

American Chemical Society

Form: Part II - Annual Narrative Report

Organization: South Carolina

Year: 2009

A. Activities

Please describe and rank up to ten of your section's activities during 2009. Provide (a) the title of the activity, (b) a one paragraph description of the activity, and (c) an indication if this activity was new in 2009. If you wish to provide details beyond these paragraphs, please do so in Appendix 1.

Activity #1

a) Title: UNDERGRADUATE POSTER SESSION

UNDERGRADUATE STUDENT RESEARCH POSTER SESSION PROGRAM
(Administered by Angela Peters)
In order to encourage, promote and recognize chemical research among college undergraduates, the South Carolina Section organized an Undergraduate Student Research Poster Session at its April Section meeting. A pre-registration form soliciting participation was designed and mailed to each college and university within the boundaries of the South Carolina Section. Inasmuch as this was the inaugural poster session, only nine (9) students exhibited their research. However, the quality of the research was judged to be outstanding. Dr. Angela Peters organized the activity and presented each participant with a special certificate. This is a new activity and will be continued.

Description
(Please limit

b) to one paragraph):

c) This activity was new in 2009

Activity #2

a) Title: HIGH SCHOOL STUDENT RESEARCH AWARD PROGR

HIGH SCHOOL STUDENT RESEARCH AWARD PROGRAM
(Administered by Daniel J. Antion)
This award is made to the high school student who presents the best non-mentored chemistry research project at the South Carolina Junior Academy of Science Annual Conference. A member of the Section judges the presentation. The awardee receives a \$100 honorarium and a handsome certificate. The winner and parents as well as the sponsoring high school teacher are invited to the Section's annual awards banquet in April to be recognized. In 2009 the winner of this prize was Sarah Law of Heathwood Hall Episcopal School in Columbia, SC. Her teacher sponsor was Sondra F. Wieland. This is a continuing program.

Description
(Please limit

b) to one paragraph):

c) This activity was new in 2009

Activity #3

a) Title NATIONAL CHEMISTRY WEEK PROGRAMS

NATIONAL CHEMISTRY WEEK PROGRAMS (Administered by Sondra F. Wieland)

i) The Section sponsored a program of chemical activities at the EdVenture Children s Exploratory Museum in Columbia to celebrate National Chemistry Week during October 19-24. Sondra Wieland created the activities and organized the program. In September, she conducted a training workshop for high school teachers in which teachers learned how to set up and perform chemical demonstrations as well as to be able to explain the science underlying each activity. The Section provided all the supplies and chemicals necessary to do the activities. Teachers returned to their respective schools to prepare their classrooms for National Chemistry Week in October. Two chemistry teachers, Theresa Pizzuti (White Knoll High School) and Karen Gamble (Blythewood High School), volunteered to train their students to assist children to do the activities at the EdVenture Children s Exploratory Museum during National Chemistry Week. Visitors to EdVenture enjoyed hands-on activities at ten stations set up throughout the Museum.

ii) The Section teamed up with the South Carolina Association of Chemistry Teachers (SCACT) to co-sponsor the 2009-2010 NCW Poster Contest in grades k-12. The theme for this year s NCW was Chemistry, It s Elemental. Posters were solicited, received and judged by SCACT. The South Carolina Section provided funding for cash prizes. Students with winning posters will be invited to attend both the Annual Awards banquet of the Section as well as the Annual meeting of SCACT in spring 2010. Handsome certificates will also be awarded.

Description
(Please limit

b) to one paragraph):

c) This activity was new in 2009

Activity #4

a) Title: OUTSTANDING SENIOR UNDERGRADUATE

OUTSTANDING SENIOR UNDERGRADUATE STUDENT AWARD PROGRAM (Administered by James P. Deavor)

The Section annually recognizes the highest academic ranking Senior Chemistry or Biochemistry major at each college and university within the Section boundaries. Their respective faculty sponsors at the Annual Section Awards banquet present awardees to the membership in April. Students receive a certificate and a Merck Index engraved with their name. The 2009 awardees and their institutions were:

Undergraduate	Institution
Johnnie Walker	Claflin
Melanie Blaschke	Charleston Southern
Ana Giordano Perez Hicks	Columbia College
Robert Wayne Clark	The Citadel
Richard Liberatore	College of Charleston
Sarah Hickman	Francis Marion
Hamer Elizabeth Manning	U of South Carolina

Description
(Please limit
b) to one paragraph):

c) This activity was new in 2009

Activity #5

a) Title INDUSTRIAL SPEAKER PROGRAM

INDUSTRIAL SPEAKER PROGRAM (Administered by Executive Committee)

The Section continued to invite representatives of the chemical and related industries as featured speakers at Section meetings. In 2009 the industrial speakers were: (1) Dr. Sam Bhargava of Specialty Polymers and Filaments Division of Jarden Applied Materials, Inc. (February); (2) Dr. Pam Horine, Manager of Technology, Primary Materials at Sonoco, Inc. (October); and (3) Mr. E. Ray McAfee, President of Technology and Manufacturing, Carolina Specialty Chemicals, LLC (November).

