



The CSRA Chemist

SAVANNAH RIVER SECTION
OF THE
AMERICAN CHEMICAL SOCIETY

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The CSRA Chemist

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Meeting Announcements: *The CSRA Chemist* will announce scientific meetings of interest to chemists and chemical engineers (when space is available). For information and deadlines, contact Lewis Baylor.

Change of Address: On the web at <http://www.acs.org>; by telephone at 800-333-9511; by email: service@acs.org. The Local Section receives roster updates on a monthly basis from ACS National.

FEBRUARY EVENT

CHOCOLATE - FOOD OF THE GODS

Date: Thursday, February 7, 2008
Location: Carrabba's Italian Grill, 2832 Washington Road, Augusta, GA
Time: 6:30 p.m.
Speaker: Dr. Howard Peters
Cost: We will be ordering off the menu.
Menu: Carrabba's normal fare

Reservations: Contact Elise Fox at (803) 507-8560 or elise.fox@srnl.doe.gov. Leave a message on voice mail if necessary, indicating the names of those attending. Please sign up early!! The deadline is Wednesday, February 6.

Directions: Carrabba's is on Washington Road in Augusta, approximately 1 mile east of I-20.

Abstract Chocolate has been part of the world culture for thousands of years. This talk will present: the high points of the history of chocolate from the Mayan and Aztec cultures to the present; some chemistry and biochemistry of theobroma cocoa (the food of the gods); some health results that indicate this exotic vegetable (obviously since wine is a fruit) is actually good for you; some circulating urban legends (little known facts, trivia) about chocolate; discussions about the recent book "The Emperors of Chocolate"; and samples sufficient to make some attendees sick. Some of us are not ashamed to admit to being card-carrying chocoholics and on a 12-step plan.

About the Speaker A patent attorney and partner in the law firm of Phillips, Moore, Lempio & Finley of Palo Alto and San Francisco, Dr. Howard Peters received his B.S. at Geneva College (Beaver Falls, PA) in 1962 and his Ph.D. from Stanford University in 1967. (*Continued on page 8*)



CHAIR'S THOUGHTS

Happy New Year!

It is hard to believe that a year has gone by and now I must fill the duties of the Chair of the Savannah River Section of the ACS. I want to thank Mike Bronikowski for doing a great job last year. I have big shoes to fill as I believe that we had a very good 2007 as a section. We celebrated the Section's 50th Anniversary at an Augusta GreenJackets game, had record number turnouts at many of our monthly dinner meetings and celebrated National Chemistry Week's 25th anniversary at 3 venues around the area. We also increased the monetary portion of our Denise Creech Outstanding Teacher award as well as rewarded the teacher's school monetarily. We closed the year with an extremely well-attended awards ceremony and wine tasting with the AIChE in December. And how could I forget our nomination and winning of the 2006 ChemLuminary Award for Outstanding Performance by a local section (Medium Small) at the Fall 2007 National ACS Meeting in Boston. It was an honor to accept the award on the Section's behalf!!!

We plan to participate in many outreach programs this year including Technology Days in February, Earth Day in April, and of course National Chemistry Week in October. We are also planning on performing a Thermite Reaction in the spring in conjunction with Aiken's rebuilding of the Old

Train Depot. As the Augusta GreenJackets ballgame was so popular, we plan on having another outing in April. One of the more exciting things that I am looking forward to this year is the activation of our Younger Chemists Committee (YCC), which have plans for public outreach events as well as social events to get our under-35 crowd active in the ACS.

Other behind the scenes objectives include revising our current by-laws, as well as looking at our membership and how we can get you involved in some of our activities. So don't be surprised if you get calls and e-mails from us requesting information on what you would like to see from our organization. As always, we would love to get our active member participation numbers up from last year.

We welcome any volunteers to help with our different events and we do like to see new faces come out, as we did see many last year. If you have any questions or concerns or just want to let us know what you think, please don't hesitate to call on me or any of the officers. I look forward to serving you as the chair and hope too see you out at some of our planned events!

- Krissy Zeigler

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PUBLIC OUTREACH EVENTS

We are always looking for volunteers for the many public outreach events we have planned. Please consider volunteering for one or all of the events that are on the calendar. For more information on the events or to volunteer, please contact Krissy Zeigler or Elise Fox.

