



# SWE NEW YORK

*The New York Section of the  
Society of Women Engineers*

WINTER 2006

Section website: <http://www.swe-ny.org>  
Section email: [SWE-NY@SWE.ORG](mailto:SWE-NY@SWE.ORG)



### SWE MISSION:

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

### Upcoming SWE Events at a Glance:

### Inside This Issue:

*(Click on the page number)*

January 2006						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

February 2006						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

March 2006						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- **February 21**  
Create Confidence Seminar (NYC)

- **March 6**  
Board Conference Call

- **March 23**  
Negotiating Skills Seminar (Woodbury LJ)

President's Message	2
SWE NY Officers	2
Event Highlights	3
Student Event Highlights	6
Upcoming Events Calendar	7
Interest Topic:	
Why Did They Build It Like THAT?	8
Do You Need PDH's?	9
Calls for Volunteers	9
Member News	9
National Engineers Week	10
Calling Student Sections	10
Next Newsletter Deadline	10

## FROM THE PRESIDENT'S DESK



Dear SWE-NY:

Winter seems to have taken a turn towards spring. I hope everybody is enjoying this mild weather! Let's remember to take a moment to enjoy time with our families and friends! They are our strongest supporters.

We recently enjoyed the After Holiday Party. It was a pleasure seeing some of you again, and having the opportunity to meet those of you I hadn't had the pleasure of meeting previously.

We have National Engineers Week coming up later in February, so we have some programs in the planning stages, and we've received several requests to provide engineers to speak with students. If you're interested in volunteering, please [let me know](#)! In the meantime, we've posted a presentation on engineering that was quite successful with our partners at Stuyvesant High School.

The board has continued to work diligently to build programs that meet the demands of our members, and to build and maintain relationships with other professional organizations, local corporations, and educational facilities. Some of the exciting events that are planned for the spring include **Creating Confidence** and **Negotiating Skills** seminars. We are proud to announce that we have some high-caliber speakers who have volunteered to speak, and we look forward to very successful events.

We are currently reviewing long-term missions and goals for our Section, and would appreciate your input to ensure that we are moving in the correct direction. We have engaged a Leadership coach who will assist us in preparing a plan to address some of the items mentioned in the last newsletter, including providing our members with opportunities to improve their soft skills and become more well-rounded.

Please remember that the meeting minutes from all board meetings are posted on our website, under the "Documents" heading. We are still looking for assistance in marketing, advertising, and programming, and with the student sections as well. If you are a talented, motivated individual who is interested in volunteering, please email us at [swe-ny@swe.org](mailto:swe-ny@swe.org).

We'd like to emphasize that we are very much interested in feedback from all of our members. If you have ideas, challenges, or complaints, please email us at [swe-ny@swe.org](mailto:swe-ny@swe.org).

Best Regards,

*Martha Shwerek*

President SWE-NY FY06

**2005-2006  
Executive Board**  
(Contact Info on [website](#))

**President**  
Martha Shwerek

**Vice Presidents**  
NYC: Alexandra Gagliotta  
LI: Suzanne Boglioli, PE

**Secretary**  
Kimberly Wong

**Treasurer**  
Kelly Schumacher

**Professional Development  
Chairperson**  
Mynoon Doro

**Committee Members**  
Christine Chappell  
Jennifer Leng  
Alicia Licata  
Catherine Strez  
Kimberly Wong

**Membership Chair**  
Hetal Sanghvi

**Section Representatives**  
Jane Zimmer Daniels  
Michelle Dipaola

**Alt. Section Representative**  
Laureen Pellegrino

**Newsletter Editor**  
Rebecca Gillman, PE

**Website Coordinator**  
Yuping Shen, EIT

**Student Section Liaison**  
Gerarda Shields

**Volunteer Coordinator**  
Jennifer Leng

**Corporate Relations**  
Laureen Pellegrino  
Hetal Sanghvi

## EVENT HIGHLIGHTS

### *BALANCING LIFE AND CAREER - OCTOBER 19, 2005*

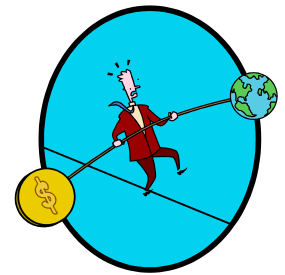
BY IMOLA SANDOR

This event was very useful, especially considering how many of us are in a constant struggle between our career and our family. We try to be all things for all people. Is this possible? Those of us who want to make it possible have to learn a trick or two. The main secret, as elaborated by our guest speakers, is summarized with “You can please some people all of the time, all people some of the time, but you can’t please all people all of the time.”