Description
(Please limit
b) to one paragraph):

c) This activity was new in 2009

Activity #6

a) Title: USNCO OLYMPIAD COMPETITION

USNCO OLYMPIAD COMPETITION (Administered by E. Ray McAfee)

The South Carolina Section conducts a competition in the Chemistry Olympiad every year. In 2009, 210 invitations were solicited among high schools in the 29 counties comprising the Section. A total of 56 students representing 9 schools registered for the first round of examinations at two sites (University of South Carolina in Columbia and the College of Charleston in Charleston). 9 students qualified to take the final examination. Each finalist received a USNCO pin which was presented by each corresponding teacher at a high school awards program. The following students, high schools and teacher sponsors were recognized and awarded certificates at the Annual Awards banquet of the Section:

Student and (High School)	Teacher Sponsor
Sunny Chung (Wilson)	Patricia Evans

	Marc O. Blais (Dutch Fork)	Patricia Smallwood
	Meredith Harris (Ridge View)	Regis Goode
	Priyanka Juneja (Dutch Fork)	Patricia Smallwood
	Zoe Trock (Ridge View)	Regis Goode
	Avnika Amin (Heathwood Hall)	Sondra Wieland
	Paul Kern (Wando)	Celise Macmillian
Description	Sara Hunter (Heathwood Hall)	Sondra Wieland
(Please limit	Javi Ayala (Wando)	Celise Macmillian

b) to one paragraph):

c) This activity was new in 2009

Activity #7

a) Title: OUTSTANDING SC CHEMIST AWARD

OUTSTANDING SOUTH CAROLINA CHEMIST AWARD PROGRAM
(Administered by William H. (Jack) Breazeale, Jr.)

This award is made to the individual (academic or industrial) whose research has achieved extraordinary recognition at state, national and international levels. The award is not made every year. The 2009 awardee was Dr. Lucasz Lebioda, the Guy F. Lipscomb Sr. Professor of Biochemistry at the University of South Carolina.

Professor Lebioda's first research project that gained international recognition was his study of the structure and mechanism of enolase, establishing that enolase and two other glycolytic enzymes, triose phosphate isomerase and pyruvate kinase evolved from a common ancestor. Based on the asymmetry of the complexes of those dimeric enzymes, Lukasz developed the concept of hetero inhibition. In this approach a mixture of two inhibitors, binding in different subunits of an asymmetric homodimer, are used to obtain a synergistic effect. One of the inhibitors mimics the substrate, while the other mimics the product. By applying this concept to human thymidylate synthase, using the drugs Tomudex and Alimta as chemotherapy agents, the system of two inhibitors provided a three-fold stronger inhibition. One of the subsequent publications currently has more than 120 citations. Professor Lebioda was presented with a citation and plaque while being honored at the Annual Awards banquet of the Section.

Description:
(Please limit to

b) one paragraph):

c) This activity was new in 2009

Activity #8

a) Title: DISTINGUISHED SERVICE TO THE SECTION

DISTINGUISHED SERVICE TO THE SC SECTION AWARD
PROGRAM
(Administered by Daniel J. Antion)

This award is made to the individual whose service contributions to the South Carolina Section have resulted in widespread recognition for the Section. This award is not made every year. The 2009 awardee was Dr. Scott R. Goode, Section Councilor and Professor of Chemistry at the University of South Carolina.

Scott's contributions to chemical education in South Carolina have been outstanding. He has presented countless chemical demonstrations to pre-college students and teachers at all levels and in many venues such as at the South Carolina Academy of Science, the South Carolina Junior Academy of Science and the South Carolina State Museum. In addition, Scott has presented seminars and invited talks on criminalistic chemistry in the state and around the nation. During three major teacher education projects co-sponsored by the South Carolina Section and the National Science Foundation (i.e., Project Interaction, The South Carolina Professional Development Program for Science and Mathematics Teachers, and Teachers Leading Teachers), Scott was one of the primary instructors who helped elevate the subject matter knowledge and pedagogy of teachers enrolled in the projects. All three projects have been cited for excellence in state and national publications.

Description:
(Please limit to

b) one paragraph):

c) This activity was new in 2009

Activity #9

a) Title: EXCELLENCE IN HIGH SCHOOL CHEMISTRY TEAC

THE DANIEL J. ANTION AWARD FOR EXCELLENCE IN HIGH SCHOOL CHEMISTRY TEACHING (Administered by Scott R. Goode)

This award is made to the South Carolina high school chemistry teacher who (1) demonstrates excellence in classroom teaching; (2) engages students to participate in activities such as science fairs, competitions, and student research; and (3) has made a commitment to continual professional growth as a science educator. The prize that consists of a \$100 honorarium, an engraved plaque and a citation are presented to the awardee at the Annual Awards banquet of the Section in the spring.

