



*IEEE Pittsburgh Section*  
**Bulletin**



April 2007 Volume 56, No. 4



*Included in this issue:*

- From the Chair
- Magnetics Society–April 12
- Electromag’ticCompatibility–Apr 17
- Ethics & Professional Engr–April 26
- TeraHertz Wave Technology–May8
- Nuclear Plant Control Room–May 9
- Congressional Visits by IEEE
- Four New Senior Members
- Edit the Bulletin
- Holm Conference in Pittsburgh

Editor of this issue: Jace Cochrane, P.E. [jacejc@pghmail.com](mailto:jacejc@pghmail.com) (412) 390-0718

Contributors: Joe Cioletti, Phil Cox, Ganping Ju, Joe Kalasky, Mike Oliver, Kal Sen, Ralph Sprang, John Twigg, and Dave Vaglia.

*All announcements for publication in a particular month’s bulletin are due to the Editor by the 20<sup>th</sup> of the previous month. The accuracy of the published material is not guaranteed. If there is any error, please bring it to the Editor’s attention.*

*The Section’s web site [www.ewh.ieee.org/r2/pittsburgh](http://www.ewh.ieee.org/r2/pittsburgh) has past issues of the bulletin and lots of other useful information.*

## • *From the Chair*

Dear Pittsburgh Section members,

Last year in the September bulletin, it was announced that the Pittsburgh Section was chosen to receive the 2005 Outstanding Large Section Award. This meant that of all the large IEEE sections in the world, Pittsburgh was the section that best met IEEE's goals in 2005. This award was presented at the Region 2 IEEE meeting held in Pittsburgh at the end of March 2007. Section officers were on hand to receive this award, but the thanks really go to you, our members and participants. Without your participation, we would not be receiving this award.

The Section sent two representatives to Washington, DC to meet with our congressional representatives about visa issues. Look for the report in this bulletin. There is another opportunity to meet with congressional representatives coming up soon – let us know if you would like to participate.

We have traditionally held our History Dinner at the Westinghouse Castle in Wilmerding in April. Ownership of the building changed recently, and it may not be available for the dinner. We are presently looking for another site, and this will delay the history dinner. As always, volunteers or suggestions on speakers for the dinner are welcome.

We have begun planning the annual picnic, tentatively scheduled for the afternoon of 9/15/07 at Schenley Park. If you are interested in the picnic and would like to consume adult beverages there, please let us know. A separate permit is required, and we want to make sure there is sufficient interest before we incur that cost.

Feel free to contact me with any questions or concerns. Email is the best way to contact me, [rsprang@ieee.org](mailto:rsprang@ieee.org).

*Ralph Sprang*

### **Section**

Chair & Awards Co-Chair – Ralph Sprang  
[rsprang@ieee.org](mailto:rsprang@ieee.org)

Vice Chair – John Twigg  
[jtwigg@ascent-systems.com](mailto:jtwigg@ascent-systems.com) (412) 795-4444

Secretary – Joe Cioletti  
[joseph@cioletti.com](mailto:joseph@cioletti.com) (724) 516-3897

Treasurer – Harold Hagerty, P.E.  
[hhagerty@ieee.org](mailto:hhagerty@ieee.org) (412) 492-0943x226

Webmaster – Andrew Novotny  
[andrewnovotny@ieee.org](mailto:andrewnovotny@ieee.org) (412) 351-4954

Immediate Past Chair – David J. Vaglia, P.E.  
[davevaglia@ieee.org](mailto:davevaglia@ieee.org) (412) 491-6944

UpperMon Subsection

Chair: Dr. Dimitris Korakakis  
[Dimitris.Korakakis@mail.wvu.edu](mailto:Dimitris.Korakakis@mail.wvu.edu)  
(304) 293-0405 x2512

### **Chapters**

Communications Society

Chair: Phil Cox  
[p.e.cox@ieee.org](mailto:p.e.cox@ieee.org) (724) 443-0566

Computer Society – Chair: John Twigg (see above)

