



IEEE Pittsburgh Section



# Bulletin

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*All announcements for publication in a particular month's bulletin are due to the Editor by the 20th 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*

Greetings, friends. I trust you are all doing well.

Dr. Ralph Wyndrum, 2006 IEEE-USA president and President of the IEEE-USA Innovation Institute, will visit our Section on December 19, 2007 to explain how the Innovation Institute can help engineers in our Section. This meeting is open to all section members. Please look for the announcement in this newsletter.

As we enter the holiday season, please take the opportunity to thank the volunteers that make our Section work. Every meeting, every talk, every activity requires hard work on the part of volunteers to make it happen. These volunteers serve the Section out of a selfless desire to make our Section better and to provide opportunities to our members for professional growth. A simple “thanks” from a member can mean a lot to an overworked volunteer.

I am pleased to report that I have been contacted by members interested in starting local chapters of the Nanotechnology Society and the Lasers and Electro-Optics Society. If you are interested in assisting with the formation of these local chapters, please let me know and I will put you in touch with the appropriate people.

We have a number of new volunteers this year, but there are still open positions for next year. Our Section grows through the introduction of new ideas and different perspectives, and perhaps your contributions will make the difference. Please consider serving your Section and sharing your ideas.

Ralph Sprang  
Pittsburgh Section Chair  
[rsprang@ieee.org](mailto:rsprang@ieee.org)

### **Section**

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### **Chapters**

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Computer Society – Chair: John Twigg (see above)

Engineering In Medicine & Biology Society  
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Signal Processing Society – Chair: Dr. Heung-No Lee  
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Society on Social Implications of Technology  
Chair: Joe Kalasky, P.E.  
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### **Affinity Groups**

GOLD – Chair: Andrew Rydholm  
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Life Member – Chair: Bob Grimes, P.E.  
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Women In Engineering – Chair: Jennifer Ploskina  
[jennifer.ploskina@eaton.com](mailto:jennifer.ploskina@eaton.com)

### **Committees**

Consultants Network

Professional/Career Activities (PACE)  
Chair: Joe Kalasky, P.E. (see above)

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Publicity – Chair: Thomas Dionise, P.E.  
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2008 PES General Meeting Technical Program Chair – Dr. Kalyan Sen (Kal) [senkk@ieee.org](mailto:senkk@ieee.org) (724) 696-1611; General Chair - Dave Vaglia (see above)

## • *IEEE-USA Innovation Institute Forum*

**Speaker:** Ralph W. Wyndrum CEO, IEEE-USA Innovation Institute & 2006 IEEE-USA President  
**Date:** Wednesday, December 19, 2007  
**Time:** 6:30 PM  
**Place:** Benedum Hall, Room 1175, University of Pittsburgh, Oakland Campus

*Abstract:* The IEEE-USA founded the Innovation Institute, homed in Washington DC, to advance the preparation of leaders responsible for the innovation of new products and services, in a formal program of courses and workshops, shared learning, mentoring and networking. This talk will present the mission, goals, structure and leadership of the Institute, and propose that the Pittsburgh Section host an Innovation Forum.

The IEEE-USA Innovation Forum will provide face-to-face training for mid-level managers, current and future leaders from industry, academia, and government. Top innovation leaders with extensive first-hand experience will lead attendees through this interactive and educational experience. They will learn to innovate in a team setting and work through real case studies, using group discussions and exercises.



*Bio:* Dr. Ralph Wyndrum leads Executive Engineering Consultants, in areas of R&D resource allocation and decision sciences targeted at new products and services. He also teaches Strategic Leadership/ Decision Quality at Rutgers. Prior to assuming these positions, he had a long and successful career at Bell Labs and AT&T Labs, beginning in thin film and solid state circuit R&D, and retiring as Technology Vice President and then Program Planning and Management Vice President. As IEEE-USA 2006 President, Dr. Wyndrum advanced programs aimed at mid-career education and at K-12 Science and Mathematics education. [More Info...](#)

## • **"WHY NOT NUCLEAR?"**

Speaker: Joseph T. Cioletti, PE., Principal Engineer, Westinghouse Electric Company  
Date: Wednesday, January 23, 2008  
Time: Social 6:30 PM, Program 7:00 PM  
Place: Westinghouse Energy Center  
Cost: No Charge but RSVP Required by Wednesday January 16, 2008  
Sponsors: Power Engineering Society/Industrial Applications Society.  
Organizer: Dr. Kal Sen, P.E., [senkk@ieee.org](mailto:senkk@ieee.org) or 724-696-1611.

*Abstract:* Commercial nuclear power has always been a controversial topic in the media, especially since Three Mile Island and Chernobyl. Over the last several decades, changes throughout the industry have provided advancements in safety and operating efficiencies, making nuclear power a safe, economically viable and sound option for our energy future. The purpose of this presentation is to lay out the facts in a reasonable manner that shows a clear-cut case for expansion of nuclear power plants in the U.S.



