



Summer, 2009

Vol. 3 - Issue 1

# SWE~Charlotte-Metrolina Chronicle

## SWE~Charlotte-Metrolina Award Recipients Announced

*Awards & Recognition Banquet, June 27, 2009*

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The award banquet is an annual event where SWE members and other engineers are recognized for their commitment and service to SWE and the Engineering Community. This year the Distinguished Engineering Service Award was presented to Angela Berry. The Service to SWE Award was presented to Sandra Kolvick.

Angela's service is long standing and covers many aspects of SWE and the Engineering Community. She has organized the Girl Scout event for several years while making it look easier each year. She is the SWE Counselor for the UNCC Collegiate Section and has helped this Collegiate Section weather the down turn in membership so common to Collegiate Section at smaller schools. Angela has also worked to gain a partnership with SWE and several other organizations including PENC and WTS. Through her work with these organizations, she has helped other members secure employment, mentoring, and career advice. Her continued support of the Charlotte SWE



*Angela Berry receives the 2009 Distinguished Engineering Service Award from Sectin President Chris Cathcart*

Section has enabled growth and continued work in the area of professional development and outreach.

Sandra's service includes serving as an officer for the Section immediately upon

*[Continued on page 5]*



# President's Corner

by: **Chris Cathcart**

Welcome to FY10. What a great year as this is the 60th Anniversary of SWE! Look for different events to celebrate with SWE this year.

In addition to the National SWE Anniversary, our Section has a very active year planned and hopes that more members can participate in the activities. Check out the event calendar for details and dates.

I would like to thank the FY09 officers and chairs for their hard work and dedication to the Section. Each one has made a tremendous difference to the Section and continues to contribute, even those that have chosen not to serve as an officer or chair. The FY09 officers were Sandra Kolvick – Vice-President, Kerrie Goforth – Treasurer, Cheryl Kinchen – Secretary, Angela Berry – Section Representative, Crystal Freeburg – Alt. Section Representative, Mandi Brigman – Outreach Chair, and Jennifer Braganza – Professional Development Chair. Each of these officers and chairs was recognized at the Awards Banquet held in June. Again, many thanks and great appreciation to all the officers and chairs, you made my term as President for the Section very easy and rewarding.

This year several of the events will be held with other organizations in the Charlotte area. This collaboration is a way of extending the reach for each event and to allow SWE members more networking opportunities. If there is another organization that would like to work with SWE and collaborate on events, please let me know via email ([chris.cathcart@swe.org](mailto:chris.cathcart@swe.org)) and one of the officers will make contact.

The Section is also looking for new ideas for events to hold. If you have an idea please contact one of the officers. If you are willing to help organize the event, all the better!

# THANK YOU!



*FY09 Section Officers*

*(l-r) Treasurer Kerrie Goforth, Section Rep Angela Berry, Vice President Sandra Kolvick, President Chris Cathcart, Alternate Section Rep Crystal Freeburg; not pictured: Secretary Cheryl Kinchen, Outreach Chair Mandi Brigman, Professional Development Chair Jennifer Braganza*

Although most of the FY09 officers have remained on as FY10 officers, we offer our sincere thanks to all outgoing officers for a job well done this past year.

Leaving our Executive Council to pursue personal and/or professional interests are Crystal Freeburg, Cheryl Kinchen, Mandi Brigman, and Jennifer Braganza. Although no longer participating in of-

ficer or committee chair roles, they will continue participating as section members. We wish them the best in their endeavors and thank them for their service to our section.

Joining our EC this year is FY10 Secretary Leigh Simpson. We look forward to working with Leigh this coming year!

## Changing of the Guard

**Chris Cathcart**

**President**

Chris holds a BS in Mechanical Engineering from Kansas State University and an MBA from Maryville University, St. Louis.

She is a registered Professional Engineer and is active with several organizations that promote networking and technical excellence. Chris began her career at McDonnell Douglas (now Boeing) in St. Louis. In November 2008, Chris accepted a position in Project Engineering with Gulfstream Aircraft in Savannah, GA.