Engineering In Medicine & Biology Society  
Co-Chair: Bob Brooks

[rbrooks@medrad.com](mailto:rbrooks@medrad.com) (412) 767-2400 x3506

Co-Chair: Dr. Zhi-Hong Mao  
[maozh@engr.pitt.edu](mailto:maozh@engr.pitt.edu) (412) 624-9674

Electromagnetic Compatibility Society

Chair: Michael J. Oliver  
[emi@majr.com](mailto:emi@majr.com) (814) 763-3211

Power Engineering & Industry Applications Societies

Chair: Andrew Novotny (see above)

Magnetics Society – Chair: Dr. Ganping Ju

[Ganping.Ju@Seagate.com](mailto:Ganping.Ju@Seagate.com) (412) 918-7046

Robotics Society – Chair: Dr. Guy Nicoletti

[Nicoletti+@pitt.edu](mailto:Nicoletti+@pitt.edu) (724) 836-9922

Signal Processing Society – Chair: Dr. Heung-No Lee

[hnlee@engr.pitt.edu](mailto:hnlee@engr.pitt.edu) (412) 624-9677

Society on Social Implications of Technology

Chair: Joe Kalasky, P.E.  
[j.kalasky@ieee.org](mailto:j.kalasky@ieee.org) (724) 838-6492

### **Affinity Groups**

GOLD – Chair: Andrew Rydholm

[andrew\\_rydholm@yahoo.com](mailto:andrew_rydholm@yahoo.com) (412) 261-3200 x281

Life Member – Chair: Bob Grimes, P.E.

[r.d.grimes@ieee.org](mailto:r.d.grimes@ieee.org) (412) 963-9711

### **Committees**

Consultants Network

Professional/Career Activities (PACE)

Chair: Joe Kalasky, P.E. (see above)

Student Activities

Membership Development

Publicity – Chair: Thomas Dionise, P.E.

[ThomasJDionise@eaton.com](mailto:ThomasJDionise@eaton.com) (724) 779-5864

2008 PES General Meeting Technical Program Chair –

Dr. Kalyan Sen (Kal) [senkk@ieee.org](mailto:senkk@ieee.org) (724) 696-1611

2008 PES General Meeting General Chair

Dave Vaglia (see above)

• ***State of the Art Ferrite Materials for Fundamental Research, Nano-Science, and High Frequency Applications***

Speaker: Prof. Vince Harris, Northeastern University  
IEEE Magnetics Society Distinguished Lecturer

Date: Thursday, April 12, 2007

Time: 3:00 PM – 4:00 PM Lecture  
4:00 PM – 5:00 PM Social with pizza and beverage

Place: Seagate Research Center Auditorium  
1251 Waterfront Place (Strip District) near the Heinz History Center. From Smallman St turn toward the Allegheny River on 13<sup>th</sup> St.

Sponsor: Magnetics Society. All IEEE members and their guests are welcome.

**RSVP:** Required to [Cindy.E.Roth@Seagate.com](mailto:Cindy.E.Roth@Seagate.com)

**Abstract:** Ferrite materials have long played an important role in power conditioning, conversion, and generation across a wide spectrum of frequencies (up to 10 decades). They remain the preferred magnetic materials, having suitably low losses for most applications above 1 MHz and are the only viable materials for nonreciprocal magnetic microwave and millimeter wave devices (including tunable filters, isolators, phase shifters, and circulators). Recently, novel processing techniques have led to a resurgence of research interest in the design and processing of ferrite materials as nanoparticles, films, single crystals, and metamaterials. These latest developments have set the stage for their use in emerging technologies that include cancer remediation therapies such as magneto-hyperthermia, magnetic-targeted drug delivery, and magneto-rheological fluids, as well as enhanced magnetic resonance imaging.

With reduced dimensionality of nanoparticles and films and the inherent nonequilibrium nature of many processing schemes, changes in local chemistry and structure have profound effects on the functional properties and performance of ferrites. In this lecture, we will explore these effects upon the fundamental magnetic and electronic properties of ferrites. Density functional theory will be applied to predict the properties of these ferrites, with synchrotron radiation techniques used to elucidate the chemical and structural short-range order. This approach will be extended to study the atomic design of ferrites by alternating target laser-ablation deposition. Recently, this approach has been shown to produce ferrites that offer attractive properties not found in conventionally grown ferrites. We will explore the latest research developments involving ferrites as related to microwave and millimeter wave applications and the attempt to integrate these materials with semiconductor materials platforms.



