



Society of Women Engineers

Philadelphia Section Newsletter

March 2000

PRESIDENT'S LETTER

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Dear SWE Members and Friends-

This winter has certainly gone by fast. I am still in State College and by the time you read this, we will hopefully be starting up the treatment plant. This time of year is very busy and exciting for SWE, with all types of outreach activities, science fairs, Scholarship Competition, section meetings, conferences, and other events taking place from now through Spring.

I would like to welcome our new and prospective members to SWE, and hope that both our newer members and long-time members will be motivated to participate in the many activities that are being organized by SWE and others in the engineering community. With our newest members, our total paid membership is once again above 100, which means that we can maintain our status of having two Section Representatives to provide Philadelphia Section to the Council of Section Representatives (CSR) on the regional and national levels. This is great news, especially in light of last year's loss of about 30 members to the new DelMar Peninsula Section.

I have been very encouraged with the amount of collaboration and interaction with our student sections this year, especially Drexel, Penn, and Widener. I hope that our relationships with the students continue to strengthen. I understand that changes are being made at a national level to help facilitate and promote the upgrades of graduating students to professional membership in SWE. I would also like to have us promote student upgrades to our student sections. Upgrade information can be obtained from me, Lisa Walton of Lehigh Valley Section, or from www.swe.org.

This is also the time of year to start planning for elections for the next fiscal year, which begins on July 1, 2000. I am currently accepting nominations for FY'01 for President, Vice President, Secretary, Treasurer, and Section Representative (2). You can nominate yourself or someone else. We will also need to fill all the committee positions for next year, so please let me know of your interest in any positions. The best ways to reach me are to call my trailer (814)238-6415 or email me at susan_sciarratta@golder.com (or ssciarratta@golder.com).

Enjoy your Spring!
Susan A. Sciarratta, P.E.

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FY 00 CALENDAR

<i>DATE</i>	<i>EVENT</i>	<i>LOCATION</i>
March 4	Saturday Seminar	Concordville Inn, Concordville, PA
March	Sub-Section Meetings	
March 13	Montco	Bertucci's, Plymouth Meeting Mall
March 15	Center City	Philadelphia Museum of Art
March 25	Lehigh Valley Science Fair	Lehigh University Rauch Field House
March 27	NCC Career Fair	Valley Forge Hilton
March 31-April 2	Region E Conference	Somerset, NJ
April 5	Delaware Valley Science Fairs	Fort Washington Expo Center
April 5	Career Day	Drexel University
April ?	Take Your Daughter to Work Day	Various
April 18	Awards Banquet @ 50 th Anniversary Celebration	Williamson's Restaurant Horsham
May	Beginner's Golf Outing	TBD
June 27 – July 1	SWE National Conference - Beyond 2000: Exploring Perspectives	Washington, D.C.

ANNOUNCEMENTS

- Note **new contact information** for the **newsletter editor** and the **membership** chairperson (see page 6).
- **Drexel University Student Section** is looking for presenters at a **Career Day** on Wednesday, April 5, 2000. The program will be for high school women, Drexel undergrads, faculty, and professionals. Rave reviews for the P.E. License workshop given by Susan Sciaratta at the last Region E Student Conference have led to a desire for a similar workshop for Drexel upperclass students at this Career Day. If you can help with the P.E. workshop or make some other presentation, please contact Aly Valentine by e-mail: aly@drexel.edu
- Many girls from the **Engineering Mini-Camp at Widener University** indicated an interest in spending a day with an engineer. If you can host one or two students for a day, such as on **Take Our Daughters to Work Day in April** or another mutually agreeable day, contact Vicki Brown immediately (see page 7).
- The Philadelphia Section needs **Special Awards judges** for the Delaware Valley Science Fairs on April 5, 2000. Contact Tammy Yost if you can help.
- **Judges are needed** for the **Lehigh Valley Science Fair Competition** to be held at the Lehigh Valley Rauch Field House on Saturday, March 25, 2000. Because of the shortage of judges this year, the Lehigh Valley SWE team will also be serving as regular judges. If you can help, contact Bob Haines at rah@insaco.com (use "LVSF" as the message subject) or by phone at 215-536-3500.
- SWE Philadelphia has been asked by National Career Centers to distribute SWE information to potential new members at their **Technical, Sales, and Business Professional Career Fair** to be held on Monday, March 27, 2000 at the Valley Forge Hilton in King of Prussia. Contact Deena Grattan for more details.
- Our **50th Anniversary Celebration and Annual Awards Banquet** will be at Williamson's Restaurant in Horsham on Tuesday, April 18, 2000. We hope to have several of Philadelphia Section's early members on hand to share some SWE stories with us and to honor our corporate sponsors and scholarship winners. More details will be provided in the April newsletter.
- The Philadelphia Section needs Members to **evaluate applications** for our **Scholarship Awards**. Contact Shetal Patel if you are interested.

