, and is e-mailed biweekly in an html or plain-text format. Sign up now at <http://bmsmail3.ieee.org:80/u/4985/04824637>
- Awards Board Seeks New Members: If you're looking for a rewarding volunteer activity, consider joining the IEEE Awards Board. The Awards Board Nominations and Appointments Committee is soliciting recommendations for a number of vacancies on the 2008 Awards Board and its committees. For more information, visit <http://bmsmail3.ieee.org:80/u/4986/04824637>
- Business and Systems-Analysis Classes at a Discount: The IEEE Education Partners Program and InQuesta Learning, an e-learning company, are offering members business and systems-analysis courses at a discount. The online courses include labs and study guides. To access the list of courses or find other classes, visit <http://bmsmail3.ieee.org:80/u/4987/04824637>

The IEEE Cincinnati Section Executive Committee **Member Names and Phone Numbers**

Cincinnati Section Voice Mail	513-629-9380 (call for meeting reservations)
Section Web Page	http://ieee.cincinnati.fuse.net/
Brian J. Resnick - Chair	513-556-4244 (Office), 513-759-5367 (Fax), Brian.Resnick@ieee.org (E-mail)
Randy Restle - Vice Chair	513-528-7900, Ext. 137, rrestle@ieee.org (E-mail)
Laurie Tappel - Treasurer	513-397-6383, laurie.tappel@cinbell.com (E-mail)
Ron Harbaugh - Secretary / Arrangements Chair	513-769-3781, ron.harbaugh@ieee.org (E-mail)
Steve Olenick - Member-At-Large	513-554-2059 (Office), 513-642-3220 (Fax), steveo@nsseng.com (E-mail)
Marc A. Bell - Member-At-Large	513-287-2452, Marc.Bell@duke-energy.com (E-mail)
Charlie Nash - Webmaster	513-723-3849, cnash@ieee.org (E-mail)
Randy Holt – Membership	859-572-5710 (Office), Holthr@nku.edu (E-mail)
Bob Morrison - Newsletter Editor	513-287-3697 (Office), 513-287-4493 (Fax), j.r.morrison@ieee.org (E-mail)