**About the speaker:** Vincent G. Harris received the BSc, MSc, and PhD (1990) degrees in engineering from Northeastern University. He has also received the MSc degree in engineering management from the University of Maryland (1995), and the MSc degree in executive technology management from the Wharton School at the University of Pennsylvania (2003). He is presently the William Lincoln Smith Professor in the Electrical and Computer Engineering Department at Northeastern University. Dr. Harris was a member of the technical staff at the Naval Research Laboratory (1990-2003), where he served as the head of the Complex Materials Section and the head of the Materials Physics Branch. In 2001 he established and assumed the position of director of the NRL Synchrotron

Radiation Consortium (2001-2003). In 2004 he established the Center for Microwave and Magnetic Materials and Integrated Circuits and continues to serve as its first director. The mission of this center is to develop high frequency materials and device solutions for next-generation radar and wireless communication electronics. Dr. Harris's research interests include the study of processing, structure, and magnetism in a wide range of materials. He has pioneered the use of synchrotron radiation techniques to relate the short range chemical and structural properties of materials to magnetism. He has published more than 170 technical articles and holds nine patents and patent applications. Dr. Harris is a Fellow of the American Physical Society and Senior Member of the IEEE.

- ***Measuring Noise Current and How to Reduce it Using Ferrites***

Speaker: Mr. Lee Hill, Founding Partner of Silent  
Date: Tuesday, April 17, 2007  
Time: 6:30 PM Roast beef and turkey croissant sandwiches and dessert  
7:00 PM Presentation  
Place: Westinghouse Energy Center, Monroeville Directions on page 10.  
Sponsor: Pittsburgh Chapter of IEEE Electromagnetic Compatibility Society  
All IEEE members and their guests are welcome.  
**RSVP: Required** to Michael J. Oliver at [emi@majr.com](mailto:emi@majr.com)

*Abstract:* In this presentation Lee will review the use of low and high frequency noise filter inductors that are commonly referred to as 'ferrites'. To provide the necessary background, the concepts of differential and common-mode current will be defined and demonstrated using a spectrum analyzer, a variety of current probes, and several 'live' noise sources. Discussion will also include tips for choosing the right probe and ferrite to understand and solve noise problems and Lee's favorite current probes for the measurement of low and high frequency currents. This presentation will be relevant to anyone involved in the control of electrical noise from 10 kHz to 10 GHz. Lee encourages audience participation and will welcome questions throughout the presentation.

*About the speaker:* Lee Hill is Founding Partner of Silent, an independent consulting firm that specializes in EMC and RF design, troubleshooting, and training services to commercial and industrial manufacturers with global distribution in the consumer, computer, network and telecommunications, industrial, medical, scientific and automotive industries. Previously Lee was Principal EMC and Systems Engineer at Digital Equipment Corporation's Workstation Systems Engineering Group in Palo Alto, CA. Lee received the MS degree in Electrical Engineering & Electromagnetics from the University of Missouri-Rolla and the BS degree in EE from the Rochester Institute of Technology. Lee has 20 years of experience in the EMC design, troubleshooting, and retrofit of complex electronic systems. He has been teaching short courses on EMC design and troubleshooting for over 10 years. Lee consults and teaches worldwide, presenting classes in Taiwan, Singapore, Mexico, Norway, Canada, South Korea, and the USA. He is also a regular EMC course instructor for Oxford University (UK), University of California-Berkeley Extension, General Motors University, and Freescale Technology. Previously Lee was an instructor for Agilent Technologies. He has completed a 3-year term on the Editorial Review Board of Printed Circuit Design Magazine. Lee hold a US patent for EMI control in portable electronics and provides expert witness services for patent litigation. Lee is presently a member of the IEEE EMC Society's Board of Directors.