*About the speaker:* Joe Cioletti's passions are connecting with people, technology and new market development. Joe is a Principal Engineer with Westinghouse Nuclear working on AP1000 Instrumentation and Control as well as being a speaker's bureau member. He holds BS and MS degrees in Electrical Engineering from the University of Pittsburgh and is a registered Professional Engineer in the Commonwealth of Pennsylvania. He serves as secretary for the 2007 IEEE Pittsburgh section executive committee. Earlier this year he recently represented the SW PA region for the 2007 IEEE Washington, DC 'Fly-in' by meeting with congressional members on H1-B immigration issues. He is an inventor on 5 US patents. Joe also 'grew up' with nuclear – his father was an engineer at Westinghouse Bettis for nearly his entire 41-year career. [More Info...](#)

## • **Engineer's Week 2008 - Call for Volunteers**

Once again the IEEE will have a demonstration table for Engineer's Week 2008 at the Carnegie Science Center on Saturday, February 16. The event table is a fun and effective way for the IEEE to communicate to our youth that electrical engineering can be both enjoyable and challenging. Volunteers are needed to take a turn at the table for about 1 hour each. If you are interested, please reply with the time slot you would like by February 10. The 1-hour slots will begin with the first at 10 AM.

The demonstrations by the IEEE and other engineering societies and companies will take place from 10 AM to 5 PM. In addition to ours, there will be over 60 exhibits by other local technical societies. They expect more than 600 engineers and over 4500 children and adults to attend. The volunteers get an E-Week T-shirt, free admission, free parking, and \$2 off coupon for family members.

In general, the idea is to get the children involved. The IEEE table will be setup about 8 AM including some signage and pamphlets on careers in electrical engineering. We will demonstrate some simple electrical circuits: hands on items for the children. Do you have other ideas? Something you would like to demonstrate? Please bring it with you.

A Volunteer Orientation will be held in February at the Carnegie Science Center with details provided in a future Bulletin. The orientation is helpful but not required. Pizza and soft drinks will be provided.



*To volunteer to help with the IEEE table for 2008 Engineer's Week, just email [tom.dionise@ieee.org](mailto:tom.dionise@ieee.org), and you will be given more details and included in future mailings.*

### ***• Society on Social Implications of Technology***

In just eight months we have become a very active and well recognized chapter. We had meetings on Ethics for Engineers, Implications of Home-based Production & Use of Non-Grid Power, Why not Nuclear? And an Ethics session for students. Your local officers enjoyed the privilege of meeting many of you in person this year and look forward to seeing you during 2008 in which we will offer more unique topics found no where else in the IEEE. One aspect of a local chapter that makes it successful is the number of local IEEE members who belong to the chapter per se. We now have our annual IEEE invoices in hand. Kindly consider becoming part of our local winning team by joining SSIT with a simple click ( and a few dollars ) on your annual renewal form. Although any IEEE member can attend our meetings, as an SSIT Member you can actively participate in planning and organizing our offerings in 2008. There are just seven SSIT Chapters in the USA and only twelve in world.

Some of the limitless topics:

- Health and safety implications of technology
- Engineering ethics and professional responsibility
- Engineering education in social implications of technology
- History of electrotechnology
- Technical expertise and public policy
- Social issues related to energy
- Social issues related to information technology
- Social issues related to telecommunications
- Systems analysis in public policy decisions

Economic issues related to technology  
Defense and Peace technology  
Environmental implications of technology

If the above is exciting to you, consider joining SSIT now:

Local SSIT Officers:

Chair: Joe Kalasky j.kalasky@ieee.org

Vice Chair : Andrew Rydholm arydholm@ansoft.com

Treasurer: Bob Watt rcwatt@rcwatt.com

### ***• Election of Officers for 2008***

At the November meeting of the Executive Committee, the slate presented by the nominations committee in September was unanimously accepted. There were no other nominations. The officers for 2008 are as follows:

Chair – Ralph Sprang to serve a 2nd year in this position;  
Vice Chair – John Twigg to serve a 3rd year in this position  
Treasurer - Joe Cioletti;  
Secretary - Bob Brooks

### ***• Gerry Kumnik receives RAB Leadership Award***

Gerry Kumnik has been selected as a 2007 recipient of the **RAB Leadership Award**. John Twigg placed his name in nomination. The selection was made by the RAB Awards & Recognition Committee and approved by the IEEE Regional Activities Board during its 17 November 2007 meeting.

This is a very prestigious award, and the IEEE Regional Activities Board honored Gerry for the outstanding contributions he has made to numerous section activities. The award consists of a cash prize of US\$500 and a plaque, which carries the following citation: "For continuous, outstanding service and leadership to the IEEE Pittsburgh Section and Community through the IEEE Robot Car Race".

### ***• Nominations for Outstanding Engineer Award***

**The IEEE Power Engineering Society Chapter of the Pittsburgh Section** is seeking nominations from local PES members for the 2008 PES Chapter Outstanding Engineer Award. The Outstanding Engineer Award is designed to recognize members of the Pittsburgh PES Chapter who have made outstanding contributions to their profession through their technical abilities. The nominees will be judged on the basis of their activities during the past two calendar years (2006 and 2007). Please nominate yourself or someone else by providing the following information:

Name, IEEE Membership Number, IEEE Grade, Professional Affiliations, Importance of technical contributions, Patents and/or proprietary designs and/or papers and/or technical presentations, Description and years of technical distinction and responsibility, Service to IEEE, Service to the engineering profession outside IEEE, and Recognition through other honors.