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MARCH EVENTS

SUBSECTION MEETINGS

The March **Montgomery County Sub-Section Meeting** will be held on Monday, March 13th at 6 PM at Bertucci's in the Plymouth Meeting Mall.

RSVP to Heather Bernardin at hbernardin@fcg.com or 610-989-3212.

The March **Center City Subsection Meeting** will be held on Wednesday, March 15th at the Philadelphia Museum of Art at 6 PM. The cost of \$8 includes Guinness tasting, gallery talk, performance, etc. More information will be sent to the Center City email list.

RSVP by March 8 to Louise Melchor (215-563-4244 x439)

CONTINUING DEVELOPMENT SEMINAR

The Continuing Development Seminar hosted by the SWE DelMar Peninsula and Philadelphia Sections and sponsored by the DuPont Corporation will be held on Saturday, March 4, 2000 at the Concordville Inn and Conference Center in Concordville, PA. The registration due date was February 23, 2000.

The Seminar includes three sessions, namely,

- 15 Ways to Persuade: Successful Ways to Win Over Prospects
- Styles of Leadership
- Stepping Up to Management

and lunch with keynote speaker Roberta Brown, DE Engineer of the Year. Conference details and registration form were provided in the February newsletter. For additional information, contact Jennifer Haar at 302-992-0673 or e-mail jdhaar@worldnet.att.net

REGION E CONFERENCE

The Mid-Atlantic Region Conference hosted by the New Jersey Section will be held from Friday, March 31 through Sunday, April 2, 2000 at the DoubleTree Hotel in Somerset, NJ. Events include:

Friday Night Networking: Health and Happiness - an evening of relaxation and fun

Saturday Morning Seminars:

Rural Water Development	Selling Ideas to Management	Panel Discussion: Engineering to Sales or Marketing?
Goal Setting	Women's Health	Transitioning to Management
Current Topics in Biotechnology	The Business of Golf	Womansafe

Saturday Lunch: Keynote Speaker Lois Benjamin-Bohm, President of Schelpper's Moving and Storage

Saturday Afternoon: Region E Members Meeting

Saturday Evening: Dinner and Comedy Show at The Stress Factory

Sunday Breakfast

Sunday Seminar: Presenting a Powerful Image

Sunday Tour: Princeton Plasma Physics Laboratory

Conference details and a registration form were included in the February newsletter. Registration is due by March 10. The conference cost is \$70 for Members and student Non-members, \$40 for Students, and \$100 for Non-members. There is a \$30 fee for late registration. Hotel reservations must be made by March 1 to obtain the conference rate of \$89/night; contact the hotel directly at 732-469-2600 for reservations. For additional conference information contact Michele Groen at 908-771-1291 or mar-conf@swe.org

PHILADELPHIA FUTURE CITY COMPETITION RESULTS

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The Philadelphia Regional Future City Competition held its 5th contest on Saturday, January 29 at the Franklin Institute. Twenty-five local schools participated by entering their City of the Future. This year's 1st place winner was Choice Homeschool Network. These students will represent Philadelphia at the National Competition in Washington, DC on February 26. In addition to six finalist awards, 31 special awards were given out, with at least one to each competing school. The SWE sponsored special award, "Quality of Life," went to Albert M. Greenfield Middle School in Philadelphia.

Many SWE members were involved with this year's competition. Susan Best coordinated the judges and Jennifer Wetzel coordinated the volunteers. Shetal Patel and Gwen Schell were engineering mentors to two schools. Preliminary judges included Deena

Grattan and Carrie Griesser; Maggie Schwartz was an Essay Judge; and Jennifer Lambert, Julie Fournier, Lisa Mahon-Lesher, and Linda Gaffney helped out as Special Awards Judges.

The competition started in September when a group of three 7th or 8th grade students, a teacher, and an engineering mentor started creating their city using the Sim City 2000 software program. Requirements of the competition included submitting their computer city, writing an essay, and presenting their city to a panel of judges on the day of the competition. Many volunteers are needed throughout the fall to help out as mentors, judges, and volunteers. If you would like to volunteer for next year's competition or would like more information, please contact Jennifer Wetzel at 215-573-3935 or jwetzel@trammellcrow.com

DELAWARE VALLEY SCIENCE FAIRS: JUDGE FOR YOURSELF !!!

