



SWE Outlook

January 2004

Inside this Issue

- 2 SWE Calendar Announcements
- 3 Section News
January Meeting
- 4 More Section News
November Meeting
December Meeting
Section Scholarship Program
Volunteers Requested
Fund Development
Science Fair Judges
- 5 Engineering Mini-Camp for Girls
- 6 Camp History
- 7 Upcoming Events
Future City Competition
Touch the Future Program
- 8 Around the Region
DelMar Peninsula Section
Lehigh Valley Section
LM Subsection
Neighboring Region
- 9 Region E Conference
- 10 Professional Development
Engineers Club Courses, Tours
SWE-Phila Spring Seminar
- 11 FY04 Contact List

We will gladly include news items and activities from SWE Student Sections and nearby SWE Sections in *SWE Outlook*. Announcements for other organizations will be included as time and space permit. Please send inputs to Barbara.Faust@swe.org

SWE Outlook is published on our website and is available for direct mail to Section Members and other interested parties in electronic and/or paper formats. Please forward your preferred e-mail address and option for electronic copy only or for both electronic and paper copies to Carole.N.Stowell@lmco.com or Barbara.Faust@swe.com.

President's Corner

As we usher in the New Year, I wanted to give you a status of our section. I wrote in my September letter that one of the goals of the Section's Executive Board is to increase member participation. We are now half way through our fiscal year and I am pleased to report that participation in our section meetings has increased. Even more exciting is that many of the attendees at our meetings had never previously been to a section meeting. We have several interesting meetings coming up in the second half of the year, including joint meetings with ISA (Instrumentation, Systems, and Automation Society) and SHPE (Society of Hispanic Professional Engineers).

While the increase in meeting attendance is great news we still have more work to do. We need to continue the momentum we have with meeting attendance, but also find ways to get more of our members involved in other activities. In order to thrive, the section needs members to volunteer in a variety of ways. The time commitment can vary from a couple hours on a Saturday to several hours a month. If you are looking for short time commitments, consider volunteering to help with the Widener Engineering Mini Camp, reviewing scholarship applications, helping with the science fair, or presenting awards at local high schools. If you have time to make a more regular commitment, there are still a number of board and committee positions that need leaders. These activities are not only fulfilling but they look great on a résumé.

If you are interested in volunteering for a position or an activity, please contact me or the committee chair making the request.

Heather Bernardin

Reminder

- RSVP for January meeting to Dan Oswald by January 19 (Page 3)
- Training session for new Future City Preliminary Judges is on Jan 20 (Page 7)
- Early registration deadline for the Region E Conference is January 31 (Page 9)
- Application deadline for MIT Women's Technology Program for high school juniors is February 3 (Page 2)

The **SWE MISSION** is to:

- *stimulate women to achieve full potential in careers as engineers and leaders;*
- *expand the image of the engineering profession as a positive force in improving the quality of life; and*
- *demonstrate the value of diversity*

SWE Calendar - FY04

Date	Event	Location
Jan 04 21 24	Joint SWE-ISA Meeting: Web Based Technologies Philadelphia Regional Future City Competition	Siemens, Fort Washington Widener University
Feb 04 7 20-28	Engineering Mini-Camp for High School Girls Engineers' Week Activities	Widener University Various
Mar 04 5-7 8 9 13 20	Region E Conference Professional Development Seminar: Verbal Communications Bucks County Science Research Competition Lehigh Valley Science and Engineering Fair AAUW Touch the Future Program	Baltimore Drexel University Delaware Valley College Lehigh University Pennbrook Middle School
Apr 04 7	Delaware Valley Science Fairs Competition Awards Banquet	Fort Washington Expo Center TBD
May 04	Section Meeting Certificate of Merit Presentations	Various
June 04	Section Meeting Certificate of Merit Presentations	Various
Oct 04 13-16	SWE National Conference	Milwaukee, WI