Nominations should be submitted to the chair of the PES Award Committee, Harry Hagerty, at hhagerty@ieee.org no later than January 31, 2008. The decision of the Award Committee is final. The winner will be recognized at the Pittsburgh Section's History Dinner in the Spring of 2008.

### **. *Distinguished Lecturer Visits Pittsburgh***

On November 7, 2007, Pittsburgh in Region 2 had the privilege of having PES President-Elect and IEEE Distinguished Lecturer Wanda Reder to give a presentation on *Practical Lessons from Wind Farm Collector Systems and Interconnections* at the Westinghouse Energy Center. Kalyan Sen, Past Chair of IEEE Pittsburgh Section, hosted the meeting. The program started with a social followed by the presentation with an attendance of 24. There was plenty of opportunity for questions and answers.



The purpose of this presentation was to give an overview of wind energy development in the United States, including system modeling and studies for interconnection, typical project structure, the turbine and tower, and engineering the collector system. The driving forces behind the growth in wind energy capacity were discussed. The copies of the presentation were provided to the participants.

**Host Kalyan Sen and Distinguished Lecturer Wanda Reder.**

### **. *New Senior Members***

Congratulations to the following members of the Pittsburgh Section who were promoted to Senior Members of IEEE in late October 2007.

Robert Parker  
Thomas Kerr

- ***Approval of the New IEEE Transactions on Haptics***

At the June meeting of the IEEE TAB approved the Phase II Proposal For *IEEE Transactions on Haptics* (TH). This creates another RAS, (Robotics and Automation Society), sponsored or co-sponsored archival publication. The Journal will address the science, technology and applications associated with the acquisition of information and manipulation of objects through touch. The Journal will include all aspects of manual exploration and manipulation by humans, machines and interactions between them which can be performed in real, virtual, teleoperated, or networked settings.

Haptics is a growing area. With exception of the *IEEE Transactions on Robotics*, there is no single journal that covers all aspects of Haptics. As a research area, Haptics is a non-traditional scientific discipline in that disciplines such as psychology and sociology are naturally inter-correlated with engineering and computer science.

The new transactions will target professionals in diverse fields, including cognitive psychology, medicine, computer science, robotics, ergonomics, and Mechanical Engineering. The First Issue is scheduled to be published in March 2008. The new Journal is financially cosponsored by the RAS, the Computer Society, and the Consumer Electronics Society. The Engineering in Medicine and Biology Society is a technical co-sponsor.

Respectfully submitted,

Guy M. Nicoletti  
IEEE Robotics Chapter Chair

- **Local Job Opportunity**

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Generation Systems Division  
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BS Engineering or tech, + 8 yrs sales exp in elec gen equip or related field; Exp negotiating t&c; Computer literate - MS Office & MRP/ERP.

Apply: [jobs@meppi.com](mailto:jobs@meppi.com); EOE.

## 2007 Calendar – Meetings of IEEE Pittsburgh Section

	Jan	Feb	Mar	Apr	May	June	July	August	Sept	Oct	Nov	Dec
Executive Committee	18 - 7pm Panera Bread Oakland	15 Panera Bread Oakland	15 Panera Bread Oakland	19 Panera Bread Oakland	17 Joe Mama's Oakland	21 Joe Mama's Oakland		16 Joe Mama's Oakland	20 Panera Bread Oakland	18 Panera Bread Oakland	15 Panera Bread Oakland	20 John Harvard's
Section		17 Engineers Week table	30 SciTech			28 History Dinner			15 Picnic North Park			19 Ralph Wyndrum
Communi- cations					8 Terahertz Imaging					19 WiFi In the US	13 EO Tour 16 Lyapunov	
Computer		17 Robot car race										
EMBS		28 Data Compression										
EMCS				17 Ferrites to Reduce Noise						25 MIL-STD- 461		
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 31 High Res Grounding		12 AdCom	17 Pirates game	26 AP1000 Control Rm Tour	25 PES Gen. Meeting Cmte. 16 AdCom	7 Wind Farm 13 EO Tour	12 AdCom 6:00 PM Panera Bread Penn Center
Magnetics	17 Imaging Mag Surface			12 Ferrite Materials		12 Ultrafast Microscopy					14 Nano- particles	
Robotics									20 Lunch Greensburg			
Signal Processing	31 Magneto- encephalogra phy					8 Quantization						
Social Impl of Technlgy				26 Ethics & Prof Engr	24 Home- based Power					19 Why not nuclear?		
Upper Mon			19 Commun. Train Contrl		8 Nano- materials					15 FECC Proc.		
Consultants Network												
Life Member		8 Wearable Computing							20 Lunch Greensburg			
GOLD										19 Why not nuclear?		
PACE				26 Ethics & Prof Engr	24 Home- based Power							
Student Activities												