Want to learn what our kids are doing in science and engineering? Here is an opportunity to find out. Volunteers are needed both for SWE Special Awards judges and for overall Science Fair judges. The junior and senior high school students are winners at local science fairs held throughout the Delaware Valley region. The top winners in this competition go on to the Intel International Science Fair to be held in Detroit. SWE judges decide the recipients of our awards; at least six people are needed as SWE judges. It really is a great experience; Hey, "Judge for yourself!!"

Delaware Valley Science Fairs
April 5, 2000 8AM-5PM
Ft. Washington Expo Center,
Ft. Washington, PA

Contact: Tammy Yost at (610) 347-2721
or e-mail: Tyost143@aol.com

FEBRUARY MEETING HIGHLIGHTS

At the February Meeting Diane Petrecz-Shaw and Patty Niemitz and from Macy's in King of Prussia provided makeup and dressing tips for the work place. Diane is

ENGINEERING TOURS OF THE DELAWARE VALLEY

The Engineers' Club of Philadelphia sponsors visits to facilities and sites with a wide variety of technical features to stimulate your interest. The tours are geared for the technical professional; 2.5 Professional Development Hours (PDH's) applicable for P.E. license renewal are awarded for each tour. The Spring 2000 tours include:

- The Mercer Museum
Doylestown, PA
Saturday, April 8, 2000 at 10:00 AM
- The Franklin Mint
Franklin Center, PA
Thursday, April 13, 2000 at 1:00 PM
- SAP America, Inc. Headquarters Building
Newtown Square, PA
Tuesday, May 2, 2000 at 5:00 PM
- Red Cross Blood Processing Center
Philadelphia, PA
Tuesday, May 9, 2000 at 4:00 PM

The cost is \$10 per tour; see enclosed flyer or call the Club at 215-985-5701 for more details.

Counter Manager at the Christian Dior Counter and Patty is Manager of Corporate Gift Services for Macy's BY APPOINTMENT. The meeting, which was held at Charley's Place in King of Prussia, was attended by many Section members and University of Pennsylvania

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students.

Diane presented tips for makeup in the workplace. She answered questions on makeup problems and offered tips to combat common problems. For dry hands Diane suggests using an exfoliate to remove dead skin before applying moisturizer. To keep lipstick on longer, one can use lip liner and set it with a powder. In addition, different lines of lipstick provide different staying power.

To keep eye liner in place, set with a powder of eye shadow. Diane did not recommend wearing waterproof liner regularly. Certificates for complimentary makeovers and facials were presented to each attendee.

Patty provided suggestions for dressing in the workplace, including tips for going from the office to the field. Polyester, crepe, and polyester/rayon blends are recommended fabrics as these materials don't wrinkle easily, which helps give a pressed and professional look. She recommends staying away from linen for important meetings or events as these fabrics tend to wrinkle easily. A blazer with slacks and a turtleneck top or blouse will give a professional look in the office; the blazer can be removed for work in the field. Sweaters with pants or skirts will also work. Patty also recommends keeping the jewelry simple. For shoes, she suggests boots or shoes with closed toes worn with plain tights to dress up the look; knee highs rather than short socks should be worn with slacks.

As part of her presentation, Patty also gave an overview of Macy's personal shopping service. This service is free and is generally open from 10am to 6pm on Tuesday through Saturday. The offices are on the third floor of the King of Prussia store near the Better Sportswear Department. In addition to buying and shipping gifts, the service will help you coordinate a wardrobe. You don't have to spend a lot of money when using the service. The Personal Shopper can help you select a few key additions to you wardrobe, including selections from the sale and clearance racks.

ENGINEERING MINI-CAMP AT WIDENER UNIVERSITY

On February 12, 2000, 88 girls from Pennsylvania, New Jersey, Delaware, and Maryland descended upon the campus of Widener University to attend the first of what is hoped to be an annual Engineering Camp for Girls. This event was organized and co-sponsored by Widener University and SWE Philadelphia, through an Exxon Foundation grant provided through SWE headquarters. The event was developed and spearheaded by Dr. Vicki Brown, who is a civil

engineering professor at Widener, as well as the faculty advisor to the Widener SWE Student Section, and member (and Speaker's Bureau chair) of the SWE Philadelphia Section.