Announcements

- **Mock Interview for students at Drexel U.** Students are encouraged to participate in events such as this to practice their interviewing skills with professionals from local companies. There are great possibilities that a co-op, internship, or permanent job may result from a practice session. For more information, please contact Andrea Martinez-Ayala, Society of Hispanic Professional Engineers, Greater Philadelphia Chapter First Vice President, at 267-625-6968.
- The **Women's Technology Program at MIT** is a 4-week summer residence program to introduce high school girls to electrical engineering and computer science. If you know a girl who is currently a high school junior with demonstrated math and science ability and an interest in finding out about Electrical Engineering and Computer Science, please encourage her to visit their web site <http://wtp.mit.edu> for more information and for an application form (applications are due February 3, 2004): Classes are taught in a supportive environment by a staff of MIT women PhD candidates and undergraduates. The full-time academic program includes hands-on experiments and team-based projects in computer science, electrical engineering, and mathematics. The goals are to increase girls' interest and confidence in pursuing computer science and engineering and to make them aware of their potential for success in these fields. Participants are selected from all over the country. For more information, please contact Cynthia Skier, Director, Women's Technology Program (WTP) www.wtp.mit.edu, MIT Department of Electrical Engineering and Computer Science.
- **Entry-level jobs** for scientist and engineers at the **Naval Surface Warfare Center (NSWC)**. Announcements of entry-level engineering/scientist positions for FY04 at the ND-II (Bethesda) and GS-5/7 (Philadelphia) levels are posted on NSWCCD's web site as well as on OPM's web site at www.usajobs.opm.gov. Vacancies at the ND-III/IV and GS-9/11/12 levels will be advertised on a case basis when requested by the departments. For more information, contact Rosali Bermudez, EEO Specialist NSWCCD P at 215-897-1794 or Pat Colgan at 215-897-7731.
- **Habitat for Humanity - Women Build.** On October 4, 2003, the family of Katina Montanez and dozens of volunteers celebrated the completion of her home in Easton. SWE volunteers helped to make this home a reality. The 2nd Women Build in the Lehigh Valley is now underway with a campaign to raise the \$50,000 necessary to fund the construction of a new home for another family in the Lehigh Valley. The goal is to have 500 women donate \$100 towards this project. For more information, visit the Habitat for Humanity International web site at www.habitat.org or call Habitat for Humanity of the Lehigh Valley at 610-776-7737, or visit web site www.habitatlehighvalley.com. Make checks payable to "Habitat for Humanity of the Lehigh Valley" and include "Women Build 04-05 in the memo line on the check. Please mail your donation to Habitat for Humanity of the Lehigh Valley, c/o Women Build, 34 South 10th Street, Allentown, PA 18102
- **SWE membership application form.** Download the form to be used for new member application or for requesting a membership upgrade from the national SWE website www.swe.org.
- Visit the **Philadelphia Section web site** at- www.swephila.org for current updates on section activities.

Section News

Joint Meeting of SWE-Philadelphia and the Instrumentation, Systems, and Automation Society (ISA)

Web Based Technologies

Speaker: Joe Valencia, Business Development Manager, AutomaTech, Inc

All section members, students, and guests are invited to join us in learning more about "Web Based Technologies." You have probably heard the term, but do you really understand what they are and how your plant operations can benefit with their implementation? This presentation will provide:

- Basic overview of what web based technologies are
- Summary of key benefits and applications
- Examples of some typical plant system architectures
- Discussion regarding major issues that must be considered when selecting and implementing these technologies

The newest web based technologies will be introduced and the benefits over previous technologies will be discussed. Vendor displays will be available.

The speaker, Joe Valencia, is a software solutions representative with over 10 years of industrial control experience. Joe currently provides guidance to companies in turning their manufacturing data into Key Performance Indicators (KPIs). Previously, he worked as an application engineer, electrical engineer, and certified trainer, providing HMI and SCADA consulting, design and implementation support to industrial customers. Joe has a B.S. Degree in Electrical Engineering from Drexel University.

Date: Wednesday, January 21, 2004

Time: 5:00 PM vendor displays open
5:30 PM light meal
6:45-7:45 speaker's presentation

Place: Siemens Campus
1015 Virginia Drive, Fort Washington, PA
(large sign on outside of building, just west of Honeywell)

Cost: \$10 for Members, Students, and Guests

RSVP: to Daniel J. Oswald
Applied Control Engineering
Phone: 215-631-9667 x344 or
E-mail: oswaldd@ace-net.com
by Monday, January 19, 2004

Vendor Displays

Applied Control Engineering (Systems Integrator)
AutomaTech (Intellution)
ABB Automation
Proconex (Emerson Process Management)
Engineering Consultants Group (OSI PI)
Rumsey Electric (Rockwell Automation)
Siemens Energy & Automation, Inc.

Directions: From the PA Turnpike - take Exit 26 (Fort Washington at Route 309) and follow signs to the Expo Center, which is also on Virginia Drive. Siemens will be on the right, prior to reaching the Expo Center/Honeywell. Note: the EZ Pass exit at Virginia Drive is in operation for westbound traffic only.

From Susquehanna Rd/Limekiln Pike, Siemens will be on the left after the Expo Center/Honeywell.

For detailed maps, visit www.isa.org/~phila/phillyisa/index.htm.

The **SWE OBJECTIVES** are:

- to inform young women, their parents, counselors, and the general public of the qualifications and achievements of women engineers and opportunities open to them;
- to assist women engineers in readying themselves for a return to active work after temporary retirement;
- to serve as a center of information on women in engineering; and
- to encourage women engineers to attain high levels of educational and professional achievement.

