



IEEE Pittsburgh Section

Bulletin

September 2007 Volume 56, No. 9



Included in this issue:

- From the Chair
- Advances and Applications in Biped Robots from the Robotics Society & Life Member Groups
- Modern Control Room Simulator for Nuclear Power Plants Tour
- MIL-STD-461E/F requirements and techniques from the EMCS group
- Section Picnic – Sept. 15 – North Park
- “Why Not Nuclear?”
- Local Committee Update for July 2008
PES General Meeting in Pittsburgh

Editor of this issue: Philip Cox, p.e.cox@ieee.org (724) 443-0566, assisted by Craig Baker.

Contributors: Andrew Novotny, Bob Grimes, Ralph Sprang, Mike Oliver, Joe Kalasky, and Dave Vaglia.

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 has past issues of the bulletin and lots of other useful information

From the Chair

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

The annual section picnic will be at North Park this year, at the Leet shelter. This is a great opportunity to get involved and meet the other Section members, volunteers, and officers. Please see the announcement in this bulletin for the details.

The executive committee has elected a nominations committee and the committee is seeking nominees for the officer positions. Our past chair Dave Vaglia is chairing the nominations committee and Phil Cox and Joe Kalasky are the committee members. The elected positions in the Section are Chair, Vice Chair, Treasurer, and Secretary. If you are interested in serving as an officer of the Section, please let a member of the nominations committee know soon. The candidates will be confirmed at the September 20, 2007 executive committee member and announced in the October Section bulletin. Volunteer positions, appointed by the chair, are also available. If you have questions or need further information, please feel free to contact me or any other Section officer.

Our Section grows through the introduction of new ideas and different perspectives. Most of the current group of officers and volunteers has served the Section for several years. It would be wonderful for some new folks to get involved and give some of the others a chance to take a break. Please consider serving your Section and sharing your ideas.

At the September executive committee meeting, the budget for the next year will also be discussed. If you have ideas for meetings, topics, or special events, please tell the appropriate chair so that funding for these events can be allocated in the budget.

Ralph Sprang
Pittsburgh Section Chair

Section

Chair & Awards Co-Chair – Ralph Sprang
rsprang@ieee.org

Vice Chair – John Twigg
jtigg@ascent-systems.com (412) 795-4444

Secretary – Joe Cioletti
ioesph@cioletti.com (724) 516-3897

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

Webmaster – Gerry Kumnik, gerrykum@ieee.org

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

UpperMon Subsection
Chair: Dr. Dimitris Korakakis
Dimitris.Korakakis@mail.wvu.edu
(304) 293-0405 x2512

Chapters

Communications Society - Chair: Phil Cox
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 (412) 767-2400 x3506
Co-Chair: Dr. Zhi-Hong Mao
maozh@engr.pitt.edu (412) 624-9674

Electromagnetic Compatibility Society
Chair: Michael J. Oliver
emi@majr.com (814) 573-2812

Power Engineering & Industry Applications Societies
Chair: Andrew Novotny
andrewnovotny@ieee.org (412) 351-4954

Magnetics Society – Chair: Dr. Ganping Ju
Ganping.Ju@Seagate.com (412) 918-7046

Robotics Society – Chair: Dr. Guy Nicoletti
Nicoletti+@pitt.edu (724) 836-9922

Signal Processing Society – Chair: Dr. Heung-No Lee
hnlee@engr.pitt.edu (412) 624-9677

Society on Social Implications of Technology
Chair: Joe Kalasky, P.E.
j.kalasky@ieee.org (724) 838-6492

Affinity Groups

GOLD – Chair: Andrew Rydholm
andrew_rydholm@yahoo.com (412) 261-3200 x281

Life Member – Chair: Bob Grimes, P.E.
r.d.grimes@ieee.org (412) 963-9711

Women In Engineering – Chair: Jennifer Ploskina
jennifer_ploskina@eaton.com

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 (724) 779-5864

2008 PES General Meeting Technical Program Chair – Dr. Kalyan Sen (Kal) senkk@ieee.org (724) 696-1611; General Chair - Dave Vaglia (see above)

Advances and Applications in Biped Robots

Joint Meeting of the Pittsburgh Area Robotics Society & Life Member Group

Speaker: Dr. Guy Nicoletti, University of Pittsburgh, Greensburg
Date: Thursday, September 20, 2007
Time: Luncheon: 11:30 PM
Technical Presentation: 12:30 PM
Short LM Meeting: 1:00 PM
Place: University of Pittsburgh, Greensburg Campus
Hempfield Room, Chambers Hall