Chris still lives in Charlotte, NC and continues to be active with SWE, PMI, and

ASME. She is currently serving SWE on as Region D Senator and Region D Treasurer.

**Angela Berry**

**Vice President**

Angela holds a B.S. in Oceanic Science from the University of Michigan and a M.S. in Environmental Engineering from the University of Southern California.

She is a North Carolina registered professional civil engineer with 18 years of experience specializing in construction activities.



## Changing of the Guard Continued

She was an active member of the Southeast Florida Section of SWE while living in West Palm Beach, Florida and has served previously as the Section Representative and Section President for the Charlotte-Metrolina Section.

Angela currently works for the City of Charlotte's Department of Transportation (CDOT) as a Project Manager with their Implementation Section.

### Leigh Simpson

#### Secretary

Leigh holds a B.S. in Systems and Industrial Engineering from University of Arizona and completed the Arizona State University Corporate Leaders Program. She started her career with GTE Research and Development and has worked as an independent contractor in a variety of industries. She joined the Charlotte-Metrolina Section in 2008. She is also an active Girl Scout Troop Leader.

### Kerrie Goforth

#### Treasurer

Kerrie is from Clover, SC and holds a B.S. in Chemical Engineering from Clemson University. She joined SWE in FY94 while at Clemson and has been a part of the Charlotte-Metrolina Section

*Below: FY10 Section Officers (l-r) Kerrie Goforth, Angela Berry, Sandra Kolvick, Chris Cathcart, Leigh Simpson*

since its reinstatement in FY00.

She began her career with MEMC Electronic Materials, Inc. in Spartanburg, SC but switched careers in 2001 when she became a high school science teacher at Clover High School until May 2007 when she resigned to stay at home with her children.

She plans to return to full-time teaching when her children begin attending school.

### Sandra Kolvick

#### Section Representative

Sandra is a Mechanical Design Engineer at Fluor. She holds a B.S. and M.S. in Mechanical Engineering from Georgia Tech and a Master Professional from École Nationale Supérieure d'Arts et Métiers (ENSAM) in Metz, France. She is pursuing her professional licensure in NC.

She is from Tuscon, AZ but currently lives in Charlotte. She joined the Charlotte-Metrolina Section when she moved to Charlotte in May 2007 and has served as Vice President. She has also coordinated our Carowinds outreach events and co-coordinated our Girl Scout events.

Sandra is also involved with ASME and ASHRAE.

## FY10 Leadership Team

### President:

Chris Cathcart  
Gulfstream  
Chris.Cathcart @ swe.org

### Vice President:

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

### Secretary:

Leigh Simpson  
Charlotte.Metrolina @ swe.org

### Treasurer:

Kerrie Goforth  
Goforth Residence, Clover Schools  
Kerrie.Goforth @ swe.org

### Section Representative:

Sandra Kolvick  
Fluor  
Sandra.Kolvick @ swe.org

### Alternate Section Rep:

To be elected as necessary

### Newsletter Editor:

Leigh Simpson

### Website Coordinator:

Kerrie Goforth  
webmaster@swe-cm.org

### Nominating & Teller Committee Chair:

To be selected by 01 March 2010

### Membership, Outreach, & Professional Development Committee Chairs:

Open; email webmaster@swe-cm.org to volunteer

Subscribe to or unsubscribe from our email list.



# Upcoming Events

The following is our **tentative** calendar of events for FY10. Details will be available on our website and through email announcements.

