PRESIDENT
GAIL DYER
Gail has been an Automation Controls Engineer at Corning Incorporated since 2008. She holds a BS in Mechanical Engineering with Robotics and just graduated with her Masters in Integrated Manufacturing Systems Engineering in May 2016. Gail has been involved in SWE since college and has held many leadership positions both at the section and region level. For the FY16 year she also served as a region E leadership coach for the society Leadership Coaching Committee. In her spare time she enjoys hanging out with friends, karaoke, and traveling the world.

VICE PRESIDENT
KATIE KREMER
Katie grew up in Big Flats, NY before graduating from SUNY Buffalo with a BS in Mechanical Engineering in 2012. She had two summer internships with Corning Incorporated and now works for Corning as an Equipment/Process Engineer. Katie lives in Corning, NY with her fiancé and a maniac cat. In her spare time she loves photography, art, and graphic design. She was excited to be able to use her artistic skills putting together the Twin Tiers Section SWE Yearbook.

TREASURER
DOROTHY SHECKLER
Dorothy grew up in Severn, MD and obtained MS and BS degrees in Chemical Engineering from Clarkson University. Dorothy has worked her whole career, of 19 years, within Corning Incorporated. She is currently enjoying her work designing new equipment for Corning’s fusion formed glass process. Dorothy lives in Corning, NY with her two children, cat, and beta fish. She enjoys photography, hiking, and reading novels. Her passion for STEM education motivates her to stay involved with SWE.

SECRETARY
LORI ROHLFING
Lori has spent 28 years working in the semiconductor industry, primarily at I.B.M. and most recently at Globalfoundries. She has held engineering and engineering management positions in a variety of areas including product, application and quality engineering and sales. She currently manages a Technical Sales group generating quotes to design and build Custom Logic devices for networking/ telecomm clients. Lori is a Pennsylvania native and earned her BS and MS degrees in Materials Engineering from the Pennsylvania State University. She lives in Horseheads, NY with her husband and has two grown children.

SECTION REPRESENTATIVE
ERIN K. WATKINS
Erin has a dual BS/MS degree from RIT in Mechanical Engineering. She has been working for Corning Incorporated on a contingent and now permanent basis for the past 5 years. She is currently a Process Project Leader, where she provides process improvement capabilities to various Corning manufacturing facilities around the globe. While at home, Erin enjoys mountain biking with her husband, cooking for family and friends, and running around the streets of Corning. Her drive for the advancement of women in engineering brought her to SWE only 2 years ago.
EMPLOYEE SPONSORED DUES PROGRAM SPONSORS
TOM CAPEK & JESSICA ORTIZ – CORNING INCORPORATED
A special thank you to Tom Capek and Jessica Ortiz of Corning Incorporated for their generous support of the employer sponsored dues program. The program allows employees to become a SWE member and experience all the benefits without any cost to them. The section would not have been able to grow and accomplish as much without their support. We look forward to continuing the partnership in the future.

WEBMASTER
SARA MANLEY
Sara grew up in Corning and fondly remembers attending ‘Take Your Daughter to Work Day’ at the Corning Fall Brook Plant with her father. Sara obtained her BS in Mechanical Engineering from Binghamton University. After college, Sara followed in the footsteps of her father and grandfather and joined Corning Incorporated. Sara lives in Painted Post with three cats in a little house full of books. She enjoys reading, jogging, and playing video games. Sara maintains the section’s website and email listservs.
MILLICENT OWUSU
Congratulations to Millicent Owusu, who was presented the Technology Rising Star Award at the 20th Annual National Women of Color STEM Conference. Rising Stars are young women, approximately 1 to 22 years in the workforce, who are helping to shape technology for the future. They are honored at a special recognition event during the Women of Color STEM Conference.

