

Volume 16, Number 4

<http://sections.asme.org/pgh/>

Pittsburgh Section Calendar

January 5 – Executive Council Winter Social
(Pittsburgh, PA)

January 21 – Plextronics Tour (Location –
Pittsburgh, PA)

January 24 – Future Cities (Carnegie Music
Hall – Pittsburgh, PA)

February 2009 – Student / Professional Mixer

February 2009 – Engineers Week (Carnegie
Science Center – Pittsburgh, PA)

April 2009 – Awards Banquet



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PLEASE PRINT AND POST

Upcoming 2009 Program



PLEXTRONICS Tour

Date: Wednesday, January 21, 2009

Time: 6:00 PM,
Dinner Follows Tour

Location: Plextronics, Inc.
2180 William Pitt Way,
Pittsburgh, PA 15238

(links to maps are provided at <http://sections.asme.org/pgh/>)

Parking: Free

Tour Cost: Free

Dinner Cost: TBD

Contact: Ron Kalnas
E-mail: rskalnas@earthlink.net

Phone: (412) 825-8994

RSVP: by Friday, January 16, 2009

Program Description

Plextronics, Inc. is an international technology company that specializes in printed solar, lighting and other electronics. Headquartered in Pittsburgh, PA, the company's focus is on organic solar cell and OLED (Organic Light Emitting Diode) lighting, specifically the conductive inks and process technologies that enable those and other similar applications.

Plextronics is a privately held company with select partners and strategic corporate and venture investors. Plextronics has also teamed up with multinational companies in joint development agreements, strategic alliances and research partnerships.

The company was founded in 2002 as a spinout from Carnegie Mellon University, based upon conductive polymer technology developed by Dr. Richard McCullough. Over the past six years, Plextronics' scientists have refined and further developed this technology to deliver exceptional performance for printed electronics.

NOTE: Enrollment is limited to 20 people, so sign up **now!**



Message from the Chair



Dear Members,

Seasons Greetings!

I hope this message finds everyone well. On behalf of the EC I would like to thank all who responded to the Professional Development Survey. The Survey thus far has shown that there is a reasonable amount of interest in topics such as Project Planning, Six Sigma, FEA Product Design and a few other programs. We will be sending out another request to complete the survey so I encourage those who haven't to take a moment to provide feedback. These surveys provide the information that we need to plan successful programs that benefit us all.

There are no planned events for the month of December 2008 due to the Holidays. The Financial Planning Seminar scheduled for last month unfortunately had to be canceled due to low turnout. We recognize that such a program has value and so we will work towards implementing it at another time. We are planning a tour at the Plextronics facility in January, 2009 and hope that you will be able to attend. Details on this tour can be found in the December Newsletter.

Finally, I encourage you all to renew your membership with ASME for the next year. Furthermore, if you are interested in becoming more involved with the ASME Pittsburgh Section, please contact any of the Executive Committee members or myself. Our next Executive Committee meeting will be held on Friday, January 9, 2009 at the Denny's in Monroeville beginning at 7:30 a.m.

With Regards,

Akan, Akaninyene

ASME Pittsburgh Chair 2008-2009

aakan81@msn.com



Executive Committee Meeting

The next Executive Committee meeting will be Friday, January 9, 2009 at 7:30 AM at Denny's on Rt. 22 in Monroeville, PA.

If you wish to attend, please contact Akaninyene Akan at aakan81@msn.com or any member of the Executive Committee.

UPCOMING PROGRAM 2009



Program: Tour of Plextronics, Inc. (Pittsburgh, PA)

Date: January 21, 2009

Time: 6 PM,
Dinner Follows Tour

Location: 2180 William Pitt Way, Pittsburgh, PA 15238
(links to maps are provided at <http://sections.asme.org/pgh/>)

Parking: Free

Costs:

Tour Only: Free

Dinner: TBD

Contact: Ron Kalnas
rskalnas@earthlink.net,

RSVP: by Friday, January 16, 2009

Plextronics, Inc. is an international technology company that specializes in printed solar, lighting and other electronics. Headquartered in Pittsburgh, PA, the company's focus is on organic solar cell and OLED (Organic Light Emitting Diode) lighting, specifically the conductive inks and process technologies that enable those and other similar applications.