**August 29, 2009; 1:00pm-4:00pm**

“Laid Off? Now What?” Networking

**September 11, 2009; 8:00pm-11:00pm**

Carowinds Girl Scout Event

**October 2, 2009; 11am-4:00pm**

Joint Professional Development Seminar

**November 14, 2009; 8:00am-2:30pm**

“Engineers are Cool!” Girl Scout Event

**December 3, 2009; 6:00pm**

Holiday Social

**January 22 & 29, 2010; 11:30am-1:00pm**

“Take Charge of Your Career and Your Life” Webinar from Oprah.com

**February 20, 2010; 8:00am-2:30pm**

“Engineers are Cool!” Girl Scout Event

**March, 2010 - Women’s Health Meeting**

**April 1, 2010**

Call for Distinguished Engineering Service Award (DESA) nominations

**April 23 or 24, 2010**

Bowling with SWE-UNCC

**May 1-25, 2010**

Section Officer Elections

**May 6, 2010; 6:00pm**

Section Anniversary Celebration

**May 14, 2010; 8:30am-1:00pm**

Carowinds Education Day

**May 15, 2010 - DESA nominations due**

**June 11 or 12, 2010**

Awards & Recognition Banquet

## Laid Off? Now What?

August 29, 2009; 1:00-4:00pm

Join SWE for an afternoon of resume updating, critiques, and networking for those who are looking for new jobs or considering looking.

**HOMEMADE ICE CREAM WILL BE SERVED!**



We are meeting at 9973 Reindeer Way Lane, Charlotte, NC. Please be considerate by not blocking neighbors’ driveways when parking.

## Carowinds Education Days

by: Sandra Kolvick

SWE-CM had a great time supporting Carowinds Education Days on Friday, May 15 for the second year. Carowinds Education Days is geared towards middle and high school students and illustrates the application of math and science with the exciting example of roller coasters! We had 5 volunteers who wore lab coats and filled

the roles of engineers and scientists for 3 hours, each explaining a different physics or science concept. We had rolling platforms and used props from slinkies to buckets and beads to disprove the following mindbugs/myths:

1. Heavy things fall faster than light things.
2. Astronauts are weightless in orbit

**BARBARA CIRO**  
Home: (353)900-0000  
bcir@earthlink.net

**ENGINEERING PROFILE**

Detail-driven engineer with over 20 years of experience, MS and BS in Mechanical Engineering, Six Sigma Certification, and track record of success in consistent achievement of engineering project goals. Skilled problem identifier and troubleshooter able to pinpoint and resolve errors in early stages to avoid time/cost expenditures. Efficient, organized leader with expertise in coordinating efforts within internal/external teams to reach and surpass expectations. Expert-level skills in mechanical engineering, researching, and testing.

**Core competencies:**

- Project Lifecycle Management
- Team Training & Mentoring
- Laboratory/Turbine Testing
- Hardware Design/Integration
- Thermodynamics/Fluidgraphics
- Quality Assurance Standards
- Engineering Documentation
- Regulatory Compliance Issues
- Product Development Management
- Engineering Change Order (ECO)
- Research and Development (R&D)
- Experimental Design Activities

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**PROFESSIONAL EXPERIENCE**

**High Land Corporation - Boca Raton, FL** 2003 - Present  
**QUALITY ASSURANCE ENGINEER**

Oversee assembly, testing, and quality documentation for F-16 jet engines as part of \$50 million contract between Israeli Air Force and Pratt & Whitney. Evaluate test data and conformance to specified parameters as part of quality assurance objectives. Worked jointly with IAF in identifying reporting requirements, defined on-site responsibilities at assembly/test facilities and established open lines of communication and interaction with P&W managers and engineers. *Key Accomplishments:*

- Generated Excel spreadsheets and charts for IAF to summarize present test results and subsequently compare to previous tests, providing value-added information to IAF
- Earned approval for 3-year contract extension beyond 1-2 years based on special request from IAF (maximum time for contractors at P&W is 2 years)
- Granted ability normally reserved for IAF personnel to purchase engines, including primary/spare engines and spare modules, as needed by IAF.

**Wide Electric - Schenectady, NY** 2000 - 2003  
**AERO TURBINE TEST ENGINEER**

In charge of multiple testing and design functions, working jointly with vendors, designers, and testing team members to reach objectives. Performed data reduction of air turbine test results, designed internal test rig components, and created all hardware and test instrumentation for air turbine tests. Conducted both aerodynamic and aeromechanic tests, ensured on-time, on-budget hardware availability. *Key Accomplishments:*

- Produced design for tools using Unigraphics, with 4 patent pending. Generated 1-year savings of \$76,000 by developing design methods to produce hardware for 24-hr testing in air turbines
- Created internal method that led to reduction of air turbine data, built vendor network that resulted in on-time production of hardware
- Selected to manage air turbine test facility after 2 years, directing all test operations. Developed data analysis program that consolidated test results into digestible format for design engineers.

