

Spring, 2012

Vol. 5 – Issue 2

SWE~Charlotte-Metrolina

# Chronicle

# **Section Anniversary**

Kerrie Goforth

As I think about our upcoming Section Anniversary and celebration on May 12, I want to take a moment to remind us all of what SWE is and reflect on the importance of history.

The **Society of Women Engineers** (SWE), founded in 1950, is a not-for-profit educational and service organization in the United States. SWE is the driving force that establishes engineering as a highly desirable career aspiration for women. SWE empowers women to succeed and advance in those aspirations and be recognized for their life-changing contributions and achievements as engineers and leaders.

Its mission statement, adopted in 1986, is "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."

#### Objectives:

- Inform young women, their parents, counselors, and the general public, of the qualifications and achievements of woman engineers and the opportunities open to them.
- Assist women in readying themselves for a return to active work after temporary retirement.
- Serve as a center of information on women in engineering.
- Encourage women engineers to attain high levels of education and professional achievement.

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## President's Corner

By: Jennifer Wagoner

We are wrapping up another great year with the Charlotte-Metrolina Section. Since December

2010, our membership has grown from 43 members to 52 members thanks to the efforts of Membership Chair Susan Schlett.

We hosted two Girl Scout events with great success. If you haven't taken the opportunity to volunteer for this event, I would encourage you to fit it in your schedule. It is a lot of fun working with the young girls and meeting other engineers in the area. We have one more later this calendar year (October 20, 2012) so mark your calendars. Angela Berry does such a great job planning that all you have to do is show up and have fun.

Our E-Week events this year were a areat hit as well. We worked with 5<sup>th</sup> & 6<sup>th</sup> graders at Druid Hills Academy, Beverly Woods, and Morehead STEM Academy building puff mobiles. Each of the schools would like for us to come back next year and work with more classrooms. We need each of you to volunteer for just one event to make this a bigger success and hopefully, an annual event. Thank you to Mutsa Kemp for all the planning and to AREVA for supporting the event at Morehead STEM. National Engineers Week is February 17-23, 2013 so mark your calendars and watch for information to come later this year.

The Annual Awards Banquet is coming up in early June at Portofino's on Park Road (more details to come). Please make plans to join us as we present the 5<sup>th</sup> annual Distinguished Engineering Service Award and celebrate other successes from this year.

# "Engineers are Cool!"

Angela Berry

Twenty-two wonderful volunteers, including a member from the Twin Tiers Section in New York and a member from the Eastern Carolina Section, made Saturday February 25, 2012 a day to remember for 47 Junior Girl Scouts at the semiannual Girl Scout badge event "Engineers Are Cool!" This event has been held twice per year by the Charlotte-Metrolina Section in association with the Hornets' Nest Girl Scout Council since 2001. The event is limited to 50 Junior Girl Scouts (4th and 5th Grade). Fifty Girl Scouts and twelve Leaders were registered for the event.

Our 22 volunteers conducted five sessions around various fields of engineering including mechanical, structural, civil, electrical, and chemical engineering. A single volunteer generally leads each session and is assisted by other volunteers so that the Girl Scouts are provided with a lot of attention.

Our structural session was led by first time leader Meredith Allen. Meredith explained the basics about bridges such as the components that make up a suspension bridge as well as the basic compression and tension forces that are balanced. During each session the Girl Scouts were divided into two teams to work together to build a suspension bridge out of chairs (towers), rope (cable), string (stringers) poster board (deck). At the end, the bridges were loaded with

engineering text books until the bridge collapsed to the cheers and groans of the Girl Scout teams. While having fun, the girls learn to work together.

A returning session leader, Tina Maguylo, stepped into her lab coat to teach the girls how to make a polymer out of two simple household ingredients, borax and glue. Our polymer is better known as "Gloop" or "Slime" much to the girls' enjoyment. This session teaches some basic principles of chemistry such as measuring ingredients to the right proportions. The Girl Scouts took home their colored slime in plastic sandwich bags to share with their delighted parents.

In the mechanical engineering session the Girl Scouts make an air (sail) powered car called a Puff Mobile. Celia Gray stepped forward as a first time leader for this session. She taught the Girl Scouts the ins and outs of air powered vehicles made of one sheet of paper, 4 lifesavers, 3 paperclips, 2 plastic straws and all the tape the use. can Races conducted during each session and the winning vehicle's designer won a special patch for the Junior Girl Scout vest.

Danielle Suprick, UNCC Section President, donned her hard hat to lead our civil engineering session where the Girl Scouts made chocolate asphalt. Cores of real SWE-CM Chronicle Spring, 2012 Vol. 5 - Issue 2 Page | 3

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asphalt sections for the girls to look at and compare what they see in the core against the ingredients in their "asphalt" are reviewed. The chocolate asphalt is made from melted chocolate chips (binder), walnuts. shredded chopped coconut, old fashioned and quick oats, and sprinkles (various sizes aggregate materials). After stirring all their ingredients into the "binder" the girls roll out their "asphalt" between two pieces of wax paper similar to a drum roller being used to roll and compact real asphalt.

Jennifer Wagoner volunteered to lead the loud, but fun, session on electrical engineering. In this session the Girl Scouts use a manila folder, a plastic straw, aluminum foil, wire, a buzzer, battery connector, and 9V battery to construct a pressure switch that is a burglar alarm they can use on their bedroom doors. Again, another big take home hit with the parents!

Many thanks go out to our great, and varied, volunteer pool that makes this event possible every time. Our volunteers include men and women, architects, engineers, chemists and bankers. We couldn't hold this event without these great people who are willing to give up a Saturday twice per year to interest young girls in the profession of engineering.