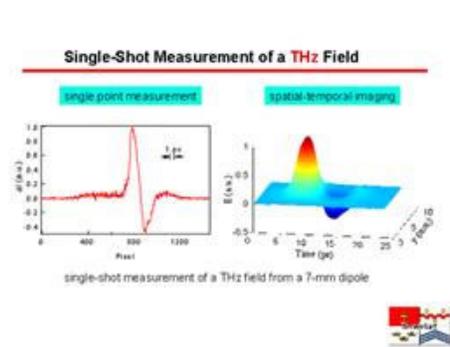
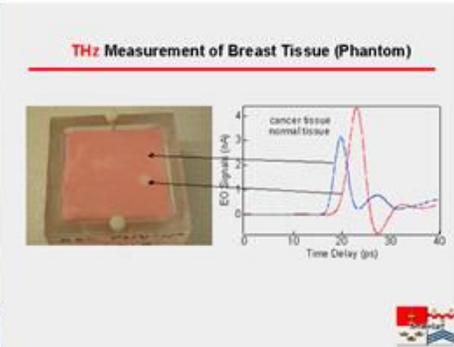
**• Ethics and the Professional Engineer:  
Duties and Liabilities of the Technical Professional**

Speaker: Joseph A. Kalasky, PE  
Date: Thursday, April 26, 2007  
Time: 6:00 PM Cash bar and order dinner from a select menu  
6:30 PM Dinner  
7:30 PM Presentation  
Place: Holiday Inn on Rt 48 (Mossie Blvd) in Monroeville.  
½ mile south of Business Rt 22 near PA Turnpike Exit 57  
The Holiday Inn is on the east side of Rt 48 and behind Max & Erma's.  
Cost: \$10 for students and IEEE SSIT members  
\$15 for other IEEE members  
\$20 for non-members  
Sponsor: SSIT and PACE Everyone is invited to this first meeting of the Pittsburgh Chapter of the Society on the Social Implications of Technology (SSIT).  
RSVP: By April 23 to Joe Kalasky at (727) 838-6492 or [j.kalasky@ieee.org](mailto:j.kalasky@ieee.org). Please give your name and phone number.

*Abstract:* Engineers and most other professionals are bound to several overlapping codes of ethical conduct. These codes of conduct are set by global, national, and local regulatory entities, professional societies, and corporations. IEEE members are reminded that in renewing their membership they agree to abide by the IEEE Code of Ethics. Professional Registration in countries, provinces, states, and municipalities entails strict adherence to Codes of Conduct. Likewise, most corporations require abiding by a code of conduct as a condition of continued employment. Thus Professional Engineers must tread carefully the maze of decisions to protect their reputations and employment. This presentation will compare various professional, regulatory, and corporate codes of conduct in a lively manner. The intent is to enlighten the IEEE Member as to the bounds of expected ethical behavior and the consequences of non-compliance. In today's complex society, we are making countless and crucial ethical decisions. The wrong choice can ruin a job, a career or even personal lives. The value of engineering education, licenses, and experience can be lost by one quick, seemingly innocent ethical error. This discussion will depict the traps to avoid and difficult choices one must make to uphold the ethical standards of the professional and to remain gainfully employed.

*About the speaker:* Joe Kalasky is a Distribution Engineer with over 30 years experience with Allegheny Energy. Joe's career is a unique combination of technical and regulatory work. He has not only set standards for substation and line design but has served as an industry liaison to federal agencies with jurisdiction over utilities such as the US EPA. Joe was a founding and charter member of the Edison Electrical Institute's Polychlorinated Biphenyl (PCB) Committee. Joe has been a volunteer for the IEEE for his entire career. He was the Pittsburgh Section Chair, the Region 2 Chair, and a Member of the IEEE and IEEE-USA Boards of Directors. He has concurrently served on PACE committees all the while and was Chair of the IEEE Industry Relations Committee. Currently Joe is on the IEEE-USA Government Activities Committee. In IEEE he serves on the Ethics and Member Conduct Committee.