Printed electronics comprises next-generation light, power and circuitry products, including flexible displays, plastic solar cells and organic RFID tags. The market for printed electronics was approximately \$1 billion in 2006 and is expected to exceed \$300 billion within 20 years. With a company vision of enabling 15 billion printed electronic devices by 2015, Plextronics is creating technology capable of commercial-scale manufacturability and performance. The company's device design, process technology and Plexcore® branded inks enable the formation of active electrical layers — the key drivers of printed electronics. The company's three main product categories are Plexcore® OC organic conductive inks, Plexcore® OS organic semiconductive polymers, and Plexcore® PV organic photovoltaic ink systems.

Plextronics is a privately held company with select partners and strategic corporate and venture investors. Some of the country's most prominent venture capital firms in the light, power and circuitry markets have invested in the company. Plextronics has also teamed up with multinational companies in joint development agreements, strategic alliances and research partnerships.

The company was founded in 2002 as a spinout from Carnegie Mellon University, based upon conductive polymer technology developed by Dr. Richard McCullough. Over the past six years, Plextronics' scientists have refined and further developed this technology to deliver exceptional performance for printed electronics.

NOTE: Enrollment will be limited to 20, so soon up now!

Engineering Beyond the BS?



Virtually all practicing engineers who look up from the trees of their work long enough to see the forest of their profession feel a variety of forces pulling them back to school.

Engineering licensing boards are adopting policies that encourage (or mandate) continuing education as a condition for maintaining professional registration. William Wulf, former president of the National Academy of Engineering, (and former Pittsburgher) notes that unlike most professionals (lawyers, doctors and even business managers), engineers consider a bachelor's degree a professional degree, which places employers in the position of investing heavily in new-hire training. Nearly seven years ago the American Society of Civil Engineers (ASCE) adopted a policy that supports the need for a master's degree as a "prerequisite for licensure and the practice of civil engineering at a professional level". Clearly, there are institutional forces at work which make graduate education attractive.

At a personal level, many recently graduated engineers observe that their typical work day is focused less on *them* solving technical problems and more on the management of *other* people and resources to get the job done. They realize that the courses completed in undergraduate school did not really prepare them for the position they find themselves in today (or the position they wish they were in). That is not surprising, says Dr. Wulf, since "social and management sciences *needed* by the modern engineer" have been "squeezed out" of the contemporary engineering undergraduate curriculum. They may also see that co-workers with advanced degrees are compensated better and climb faster in the organization. Certainly, there are personal reasons to consider graduate education.

If you have entered the engineering workforce over the last 10 to 15 years, and have contemplated going back to school you probably have confronted two concerns. First, how do you obtain the graduate degree without significant changes to your professional and personal lifestyle? You are on a career path you don't want to leave and the job permits you to enjoy life beyond the work environment.

The second issue you face is what to study. Should you specialize in a technical area within your profession or should you focus on those management sciences that Wulf notes that you need, but did not learn about during your undergrad days? You are torn between improving technical depth or managerial breadth. Perhaps you have even thought about an MBA, but still get a great kick out of technical problem-solving, which attracted you to engineering in the first place. Engineers practicing in Pittsburgh have many options for pursuing advanced degrees thanks to the vibrant educational community that has existed here for many years. The region is blessed with a variety of graduate engineering programs offered in traditional and non-traditional formats.

Traditional programs at the University of Pittsburgh, Carnegie Mellon University, and West Virginia University have recently been joined by online or e-learning programs offered by universities with campuses many thousands of miles away.

It was against this backdrop of regional educational need and graduate school opportunity that Robert Morris University launched a program to grant master-of-science degrees in Engineering Management. The program began quietly seven years ago, but RMU has now conferred more than 100 M.S. in Engineering Management degrees to talented technical individuals employed here in Western Pennsylvania.