The **SWE Vision** is to be the recognized authority on, and advocate for, women in engineering and technology.

More Section News

November Meeting: Fall Seminar on Written Business Communications

This year, SWE-Philadelphia is providing two professional development seminars on business communications in the workplace for local engineers and students. The first seminar, which was held at Villanova University on November 10, 2003, addressed written communications. The second seminar, which will be held at Drexel University on March 8, 2004, will address verbal communications.

Barbara Faust, SWE Fellow and a now-retired Lockheed Martin Program Manager with over 30 years' experience in technical and business writing applications such as routine laboratory reports, engineering descriptions of analytical models, project status and technical reports, employee appraisals, proposal inputs, and various types of business planning reports, was the speaker for the November meeting. Ms. Faust provided the ten attendees with a variety of tips and lessons learned for enhancing the quality and usefulness of various types of written technical and business reports

Volunteers Requested

As mentioned in the *President's Corner*, one of our Section goals for this year is to increase member participation in the section. An ambitious goal is to have each member participate in some way - be it in person at a meeting or event, serving on or heading a committee, verbal or written communication to provide suggestions and/or help for section programs (for example, judging essays submitted in the Future City Competition by middle school students, evaluating Section Scholarship applications from college students, writing articles for the newsletter, completing a section survey form, voting to elect Section Officers), conducting an engineering workshop for pre-college students, serving as a SWE Counselor for a Student Section at a local engineering school, presenting Certificate of Merit awards, or financial support for our student award and career guidance activities.

Current volunteer opportunities include:

- Future City Competition: Preliminary judges, Special Awards Evaluators, General Volunteers - contact Jen Wetzel (see Page 7)
- Engineering Mini-Camp: Engineers to staff the labs and talk to parents - contact Vicki Brown (see Page 5)
- Scholarship Application Evaluators: - contact Jen Garner
- Science Fair Judges: - contact Barbara Faust
- SWE Counselors for Temple University and University: - contact Heather Bernardin
- Engineering Workshop Presenters for AAUW Touch the Future program: - contact Barbara Faust (see Page 7)

December Meeting

A networking/holiday social meeting was held on December 8, 2003 at the Manayunk Brewery & Restaurant. This event provided a good opportunity for members, both those new to the area and those who have been here, to meet and learn more about each other.

Section Scholarship Program

Applications for the 2004 Philadelphia Section Scholarship awards will be sent out in early February. Full-time female undergraduate or graduate students enrolled in an engineering, engineering technology, or computer science program at an accredited school located within the Philadelphia Section boundaries are eligible for the awards. Recipients are selected based on academic performance, dedication to engineering, and service to school and/or community. Last year we were pleased to make seven scholarship awards. The application form will be provided on our section web site www.swephila.org. More information and applications may also be obtained by contacting Jen Garner, SWE-Philadelphia Scholarship chair, at 215-652-7904 or jenga17us@yahoo.com.

Fund Development Activity

Our annual drive is underway to solicit support for our scholarship and Engineering Mini-Camp programs. Response forms will be sent to all section members and local companies within the next two weeks. Donations of any amount are appreciated. Named scholarship awards are made for each donation of \$1000 or more. Sponsors may indicate a level of support for the scholarships and/or the Mini-Camp. For more information, please contact our Corporate Liaison, Jen Wetzel, at 215-573-3935 or jwetzel@pobox.upenn.edu.

Science Fair Judges Needed

Local science fairs are looking for judges to evaluate student projects. SWE members have served as Regular or Special Awards judges at various levels of competition for many years. SWE-Philadelphia Special Awards are made to students for projects in the Bucks County Science Research Competition and the Delaware Valley Science Fairs Competition. SWE-Lehigh Valley provides Special Awards for students in the Lehigh Valley Science and Engineering Fair. It is interesting to see the types of research conducted by 6th through 12th graders. The time commitment is generally between four and six hours on one day. If you are interested in serving as either a SWE Special Awards or Regular Judge, please contact Barbara Faust at 215-257-6463 or Barbara.Faust@swe.org.

More Section News

SWE-Widener University Engineering Mini-Camp for Girls

by Dr. Vicki Brown, Camp Director

The 5th Annual SWE-Widener Engineering Girls' Camp will be held on **Saturday February 7, 2004** at Widener University. This program provides an opportunity for teen-age girls in the Philadelphia metropolitan area to experience engineering camp in an all-female setting, while their parents have the option of attending a companion workshop entitled "Sending Your Daughter to Engineering School." The camp and workshops are hosted by Widener University's School of Engineering and are staffed by engineers from the SWE-Philadelphia and DelMar Peninsula Sections, by students and alumni from the SWE student section at Widener, and by support staff from the Admissions, Financial Aid, and Freshmen Programs offices at Widener University.