The evening started with an introduction by the brilliant Mynoon Doro, who has found a solution for a well-balanced life. She not only has a successful career, but she has been happily married for 25 years. Apart from bringing up two children (twins) she managed to become one of the “Outstanding 50 Asian Americans in Business.” Her accomplishments are astronomical. There is much to learn from Mrs. Doro. After 22 years at a leading telecommunications firm, she is currently a financial advisor at Merrill Lynch.

Mynoon introduced the speakers (listed below) and asked each one to describe or answer the following questions:

1. At each stage, how did you overcome the challenge of balancing your life and career?
2. What are the key factors that contribute to a successfully balanced career and life?
3. What infrastructure do you have to support your balancing act?
4. Cite some interesting and memorable moments in juggling your career and life.
5. Provide advice to young career women who are interested in balancing their lives and careers.



First, we were introduced to Linda Houston, who was a Director at Manhattan East complex and recently changed jobs to the World Financial Center complex within Merrill Lynch. Mrs. Houston has a degree in theatre and dance, and came to New York to dance on Broadway. Later, she decided that she wanted to settle down and have a different career and a family. Her advice to young women is that “you have to take time out to assess what is important and what is not important.” Mrs. Houston’s infrastructure for a successfully balanced life is to give and take, to prioritize, to be clear with yourself. She also surrounds herself with good teammates: an assistant at her job and a house manager in her home. Mrs. Houston told the women in attendance that “**If you are not doing the most productive job, you are stealing time from somewhere else,**” and “**Do it big or stay in bed.**”

The next speaker was Lauren L. Wong, an Executive Vice President of Tandem Capital Management. Ms. Wong’s comments were:

- Do what you want, not what people think you should do.
- Just because you work more time, that does not mean that you are more productive.
- When you are at work, you should think only about work. When you are with your family, give all of your attention to them.

Mrs. Wong also told us the story about her daughter in kindergarten, who was picked on by other children. In the beginning, she did not know how to respond, because before that, everybody had been nice to her. Then her mother taught her how to fight back.

The evening finished with questions to the panel. The speakers were both informative and entertaining. Thank you to our speakers for an enlightening evening!

## EVENT HIGHLIGHTS

### *ATTENDING THE SWE NATIONAL CONFERENCE - NOVEMBER 3-5, 2005*

BY JANE DANIELS

I attended SWE National Conferences as SWE-Purdue University advisor for over 20 years. This was my first conference where I attended as a “grown-up” section representative...Wow! I think I’m too old for this... After flying cross-country and checking into the hotel on November 3, I ran to my first meeting: “Mega Issue Discussion” with more than 100 women sharing thoughts and ideas. That evening marked the opening of the career and graduate school fair with more than 200 organizations. Friday was the Region E meeting, which I attended with Martha Shwreb. Highlights included:

- Information about the upcoming Region E Conference in Philadelphia from March 31-April 2. See [the conference website](#) for info.
- For the first time ever, there is a collegiate representative on the SWE Board of Directors.
- They are looking for SWE members who held leadership positions in college since 2001 to volunteer to train student leaders.
- Membership workshops will be posted on the SWE National website ([www.swe.org](http://www.swe.org)) to help sections develop their membership.

Later on Friday, I met with the Member Grade Focused Interest Group [FIG] led by Nicole Eigner. This group is looking at the six current categories of SWE membership (student member, MAL member, etc.) and their associated fees, voting status, rights, and privileges. If you have any thoughts on this subject, I would be glad to carry them forward to the group.



