



The CSRA Chemist

SAVANNAH RIVER SECTION
OF THE
AMERICAN CHEMICAL SOCIETY

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INSIDE THIS ISSUE

- **Awards** Don't miss the November meeting...
 - **Councilor's Report**
 - **Section Elections Results**
 - **November Meeting: Dr. Joel Harris** Great food...
 - **Budget Summary / Making Cents** Outstanding speaker...
 - **Member's Corner**
 - ***The CSRA Chemist* - Get It By Email!** Cool science...

 - Friends and colleagues.
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The CSRA Chemist

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Mailing Address: Savannah River Section - American Chemical Society, c/o Lewis C. Baylor, Equitech Int'l Corp., 1359 Silver Bluff Rd., Ste. G6, Aiken, SC 29803. All newsletter articles should be sent to this address. All subscriptions, ads, and payments should be sent c/o Brian Anderson.

Advertisers: Brian Anderson is the Advertising Manager. The current ad prices are as follows: Full page (4.5" x 7") for \$100, Half page (4.5" x 3.5") for \$65, Quarter page (2.25" x 3.5" or 4.5" x 1.75") for \$40 and Business Cards (2.25" x 1.5") for \$15. We cannot accept ads that are larger than these size requirements. Send your camera ready art or computer diskette and payments to the mailing address above c/o Brian Anderson. The deadline is three weeks prior to the meeting date.

Member Profile(s): Joe Krupa is Chair of the Membership Committee. This topic is a regular feature in the newsletter. The profile should include: education, experience, accomplishments, hobbies and family items. To be featured, please send a 450 or less word profile, along with your phone number, to the mailing address above. Profiles will be selected by the chairperson and printed in the order received.

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: Send new address and member number to address above and ACS, PO Box 3337, Columbus, Ohio 43210. You may also send e-mail to service@acs.org.

Recently one of our members remarked to me that the strength of the section is community outreach. At the October meeting the Local Section celebrated the accomplishments of some of our members. These members clearly represent our strength. Join me in congratulating their efforts.

I am pleased to announce that we have been able to provide seven names to the

Richmond County School system to contribute to the Coaches' Board initiative started this fall. This is another outstanding example of our strength.

I have enjoyed participating in the efforts the Local Section to serve the membership and reach the community. It was a pleasure working with our Chair-Elect, Dr. Brian Anderson and so many other talented individuals in our Section.

The Local Section made very positive and visible impact in our community in

1999 and will continue to do so under Brian's leadership in the year to come.

- Roy Beck



SECTION AWARDS

At the October Meeting, the following awards were presented:

Dr. Joyce Morningstar

Recognized for her contributions in direct support of the Local Section.

Mr. William Trammell

Recognized for his contributions to the community promoting chemistry.

Dr. Brian Anderson, Dr. Thomas White and Dr. Charles Crawford

Recognized for the promotion of scientific knowledge as evidenced in their publications.

Mrs. Janice Owens

Recognized for her assistance in the planning, and organization of the CSRA college night.

Fifty-Year Members

Mr. Homer E. Benson

Dr. Leon H. Meyer

Mr. Robert F. Overman

Mr. Richard G. Spaunburgh

Continued on page 8.

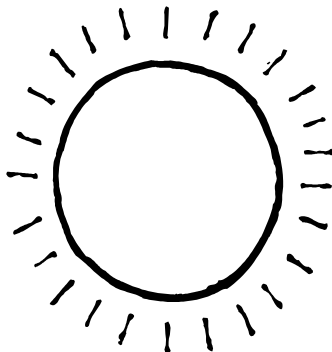
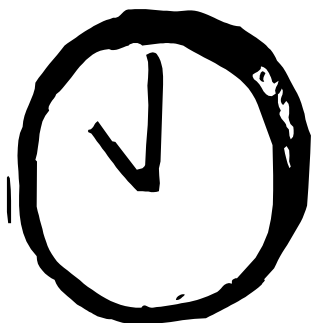
NOVEMBER MEETING

TIME-RESOLVED SPECTROSCOPIC MONITORING OF PHOTOINITIATED PROCESSES

- Date:** Thursday, November 18, 1999
- Location:** Newberry Hall (the Bowery's Banquet Facility), 151 Bee Lane, Aiken, SC
- Schedule:** 6:30 p.m. Social, 7:00 p.m. Dinner, 8:00 p.m. Presentation.
- Speaker:** Professor Joel M. Harris, University of Utah
- Menu:** Catered buffet dinner to include:
Tossed salad with ranch and honey vinaigrette dressing, dinner rolls and butter, steamed green beans and carrots, oven roasted potato wedges, **Prime Rib** au jus, sliced to order by chef in whites (Served with horseradish sauce), triple layer chocolate cake, iced tea and coffee.
- Cost:** \$22.00 at the door, no student discount; no cost for attending presentation only.

Reservations: Contact Sara Diamond at (803)-725-2605 and make your reservation by 2:00 p.m., Wednesday, November 17, 1999. Leave a message on voice mail if necessary, indicating the names of those attending and whether you will be attending the dinner, presentation, or both. Please be sure to sign up early!!

Continued on page 9.