MICHELLE PASTEL
Congratulations to Michelle Pastel on celebrating her 25th anniversary of SWE membership. We hope the society has proved to be a valuable resource and that there are many more years of membership ahead of you.
STRATEGIC GOALS (3-5 YEARS)

1. Increase Member Participation and Retention
   a. More than 50% of members attend at least one event per year
   b. Retain 75% of membership year to year
2. Increase membership to 250 members (200 Corning Incorporated + 50 outside)
   a. Broad representation of companies within the section/geographically
   b. Have approximately 20 members from outlying areas (success as of start of FY16)
   c. Utilize all 200 Employee Sponsored Dues memberships from Corning Incorporated
3. Maintain financial security
   a. Be on track to endow a second scholarship by FY22
   b. Be able to fund programs that support SWE’s mission
4. Our local section adds value to the achieving the Society SWE objectives around professional excellence and advocacy
   a. Members value SWE as a valuable professional or personal resource
   b. Community values the Twin Tiers SWE section as a valuable resource for girls in STEM

TACTICAL PLAN

1. Intentionally capture specific event information for the annual yearbook
   a. Review calendar and tracking sheets at every e-board meeting
2. Host at least 5 outreach events and 5 professional development events
3. Host or collaborate at least one event with a collegiate section
4. Contact at least 5 companies (other than Corning Inc.) regarding SWE membership/participation, and hold at least one event at one of these companies
2015 marked the 22nd annual SWE Golf Scholarship Event. A small committee made up of golfers and non-golfers from SWE, followed a set of well-defined guidelines perfected over the years to pull off another successful event. We had 144 players, 27 different hole sponsorships, and raised over $14,000. The support from local business continued to be outstanding and accounted for sponsorships of teams, holes, and donations for prizes for the tournament.

The event was conceived by George Brewster who was an active member of SWE and also in recruiting for Corning Incorporated. In his retirement, he still supports the event any way he can. In 1993, he won the Rodney D. Chipp Memorial Award, presented to a man or company that has contributed significantly to the acceptance and advancement of women in the engineering field. This National award came with a monetary value of $1,000. George gave the money to SWE Twin Tiers as seed money to begin giving out $500 scholarships to local young women entering college in engineering or computer science.

Over the years, we have consistently raised over $10,000 annually and were able to raise the amount of the scholarships to $2,000 each. In 2015, we awarded five $2000 scholarships to students from various local high schools.

Once again, the weather cooperated and all the teams enjoyed a beautiful warm and sunny day while playing in the SWE golf tournament at the Corning Country Club.
At the beginning of every fiscal year, we try to host a planning session with the new executive board. We decide on our strategic and tactical goals for the year, lay out an initial budget, and discuss any new projects or events we would like to implement. It's always a long day, but we find it so much more effective to have one long sitting and hammer out all the details!

After the executive board’s discussions, the session is opened up to the general membership. We have a brainstorming session to hear what sort of events people would like to see in the coming year—more outreach programs, more networking events, professional development focus, etc. We also love to hear new ideas anyone has for events or activities. This gives the executive board a much more diverse set of ideas for planning, as well as a better understanding as to what people are looking for from SWE.

Once all the desired activates and events are written out, they are divided into categories such as outreach, professional development, networking, etc., and we physically lay them out on a calendar year. This allows to space things out accordingly and make sure we have events scheduled regularly. We also take this time to assign a leader or coordinator to each event. After finalizing the layout, we compile our master calendar for the year - and it typically remains very similar to what is planned during this session! This may not be the section’s most exciting event, but it's great to get so much input from our members, as well as a perfect opportunity for members to volunteer to lead events they might not otherwise have signed up for.
Both students and adults enjoy a delicious lunch of Wegmans subs while discussing technology and science related careers. After, all 'enjoy' dissecting owl pellets!
GENERAL MEETINGS

VARIOUS LOCATIONS IN THE CORNING VALLEY
EVERY OTHER MONTH

A general meeting for the section is held approximately every other month. In addition to discussing upcoming events and opportunities, volunteers needed, and section business, a speaker is organized for each meeting.