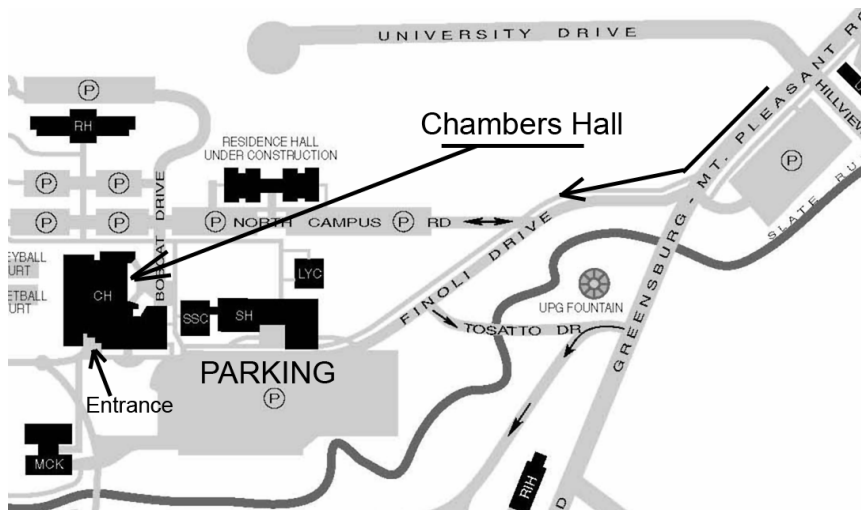
There is no charge for the lunch but RSVP REQUIRED by Friday, Sept 7. to nicolett@verizon.net

In addition to the technical presentation the meeting will organize participation in the UPG freshman engineering mentoring program. This is an opportunity for experienced engineers to sit down with two groups of 20 to 25 freshman engineering students in informal discussions about general engineering, social, and management topics. Any one in the IEEE Pittsburgh Section that can invest an afternoon with the students is welcome. If you are interested, but can not attend the meeting, contact either Bob Grimes, Chariman LM Group, r.d.grimes@ieee.org, or Dr. Guy Nicoletti, Chairman Robotics Society, nicolett@verizon.net.

Directions to UPG from Pittsburgh via Turnpike:

(Or go to: <http://www.upg.pitt.edu/Alumni/directions.aspx>)

- Exit at the Irwin new #67 (old #7) - take U.S. Route 30 East for about 9 miles (Note: DO NOT exit into downtown Greensburg. Route 30 bypasses the city; stay on the bypass).
- Exit from 30 east at the Greensburg- Mt. Pleasant Road exit.
- At Stop sign at the foot of the ramp turn right and follow Mt. Pleasant Road for approximately 8/10 mile.
- Turn right at the traffic light at main entrance onto Finoli Drive. Park in large lot at end of Drive.



Please Reply:

We need to know the attendance to make luncheon arrangements. Please contact – Dr. Guy Nicoletti before Friday, Sept. 7th by email: nicolett@verizon.net

Modern Control Room Simulator for Nuclear Power Plants Tour



Date: Wednesday, September 26, 2007

Time: 6:00 PM Light dinner
6:45 PM Nuclear Energy Update
7:00 – 8:30 PM Tours

Place: Westinghouse Energy Center, Monroeville, PA Directions below

Cost: No charge to IEEE members and their guests

Sponsors: IEEE Pittsburgh PES/IAS
All IEEE members and their guests are welcome

RSVP: **Required** to Dave Vaglia at 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.

Note that this is a repeat of the tour that was held in May this year. Those members that responded for the May event but were placed on the waiting list will have first priority.

Westinghouse will be providing a tour of two areas, the AP1000 Nuclear Power Plant Control Room Simulator that is under development, and the Customer Center for 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.



- ***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 2nd 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 1st 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 1st traffic light, turn left onto Rt 48 South (Moss Side Blvd) and follow the above directions.

- ***Section Picnic - Sept. 15 - North Park, Leet Shelter***

Catered by Famous Dave's Barbeque

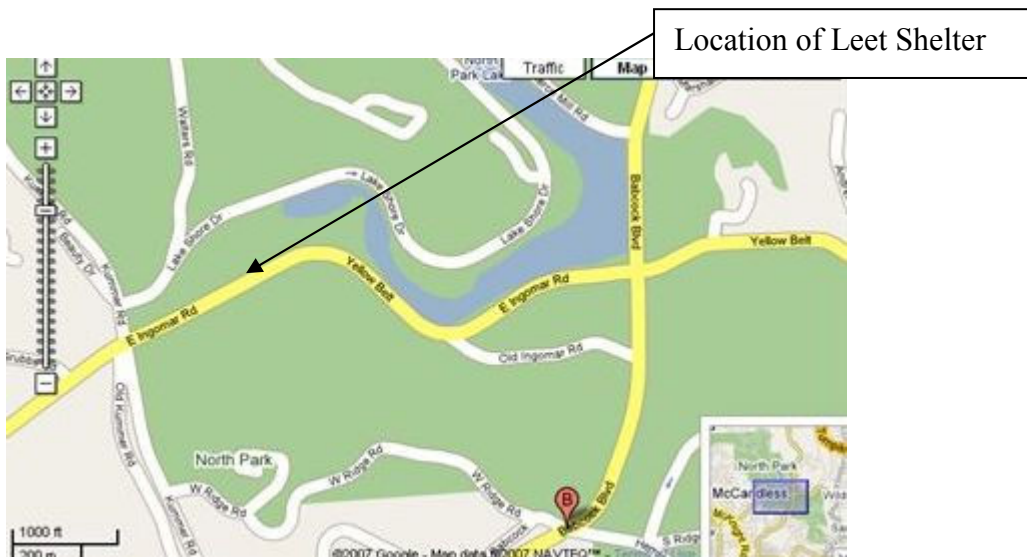
Date: Saturday, September 15, 2007

Time: 1 PM – 5 PM

Place: Leet Shelter in North Park

Cost: No charge

RSVP: **Required**, to make sure there is enough food, to Ralph Sprang, email rsprang@ieee.org with your reservation by 9/12/07.