Awards banquets were held on Friday and Saturday evening. On Friday, the focus was on personal achievement: student scholarships, Distinguished New Engineers, and so on. On Saturday, the awards focused on contributions to SWE goals. The Saturday night event was my personal favorite...which may have had something to do with the fact that I received a Distinguished Service Award (I’m on the far left in the picture). It was presented to me by SWE President Ronna Robertson, and by Sidika Demir. Ronna happened to be one of my former advisees as a past SWE-Purdue president, and Sidika worked with me in Purdue’s Women in Engineering Programs...I hope this was a happy coincidence and not the result of anyone stuffing the ballot box...

Each year, more schools host events at the SWE National conference. It is a wonderful opportunity to network, make new acquaintances, and renew old friendships. One such meeting resulted in a lunch here in New York with three Purdue alumnae – each of them are now CEOs of their own businesses. What an amazing group of women!

Saturday was the heralded “Council of Section Reps” meeting. In previous years, these meeting sometimes went on and on for hours, even days. I’m happy to report that this year’s meeting was run efficiently – business was handled in 2 hours, including:

- The motion regarding “SWE Liaisons with Other Professional Societies” passed: investigate and develop a strategy for successful liaisons with other professional societies and produce a report by May 1, 2006. If any of you are active in another professional society and would like to serve on this task force, please let me know and I will send your name to the speaker.

I hope each of you will consider attending a national conference some time. It is exciting, informative, and worthwhile!

## EVENT HIGHLIGHTS

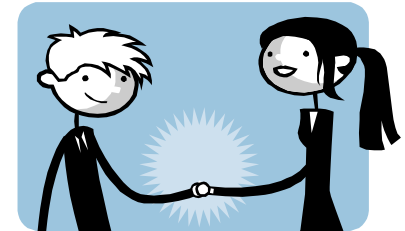
### *SWE PARTNERS WITH STUYVESANT HIGH SCHOOL - NOVEMBER 17, 2005*

BY MARGARET TANG

Stuyvesant High School often markets itself as the nation's #1 math and science high school. Some people may wonder just what that means, and truth be told, some of its students wonder too. More specifically, some of the students at Stuyvesant wonder how exactly they are supposed to apply their math and science education in the "real world." In search of answers, a few of these students contacted us at SWE New York, and we have recently created a SWE-Stuyvesant mentoring partnership.

These students have formed a club called Stuyvesant Women in Science, devoted to exploring real world applications of math and science. The club is geared towards women students, yet also welcomes men, similar to SWE. Working with SWE members, the Stuyvesant Women in Science club has begun to formulate ideas for activities. These ideas include a discussion panel about different fields within engineering, a design competition, visiting engineering companies, and other ways to explore the technical world from a high school student's perspective.

This past November marked the first joint activity between SWE and the Stuyvesant "Women in Science" club. I chaired a discussion panel to introduce students and their parents to the world of engineering. Participating with me on the panel were: Christine Leber of Navigant Consulting, Sara Najork of Turner Construction, and Gerarda Shields of Hardesty & Hanover. All four of us have civil engineering degrees. We work in different civil engineering disciplines and were able to provide a complete picture of the field.



I opened the discussion with a short presentation on how different fields in engineering provide solutions to everyday problems. For example, chemical engineers work to develop medicines for cancer, and industrial engineers develop ergonomic office furniture to help prevent injuries. This was followed by a short introduction from each panelist on her current field of work, and then by an open Question-and-Answer session. Students' question topics ranged from education to career to social life: *Is CAD really essential to being an engineer? (How many of us have wondered the same at one point or another?) Is engineering harder than other fields of study in college? Will it prevent me from having a social life? Is engineering only for the nerds at the top of the class in math and science? What's a typical day in the life of a practicing engineer?* Across the board, our answer to this last question was that no day can be classified as "typical."

The discussion panel had been scheduled for an hour and a half. Yet, two hours after we started, many students and parents were lingering to ask us even more questions. They were heartened to meet four women in technical fields who were telling them that **“math & science are worthwhile fields of study...at the end of the day, as long as you have passion in what you do, work can be fun ... even when that work is in a 'nerdy' field like engineering.”** We had a great experience and look forward to our next event!