For the FY16 year, members were able to figure out their Focus Balance Energy Indicator, a validated personality assessment and coaching tool that measures four fundamental energy patterns linking mind, body and behavior, as well as talk about the unwritten rules in the workplace, and receive a tour of Depuy Synthes, a company that delivers innovative medical devices and solutions in orthopaedics, spinal care and neuroscience that help patients live full lives.

Through the general meetings, members were exposed to a variety of professional development experiences, networking opportunities, and some delicious refreshments.

MEETING

SEPTEMBER 30, 2015
“Focus Energy Balance Indicator”
- Rhonda Morton

JANUARY 26, 2016
“Unwritten Rules in the Workplace”
- Jessica Ortiz

APRIL 6, 2016
Tour of Depuy Synthes
- Tabatha Savage

NETWORKING LUNCHES

VARIOUS LOCATIONS IN THE CORNING VALLEY
VARIOUS DATES

The SWE Twin Tiers section sets up regular networking lunches throughout the Corning Valley, typically every other month, to encourage communication and relationships among members.

LUNCHES
JULY 23, 2015
Sorge’s Restaurant

SEPTEMBER 17, 2015
Thali of India

NOVEMBER 18, 2015
Hand & Foot

JANUARY 28, 2016
Sorge’s Restaurant

MAY 17, 2016
Little Boomers’ Burrito Bar
Four members of the executive board were able to attend the world’s largest conference and career fair for women in engineering and technology in Nashville, TN: WE15 SWE Annual Conference. This year’s annual conference broke records with over 8,000 people in attendance. Gail, Katie, Erin and Sara were able to attend various information sessions that taught everything from using Harry Potter techniques to find your destined career path, to looking beyond pink and princesses to engage girls in outreach activities, to effective ways to give and receive feedback professionally. Various session tracks were offered targeting career development, technical innovations, SWE leadership, and outreach activities, among others. The conference also offers a massive career fair with hundreds of companies looking to hire both collegiate and professional members.

Highlights of the four day conference included the Region E business meeting, attending conference sessions, enjoying the Celebrate SWE Banquet, and manning Region E’s SWE boutique booth. When not in attendance at the conference, everyone was able to experience the excitement of being in the heart of downtown Nashville and do some sight-seeing. For the first time ever, the Region E sold out of all the SWE merchandise offered, which included ceramic coffee mugs with lids and zip-up jackets with the new SWE logo.

To help end the conference in style, a dance party ensued after the closing of the annual awards banquet and dinner on Saturday evening.
This was the third year that Twin Tiers SWE participated in Tanglewood Nature Center’s ‘Haunted Happenings’ and the project was, once again, a huge hit. Many children specifically sought out our booth after seeing others with their plastic bag of Halloween goo! The children really enjoyed making colorful slime or putty from a mixture of glue and a borax solution, all while learning some basics facts of chemistry such as cross-linking and polymerization. After all, what better way to celebrate Halloween than with your own hand-made slime?

The borax ion makes weak bonds with the polymer ions in the glue. If a child wants to make slime, they add less borax solution, so there are fewer bonds and their goo will flow and ooze more. If they want to make putty, they are add more borax solution, so more cross-links are formed and the goo is a little more firm and sticky. We love explaining cross-linking by equating it to a group of friends trying to run while holding hands; the more people holding hands, the more slowly the group will have to move. Of course, all slime is made with food coloring too, to make it even more fun! After making their slime or putty, it’s playtime! The children got a chance to stretch and squeeze the slime, see how high the putty can bounce, and compare the differences between the two.

This is the type of outreach event the SWE loves to host. It is important to engage young children in a fun activity where they can learn that science can be interesting and exciting! By attracting their interest at a young age, they may be more excited in their science and technology classes as they get older, and maybe even enter in a STEM related career.

SWE is looking forward to next year’s Haunted Happenings for even more slime and chemistry fun!

