Letter from the President

As we come to the end of the calendar year, there are new opportunities for SWE Philadelphia members to be part of. First, our section was contacted by Drexel and SHPE to be part of an area alliance of professional organizations, community colleges, and universities. The combined resources of the groups could consolidate some of our individual career development programs. I am very happy that SWE-Philadelphia was included in a kickoff meeting November 21st, because it shows that SWE is viewed as an important part of outreach to girls at various school levels. Candice Hebden and I highlighted our certificate of merit program, 3D WIT, and the Widener mini-camp as successful tools for outreach. Temple, Drexel, Villanova, and the Community College of Philadelphia were also present. The theme of our discussion reminded me of our 2006 Regional Conference – Bridging the Past, Present, and Future. With this alliance, we hope to serve our communities by providing sustained, systematic exposure to STEM fields and link students from grade school to high school and from high school to community college or four-year institution. I believe community college outreach is SWE’s next step in reaching back and pulling forward strong candidates to higher engineering education. There is a SWE Forum open on www.swe.org to discuss Community College programs as a new SWE initiative, and I’d encourage all of you to logon and have a look. This alliance is brand new, so I’ll keep you informed of our progress!

Second, the Engineers Club of Philadelphia and the Engineering Week Council would like to collaborate on a scholarship program as well as public-relations projects. This is another great way to share resources and present a unified message to area students in terms of scholarships. It would also allow greater promotion of all the diverse aspects of the people and skill sets in engineering. This group is having a kickoff meeting December 13th at Pennoni Associates. If anyone is interested in representing SWE, please let me know!

The board is pleased to announce that Maryann Jessen has been appointed as the section’s Professional Development chair! Maryann joined SWE this year through her current position at the Vanguard Group Technology Operations Planning Department. She has worked with us at the 2006 Region E conference, at the Women in Information Technology event at Vanguard in September, and she was also able to attend this year’s National Conference in October. Maryann’s technical and business experience will help her in the professional development role, and the board is excited to have her join us.

Have a great holiday season!

Jennifer Garner
SWE-Philadelphia Section President
foilfencer27@verizon.net
SWE Calendar

December 2006

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>December 7</td>
<td>Holiday Lights at Longwood Gardens</td>
<td>Kennett Square, PA</td>
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January 2007

<table>
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<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>January 13</td>
<td>After Holiday Party with SWE NY at Heartland Brewery</td>
<td>New York, NY</td>
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Upcoming Events

After Holiday Part with SWE NY

January 13, 2007

Location: Heartland Brewery, Times Square, 127 West 43rd St, NYC
Time: 1pm
Price: $35 price fixed 3 course meal
RSVP by 1/5 to Kyrsten Brea at kbrea@hardesty-hanover.com
For more information, please visit the section website at www.philaswe.org

SWE Web Seminar in December:
Leading Technological Innovation
December 14, 2006, 2pm (EST)

Speaker/Webinar Information

Cheryl Perkins will speak about the challenges that face companies in the consumer products market and how Kimberly-Clark, as an innovation organization is addressing those challenges through open-innovation. She will discuss how the innovation function must be strategically integrated into the organization; and how an innovation organization leverages technologies, capabilities and processes to deliver insight-driven solutions.

Cheryl is Senior Vice President and Chief Innovation Officer for Kimberly-Clark Corporation. In this role, Cheryl leads and has responsibility for K-C’s innovation and enterprise growth organizations, including research and development, engineering, new business and global strategic alliances.

She provides visionary leadership to K-C and its global teams, and oversees the development of new strategic business opportunities aimed at maintaining K-C’s competitive advantages across its four key businesses to ensure long-term growth and deliver a continuum of innovative solutions. Additionally, Cheryl leads a team of innovators, who through the development and utilization of intellectual assets and core technologies, identify and transform insights, designs, emerging technologies and capabilities into total solutions and new-to-the-world innovations through internal development, acquisitions, strategic partnerships, joint ventures, alliances and by leveraging information technologies. Please visit www.swe.org under professional development to register.
On November 14, the Rohm and Haas Company sponsored the Philadelphia local chapter monthly meeting, which was held at the Bristol Engineering Center. Approximately 25 engineers participated in the meeting, of which approximately 50% were Rohm and Haas employees.

The SWE organization was welcomed by Carol Eicher, Vice President, Rohm and Haas Company. Lisa Colosimo, SWE chapter member, then provided general announcements, including the next SWE event scheduled for December 7 at Longwood Gardens. Carol Eicher introduced the speaker, Deirdre Crowley, Market Manager for Personal Care Products, Rohm and Haas Company. Her discussion was on “The Science Behind Personal Care Products”.

Deirdre’s presentation provided an introduction to the astounding sales and market potential of personal care products worldwide. Consumer trends were described for hair care, skin care and sun care. The products range for youthful and “experienced” skin. Even young men and teenagers are showing more interest in grooming products. Deirdre used the hair fixative product as an example to show how consumer needs are objectively measured to evaluate prototype formulations. The hold and aesthetic requirement of the hair styling product is mainly a function of the molecular weight (length of polymer chain) and glass transition temperature (temperature at which physical behavior changes) of the polymer. By varying the formulation and evaluating the formula through lab testing, salon testing and consumer testing, a score is developed on how well the product makes hair shine or stiffen, etc. Many formulas are developed to give varied results as consumers are looking for different attributes. In the end, however, the consumer is the real test and even after extensive testing, the product may fail to achieve target sales. We all received small samples of formulated prototypes.