For more information about future events with the SWE-Stuyvesant partnership, please contact Margaret Tang of Weidlinger Associates, Inc. at [tang@wai.com](mailto:tang@wai.com).

## STUDENT EVENT HIGHLIGHTS

### *NASSAU COMMUNITY COLLEGE ENGINEERING DAY - DECEMBER 1, 2005*

Is there anything you learned working in the “real world” that you wish you had known while you were still in school? If you’re like most people, the answer is a resounding YES! To help students get a head start, the Nassau Community College Engineering Science department had their first Engineering Day panel on Thursday, December 1, 2005. The panel included eight alumni:

- Al Bachner, retired from the New York State Department of Transportation
- Rebecca Gillman, Traffic Engineer at Cameron Engineering & Associates
- Stephen Gutierrez, Stress Analyst at Northrop Grumman
- Nancy O’Connell, Associate Transportation Analyst at the New York Metropolitan Transportation Council (NYMTC)
- Frank Pannacciulli, Senior Engineer at Verizon Communications
- Quan Nguyen, Lead Structural Analysis Engineer at Northrop Grumman
- Yen Nguyen, Validation Engineer at Precision Pharma Services



*Above: Panel members talk to the NCC group.*

We started out by discussing our lives at NCC, how we transferred to 4-year schools, and anything career-related that we thought would be of particular interest. The students then asked us questions, such as advice for looking for summer jobs/internships, and tips for passing Physics 3 and thermodynamics... apparently, some things never change ☺

Once things got into swing, we started talking about some general practical advice on a number of topics:



*Above: The rest of the panel.*

- **Office politics:** “Nice people are easy to work with... but the person in the next cubicle might be an arrogant [*insert epithet here*], and you must to be able to work with him anyway. You can’t avoid co-workers or bosses like you can avoid people in school.”
- **Funding a four-year degree:** “Take as many classes as you can at NCC so you transfer as many credits as possible and graduate on time... Look for schools which take your credits... Look for scholarships and loans everywhere you can...”
- **Working in the public sector vs. the private sector:** “My salary may be less than what you make working for a private company, but I will retire at age 55 with 70% of my salary as a pension. Think about where you want to be in 30 years.”
- **Networking:** “Join organizations like SWE, NSPE, ASME, IEEE, ASCE, etc. at the student level to get involved, to learn about different disciplines, and to get a head start on making professional contacts.”

Everyone involved had a great time, and I am already looking forward to next year’s Engineering Day panel. A special thanks to Professor Holly Giordano and the rest of the Engineering Science Department staff for setting it up!

## UPCOMING EVENTS CALENDAR

<p><b>Wednesday, February 15</b> – WIE/Communications Society Seminar: Radar and Sonar Systems: Robust Signal Processing Techniques 350 5<sup>th</sup> Avenue, NYC 6:00 pm Email <a href="mailto:DRivera938@ieee.org">DRivera938@ieee.org</a> to RSVP by February 13</p>
<p><b>Tuesday, February 21</b> – Create Confidence and Deal with Sexual Harassment Merrill Lynch, NYC 6:00 pm <a href="#">See our website flyer</a></p>
<p><b>Wednesday, February 22</b> – Women For Hire Career Expo at Manhattan Center 10:00 am FREE <a href="#">See info</a></p>
<p><b>Friday, February 24</b> – Wharton Technology Conference Philadelphia, PA</p>
<p><b>Monday, March 6</b> – Board meeting / Conference call 6:00 pm * contact <a href="#">Martha Shwereb</a> if you would like to participate</p>
<p><b>Thursday, March 23</b> – Negotiating Skills Seminar led by Eric Kruger of Corporate Development Strategies Cameron Engineering Woodbury, LI 6:00 pm <a href="#">See our website flyer</a></p>
<p><b>Friday March 31 – Sunday April 2, 2006</b> – SWE Region E Conference in Philadelphia, PA Several Board members will be carpooling. See the <a href="#">Conference website</a> for info &amp; let us know if you can <a href="#">join us!</a> Features Professional/Student/Personal workshops &amp; a Career Fair ~ Early Bird registration ends March 17</p>
<p><b>April 2006</b> – Board meeting / Conference call April 4 6:00 pm – email <a href="#">Martha Shwereb</a> to participate Managing Stress (NYC – Date and Location TBA) Student Upgrade Events (NYC and LI – Date and Locations TBA)</p>
<p><b>May 2006</b> – Nontraditional Career Paths for Engineers (LI – Date and Location TBA)</p>
<p><b>Saturday, May 6</b> – Revlon Run-Walk for Women breast cancer fundraiser (NYC)</p>