Everyone loves making their slime and putty, but the best part is playing with it! Kids and adults enjoy stretching, bouncing, and swishing the glue and borax combination.
For 2015-2016, one of SWE’s goals was to have more involvement in the community. We were given the opportunity to the partner with the Habitat for Humanity on a service project to build furniture risers for the ReStore just north of Corning. Additionally, they wanted to add a second level to one of their side rooms to display larger furniture like chairs and couches to save on showroom space. What could be a better service project for a group of engineers than the chance to roll up their sleeves and actually get to do some building?

We were provided with a general design for the projects as well as all of the supplies needed to complete the work. Four of us met at the ReStore on a chilly Saturday morning to begin the construction. Although not everyone was a master with the different tools at the start of the day, by the end of the project everyone felt comfortable and skilled in their use! Within just a few hours we had assembled the two riser beds for the furniture and the support legs that would be mounted. Once assembled, the risers were too big to fit through the doors of the store, so, as planned, they were to be completed by another group at a later date when the store was not as crowded.

The risers are now installed in the Habitat for Humanity ReStore and the staff is extremely pleased! Due to their growing need, we may well end up planning more construction projects for the ReStore in the future. It was a fantastic opportunity to give back to the local community, give SWE members some basic power tools and building experience, and of course, have some fun!

We look forward to our next construction project and hopefully get an even bigger turnout in the future!
After filling up on Thanksgiving turkey and pumpkin pie, the Twin Tiers SWE section hosted a Holiday Party at Bottles & Corks in Corning, NY on December 10th as a means to de-stress and celebrate the upcoming holiday season. Employees of the local wine store introduced members to a very broad offering of wines from around the world alongside some delectable food pairings. From a sweet Italian Moscato to a bold California red Zinfandel, there was something for everyone to enjoy. In addition, it was a perfect opportunity to support a local business and check some holiday gifts off the list!

The buffet style light dinner was delicious! Warm offerings of meatballs in marinara, along with a variety of cheeses, hummus, crackers, veggies and chocolate ensured that no one walked away hungry. The Bottles & Corks employees were even kind enough to recommend which appetizer to try with each wine. SWE members agreed any excuse to have a little more dark chocolate was worth it, and were surprised at the taste difference after trying it with a dry red wine.

Although a poll was not taken on event enjoyment, attendees raved about the mouth watering meatballs, laughed and conversed with their fellow members, and most people went home with at least one bottle of wine in hand signaling a successful event. SWE members were sent off to enjoy their holiday seasons with ‘spirit’ in hand—in more sense than one!

Best wishes in the new year, SWEesters!

SWE members enjoy tasting a variety of wines, filling up on delicious appetizers, and networking with other members. All left with a bottle of wine and some holiday spirit!
The Society of Women Engineers Region E’s 2016 Annual Conference was held February 19-21st in Newport News, VA, co-hosted by Old Dominion University and Hampton Roads sections of SWE. Hundreds of collegiate and professional SWE members from the Mid-Atlantic region enjoyed developmental sessions, business meetings, and a career fair throughout the weekend.

One of the new benefits being offered this year was a photographer taking professional headshots for college graduates in need of one for their job hunting portfolio. This amenity was greatly appreciated, especially considering the fact that collegiate members make up the majority of attendees for the regional conference.

A highlight of the conference is the Region E business meeting where our senators discussed the upcoming changes to SWE governance; this included the possible dissolution of region geographical boundaries, leaving only national SWE as opposed to national and regional. The proposal sparked a strong emotional reaction from several members of the region. In addition, Region E’s FY16 Governor, Libby Taylor, updated us on the state of the region.

During the conference lunch offered on Saturday, a panel of men who identify as advocates of women in engineering spoke on how men can champion for women in industry and academia. The keynote speaker for the conference banquet was Dr. Jennifer Michaeli, who has spent the majority of her career working for the Department of Defense. Both events were highly informative and interesting. We are looking forward to next year’s region conference!
SOUTHEAST STEUBEN COUNTY LIBRARY
MARCH 14, 2016
BY KATIE KREMER

SWE has been trying to host a Pi Day event for several years, but 2016 was the first year we managed it! Together with the Southeast Steuben County Library and the Corning Museum of Glass, we planned an after-school event for kids to teach them about pi and how to use it.