The camp provides a series of individual hands-on laboratory sessions, organized as individual groups of about 10-12 girls. Lab sessions fit into a 50-minute-long format, with a short break in between. Each lab is led by one or two volunteer local women engineers ("camp counselors") who not only assist the girls in completing a laboratory project, but also talk about their work and explain how the lab project relates to that work. For example, a chemical engineer from DuPont might lead a laboratory project on fermentation, while explaining about her career as a process engineer.

All girls may participate in four laboratory projects while interacting with four to eight different SWE volunteers as the groups rotate among the lab projects. Because the "counselors" have varying professional backgrounds, the girls are exposed to a wide diversity of possible engineering careers and experiences. Content of any individual laboratory is less important than the contact between the girls and the SWE volunteers. The camp meets as a group for lunch, where conversation is led by members of the SWE student section at Widener and the focus is on the female engineering student experience. This interaction is desirable because many teenage girls more comfortably relate to college-age women than to professional women. The lunch period also provides an opportunity for parents to network with the women

engineers. The day ends with a general wrap-up session in which all participants are asked to evaluate the day. Schedules for the Girls' Mini-Camp Parents' Workshop are shown below.

Girls' Camp Schedule

Time	Activity
9:00 - 9:30AM	Registration / Continental Breakfast
9:30 - 10:00	Welcome / Introductions
10:15 - 11:05	Laboratory Session #1
11:15 - 12:05PM	Laboratory Session #2
12:15 - 1:30	Lunch / The Female Engineering Student Experience
1:40 - 2:30	Laboratory Session #3
2:40 - 3:30	Laboratory Session #4
3:30 - 4:00	Closing / Camp Evaluations

Parents' Program Schedule

Sending Your Daughter to Engineering School Workshop

Time	Activity
9:00 - 9:30	Registration / Continental Breakfast
9:30 - 10:00AM	Welcome/Introduction
10:15 - 10:30	Engineering as a Career Choice <i>Presented by women engineers from industry</i>
10:30 - 11:00	Admissions to Engineering School: What to Do to Prepare <i>Presented by Widener University. Admissions Office</i>
11:00 - 11:15	Break
11:15 - 12:00PM	The Engineering Curricula: What to Expect Academically <i>Presented by Widener University Engineering Faculty</i>
12:15 - 1:30	Lunch <i>(with daughters and volunteers)</i>
1:45 - 2:15	What to Expect Socially and Emotionally in College <i>Presented by the Dean of Student Services</i>
2:15 - 2:30	Break
2:30 - 3:00	Effective Student Work Habits for College <i>Presented by Widener Univ. Freshman Programs Office</i>
3:00 - 3:30	Financial Aid: Where and How to Get Help <i>Presented by Widener University Financial Aid Office</i>
3:30 - 4:00	Closing / Parents Program Evaluation

The girls may select four of the following labs:

- Aerodynamics & Flight (Paper Airplanes)
- Pavement Design using Chocolate Asphalt
- Bridge Design Software
- Electric Sensors
- Motorized Lego cars
- Roller Coaster Design
- Reaction Kinetics
- Tower Building
- Programmable Robots
- Water Treatment

Volunteers are needed to staff the labs and to talk to the parents about engineering careers - basically to give them a sense of what it's like to be a female engineer. We can use your help even if you are available only for either the morning or afternoon sessions. For more information or to volunteer, please contact Vicki Brown at 610-499-4607 or Vickiprof@aol.com.

Engineering Mini Camp Background & History

Engineering camps have become one means for introducing and attracting middle school and high school students to careers in engineering. Typical engineering camps are one to two weeks in duration in the summer and are conducted at a college or university with an engineering program. Such a camp is a mixture of discussions, lab experiences, and field trips all geared toward explaining what engineers do and providing an enjoyable experience that fosters positive attitudes and enthusiasm for engineering. This format can be effective for male students, who tend to populate the camps. However, girls may be intimidated / inhibited by the overwhelming majority of boys in the coed camps.