TBA info will be announced in later newsletters & our website [www.swe-ny.org](http://www.swe-ny.org). We hope this makes it easier for you to attend!

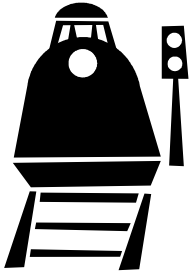
### Next Board Meeting Conference Calls

**Monday, March 6 ~ Tuesday, April 4 ~ 6-7 pm**

The Board uses monthly conference calls to “meet,” plan meetings, and brainstorm ideas for future events. Every member is welcome to listen in on these calls and participate: just email [Martha Shwereb](#).

For all events, stay tuned for details in your email every other Monday, and be sure to check out the SWE New York website: [www.swe-ny.org](http://www.swe-ny.org)





## INTEREST TOPIC: WHY DID THEY BUILD IT LIKE THAT?

As engineers, we sometimes have to do the proverbial head scratch when we see someone else's design that we know isn't right...A colleague at KLD Associates, Inc. found this story in a local paper (the *Bayport-Blue Point Gazette*) and passed it on as a funny example of why not to rely on something "just because." Read on...

The US standard railroad gauge (meaning, the distance between the rails) is 4 feet, 8.5 inches. This strikes many people as an exceedingly odd number. Why was that gauge used? Because that's the way they built them in England, and English expatriates built the US Railroads...

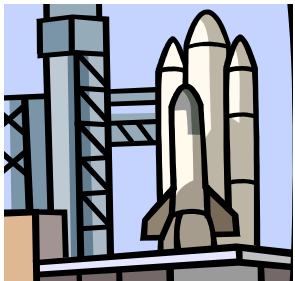
Now, why did the English build them like that? Because the first rail lines were built by the same people who built the pre-railroad tramways, and that's the gauge they used. Why did they use that gauge? Because the people who built the tramways used the same jigs and tools that they used for building wagons, which used that wheel spacing...

Okay! Why did the wagons have that particular odd wheel spacing? Well, if designers had tried to use any other spacing, the wagon wheels would break on some of the old, long distance roads in England, because that's the spacing of the wheel ruts...

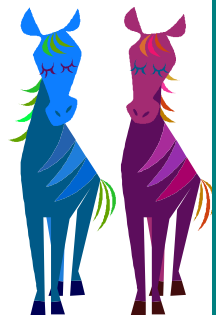
So who built those old rutted roads? Imperial Rome built the first long distance roads in Europe [and England] for their legions. The roads have been used ever since. And the ruts in the roads? Roman war chariots formed the initial ruts, which everyone else had to match for fear of destroying their wagon wheels. Since the chariots were made for Imperial Rome, they were all alike in the matter of wheel spacing.

So, the next time you are handed a spec and are told "We have always done it that way," and you wonder what horse's [behind] came up with that, you may be exactly right...because the Imperial Roman war chariots were made just wide enough to they would accommodate the back ends of two war horses.

Now the twist to the story ...



When you see a Space Shuttle sitting on its launch pad, there are two big booster rockets attached to the sides of the main fuel tank. These are solid rocket boosters, or "SRB's". The SRBs are made by Thiokol at their factory in Utah. The engineers who designed the SRBs would have preferred to make them a bit fatter, but the SRBs had to be shipped by train from the factory to the launch site. The railroad line from the factory happens to run through a tunnel in the mountains, so the SRBs had to fit through that tunnel. The tunnel is slightly wider than the railroad track, and the track (as you now know) is about as wide as two horses' behinds ...