SWE built several mousetrap racecars that kids got to wind up and run in between the library shelves. They were encouraged to measure the diameter of the car’s wheel, use pi to calculate the circumference, then predict how far the racecar would travel based on how many times they wrapped the axel. It was a fun activity that involved measurement, math, as well as a discussion around ideal expectations versus how far the car actually travelled.

The Corning Museum of Glass brought in a ‘pi divider,’ a device that glassmakers use when rolling hot glass and picking up cane. With the pi divider, the gaffer can measure the diameter of his glass piece, then lay out exactly the number of cane he needs to cover the glass. Kids got the chance to try the pi divider with a tape covered cup and plastic straws instead of glass.

Kids even had the opportunity to use raspberry pi computer programming during the event! The library had several raspberry pi systems set up with different programs they could try. The Pi Day celebration was a big hit with a fabulous turnout, especially considering it took place on a Monday afternoon. Hopefully it will become an annual event with more activities and a higher turnout in the coming years!
Each year, the Society of Women Engineers has worked to put together a professional women's clothing drive at the Corning Valley area plant locations. For 2016, SWE partnered with the Corning Professional Women's Forum and Corning's Black Women's Forum to expand the drive with even more volunteers. The donations were hand delivered to Dress for Success out of Rochester, and they were more than grateful to receive so many bags of clothing, shoes, and accessories. Dress for Success is a non-profit organization centered on promoting the economic independence of disadvantaged women by providing professional attire and career development tools. There are several locations, and for the 2016 drive SWE, CPWF, and BWF worked with the newly opened Rochester section for a second year.

The drive is generally held during the month of April, and several Corning plant locations including IDM, Erwin, CMS, Diesel, Big Flats, Headquarters, and Decker have participated regularly in this drive. For 2016, we also had our first non-Corning donation location—Depuy Synthes. There has been growing interest for past several years, and it is anticipated that the drive will continue to grow each year. Donations have included suits, pants, blouses, sweaters, gently used shoes, handbags, scarves, scrubs for women in the medical industry, and new makeup and personal care items.

There were volunteers from each organization and all of the help was and is continued to be extremely appreciated!
The 2016 Girl Scout STEM Event was a great success with a record turnout of 65 girl scouts ages 9-16 who spent half a day at Corning Incorporated Headquarters. The event featured four hands-on engineering activities led by SWE volunteers. The girls were divided into groups and rotated through 30-minute activity including: building and testing a robot gripper with a variety of small items, extracting DNA from a strawberry, disassembling and learning how a calculator, hand mixer, and alarm worked by practicing reverse engineering, and even exploring tire designs by carving tire treads in clay and testing the ability to reduce hydroplaning!

There was also a career panel during a break with provided snacks. This gave the scouts a chance to see presentations by working engineers and have some of their questions answered. Each girl took home a SWE drawstring pack and National SWE/Girl Scout patch. The SWE volunteers were excellent role models for the girls showing them that women can be STEM leaders, tech savvy and that all career options are open to them.

The feedback from girls and troop leaders was excellent. 69 of 70 feedback respondents answered yes to both ‘had fun’ and ‘learned something’. 97% of the ratings for the 4 activities and career panel were ‘Great’ or ‘OK’ vs. 3% ‘Not so great.’ The girls’ comments made it clear they had a great time and couldn’t wait to come back next year!

Thank you to the dedicated and enthusiastic SWE volunteers who made the 3rd Girl Scout STEM event a wonderful success!
EGG DROP

HOUGHTON PARK PARKING GARAGE
MAY 14, 2016
BY LAURA MECHALKE

2016 marked the 32nd annual SWE Egg Drop event at the Houghton Park parking garage, an exciting event where kids and adults of all ages do their best to create an egg-holding contraption that will survive a three story free fall! Despite the depressing weather forecast of rain all morning, we were pleasantly surprised to have a little sunshine and several dozen eager entries.