Future City

We are sponsoring an award for the "Best Use of Green Chemistry and Materials" at the Future City Competition on January 29th at USC-Aiken. The award will be given to the project that best demonstrates commitment to the ideals of "green chemistry." Future City is a competition that provides a fun and exciting educational engineering program for seventh- and eighth-grade students that combines a stimulating engineering challenge with a "hands-on" application to present their vision of a city of the future. The ACS will have a booth set-up and we need people to man the booth and hand out literature to interested parties. If you are interested in helping with the booth or judging the award at the competition, please let us know.

Tech Days

Once again, the ACS will have a booth at the SRS Technology Days, February 12th and 13th at Ft. Discovery in Augusta, GA. The event is designed to get

middle school children interested in science and math through interactive exhibits. We need volunteers for Tuesday from 8am-1pm and 4pm-8pm, as well as Wednesday from 8am-1pm. Family Night is Tuesday the 12th from 4:30pm-7:30pm and admission to Ft. Discovery is free .

Earth Day

In April, the section will be participating in Earth Day. Some ideas we have include setting up a booth at a local community's Earth Day celebration, adopting and cleaning up a local stream, or discussing the benefits of the new energy efficient light bulbs at a local store. If you are interested in participating, let us know.

Thermite Reaction

In conjunction with the rebuilding of the old Aiken Train Depot and the restoration of the train cars, we thought it would be fun to run a thermite reaction for the public. The reaction of rust with aluminum, $\text{Fe}_2\text{O}_3(\text{s}) + 2 \text{Al}(\text{s}) \rightarrow \text{Al}_2\text{O}_3(\text{s}) + 2 \text{Fe}(\text{l})$, is used to weld train tracks together. We will be attempting to run a thermite reaction sometime during National Transportation Week, May 11-17th. We did not have enough time to address permits and liability issues last year for National Chemistry week to run this reaction, so we postponed it. Both CSX and Norfolk Southern were interested in participating. If you are interested in helping call Mike Bronikowski or Glen Fugate. More

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info on times, dates and locations will follow- be sure to check the website!

(robert.lascola@srl.doe.gov). To volunteer, contact Bonnie Maxwell at 803-952-8720.

National Chemistry Week

Although NCW is not until October, it is never too early to start thinking about our participation. This year, Bill Trammell has stepped down as the NCW Coordinator. He has served in this capacity for the past 5 years and done a terrific job. We will certainly miss Bill's coordination and efforts that he puts in to the NCW events. We have had successful NCW events because of his enthusiasm and love of chemistry. This year we had a picture of Mark Barnes at SEED featured in the C&E News, because of Bill's NCW report. With that being said, we are looking for an NCW Coordinator. The theme this year is "Having a Ball with Chemistry." Please mark your calendars and plan to help us celebrate NCW at a local venue.

DOE Science Bowl Competition

Every year SRS sponsors the DOE Science Bowl Competition. This year, it is being held on Saturday, February 9th at USC-Aiken. No previous experience is needed and volunteering involves either being a moderator, time keeper, or scientific judge. Information about the event and quick training is supplied by SRS Education Outreach. If interested in or want to know what the competition is about, contact Rob Lascola, who has volunteered the past few years

Science Café

We have been awarded a Science Café grant by the ACS. The Science Café is a venue that gives scientists and non-scientists the opportunity to come together to talk about the latest science technology. This is usually held in a public location such as a bookstore, coffee shop, or bar. If you have an idea for a topic for the Science Café, please let us know. We plan on hosting this event in the fall.

-Krissy Zeigler

INAUGURATION OF THE YOUNGER CHEMIST COMMITTEE

You might be a YCC member if....
You are under the age of 35 in body or mind.
You once majored, minored, or feigned interest in chemistry.
You are interested in networking either to help yourself or others.

We are starting a Younger Chemists Committee here in the Savannah River Local Section! Please e-mail Blythe

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Ashcraft (Blythe.Ashcraft@srs.gov) if you or someone you know would be a good candidate. The YCC is open to all young chemist, ACS or non-ACS members.

The first YCC meeting was held prior to the ACS wine and tapas tasting. There were nine members in attendance and though brief it started the ball rolling and helped to develop some new connections between young professionals.