Five years ago, Dr. Vicki Brown, Engineering Professor at Widener University and a member of the SWE-Philadelphia Section, led development of a one-day engineering camp for high school girls. Originally, it was intended that each one-day camp would be limited to 50 girls from the Philadelphia metropolitan area, and that at least two sessions of the camp would be offered each academic year. Given the level of involvement required for each camp, a more feasible plan was adopted, in which one camp session that accommodates a larger number of girls is offered each academic year. The initial camp, held on February 12, 2000, had 88 girls in attendance, and was funded by SWE through a grant from the Exxon/Mobile Education Foundation and by Exelon Nuclear Corporation. A second camp, funded by Exelon Nuclear, the American Society of Mechanical Engineers, and SWE-Philadelphia Section, was given with 91 girls on February 17, 2001. The 2002 camp, also attended by 91 girls and funded jointly by SWE through a grant from the Ford Motors Foundation and donations from SWE-Philadelphia Section members, and by grants from the Exelon Nuclear Corporation and the Rohm and Haas Company, was held on February 23, 2002. In 2003, while 97 girls registered for the camp, bad weather the morning of February 15 limited attendance to 65 girls; funding for the camp was provided by grants from the Turner Construction Company, Exelon Energy, the Rohm & Haas Company, Henkels & McCoy, Inc., and SWE-Philadelphia. Widener University has provided use of classroom and laboratory facilities in addition to administrative/clerical support for each camp offering.

A feature first added in the 2001 camp is a morning program for the parents of girls attending the camp. This program, which was attended by approximately 50 parents, was very well received and subsequently expanded to a more formal, full-day workshop for the 2002 camp. Approximately 65 parents participated in the 2002 program and 50 parents in the 2003 "Sending Your

Daughter to Engineering School" workshop, which included sessions on engineering as a career choice (presented by women engineers in industry), preparing for admission to engineering school (presented by a college admissions counselor), what to expect academically in engineering school (presented by a female engineering faculty member), social and emotional adjustments (presented by a Dean of Freshmen Students), effective student work habits for college (presented by a Freshman Programs counselor), and financial aid issues (presented by a Financial Aid counselor).

The girls' camp and parent workshops, which are all held at Widener University, are staffed by volunteers from the SWE-Philadelphia and DelMar Peninsula Sections, by students and alumni from the SWE student section at Widener, and by support staff from the offices of Admissions, Financial Aid and Freshmen Programs at Widener University. The camp budget is \$3000-\$3500. The camp is offered tuition-free to interested local high-school girls, as are the workshops for their parents. Widener University provides meeting rooms, laboratory facilities, mailing lists, secretarial support, staff specialists, and a camp coordinator as in-kind contributions. Volunteer counselors select, develop, and document their laboratory projects, in consultation with the camp coordinator from Widener University, to ensure that all required equipment and facilities are available.

The basic Girls' Camp format is a series of concurrent hands-on laboratory sessions, organized to accommodate groups of approximately 12 girls. Each group of 12 girls participates in four different laboratory experiences, led by four different groups of leaders who are chosen to have varying professional backgrounds in order to expose the girls to the wide diversity of possible engineering careers. Laboratory experiences complement the leaders' backgrounds, so as to provide a context for discussion of engineering careers. Widener undergraduate and graduate students assist in the laboratory sessions and lead lunch-time discussions on female engineering student experiences.

Student and parental response to the program has been overwhelmingly favorable. Annual mailings to high school principals in the Philadelphia area resulted in 150 applications for the 2000 camp, 165 applications for the 2001 camp, 130 applications for the 2002 camp, and 125 applications for the 2003 camp. Girls who cannot be accommodated in a given year are placed on a waiting list and guaranteed an invitation to the next camp offering.

Upcoming Events

FUTURE CITY COMPETITION 2004

Saturday, January 24 at Widener University

by Jennifer Wetzel, Philadelphia Regional Volunteer Coordinator

The Delaware Valley Engineers Week Council is proud to host the 9th annual Philadelphia Regional Future City Competition! Forty-four schools from throughout the Philadelphia region are working hard on their cities. Teams made up of 7th and 8th graders are working with their teachers and engineer mentors to:

- Design a city of the future using Maxis SimCity 3000™ software.
- Build a working model of a portion of their city using recycled products.
- Write an essay about city planning and design issues.
- Verbally present their city to a panel of judges from the engineering, planning, and architectural communities.

Last year, 40 teams participated in the regional competition. We recognized the top six teams and sent the first place team to the national finals in Washington DC. Additionally, each team received at least one of the special awards which are sponsored by local engineering firms and societies, including SWE-Philadelphia.

Volunteers are needed for the following opportunities.

Preliminary Judge: Available on January 24 and also able to attend a training session on Tuesday, January 20 if you have not judged before. The training session will be held from 5:00PM to 7:00PM at the Municipal Services Building, 1401 JFK Blvd, Philadelphia. You work with a team of judges as you listen to student presentations and ask the students questions.

Special Award Evaluator: Available on January 24 from 8:30AM to 12:30PM to evaluate the special award for SWE or any other award that needs an evaluator. You meet with all the teams to evaluate which school should win the award.