- ***MIL-STD-461E/F requirements and techniques***

Speaker: Mr. Steve Furgeson , V.P. Operations of Washington Laboratories
Date: Thursday, October 25, 2007
Time: 6:30 PM Reception 7:00 PM Presentation
Place: Westinghouse Energy Center, Monroeville
Cost: No charge
Sponsor: EMCS Chapter
RSVP: **Required** to Mike Oliver at emi@majr.com or (814) 573-2812

Abstract: The MIL-STD-461 standard establishes interface and associated verification requirements for the control of the electromagnetic interference (emission and susceptibility) characteristics of electronic, electrical, and electromechanical equipment and subsystems designed or procured for use by activities and agencies of the Department of Defense. Such equipment and subsystems may be used independently or as an integral part of other subsystems or systems. This standard is best suited for items that have the following features: electronic enclosures that are no larger than an equipment rack, electrical interconnections that are discrete wiring harnesses between enclosures, and electrical power input derived from prime power sources. This standard should not be directly applied to items such as modules located inside electronic enclosures or entire platforms. The principles in this standard may be useful as a basis for developing suitable requirements for those applications. Data item requirements are also included.

About the speaker: As the Vice President of Operations, Steve Ferguson is responsible for the day-to-day testing and engineering activities at Washington Laboratories. He also prepares control plans, test plans, and test reports to guide the design from concept to qualification test acceptance for Department of Defense and commercial programs. He has over 28 years of experience in the EMC area with prior management positions for US Government and commercial electronics manufacturers. At times he can be found in the laboratory or on-site performing a test and presents a hands-on course for testing per MIL-STD-461.

- ***"WHY NOT NUCLEAR?"***

Speaker: Joseph T. Cioletti, PE., Principal Engineer, Westinghouse Electric Company
Date: Friday Evening October 19, 7 PM
Time: 7 PM, Social: 6:30 PM
Location: Conference Center Room 1175 Benedum Hall, University of Pittsburgh.
Cost: No charge
Sponsor: Society for Social Implications of Technology (SSIT) and Graduates of the Last Decade (GOLD)
Organizers: Joe Kalasky, j.kalasky@ieee.org; Andrew Rydholm, arydholm@ansoft.com

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 US.

- ***Local Committee Update for July 2008 PES General Meeting to be held in Pittsburgh***

Our monthly Local Committee meeting was held again on Wednesday evening, August 29th at the Boulevard of the Allies Panera Bread in Oakland to continue preparation for the 2008 conference. We plan to continue to hold the meetings at the Boulevard of the Allies Panera Bread. The following dates we scheduled for the next Local Committee meetings, so mark your calendars:

September 27

October 25

November 29

Everyone is enthusiastic about this opportunity to show off our IEEE section and city. Please consider helping in our preparation. Spouses are also needed to help plan and support the “Partners Program” which is being headed by Angela Vaglia (vagliaac@verizon.net).

Thanks for your support!

Dave Vaglia, P.E.
Chair, 2008 IEEE Power Engineering Society General Meeting
412-374-6513 office
412-491-6944 cell
vagliad@westinghouse.com

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			
Section		17 Engineers Week table	30 SciTech			28 History Dinner			15 Picnic North Park			
Communications					8 Terahertz Imaging						10 Tour of Electro Optics Center Freeport PA	
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	7, 21, 28 PE Prep class	7, 14, 16, 21, 28, 30 PE Prep class	4, 11, 18 PE Prep class	9 AP1000 Control Rm Tour		12 AdCom	17 Pirates game	26 AP1000 Control Rm Tour		10 Tour of Electro Optics Center Freeport PA	
Magnetics	17 Imaging Mag Surface			12 Ferrite Materials		12 Ultrast Microscopy						
Robotics									20 Lunch Greensburg			
Signal Processing	31 Magnetoencephalography					8 Quantization						
Social Impl of Technology				26 Ethics & Prof Engr	24 Home-based Power					19 Why not nuclear?		
Upper Mon			19 Commun. Train Contrl		8 Nano-materials							
PES General Meeting									27 Panera Bread Oakland	25 Panera Bread Oakland	29 Panera Bread Oakland	
Life Member		8 Wearable Computing							20 Lunch Greensburg			
GOLD										19 Why not nuclear?		
PACE				26 Ethics & Prof Engr	24 Home-based Power							
Women in Engineering												