The program was designed to appeal to working engineers who want a curriculum that satisfies their personal learning objectives. Most classes are offered in eight-week sessions and meet one night per week, enabling students to finish the degree within two years by taking one course per session. Classes are led by faculty members who have significant engineering experience. They encourage you to bring your work into the classroom by adapting your specific problems for class discussion, class projects, or term papers. The project work needed for the degree can complement to your career demands. The classroom lecture topics are also directly applicable to your career. One graduate has said, "I've used many techniques that I've been able to put to use almost immediately at my place of work."

The degree requirements are flexible enough to allow students to tailor a program to fit their specific educational needs for technical depth and/or managerial breadth. Seven of the 10 required courses can be chosen from a menu of engineering, business, or information systems topics, enabling each individual to pursue a unique emphasis. Program participants can select from either a thesis or non-thesis option. This flexibility makes the program equally attractive both to students who wish to learn about robotics, lean manufacturing concepts, as well as discrete event simulation modeling and to those for those who want to learn about managerial accounting, group dynamics and developing strategies for technical organizations.

With more than 100 graduates currently employed in the Pittsburgh region, the RMU Engineering Management program is beginning to make a noticeable contribution to the educational needs of our community. You may be surprised to learn that the colleague you meet at the next association meeting may tell you that while working at FedEx, Bombardier, PPG, First Energy, Northrop Grumman, CTC, Siemens, Michael Baker, Bettis Labs, Eaton, or Bechtel, he earned his engineering graduate degree from Robert Morris University.

Contact Dr. John C. Hayward, P.E.,
Director of Graduate Engineering Programs at hayward@rmu.edu
or 412-397-2209 if you are interested in learning more about the program.

SHOW YOUR SUPPORT FOR ASME

If you sponsor ASME Pittsburgh, we will feature your company's products and services in our newsletter. For \$300 you can capture the attention of 1500+ fellow members and inform them of your company on a full page in one issue. For \$180 your company will be featured in ½ page; for \$95, ¼ page; for \$70, 1/8 page and for \$50 a business card sized space.

Nominate an Engineer for the 2009 Old Guard Early Career Engineer Award!

Recognize an outstanding early career engineer who actively involves themselves in the engineering profession, their communities, and the work of ASME. Application deadlines are February 1 annually. Submit your nominations today!

Visit <http://files.asme.org/asmeorg/Communities/EarlyCareer/8026.pdf> for more details.

Enhance Your Presentation Skills at Congress

Join us on Saturday, Nov. 1 from 8:30 – 4:30 pm for the Best Practices for Powerful Presentations event in Boston.

In this hands-on and interactive session, you will explore four key best practices for presentations: appropriate content, presentation format, enhancing the overall learning experience, and fine-tuning in real time. You will engage in mini presentations to obtain first-hand experience, examine varied presentation formats and their respective value, and discuss facilitating different types of groups and participation situations.

The Best Practices for Powerful Presentations event will leave you more confident and more competent in your presentation skills. Since this is such an important skill for ASME volunteers it will be held *free* of charge to all participants. Travel reimbursement is limited and will be offered on a *first-come, first-serve* basis to participants attending this 1-day event. This reimbursement will cover reasonable travel expenses (excluding rental car costs) and up to \$150 per diem for the day. To register or find out more information for this event, contact Ty Booker at bookert@asme.org by Oct. 15, 2008.

For more information on the event facilitator go to <http://files.asme.org/Volunteer/VOLT/15697.doc>.



Looking for Engineering Mentors at CMU

Only nine percent of American engineers are women. And only twenty percent of engineering degrees are earned by women. There are a number of reasons why the number of women in engineering is low. One of those reasons is a lack of role models and access to females who have earned and utilized engineering degrees.

You can make a difference in the education and career of female students in their first year of study at Carnegie Mellon. We are looking for ten women to mentor female engineering students. As a mentor you will help a student learn to develop supportive relationships, provide career guidance, build a professional network, build confidence, and gain valuable academic advice (this does not include tutoring or job prospecting).