Your resume is your ticket in the door (but you may still enter if you happen to forget to bring yours!).

Contact the event coordinator Angela Berry at [Angela.Berry@swe.org](mailto:Angela.Berry@swe.org) or 704/398-2016 for more information or visit our website and/or view the event flyer.



and you are weightless on rides at Carowinds.

3. The center of mass is in the middle of an object.
4. Loaded coasters will go down the hill faster than empty ones.
5. Air does not weigh anything.

We had so much fun sharing science and engineering with the students! Also, Carowinds is hosting its annual Girl Scout Camp September 11-12, so if you are interested in volunteering, we welcome all backgrounds. This year some of us may stay and camp with the girls as well!





## Women Advancing the World of Technology

Long Beach Convention Center  
Long Beach, California

1.877.SWE.INFO

*The Gateway to the World will open up wider than ever with opportunity as more than 6,000 women in engineering and technology will converge in Long Beach for WE09—the largest and most comprehensive gathering of forward-thinking women engineers and technologists. When these bright and energetic women come together great things will happen. Careers will advance, as will the world of technology.*

Early registration ends September 1, 2009 while late registration ends September 28, 2009. On-site registration fees are incurred after September 28. Register early to ensure you get tickets to the events you wish to attend (Career Enhancement Series, Technical and Sight Seeing Tours fill up quickly). Hotel reservations must be made through the Long Beach Convention Center Housing Department. Individual hotels cannot accept direct reservations.

Visit the WE09 website to get more information, register for the conference, and make hotel reservations.

<http://we09.swe.org/>

## Member Profile: Erin Pratt

Erin Pratt joined SWE in 2002. She holds a Bachelor of Science in Civil Engineering from the University of North Carolina at Charlotte. Erin chose UNCC because her older brother attended NC State and it “was too small for the both of us.” She is a roadway designer for STV/Whitehead Associates and enjoys her job because she is given opportunities to work with the public and provide

solutions to every day roadway/water needs.

Originally from New Bern, NC, Erin and her husband Hunter currently live in Fort Mill, SC. Her favorite color is red and she likes eating pasta. Her favorite movie is Cinderella and she enjoys reading *The Wedding* and watching Orlando Bloom.

## “Pay by PayPal” - Treasurer’s Update

by: Kerrie Goforth

The Section begins FY10 fiscally sound and a budget has been approved by the Executive Council. The Executive Council also approved a policy for accepting payments for those few events for which a fee is charged.

Although the Section normally does not charge fees for events, there have been a few occasions for which a fee was charged. In the past, the option of paying event fees by check where the attendee was instructed to mail their check to the Section post office box was offered. Because this method of payment was rarely used and payments

were not received, the EC has approved a “pay by PayPal” policy.

PayPal is a very convenient method of payment, especially if an attendee already has a PayPal account. However, **attendees do not have to have an account with PayPal** in order to pay event fees via PayPal. An attendee may also pay by credit card without having an account. If you have any questions about this policy or if you wish to learn more about PayPal, contact the Section Treasurer at Kerrie.Goforth @ swe.org or you may view the PayPal website ([www.paypal.com](http://www.paypal.com)).

*[Continued from page 1]*

joining the group. She has organized several events including the Girl Scout event at Carowinds, the Education Days at Carowinds, and several other events through the years. Her willingness to serve as an officer has allowed the Section to continue and even grow. She has accepted the responsibility of the office and gone well beyond the call of duty for the work she is assigned for SWE. Sandra’s life takes her to many faraway places but her commitment to SWE has not faltered or waived.



*Sandra Kolvick receives the 2009 Service to SWE Award from Section President Chris Cathcart*