**SO: A major Space Shuttle design feature of what is arguably the world's most advanced transportation system...  
...was determined over 2,000 years ago based on the width of a HORSE'S BUTT!**

## DO YOU NEED PDH'S?

Anyone renewing a P.E. license (except those doing it the first time) must have obtained 36 Professional Development Hours (PDH's) in the last 3 years. Many websites offer online PDH courses, and one site is [www.PDHEngineer.com](http://www.PDHEngineer.com). Your first PDH is free, and later PDH's are \$19 each. The Editor hasn't used this site and can not recommend it, so...

...have you used an online course to obtain PDH's? What site did you use? Was your experience good or bad?

Please [let me know](#) so I can pass it on to the other members. Thank you!

## CALLS FOR VOLUNTEERS

To mentor students at Brearley School and Stuyvesant ...

To help nominate SWE members for awards ...

To be liaisons with other professional organizations ...

For more information, please go to [www.swe-ny.org](http://www.swe-ny.org) or email [Jennifer Leng](mailto:Jennifer.Leng).

The most current volunteer request information can always be found on our [website](#).

Thank you for your help – the more involved you are, the better we will become!

## MEMBER NEWS

Shamma Murphy and her husband Dan are proud new parents!

Owen Patrick was born on Monday, November 7.

Jane Daniels received a Distinguished Service Award from SWE National at the SWE National Conference in Anaheim last November.

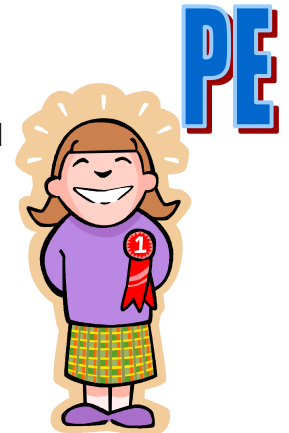
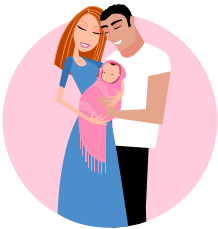
Hetal Sanghvi is getting married to Kapil Maheshwari on March 5, 2006 in India.

Lorena Moschetta recently got engaged to Lev Beylin.

Rebecca Gillman obtained her P.E. license this past January.

**Congratulations to all our members who have something to celebrate!**

If you have good news to announce, [let us know](#) and we'll post it next issue!



**NATIONAL ENGINEERS WEEK: FEBRUARY 19 – 25, 2006**

**Engineers Make a World of Difference!**

Most of us know how much of our day-to-day lives are possible because of engineers. But the general public tends to not realize it.

National Engineers Week gives us the opportunity to reach out into our communities – adults and children alike – to increase awareness and appreciation for our profession. Activities include everything from a nationwide ad program to presentations in area classrooms. The websites [www.eweek.org](http://www.eweek.org) and [www.swe-ny.org](http://www.swe-ny.org) are full of ideas and materials, and check out this [SWE NY presentation](#) too!

---

**CALLING ALL STUDENT SECTIONS**

Many professional members want to increase student section outreach. Why not help us help you, and come to an event or two? Students get reduced rates for all SWE NY events, and it's the perfect opportunity to make contact with professional women who work in your chosen field.

We also want to include information about your events in our newsletter and website. [Let us know what you have going on!](#)

---

**INTERESTED IN JOINING SWE? KNOW SOMEONE WHO MIGHT BE?**

Apply online at <http://www.societyofwomenengineers.org/MemberServices/service.aspx>

Many companies give discounts to SWE members!

GEICO • Alamo Rent A Car • MBNA Bank • jobmatch® • resumematch® • Kaplan AEC

---

**NEXT NEWSLETTER DEADLINE**

*New writers and ideas are always welcome!*

If there's anything you want to write or read about, or if you have an achievement to announce (an award, a promotion, your PE license, or you gave birth) don't be shy – be proud and [let me know!](#) The next newsletter deadline is Tuesday, April 4.

---

**COMING UP IN THE SPRING 2006 NEWSLETTER:  
UPCOMING EVENTS ... ONLINE MENTORING ... AND MORE!**