Competition Help/General Volunteers: Available on January 24 and willing do whatever task is needed, for example, help with registration or serve as escorts, runners, photographers. Most volunteers are needed from 8:30AM to 12:30PM, but some volunteers are needed as early as 7:00AM to as late as 5:00PM.

Also, there are still five schools without **mentors**. An engineer-mentor is an engineer, of any discipline, who is involved in all phases of the competition as an advisor, providing input and technical assistance and integrating real-life engineering experiences as the students work on the competition. Even a few hours a week over the next week can make a huge difference in the experience and the success of the team.

C.C.A. Baldi Middle School Philadelphia, PA (Bustleton)
Conwell Middle Magnet School Philadelphia, PA (Richmond)
Grover Washington Jr. Middle School Philadelphia, PA (Olney)
Sayre Beacon Middle School Philadelphia, PA (West Phila)
Visitation BVM School Philadelphia, PA (Kensington)

Visit web site www.futurecityphilly.org to sign up on-line. If you have any additional questions, please contact Jennifer Wetzel, Volunteer Coordinator at:

Phone: 215-573-3935
FAX: 215-746-6606 FAX
E-mail: jwetzel@futurecityphilly.org

AAUW Touch the Future Program

The Lansdale Branch of the American Association of University Women (AAUW) has invited SWE to participate again in their program designed to acquaint middle school girls with types of careers that may be available to them in science and engineering. Hands-on workshops are preferred. The SWE workshops on "roller coasters" and "tower building" seem to bring out some creativity in the girls! If you are interested in participating, please contact Barbara Faust (215-257-6463 or Barbara.Faust@swe.org) or Mindy Moyer (215-412-7889) from AAUW.

Around the Region

Lehigh Valley Section

Due to the Holiday rush, the **Retirement Planning Dinner Meeting** was rescheduled for **January 22, 2004**. The start of the New Year is a great time to look at your finances and assess your progress. Are you contributing the right amount to your 401K and/ or IRA's? Do you know the difference between a Roth IRA, a Coverdale IRA, and a traditional IRA? Do you know what the annual maximum contribution rates are? As tax laws are revised and investment options become more diverse, it is critical to keep up with new opportunities in order to maximize investment returns. Paula Fantaski of Edward Jones in Whitehall, PA, will speak to us about the latest changes regarding retirement planning and tackle the traditional misconceptions about investing for retirement. There will also be plenty of time for socializing and networking with other SWE members! As always, non-members (including spouses) are welcome.

Location: Spice of Life Restaurant
1259 S. Cedar Crest Blvd., Allentown
(across the street from Lehigh Valley Hospital);
Time: 5:30 - 6:45 PM Networking & /Dinner
6:45 - 7:30 Presentation
Cost: \$22 for Students and Unemployed Members
\$24 for Members, \$26 for Non-Members
RSVP: By Monday, January 19, to
Kathy Kinsey, 570-467-4482 or
kinseyko@airproducts.com.

Neighboring Region News

from Laura Mechalke, Region E Director

SWE-Connecticut in our neighboring Region F will hold their 50-Year Anniversary Gala & Scholarship Awards Luncheon on Saturday, March 20, 2004 at the Fairfield University Charles F. Dolan School of Business. The theme of the meeting is **50 Years of Breaking Barriers**. Evelyn Fowler, SWE-CT first Section President and one of the founding members of SWE who met at Camp Green in New Jersey 1950, will be the *History Speaker*. The Society's 41st (and current) President, Alma Martinez Fallon, who is recognized as one of America's leading minority women in technology by both Hispanic Engineer and Information Technology magazines, will be the *Keynote Speaker*. For more information, contact micki.metsopoulos@swe.org or visit web site www.geocities.com/swe_conn/.

DelMar Peninsula Section

SWE Headquarters Awards and Recognition Chair Marilyn Reeder has announced the SWE New Faces in Engineering selections for 2004. This year, SWE was asked to submit a total of five names to EWeek; one top candidate and four runner-up candidates. The SWE top candidate has been selected as a Engineers Week New Face in Engineering. She will be recognized in USA Today during Engineers Week and on the EWeek web site. In addition, all five of SWE's selections will all be showcased in an article in the upcoming issue of SWE Magazine.

The five SWE candidates selected from a total of 13 candidates are:

Erin McGinnis (Top Candidate), Los Angeles Section
Kerry A. Riek, DelMar Peninsula Section
Julie Grim, Central Indiana Section
Katie McCullough, Tulsa & Northeast Oklahoma Section
Jennifer Puffer, PE, Heart of Iowa Section.

Congratulations to Kerry on being named as SWE's first runner-up.