# **FY13 Officer Elections**

#### Chris Cathcart, Nominating Chair

The following is the slate of officers for Charlotte-Metrolina Section for FY13.

President: David CauseyVice President: Mutsa Kemp

· Secretary: Yurania Jimenez

· Treasurer: Kerrie Goforth

· Section Representative: Rose Mary Seymour



The link to the online ballot was sent to our members on May 3 and votes must be submitted by **May 25** in order to be counted. The officers will be announced and installed at our Awards Banquet in June 2012. If you have questions about our election process, contact Chris.Cathcart @ swe.org. If you have questions about our ballot form or other web issues contact <u>webmaster@swe-cm.org</u>.

Additionally, we are seeking volunteers for our committees which include: Awards, Membership, Newsletter Editor, Outreach, Professional Development, Publicity, and Web Site Coordinator. More information about each committee and its responsibilities can be found in our training PowerPoint pdf on the "Officers" page of our website under "Files and Document Templates." Contact Chris.Cathcart @ swe.org or webmaster@swe-cm.org to volunteer.

### FY12 Leadership Team

#### President:

Jennifer Wagoner Baldor Electric Company jlwagoner @ baldor.com

#### Vice President:

Angela Berry
City of Charlotte – DOT
Angela.Berry @ swe.org

#### Secretary:

Yurania Jimenez City of Charlotte Yurania.Jimenez @ swe.org

#### Treasurer:

Kerrie Goforth Goforth Residence Kerrie Goforth @ swe.org

#### Section Representative:

Rose Mary Seymour CPCC rosemary.seymour @ cpcc.edu

#### Alternate Section Rep:

Angela Berry
City of Charlotte
Angela.Berry @ swe.org

#### Membership Chair:

Susan Schlett
Schlett Residence
Susan.Schlett @ swe.org

#### Newsletter Editor:

Mandi Giles/Kerrie Goforth Kerrie.Goforth @ swe.org

#### Nominating Chair:

Chris Cathcart
Gulfstream
Chris.Cathcart @ swe.org

#### Website Coordinator:

Kerrie Goforth webmaster@swe-cm.org

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## **Upcoming Events**

May 12, 2012 – 6:30pm Section Anniversary Celebration Zapata's – Ballantyne Commons East 15105 John J. Delaney Dr, Charlotte

May 25, 2012 Officer Elections – Ballot deadline

Jun, 2012 – TBA Annual Awards Banquet Portofino's – 5126 Park Rd, Charlotte

October 20, 2012 – 8:00am-2:30pm "Engineers are Cool!" Girl Scout Outreach Event

Hornets' Nest Council Complex 7007 Idlewild Rd, Charlotte

## YCHS Career Fair

By: Kerrie Goforth

On April 27, 2012, Kerrie Goforth and Jennifer Wagoner represented the Section and SWE at the York Comprehensive High School (YCHS) Career Fair organized by the school's Career and Technology Program. Sixty-eight representatives several colleges and businesses as well as the military, law enforcement and health and safety organizations/agencies were available to answer questions and distribute information to the approximately 600 high school students (freshmen to seniors) that attended the career fair.

Our Section's participation in the career fair began in FY11 and we hope to continue participating in this annual outreach event.

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In an effort to accomplish the objectives set forth by the Society, a group of women and men have worked over the years to sustain a section in the Charlotte area. The first recorded history of the Charlotte-Metrolina Section is a letter from Billie Campbell dated January 16, 1982 requesting Society bylaws and other materials helpful to starting a new section. The Section was granted its original charter on May 2, 1982 and was active for approximately six years before being declared inactive by the Society Board of Directors on May 13, 1989.

The efforts to have the Charlotte-Metrolina Section reinstated were led by Member-at-Large Kellie Hedrick in March 1998. Through her efforts, fourteen ladies met at Rio Bravo on South Boulevard on May 12, 1999 to sign the petition to charter the Charlotte-Metrolina Section. The Section was granted its reinstatement charter on August 28, 1999 with our current geographical boundaries of North Carolina zip codes 280-282 and South Carolina zip code 297. Two of the original 12 petition signees are current members of the section, Kerrie Goforth and Helene Hilger.

In the past twelve years, we have grown from a small section of approximately 12 members to a medium section of currently 52 members. Over the years, we have been able to host many events including Region D Leadership Retreats, Professional Development Seminars, and the ever popular and fun Girl Scout Outreach Events. We have received several awards for our programs including Membership Growth & Retention, Outreach and Professional Development, and Communications: newsletter and web site. Not only has the Section received Regional and National awards, but we also established our own awards to present to well-deserving individuals: the Distinguished Engineering Service Award in 2007 and the Service to SWE Award in 2008.

Our Section leadership feels it is important to remember the past, celebrate our successes, and just have fun sometimes. To do this, we celebrate our reinstatement each year by hosting a networking social at a Mexican Restaurant on or near May 12 to commemorate the signing of our petition to charter.

This year our Section Anniversary Celebration will be held at Zapata's in Ballantyne Commons East (15105 John J. Delaney Dr., Charlotte) on May 12, 2012 at 6:30pm. Contact Kerrie.Goforth @ swe.org or webmaster@swe-cm.org if you wish to attend.

Our chartering and reinstatement processes have been chronicled in more detail on our web site (<a href="http://swe-cm.org">http://swe-cm.org</a>) under "About Us"/ "Section History". There you may read more about each process including charter approval and welcome letters and our reinstatement charter.