- *TeraHertz Wave Technology*



Speaker: Xi-Cheng Zhang, Professor, Rensselaer Polytechnic Institute  
 Date: Tuesday, May 8, 2007  
 Time: 6:00 PM Dinner and social hour  
 7:15 PM Presentation  
 Place: Indiana University of Pennsylvania, Northpointe Campus  
 167 Northpointe Blvd, Freeport, PA 16229  
 For directions go to <http://www.iup.edu/armstrong/directions.pdf> or call 1-800-889-0872  
 Cost: \$8 for catered dinner including salad and dessert. Meal choices are chicken, flank steak, or pasta.  
**RSVP:** **Required** to [kxc24@psu.edu](mailto:kxc24@psu.edu) by April 25. Indicate if you will attend the meal as well as the presentation and your meal preference.  
 Sponsor: Pittsburgh Chapter of the IEEE Communications Society and the Western Pennsylvania Optical Society of America (OSA)

*Abstract:* Historically THz technologies were mainly used by the astronomy community for searching far-infrared radiation (cosmic background) and by the laser fusion community for the diagnostics of plasmas. Since the first demonstration of THz wave time-domain spectroscopy in the late 80's, there has been a series of significant advances (particularly in recent years) as intense THz sources and more sensitive detectors provide new opportunities for understanding the basic science in the THz frequency range. Now the region of the electromagnetic spectrum from 0.3 to 10 THz (1mm to 30 micrometer wavelength) is a frontier area for research in physics, chemistry, biology, materials science, and medicine. Terahertz radiation offers innovative sensing and imaging technologies that can provide information unavailable through conventional methods such as microwave and x-ray techniques. With the advancement of broadband THz wave photonics, THz technology will impact a broad range of interdisciplinary fields, in particular, the opportunity for transformational advances in non-destructive testing, defense, and security.

*About the speaker:* Dr. Xi-Cheng Zhang is the Eric Jonsson Professor of Science, Professor of Physics, and Professor of Electrical Engineering at Rensselaer Polytechnic Institute in Troy, NY. Dr. Zhang has received 18 patents, published 10 books and book chapters, and authored or co-authored over 200 refereed journal papers. He is a Fellow of IEEE, the Optical Society of America, and the American Physics Society.

- **Modern Control Room Simulator for Nuclear Power Plants Tour**



Date: Wednesday, May 9, 2007  
 Time: 5:30 PM Light dinner  
 6:15 – 7:30 PM Tour  
 Place: Westinghouse Energy Center, Monroeville, PA Directions on page 10  
 Cost: No charge to IEEE members and their guests  
 Sponsors: IEEE Pittsburgh’s PES/IAS and ASME  
 All IEEE members and their guests are welcome  
**RSVP:** **Required** to Dave Vaglia at [davevaglia@ieee.org](mailto:davevaglia@ieee.org). Please supply your citizenship and company affiliation. There is limited space on these tours, so RSVP early to assure getting on the list.

Westinghouse will be providing a tour of the AP1000 Nuclear Power Plant Control Room Simulator that is under development and an overview of their I&C technology.

The AP1000 is an advanced 1000 megawatt (electric) nuclear power plant that uses the forces of nature and simplicity of design to enhance plant safety and operations and reduce construction costs. The control room design uses compact workstations with soft controls and displays to monitor and control the plant. Four AP1000 plants have been sold to China and are expected to come on line in 2013. US utilities have likewise recognized the value of this design and have tentatively chosen the AP1000 for 12 domestic plants.



## • ***Washington Congressional Visits Regarding High Skilled Visas***

On March 13 and 14, two representatives from the Pittsburgh Section – John Twigg, Vice Chair, and Joe Cioletti, Secretary – were among over 50 IEEE members from across the USA who attended the annual IEEE ‘Fly-In’ to Washington, DC. The purpose of the trip is to raise awareness with our elected officials of the damaging nature of the current H1-B visa on our profession through the temporary use and – in some cases – exploitation of highly skilled foreign talent without regard for making them a part of the ‘American Dream.’

The H1-B visa is only temporary (maximum of a 6 year stay in the US) and has no relation to immigration. Companies hold H1-B visas, not allowing temporary foreign talent to approach other companies, effectively depressing their wages. Moreover, when a company has no further need for the foreign employee, that employee must return to their own country, having gained technical/business knowledge while in the US. The IEEE also asserts that this has a negative impact on US skilled talent and wages. Additionally, some foreign-owned companies exploit the H1-B system for the specific purpose to train their employees in the US so they can be returned to their own country, creating more US competition.