Lockheed Martin SWE Subsection

from Doreen Nixon

Lockheed Martin(LM) Moorestown, NJ hosted a **Women in Engineering Day** event for 10th grade girls on November 21st. The event was coordinated and run by the LM SWE subsection. Nine area high schools participated with a total of 37 students and 11 teachers/counselors attending.

The girls were exposed to the field of engineering through a factory tour, a number of engineering exhibits, and a series of hands-on activities emphasizing teamwork and problem-solving skills. A question and answer panel session was also held to give the girls insight to the everyday life of engineering and what it takes to become an engineer. College students from Drexel and Rutgers were also on hand to provide the girls with first-hand information on college life. The girls and teachers appreciated the day and left with a much more informed and, in most cases, a better view of engineering. It is planned that this will be an annual event.

In 1825 Catharine Elliot patented a method for manufacturing moccasins.

---- from *What Women Have Done*,

a compilation by Susan Sharp, Margaret Wagner, Athena Angelos, and Christine Hauser
published by Pomegranate Calendars and Books, Rohnert Park, CA, 1996

More Region News

2004 SWE Mid-Atlantic Region Conference

Politics is not just for Politicians

March 5-7, 2004 in Baltimore, Maryland

The Mid-Atlantic Region (Region E) Conference will be held in Baltimore on March 5-7, 2004. As the deadline for early registration is January 31, 2004, information is provided below to help you make your plans soon. The link to the conference web site is www.swe-bws.org/FY04Conf/FY04Conf.html

Keynote

Professor Anita Jones will speak on the impact of politics and policy on engineering. Currently teaching computer science at the University of Virginia, Professor Jones also serves on the boards of a number of corporations, as well as advisory boards for national security. Previous positions include launching a software firm and Director, Defense Research and Engineering for the Department of Defense. To learn more about Professor Jones, just Google "Anita Jones".

Time	Campaign for a Better You	Government and High Tech	Public Policy and Privacy	SWE Leadership
10:30am - Noon	Find the Right Job	Alternative Fuel Vehicles	Business Ethics	Section Vitality - Leadership
1:00pm - 2:30pm	Negotiation and Influence	Six Sigma	Biometrics	Girl Scouts
3:00pm - 4:30pm	Financial Planning	Environmentally Friendly Building	Trojans, Worms, and Viruses	Mentoring

Lodging, Transportation, and Meals

Lodging: The official conference hotel is the Baltimore Marriott Inner Harbor. Lodging for students will be provided by the conference staff at the rate of \$20/night on a space-available basis. Those registering after January 15th should check the web page to see if space is still available. Students will be notified ASAP if their lodging cannot be provided in the conference block. The negotiated conference rate for non-students is \$109/night. Non-students should make their reservations directly with the hotel (410-962-0202). Reservations for non-students must be made by February 5th to obtain the negotiated rate.

Transportation: Public transportation (the light rail) and taxi service is available between the hotel, Penn Station, and Baltimore Washington International (BWI) Airport. A free shuttle will be provided between the hotel and the UMBC campus on Saturday during the conference hours.

Meals: Included in the registration fee are:

- Friday night reception
- Saturday breakfast, lunch, and dinner (dinner is included for students, \$35 for non-students)
- Sunday breakfast

On-Line Registration and Payment

Registration: Please fill out all the information on the [registration form](#) at web site www.swe-bws.org/FY04Conf/FY04Conf.html and submit via email to fy04conf@swe-bws.org. The early registration deadline is January 31st, with a \$25 penalty after that date.

Payment: Payments may be made with a credit card via [PayPal](#), or with a check made out to "Society of Women Engineers" and mailed to Conference Registration, c/o Brenda Kuhn, 6979 Bendbough Court, Columbia, MD 21045-4607. Partial-year SWE membership is included with all non-member registrations. Non-members must complete and submit a [membership application](#) (save to disk before opening) form along with their conference registration to obtain the membership. The organizers will forward your application to headquarters for processing.

Professional Development

Educational Programs for Spring 2004

Courses offered by **The Engineers' Club of Philadelphia** for Fall 2003 are listed below. Two Continuing Education Units (CEUs) may be granted for each 8-10 week course and one CEU for the 4-5 week courses. Upon request, the 2004 dues and application costs for initial membership in The Engineers' Club of Philadelphia will be waived for those taking an 8, 9, or 10 session Engineers' Club course. For registration and detailed course information, please call Tom Payne, Director of Education, at 215-985-5701 or e-mail: info@engrclub.org.