The 2009 awardee was Dr. Sarah J. Hudson of Summerville High School. Sarah has taught chemistry at the College of Charleston, Mason Preparatory School, Bishop England High School, Summerville High School and as an adjunct professor at both Charleston

Southern University and the College of Charleston. She has been active with Alpha Delta Kappa, an international honorary sorority of women educators. At Summerville High School Sarah revived the National Honor Society, acted as science coach for the QUEST competition and regularly participates in the Chemistry Olympiad Competition. Sarah's most prized teaching recognition is her frequent citation by her students as their most influential teacher. She was named Summerville High School's Teacher of the Year, the PTSA Teacher of the Year, and was also recognized by the South Carolina Association of Chemistry Teachers as their teacher of the year. Dr. Hudson said, "The rewards for teaching are plentiful although they will never be financial. I have always felt that teaching is my vocation. I love my career."

Description: I love chemistry and try to let that passion shine through for my students to see.

(Please limit to one paragraph):

c) This activity was new in 2009

Activity #10

a) Title: SOUTHEAST REGION AWARD FOR

NOMINATION FOR THE ACS DIVISION OF CHEMICAL EDUCATION
SOUTHEAST REGION AWARD FOR EXCELLENCE IN HIGH SCHOOL TEACHING (Administered by Executive Committee)

The Section submitted the portfolio of Sondra F. Wieland, chemistry teacher at Heathwood Hall Episcopal School, for the 2009 ACS Division of Chemical Education Southeast Region Award for Excellence in High School Teaching. Sondra received this award at the Southeast Region Meeting of the ACS in San Juan, Puerto Rico in October 2009.

In her classroom she employs a variety of instructional techniques such as Socratic Questioning, hands-on activities, interactive learning, independent research and inquiry learning to challenge her students to become critical thinkers. Students are continually investigating, experimenting, questioning and drawing conclusions from the multitude of opportunities to explore the wonders of chemistry as well as to build their understanding of scientific principles on concrete foundations. Sondra strongly believes that effective teaching occurs, not through dictation, but by providing students with the means to discover scientific principles through their own experiences.

Ms. Wieland's background includes twenty years of creative chemical education outreach activities involving students and teachers at all academic levels. She has been a stalwart supporter of the South Carolina Junior Academy of Science; has been a perennial presenter of hands-on activities for students in the South Carolina Middle/Elementary Academy of Science; and has conducted National

Chemistry Week Activities on behalf of the South Carolina Section for many years for students, teachers and the general public at numerous venues including shopping malls and the EdVenture Childrens Exploratory Museum in Columbia. Through this achievement Sondra has brought honor not only to herself and her school but also to the South Carolina Section.

Description:

(Please limit to

b) one paragraph):

c) This activity was new in 2009

B. Summary - Overall Section Activities

Please summarize in *1,000 words or less*, the activities of the section in 2009 which have not been already described. Outstanding events should be described in some detail and appropriate attachments included in Appendix 3. Programs described here may be featured in publications produced by the ACS Membership Division and/or at the Local Section Leaders Conferences.

C. Local Section and Chair Goals

2009 Goal Attainment. The Local Section Activities Committee strongly encourages local section planning. As a result, the 2010 local section annual report should follow-up on the attainment of goals. Please list the goals you set at the beginning of your term for your

1. section and yourself, and report on the attainment of the goals.

a) Local Section Goals and Assessment:

1. Continue several award programs. ACHIEVED.
2. Expand NCW activities: Find permanent venue for NCW activities for public outreach. ACHIEVED VIA EdVenture Childrens Exploratory Museum.
3. Continue Industrial Speaker Program. ACHIEVED.
4. Continue Chemistry Olympiad. ACHIEVED.

b) 2009 Chair's Goals and Assessment:

SAME AS IN a) ABOVE

2010 Goals. (This section should be completed by the 2010 local section chair.) Please list below at least three goals that you and your

2. local section plan to accomplish during your term as local section chair.

a) 2010 Local Section Goals (Include at least three goals):

1. Encourage increase in attendance and participation at local Section meetings.
2. Continue support of NCW, USNCO and Section Award Programs.
3. Continue to support the Industrial Speaker Program.
4. Continue to support the Undergraduate Research Poster Session at the Local Section Awards Banquet.
5. Implement the new Lab Day Program in May.
6. Expand Earth Day Celebration to include an elementary, middle school and high school program.
7. Expand publishing Section activities in Newsletter and Section newspapers.
8. Support outreach program with the Charleston County Public Library in the Harry Potter Chemistry Exhibit in Fall 2010.

b) 2010 Chair's Goals:

1. Establish Section meeting dates and programs for 2010.
2. Work on expanding Student Affiliate participation in 2010 Section meetings.
3. Solicit SC Section members to run for available elected offices in 2010.
4. Solicit Industrial companies to participate in Section meetings and special events for 2010.
5. Encourage increased participation of women in science in the Section.

D. Suggestions/Concerns

List any suggestions you have for the Local Section Activities Committee (LSAC). How can LSAC specifically help your section?