Currently the immigration bill under consideration by Congress is set to dramatically increase the 65,000/year cap on H1-B visas, without consideration to correct the flaws in the H1-B system which include:

- Lack of oversight (applications approved citing \$0 in competitive US salary)
- Lack of free market competition for foreign skilled workers
- No connection to permanent immigration, such as the EB-1, 2, and 3.

John Twigg and Joe Cioletti attended meetings with the following legislator offices:

- Senator Arlen Specter
- Senator Robert Casey
- Representative Jason Altmire

Senator Specter’s Legislative Assistant (LA) was highly informed of the immigration legislation and was very receptive to the concerns expressed by the IEEE during the session, stating that Senator Specter is leading the creation of an F-4 visa status for students – which this LA authored – that will help expedite their permanent immigration into the United States, rather than the current F-1 visa, which forces students to return to their origin country. We stated that similar should be done for the H1-B, providing a more direct path toward US citizenship. Specter’s LA was surprised when the IEEE presented specific examples of H1-B salary abuses from several states, assuring us that this information will be passed along to the Senator. Our concerns were expressed regarding the lifting of the 65,000 cap without addressing the flaws in the H1-B system, and the LA agreed to look into these concerns more closely when she reviews the immigration legislation.

Senator Casey’s LA as well as Representative Jason Altmire and his LA were provided with similar presentations from the Pittsburgh Section representatives. Contact information was also provided for Senator Specter’s highly informed LA, since both of these legislators are new to their respective offices. Representative Altmire himself seemed genuinely sympathetic to our concerns. Legislators were also made aware that the IEEE supports raising caps for the EB visa (from 140,000 to 200,000 annually), not including dependents in that cap, and streamlining the overall process leading to US citizenship.

The Pittsburgh Section thanks Russ Harrison, IEEE legislative representative of grassroots activities, and Bill Williams, IEEE senior legislative representative on technology

policy activities, for their extraordinary efforts to coordinate the IEEE national 'Fly-In.' John Twigg and Joe Cioletti would also like to personally thank Ralph Wyndrum, past IEEE-USA president, for both dinner and great conversation.

- ***New Senior Members***

Congratulations to the following four members of the Pittsburgh Section, who were promoted to Senior Members of IEEE in February 2007.

**William Courtright**  
**Robert Murphy**  
**Bruce Quayle**  
**Marius Rosu**



*Technology for Taking Off™*

Learn how to get your IT projects done at the lowest cost.

**Fast Projects.  
Lowest Cost.**

Call us at **412.795.4444** today.

***We can help make  
your ideas fly!***



Ascent Systems has been named ***The 14<sup>th</sup> Fastest-Growing Company in Pittsburgh for 2006*** by the Pittsburgh Business Times. Ascent was ranked #7 in IT.

We specialize in small, tight technology projects that deliver amazing performance - just like the world record-setting BD-5 aircraft above!

(201mph on only 52hp)



[www.ascent-systems.com](http://www.ascent-systems.com)

*a paid advertisement*

• ***Edit the Bulletin***

The current editor of the IEEE Pittsburgh Section bulletin will retire after the June 2007 issue. A new volunteer (or volunteers) is needed. Presently the bulletin editor each month 1) reminds all section officers and chapter chairs of the deadline for submitting items for that month's bulletin, 2) puts submitted items in a consistent format, if necessary, and lays out items in the bulletin, 3) sends the draft bulletin to the section chair and others for review, 4) revises the bulletin as necessary and converts it from Word to PDF, 5) sends the bulletin to the Webmaster to be uploaded, 6) notifies IEEE headquarters to issue the bulletin link to all Pittsburgh Section members via email, 7) assists members unable to access the bulletin link by sending them the bulletin as an email attachment, 8) answers questions about advertising in the bulletin, and 9) forwards advertising payments to the section treasurer. The new bulletin editor is welcome to share these duties with others. Presently another member of the bulletin committee mails hardcopies of the bulletin to about a dozen members. The bulletin editor does NOT maintain the emailing list for the section – IEEE headquarters does that big job.