Construction

- C-1 The 2003 International Building Code - 10 weeks starting Mon 3/15/04, 6-8:30 PM, \$600
- C-2 Home and Building Inspection - 10 weeks starting Mon 3/15/04, 6-8 PM, \$500
- C-3 Construction Project Management - 8 weeks starting Wed 3/17/04, 6-8:30 PM, \$500; Option to take 4 sessions of Planning & Scheduling for \$275 or 4 sessions of Estimates & Financial Control for \$275
- C-4 Owners Representative for Construction - 9 weeks starting Thurs 3/18/04, 6:30-8:30 PM, \$500

Electrical

- E-1 Basic Protective Relaying - 10 weeks starting Thurs 3/18/04, 7-9 PM, \$500
- E-2 Fiber Optics & Network Wiring - 12 weeks starting Tues 3/16/04, 6:30-8:30 PM, \$650

Fire Protection Engineering

- F-1 Fire Alarm & Detection Systems - 10 weeks starting Mon 3/15/04, 7-9 PM, \$500
- F-2 Sprinkler Systems Basics - 10 weeks starting Mon 3/15/04, 7-9 PM, \$600

Mechanical

- M-1 Heating & Ventilation - 10 weeks starting Wed 3/17/04, 7-9 PM, \$600
- M-2 Basic Piping Design - 10 weeks starting Tues 3/16/04, 7-9 PM, \$500
- M-3 Air Conditioning - 10 weeks starting Wed 3/17/04, 7-9 PM, \$500

Spring 2004 Engineering Tours of the Delaware Valley

The Engineers' Club of Philadelphia sponsors a series of tours geared to the technical professional. Participants may be awarded 2.5 Professional Development Hours (PDHs) per tour for P.E. license renewal requirements. Anyone can participate in these tours; Club membership is not required. The cost is \$10 per person per tour, except for the Winterthur Tour. Engineers' Club members and one guest may attend at no charge; exception - Winterthur Tour charge is \$10. Tour group size is limited to 40 people, with reservations on a "first come, first served" basis. For more information, please contact Tom Payne at The Engineers' Club by phone (215-985-5701), e-mail (info@engrclub.org), or Fax (215-985-5704).

New International Terminal 'A' West at the Philadelphia International Airport on Saturday, April 3, 2004 at 10 AM - this new 800,000 sq. ft. international terminal with 13 gates has been named Delaware Valley's Outstanding Engineering Achievement for 2004.

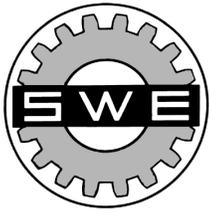
Winterthur Country Estate, Winterthur, DE on Saturday, April 17, 2004 at 10 AM - this magnificent country estate is the former home of Henry F. duPont. Because of the high admission fee, the cost for Club members and their guests is \$10 each; the non-member cost is \$20 each.

Fort Mifflin Pier & USS McFarland, Philadelphia, PA on Saturday, May 8, 2004 at 10 AM - Visit this historic pier, tour the US Army Corps of Engineers dredge, and the USS McFarland. See details of this ship and learn about its operations in the Delaware River channel.

Germantown Avenue Bridge Restoration, Philadelphia, PA on Saturday, May 22, 2004 at 10 AM - See the recent renovations as well as structural architectural improvements to this historic bridge over Wissahickon Creek. This restoration has been named Delaware Valley's Notable Engineering Achievement for 2004.

SWE-Philadelphia Professional Development Seminar

The SWE-Philadelphia Spring Seminar on developing your verbal business communication skills will be held on March 8, 2004 at Drexel University. Section member Susan Best will share up-dated best practices learned from many years of personal experience. Members, students, and guests are encouraged to attend and learn some tips for improving verbal communications in the modern business environment.



SWE Philadelphia Section
The Engineers' Club of Philadelphia
215 South 16th Street, Suite 36
Philadelphia, PA 19102

Address Correction Requested

Visit our new Web Site at <http://www.swephila.org>
Contact Us by E-mail: phila_info@swe.org

SWE Philadelphia Section Newsletter January 2004

Joint SWE-ISA Meeting

Web Based Technologies

Speaker: Joe Valencia, AutomaTech, Inc.

SWE–Philly and the Instrumentation Society of America will have a joint meeting to learn more about what web-based technologies are, key benefits and applications, some typical plant system architectures, and major issues that must be considered when using these technologies. Vendor displays will be available.

Date: Wednesday, January 21, 2004

Time: 5:00 PM Vendor displays open

5:30 PM Light Meal

6:45-7:45 PM Speaker Presentation

Place: Siemens Campus, 1015 Virginia Drive, Fort Washington, PA

Cost: \$10 for Members, Students, and Guests

RSVP: to Dan Oswald, Applied Control Engineering

215-631-9667, x344 or oswaldd@ace-net.com by January 19, 2004

Newsletter copying and distribution is underwritten by a grant from
Lockheed Martin Management and Data Systems.

Thank you!