There was a plethora of unique apparatuses to protect eggs this year, including a hollowed out rubber ball and a bag of popped popcorn. We also saw plenty of cotton, packing peanuts, and bubble wrap, as always! There was an abundance of creativity present as well; some eggs had faces on drawn on them, and some egg containers even had egg themed puns written on their sides.

To add to the excitement of the eggs dropping, each participant was individually interviewed by our DJ before their container was tested. They were asked what materials they used, how they came up with their idea, whether or not they thought it would work, etc. After they uncovered their egg, they would report back to the DJ if they ‘survived’ or ‘scrambled,’ amidst cheers from the on looking crowd. It was obvious that the contestants loved the personalized attention they received, and genuinely enjoyed watching others’ eggs fall.

The event wrapped up after a few rousing rounds of egg tossing and the disbursement of awards, which was just when the rain started to sprinkle. Egg-cellent timing! See you next year!

OUTREACH

EGG DROP participants have a great time watching their egg contraptions fall from three stories up, then unwrapping them to see if they ‘survived’ or ‘scrambled’ and if they won a trophy!

COORDINATORS
Christina Laskowski
Lori Rohlfing

VOLUNTEERS
Kelly Bleaking
Katie Kremer
Colleen Krysiak
Kimberly Lyons
Lizbeth Parent
Dorothy Sheckler
Richard Shelleman
Andre Wigley
Benjamin Wigley
Peter Wigley
On May 24, 2016, the Twin Tiers Section awarded scholarships of $2,000 each to five graduating women high school seniors entering the field of engineering. The scholarship program was started in 1995 by George Brewster, at the time a manager of recruiting for Corning Inc. The scholarships are named for his mother, Margaret R. Brewster, who was a single parent in a non-traditional occupation in the 1940’s. Ms. Brewster was one of only three women postmasters in the United States at the time, and the SWE Twin Tiers section considers an honor to have this scholarship named for her.

This year’s scholarship committee included returning members, Amy Litwiler, Amy Millett, Beth Tiberio, Kellie Putman, Karen Madison, Millicent Owusu, and one new member, Xin Wan. We had a fantastic slate of candidates to review with a total of 19 applicants from 15 different schools in the southern tier. As always, it was challenging to narrow down the recipients to just 5, but after so many years the decision making process has become somewhat of a science (and who would expect any less from a group of engineers?).

The banquet to award the scholarships is rewarding in itself to the scholarship committee. Seeing the young women just embarking on the academic path towards a future career in engineering is both exciting and exhilarating. This year’s recipients were from five different high schools in the area and intend to study biomedical, mechanical and environmental engineering at Cornell, University at Buffalo, Binghamton, and Penn State.

SWE members and scholarship recipients and their families sit down to enjoy an excellent meal. They discuss everything from school and career goals to advice on success.
It has been a goal of the Twin Tiers SWE section to have an end of the year summer celebration for several years, and in 2016 it was officially planned! We opted to take advantage of the warm weather and host a picnic at one of the area’s beautiful state parks. This way, members and their families could network with SWE, then go for a hike or enjoy the other park amenities.

Unfortunately, as typical with New York state, the weather didn’t exactly cooperate, and the day of the picnic was not only cloudy but a torrential downpour! Despite the inclement weather, there a great turnout of SWE members and their families to the upper pavilion at Treman State Park. Everyone enjoyed a delicious pot-luck style lunch of Wegmans subs, salad, fruit, pasta salad, chips and salsa, and dessert.

Even with the rain, several people traveled down the trails to get a glimpse of the spectacular Lucifer Falls, a towering 115 foot waterfall about halfway down the gorge trail. Other members had been clever enough to bring along some board games to play instead of braving the downpour. Exciting games of Uno and gin rummy took place across the pavilion.

Not even bad weather can put a damper on the spirits of the Twin Tiers SWE section members. The first annual summer picnic was definitely a success. We hope the event becomes a tradition, and with better weather, we expect an even greater turnout!