If you are interested, please contact Ralph Sprang, Section Chair, or Jace Cochrane, Bulletin Editor, to learn more about this opportunity.

• ***Directions to the Westinghouse Energy Center***

From Pittsburgh take Interstate 376 East (Parkway East outbound). Take Exit 14A to Monroeville/Rt 48 South. Cross Business Rt 22 at the traffic light and proceed on Rt 48 South (Moss Side Blvd) approx 0.5 mile (two traffic lights). At the 2<sup>nd</sup> traffic light (an Exxon Mobil station is on the right and a Sunoco station is on the left) turn left onto Northern Pike. Proceed approx 0.2 miles and turn right at the 1<sup>st</sup> traffic light onto Westinghouse Dr. Travel 0.7 miles (past the guard stand) to the 3 flags where the building's main entrance is located. Parking in the evening will be plentiful. Use the main entrance and check with the security guards inside. You will be directed to the proper room for your meeting.

From the PA Turnpike, take Exit 57 (Monroeville). After the toll plaza, get in the left lane to get on Business Rt 22 West. At the 1<sup>st</sup> traffic light, turn left onto Rt 48 South (Moss Side Blvd) and follow the above directions.

• ***Advertise in the IEEE Pittsburgh Bulletin***

Reach over 2000 members of the IEEE Pittsburgh Section every month. The bulletin is issued on or about the 1<sup>st</sup> of every month. Final advertising copy must be submitted in an electronic form compatible with Word. The ad and payment must reach the newsletter editor by the 20<sup>th</sup> of the preceding month to be included in a particular bulletin. Prices shown are for one month.

<u>Ad size</u>	<u>Business</u>	<u>University</u>	<u>IEEE Member</u>
Full page (8-1/2 x 11)	\$250	\$190	\$190
½ page	\$130	\$100	\$100
1/3 page	\$85	\$65	\$65
¼ page	\$65	\$50	\$50
Business card size	\$40	\$30	\$20

Business card size ads for job openings in our area (Pittsburgh and Morgantown) will run for no charge for one month.

• **Holm Conference in Pittsburgh**

The 53<sup>rd</sup> IEEE Holm Conference on Electrical Contacts will be held in Pittsburgh September 17 – 19, 2007 at the Sheraton Station Square Hotel. The Holm Conference is hosted by the Technical Committee on Electrical Contacts, Connectors, and Cable (TC-1), which is part of the IEEE Components, Packaging, and Manufacturing Technology (CPMT) Society. Members of the committee come from research & development, manufacturing, and utilization. To learn more about this conference, go to <http://www.ewh.ieee.org/soc/cpmt/tc1>.

***Good Luck to Everyone Taking the PE or FE exam in April***

**2007 Calendar – Meetings of IEEE Pittsburgh Section**

	Jan	Feb	Mar	Apr	May	June	July	August
Executive Committee	18 - 7pm Panera Bread Oakland	15 Panera Bread Oakland	15 Panera Bread Oakland	19 Panera Bread Oakland				
Section		17 Engineers Week table	30 SciTech					
Communi- cations					8 Terahertz Imaging			
Computer		17 Robot car race	21 Vision 20/10					
EMBS		28 Data Compression						
EMCS				17 Ferrites to Reduce Noise				
PES/IAS	3, 10, 17, 24, 31 PE Prep class  30 AdCom	7, 21, 28 PE Prep class  22 Early Power Frequencies	7, 14, 16, 21, 28, 30 PE Prep class  29 Pitt MBA programs	4, 11, 18 PE Prep class	9 AP1000 Control Rm Tour	Date TBD Tour Electro- optics Center		Pirates game
Magnetics	17 Imaging Mag Surface			12 Ferrite Materials				
Robotics								
Signal Processing	31 Magneto- encephalogra- phy							
Social Impl of Technlgy				26 Ethics & Prof Engr				
Upper Mon			19 Commun. Train Contrl					
Consultants Network								
Life Member		8 Wearable Computing						
GOLD								
PACE				26 Ethics & Prof Engr				
Student Activities								