We thank Deirdre Crowley for her excellent and informative presentation. Anyone interested in a copy of the presentation can contact ChristineMiller@rohmhaas.com.
Future City Gears Up for 2006 – 2007

The Philadelphia Regional Future City Competition, an education outreach program of the Delaware Valley Engineers Week Council, is actively seeking volunteers for this year’s program. Although the Regional Competition will not be held until January, the Future City Steering Committee has been registering schools since May.

Currently there are over 30 schools registered and working on their city designs. The program offers 7th and 8th grade students the opportunity to work with their teacher and a practicing engineer mentor to:

• Design a city of the Future using SimCity 3000
• Write a researched engineering essay describing their city development
• Build a 30” x 60” model of a portion of their city
• Prepare a 7 minute presentation

The schools will come together at the regional competition at Villanova University on January 27, 2007 to present their cities to teams of judges. The winning team will represent the Philadelphia region at the national competition in February. In addition, there are over 40 other prizes awarded at the regional competition including the SWE Philadelphia special award for Quality of Life.

In order to run the program, Future City needs almost 200 volunteers to be:

• Mentors – needed NOW in the following areas:
  o Philadelphia
  o Wilmington
  o West Chester
  o North Jersey (Freehold, Rockaway)
• Preliminary Judges, Special Award Evaluators and competition help – needed in late January

Why not volunteer for this exciting program? Share your engineering expertise and see just how creative future engineers are today! Sign up on-line at www.futurecityphilly.org, or call or e-mail Jennifer Wetzel, Volunteer Coordinator, at 215-573-3935 or volunteer@futurecityphilly.org.

Update Your Profile

Have you recently moved? Did you finally earn that master’s degree or MBA? Did you accept a great new job offer? Then don’t forget to update your National SWE Member Profile and tell us about it! The process is simple. First, go to the National SWE website (www.swe.org) and log in using your Member ID and password. Next, click on Member Services in the left hand column. Finally, click on “Profile Update” in the first column and fill in all pertinent new information (i.e. address, education record, employer, etc.)!
Would you like a chance to make a big difference in the life of a student in as little as 20 minutes a week? Then consider signing up for MentorNet, a nonprofit e-mentoring program.

MentorNet seeks science and engineering professionals in industry and government, either currently active, on leave, or retired, to mentor engineering and science community college, undergraduate, and graduate students, particularly women and underrepresented minorities, who are interested in pursuing a professional future in the fields of engineering and science. MentorNet also seeks tenured faculty members to mentor graduate students, postdoctoral scholars, and untenured faculty pursuing faculty careers.

Mentoring relationships last for 8 months. Because mentors and students communicate entirely by email, they can communicate wherever and whenever they choose. MentorNet's research-based programs have proven effective by providing "real world" information, encouragement, advice, and access to networks for students, and particularly for those underrepresented in engineering and science fields. "My mentor always gives me the encouragement that I need," says one MentorNet student. "Sometimes those few words make a big difference to me."

How can you volunteer to be a mentor?
1) Join the MentorNet Community for free: http://www.mentornet.net/join
2) Follow the One-on-One Mentoring Programs links to create a mentor profile.

Since 1998, MentorNet has matched more than 17,000 protégés and mentors with strong results. We hope you will join them! For more information, please go to www.MentorNet.net

Section Bylaws Revision- Your Help is Needed!

All SWE sections are required to revise their current bylaws in accordance with the new template provided by the Society. We are using this opportunity to change our executive council structure as well. And we could use your help!

The section executive council is proposing that we eliminate all standing committees and instead create multiple vice president positions, including one senior vice-president, who will assume the duties of president if the president is unable to serve. We hope that the addition of new officers will improve overall communication and help to distribute responsibilities more evenly among section leadership.

Please take a moment to review the draft revised bylaws and submit any questions or comments for discussion by Tuesday, December 12th. A copy of the draft bylaws can be found on our section website (http://www.philaswe.org/documents/bylaws.pdf). The first page provides a brief explanation of the information presented in the template. The actual bylaws (which begin on page 5) are not lengthy and easy to read! All of the proposed revisions to the template are marked in color.

The draft revised bylaws will be submitted to the National bylaws committee for review and preliminary approval. After this comment period has expired and pending preliminary approval from the committee, the proposed revised bylaws will require a vote from the entire membership.

Please send your comments to Tessa (tessa.winkler@gmail.com) by Tuesday, December 12th! Thank you for taking the time to share your input.
Member Spotlight

Name: Angela Lordi

Profession/Job Title: Senior Principal Engineer

Employer: Honeywell

Company Website: http://www.honeywell.com/sites/honeywell/

Work Description:
I am a Senior Principal Engineer at the Process Solutions Division of Honeywell. I started with Honeywell 16 years ago as a hardware digital designer specializing in Field Programmable Gate Array and embedded processor based designs. For the past 5 years, I worked as a Team lead to design and develop Honeywell’s next Generation Controller Platform. In the last year, I have been working as part of the system engineer/architect team to access how emerging and new technologies and tools can be best applied to improve Honeywell’s process and product portfolio. I have received 2 patents related to distributed process controller design.

College/University:
Cooper Union (New York City – Bachelor degree in EE)
Penn State University (Master Degree in Engineering)

Years as a SWE member: 1

Tell us a little about yourself:
I have a wonderful family- husband, daughter (9 years old), son (7 years old) and puppy (11 weeks old). Life is very rewarding and challenging; juggling busy work and family life is never boring. I feel that I have found a good work/family balance and happy with the career that I have chosen. As an electrical engineer, I feel that I can use my creative, analytical and leadership skills to implement and develop innovative process control systems used for oil refinery, chemical, pulp and paper, pharmaceutical, etc… products. For fun, I enjoy vacationing with my family and working on home decorating and remodeling projects. (Yes, I watch a lot of HGTV!) As my kids get older, we (as a family) plan to be more involve with community services.