The next YCC meeting will be in on **January 15th in Aiken at Teresa's Mexican Restaurant. The meeting will start at 6:30.** Chips, salsa, and water will be provided! At this meeting our main objective will be to plan our visit to the MCG Children's Hospital. We have been asked by the Local Section to visit the **MCG Children's Hospital on Friday, February 1st** and do a demonstration for the kids similar to what was done for National Chemistry Week (make slime). I think this will be an excellent kick off for our inaugural year. The second objective will be to get **volunteers for Technology Days on February 12th and 13th at Ft. Discovery.** The Tech Day committee has decided on the theme - "Radiation Everywhere". We hope to have volunteers to help work the booth from 8 am -2 pm both days, and 4:30-7:30 pm on the 12th. The exhibit will briefly discuss radioactivity and relate its health ef-

fects to more routinely encountered hazards. We will have a device available that is commonly used for detecting radioactivity along with some interesting videos on radioactive sources.

I look forward to seeing you on the January 15th and hearing your needs and suggestions for future activities. If you are interested in being involved but cannot attend please send me an email. Thanks and have a great year!

- Blythe Ashcraft
(*Ed. note: See calendar on page 11.*)



SERMACS 2006 PROFIT REPORT

The 58th Southeastern Regional Meeting of the American Chemical Society held in Augusta, GA November 1-4, 2006 has returned a healthy profit to the Savannah River Section. The meeting had an attendance of 1346, with 790 papers and posters presented across the four days. After paying all the bills, the

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gross meeting profit was \$60,580. Twenty percent of this figure was returned to the SERMACS, Inc. Steering Committee as required by the corporation bylaws. After distributing \$2,423 to the Central Savannah River Section of the American Institute of Chemical Engineers, our partners in hosting the meeting, Chris Bannochie (SERMACS 2006 General Chair) reports the Section banked \$46,041. This money has been placed in the ACS Investment Pool and will be used to fund on-going activities, such as the Denise Creech Outstanding High School Chemistry Teacher Award, as well as future activities and projects of the section.

- Chris Bannochie

(Continued from page 3) After working for Dow Chemical in Midland, MI, from 1966 to 1969, he was a research chemist at SRI International from 1969 to 1978. In 1978 he received his law degree (J.D.) from the University of Santa Clara. He was a staff attorney at Hexcel Corporation from 1978 to 1980, then a patent attorney for Syntex Corporation from 1980 to 1984. Dr. Peters is a member of the California Bar and is licensed to practice before the U.S. Patent & Trademark Office in Washington, DC. Active in national as well as local ACS affairs, Dr. Peters was co-founder of the newest ACS division, the Division of Chemistry and the Law. He

helped establish the Mosher Award and served as chairman of the Mosher Award Committee. A tireless worker for the Santa Clara Valley Section of the ACS, he has been a councilor for that section and served as section chairman in 1986. Sally Peters is a 1964 chemistry graduate of Geneva College and performed biochemical research for Dr. Hubert Loring at Stanford in 1964-65. She earned an MLS degree in library science at San Jose State University in 1983. She has been a chemical information specialist in the Information Center at PARC Inc. (formerly XEROX PARC) in Palo Alto for the past 20 years. She is currently a local section Councilor and was the 2004 Chair. She has received the Geneva College Alumni Service Award (1997) and the Santa Clara Valley Local Section's Ottenberg Award in 2001.

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2008 Section Budget

<i>Income</i>	<i>Budget</i>	<i>Actual</i>
ACS Allotment	5,800.00	0.00
Interest	250.00	0.00
Local Section Dues	2,000.00	0.00
Meeting Income	3,000.00	0.00
Science Cafe Grant	500.00	0.00
TOTAL INCOME	11,550.00	0.00
<i>Expense</i>	<i>Budget</i>	<i>Actual</i>
Awards	1,300.00	0.00
Chem. Olympiad	350.00	0.00
Invested	0.00	0.00
Meeting Expenses:		
Speaker	1,200.00	0.00
Meeting	4,000.00	0.00
New Member Program	200.00	0.00
Miscellaneous	250.00	0.00
National Chemistry Week:		
NCW Events	500.00	0.00
Chemistry Show	350.00	0.00
Newsletter:		
Software Update	500.00	0.00
Postage	400.00	0.00
Printing	1,000.00	0.00
Public Relations	1,000.00	0.00
Scholarships	500.00	0.00
Service Charge	150.00	0.00
Travel	300.00	0.00
YCC	350.00	0.00
TOTAL EXPENSES	14,450.00	0.00

- Eric Zuckerman

QUILL AND FLASK



Welcome to 2008 and the return of the “Quill and Flask” after a six-year hiatus. During that time I’ve been busy serving as Treasurer for SERMACS 2006 - a five-year-long endeavor from initial planning to financial close-out that is just about wrapped up. This is my second stint as newsletter editor, the first being from October, 1998 to the end of 2001. A big thanks goes out to Bill Spencer, who has put out the Section’s newsletters for the past six (WOW - SIX!!!!!!) years.