Based on pre-evaluations, the girls were divided into groups based on engineering interests and they participated in three hands-on engineering labs. The labs were conducted by SWE members from the Philadelphia Section, Delmar Peninsula Section, and Widener Student Section, as well as Widener alumni and professors. The labs included: Chemical Process Simulation, Tower Building, Motors/Generators, Reaction Kinetics, Logic Gates, Aerodynamics/Flight, Electrical Power, and Roller Coaster Design.

The Motors/Generators and Electrical Power labs were conducted using specialized Lego sets donated by PECO Energy. These sets are still available for use by SWE members for any workshops that we may give to students in the future. The sets come with instruction manuals for conducting many different lessons. I have since ordered the catalog which contains all kinds of books and materials for conducting hands-on labs in electricity, solar power, robotics, mechanics, and other technical subjects.

The girls also had the opportunity to interact with engineering students and professionals throughout the day, including during each lab session and during lunch. The responses to the Camp were overwhelmingly positive. Moreover, 150 girls had initially submitted applications to attend the Camp. Although the Camp was expanded to accommodate 90 girls, many had to be turned away. Many of these girls indicated an interest in spending a day with an engineer. If you are interested in hosting one or two students for a day, such as on Take Our Daughters to Work Day in April or another mutually agreeable day, contact Vicki Brown immediately.

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In Celebration of SWE's 50th Anniversary: Reflections on the Early Days

by SWE Charter Member Doris McNulty

Doris McNulty has provided us with some of her recollections of the Philadelphia Section early days and of the changes that have taken place in engineering over the past 50 years.

Ms. McNulty was one of the 83 engineering students from 19 colleges who attended the conference for women engineering students held at the Sarah Van Rensselaer Dormitory at the Drexel Institute of Technology on 2-3 April 1949. Dr. Lillian Gilbreth, industrial engineer, mother of 12, and author of "Cheaper by the Dozen", also attended this meeting and was an inspiration to many of the students.

During the early years, the Philadelphia Section in conjunction with the Drexel Student Section would use the Drexel Lodge in West Chester for special activities. Drexel Evening College students were also active in the Section. The original SWE logo and the "OUTLOOK" masthead for the Section newsletter were designed by Ruby Singleton, an Evening College student.

Several former WAVES, including Dr. Grace Hopper and Carolyn White Buggy, were instrumental in helping the fledgling Section, just as many former WAVES helped the national organization.

In addition to dinner meetings with speakers, Section activities included technical/industrial tours and hosting the annual dinner and play in honor of graduating students. The Section also participated in the Eastern Seaboard Conference, which was an adjunct to the National annual Convention. Many of our charter and early SWE members were active at both the Section and National level as officers and as committee members.

In commenting on how engineering has changed over the past 50 years, Ms. McNulty remarked that the new tires are the greatest thing. Back in the 40s and early 50s, learning to change a tire and patch the inner tube were part of the driving experience. The second greatest thing is the availability of fresh fruits and vegetables year-round from growers all over the world. We used to be able to tell what month it was by the food we had for our tables.

Many other things have also changed in the way we do business, prepare specifications and drawings for bid and/or construction, reproduce drawings and other documents, communicate with one another, transport products, etc. Gone are the days of numerous carbon copies, blueprints, transatlantic cables, actual cash in your pay envelope, long arduous calculations to size equipment with oversized margins (e.g., transformer cores and windings), making elaborate drawings of assemblies to check dimensions (e.g., cross-section assemblies of steam turbines), vacuum tubes for radio and television, etc. The list goes on and on, but the basic things have not changed. Today's engineer still needs to be well grounded in mathematics and science, must be able to communicate verbally and in writing, must be a team member as well as a good individual producer, must be able to do "back-of-the-envelope" calculations to have a "gut" feeling for the quantity, and must be a good manager.

Perhaps the most difficult challenge for an engineer today, as in the past, is the ability to recognize when he/she has a problem and to develop proposed solutions that may range from the ridiculous to the sublime.

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SWE Philadelphia Section
C/O Engineer's Club
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215 South 16th Street
Philadelphia, PA 19102

ADDRESS CORRECTION REQUESTED

Visit our webpage at: <http://www.libertynet.org/~sweps>

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SUBSECTION MEETINGS

Montgomery County Sub-Section Meeting

Monday, March 13th
6 PM

Bertucci's in the Plymouth Meeting Mall

RSVP to Heather Bernardin at
hbernardin@fcg.com or 610-989-3212.

Center City Subsection Meeting

Wednesday, March 15th
6 PM

Philadelphia Museum of Art

RSVP by March 8 to Louise Melchor at
215-563-4244 x439.

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Lockheed Martin Management and Data Systems. *Thank you!*