To learn more about this new program and how you can participate, please contact JoAnn Truchan (412-578-7981; jtruchan@achd.net).

Call for Mentors! EMentoring - Opportunities for Early Career Engineers.

Mentors are a great way to gain knowledge and learn from the experiences of experts in your field. ASME offers an e-mentoring service right at your fingers!

To learn more and sign up for mentors, or to register to become a mentor, log onto http://www.asme.org/jobs/mentoring/Ementoring_Early_Career.cfm or contact Noel Netel at neteln@asme.org

WE WANT YOUR HELP!

ASME Pittsburgh would like your input on future Professional Development Programs that we offer to you, the members of ASME Pittsburgh!

So, please take a few minutes and complete the following 7 question survey on possible programs we can offer you at:

[http://www.surveymonkey.com/s.aspx?
sm=jJqD8Vo5_2ftNAPblGjXBusA_3d_3d](http://www.surveymonkey.com/s.aspx?sm=jJqD8Vo5_2ftNAPblGjXBusA_3d_3d)



Recipient of the First Virginia Tech Memorial Scholarship



Please join The ASME Foundation in presenting the first ever Virginia Tech Memorial Scholarship award to Justin Klein. Mr. Klein, who has completed his undergraduate studies at VT, will begin graduate coursework at the College of Engineering in the fall 2008.

The Virginia Tech Memorial Scholarship Fund was created with your generosity to permanently observe the tragic events of April 16, 2007. The fund is currently endowed to ensure that a VT graduate student in engineering will receive a \$5000 award in perpetuity.

Congratulations Justin! Go Hokies!

Call for Papers: Design Engineering Technical Conferences

Technical paper abstracts and drafts are now being accepted for the 2009 ASME International Design Engineering Technical Conferences (IDETC), which will take place Aug. 30–Sept. 2, 2009, at the San Diego Convention Center and the Omni San Diego Hotel. Abstracts and draft papers must be received by Feb. 6, 2009.

Do you have an idea for a Program or Tour for ASME Pittsburgh?

If so...

Contact any Executive Committee Member to start planning! We want to know what you would like to see!

**ASME Pittsburgh
2008 – 2009 Fellows**

ADNAN AKAY
HARVEY G ALLEN
EDMUND C APPLEBY
RONALD H AUNGIER
JOHN M BARSOM
JERRY L BITNER
JONATHAN CAGAN
PRANABESH CHOUDHURY
MINKING K CHYU
WILLIAM W CLARK
RONALD D COFFIELD
RICHARD W CONLEY
ARTHUR CROLL
ELLISON L DAVISON
JAMES C DIPERNA
DAVID E DIETRICH
W. D DOTY
L. IKE EZEKOYE
PEYMAN GIVI
DONALD S GRIFFIN
JERRY H GRIFFIN
WILBUR L KENNICOTT
WILLIAM T LANKFORD
MICHAEL J MANJOINE
JACK R MAURER
THEODORE A MEYER
BERTRAM J MILLEVILLE

ARTHUR S RATHBUN
STEPHEN I ROTH
WILFRED T ROULEAU
EDWARD S RUBIN
MICHAEL SACKS
GEORGE E SAXON
STANLEY G SCHAFFER
PATRICK J SMOLINSKI
PAUL S STEIF
THEODORE STERN
REMCO P WASZINK
JOHN W WESNER
DONALD WIEBE
BERNARD B WINER
SAVIO L WOO
SHI-CHUNE YAO
MICHAEL LOVELL
JEFFREY S VIPPERMAN
NADINE N AUBRY
MING LI
WILLIAM C MESSNER
EDMUND W CHU
WILLIAM J O'DONNELL
FLETCHER OSTERLE
WILLIAM J PURCELL
DAVID L PURDY

ASME Pittsburgh Section Executive Council members are in ***Bold Italics.***

Executive Committee 2008-2009 – Pittsburgh Section

Chair

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Westinghouse Electric Company
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Directors

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Richard Horne
Thomas (Rip) Curran
Marilyn Reeder
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Eric Bono
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