For this first column, I am fortunate to have the following submission from Blythe Ashcraft.

- Lewis Baylor

KID CHEMISTRY: MAKING AN INCREDIBLOB!

You can use chemistry in the following activity to make your own plastic ball.

You will need: Paper towels - Measuring spoons - Elmer’s® white liquid glue - Epsom salt - Water - plastic

spoon 2 small paper or plastic cups - wax paper -metric ruler

1. Cover your work surface with a double layer of paper towels. In a small cup, place 1 tablespoon of Elmer’s® glue.

2. In a separate small cup, add 1/2 teaspoon of Epsom salt and 1/2 teaspoon of water. Swirl the cup until no more Epsom salt will dissolve.

3. Pour all the contents from the Epsom salt cup into the glue cup and stir. What do you notice happening to your mixture? What does your mixture look like?

4. Scoop the mixture out onto a double thickness of paper towels. Fold the towels over the mixture and press down to absorb the extra water.

5. Pick up your plastic and form it into a long roll. Measure it to see how long you can make it without breaking.

6. Form your plastic into a ball and press it down on a piece of wax paper until it is like a pancake. Measure the diameter of the pancake to see how large you can make it and still be able to lift it off the wax paper in one piece.

7. Form it back into a ball and try bouncing it off a hard clean surface. Congratulations on creating an incredible incrediblob incrediball!

Excerpt: “WonderScience” American Chemical Society, 1991.

ACTIVITIES CALENDAR

Date	Event	Venue	Location
January 29	Future City Competition	USCA	Aiken
February 7	Dr. Howard Peters "Chocolate - Food of the Gods"	Carrabba's	Augusta
February 9	DOE Science Bowl	USCA	Aiken
February 12-13	SRS Technology Days	Ft. Discovery	Augusta
March 11	Drs. Rothenberger & Webb "Is it Chemistry or Magic?"	USCA-RPSEC	Aiken
March 17	Dr. Burce Bursten - Pres. ACS	ASU	Augusta
April TBA	Augusta GreenJackets Game	Lake Olmstead	Augusta
April 6-10	ACS National Meeting	Various	New Orleans
April 16 (tentative)	Dr. Thomas Spittler "Groundwater Protection - A Problem Whose Time Has Come"	TBA	TBA
April 22	Earth Day	TBA	TBA
May 11-17 TBA	Thermite Reaction Demo.	Train Depot	Aiken
Fall TBA	Science Cafe	TBA	TBA
August 17-21	ACS National Meeting	Various	Philadelphia
September TBA	CSRA College Night	James Brown Arena	Augusta
September TBA	Meeting	TBA	TBA
October TBA	Plant Tour	Cytec	N. Augusta
October TBA	SEED	USCA	Aiken
October 19-25	National Chemistry Week	Various	CSRA
Nov. TBA	Tall Tales of Chemistry "Share your favorite chemistry stories!"	Aiken Brewing Co	Aiken
November 12-15	SERMACS2008	Music City Sheraton	Nashville
December TBA	Awards & Wine Dinner	TBA	TBA

YCC Winter/Spring Calendar of Events

Date	Event	Place	Time
January 15	MCG Planning Meeting	Teresa's	6:30 pm
February 1	MCG Childrens' Hospital Event	MCG	1:30 pm
February 11	Technology Days Setup	Ft. Discovery	8 am - 2 pm
February 12	Technology Days	Ft. Discovery	8 am - 2 pm
February 12	Family Night	Ft. Discovery	4:30 - 7:30 pm
February 13	Technology Days	Ft. Discovery	8 am - 2 pm
March 17	Dr. Bruce Bursten, ACS Pres.	ASU	TBA
April 4	Social Event with ASM & AIChE	TBA	6 pm

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