OFFICER REPORTS

BUDGET UPDATE

INFLOWS

1/1/99 TO 12/31/99

	Actual	Budget	Difference
Allotment	4,744.00	4,744.00	0.00
Interest	160.35	200.00	-40.00
Local Section Dues	1,566.00	1,500.00	66.00
Meeting Income	720.00		
<i>Total Inflows</i>	\$7,190.00	\$6,444.00	\$746.00

OUTFLOWS

Awards	68.90	350.00	(281.00)
Chem. Olympiad	481.13	500.00	(19.00)
Invested	0.00	300.00	(300.00)
Meeting Expenses	2,084.15	1,600.00	484.00
Miscellaneous	175.59	300.00	(124.00)
National Chem. Week	310.25	900.00	(590.00)
Newsletter	1,260.71	1,600.00	(339.00)
Public Relations	169.04	300.00	(131.00)
Scholarships	350.00	350.00	0.00
Service Charge	125.00	125.00	0.00
<i>Total Outflows</i>	\$5,024.77	\$6,325.00	(\$1,300.00)
<i>Overall Total</i>	\$2,166.00	\$119.00	\$2,047.00

See also page 9.

COUNCILOR'S REPORT

The Fall ACS National Meeting was held in New Orleans, LA. New Orleans managed to have its usual charm despite the 90+ °F, nearly 100% humidity and daily afternoon showers. Attendance was surprisingly high at 11,730, considering this is the low season for New Orleans. President-Elect Daryle Busch addressed the Council and discussed various aspects of knowledge management, the "Library Problem", and the many ways he has managed to interweave societal matters into many of his more general chemistry lectures. The focus issues for his term will be knowledge management, member benefits, scientific literacy, and the public image of chemistry. I was impressed and pleased with his presentation and believe he will be one of the more approachable ACS Presidents the Society has had in the past several years.

The National Employment Clearinghouse hosted 134 employers with 434 posted jobs, 964 candidates, and 2490 interviews were held. It should be noted that employers have traditionally had many more positions available than is reflected by the number of "posted jobs."

The Council Policy Committee approved an increase to the Councilor reimbursement program. Beginning next year the maximum annual reimbursement for a Councilor who attends both the Spring and Fall meetings will increase from \$1,333 to \$2,000, including the 25% Local Section or Division funds matches. Hence, the local section liability increases from \$333 to \$500. This increase needs to be taken into consideration by the Section for budget planning.

In the rapidly changing environment resulting from the growth of electronic publishing, the Committee on Committees proposed to the Council and Board that the duties of the Committee on Copyrights be added to those of the Committee on Publications, and that the Committee on Copyrights be discharged. The proposal was approved by Council but needs Board approval prior to implementation.

The Council defeated a proposed change in member population for defining Regional boundaries. The change would have increased the allowed variance from +/-10% of the average to +/-15% of the average. Opponents of the petition believed that the proposal to allow as much as a 30% population gaps between the largest and smallest Regional populations is antidemocratic.

The Society Committee on Education (SOCED) strongly opposed the Kansas Board of Education decision to strike the word "evolution" from the state curricula. SOCED's position was supported by the Board of Directors, and it received strong applause from Council when announced.

The Committee on Local Section Activities (LSAC) announced that 80% of the funding needed for the NCW Endowment have been pledged. The committee will pilot half-day Leadership Conferences at the 1999 Southeast Regional Meeting. The workshops will focus on membership involvement, personal leadership assessment, meeting organization, and networking.

A joint LSAC and Membership Affairs Committee (MAC) task force endorsed a request from the California Local Section to establish a Senior Chemists Committee, presumably modeled after the successful Younger Chemists Committee, which celebrated its 25th Anniversary in New Orleans. No action for Council has yet appeared.

The on-line abstract submittal process for the New Orleans National Meeting was very successful with over 85% of the abstracts (5000) submitted electronically. The system is scheduled to be implemented in 2000 for the Regional Meetings. The Committee on Meetings and Expositions (M&E) also reported that they were working to clarify video and audio taping and electronic transmission, reproduction and any other use of presentations at National Meetings. This issue arose at least in part during the Anaheim Spring Meeting as a result of the on-line coverage provided by a competitor to ChemCenter.

The most controversial issue dealt with by the Council was the M&E fee structure proposal for National Meetings. The concerns voiced by councilors included, the impact of the proposal on pre-college teachers, the reassignment of overhead expenses by Budget and Finance, retention and attraction of BS chemists in Industry and younger chemists in general, the need to compete for students with other chemistry meetings such as PittCon, and the available sources of money students have to cover fees. A motion to recommit the matter to M&E was defeated, as was a motion to hold the student fee to \$25 (rather than allowing it to rise to \$45 by 2003). But a motion to match the pre-college fee structure to the graduate student fee structure was

adopted. After considerable discussion and a few parliamentary activities, the Fee Proposal was adopted by Council, and will be implemented pending Board approval in December. A copy of the fee structure is available from your councilor upon request.

Council approved a petition allowing membership anniversary dates to begin on a rotating basis for new and reinstated members, rather than prorated based upon quarterly start dates.

The Committee on Professional Training (CPT) Newsletter contained the first part of a Special Report summarizing the results of the Ph.D. recipient survey completed by CPT. The second part of the report will contain an analysis of the nearly 1000 written responses generated during the survey. Anyone wishing to receive a copy of either report should contact Chris Bannochie.

Next year's National Meetings are scheduled for San Francisco in late March and Washington, DC in late August.

- Chris Bannochie



Councilors debate where to eat lunch.
(Artist's conception.)

ELECTION RESULTS

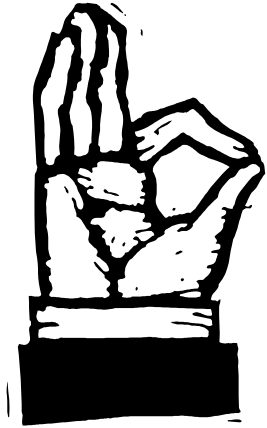
The votes have been tallied and here are the results of the 1999 Local Section election. Elected to the office of Treasurer is Dr. Thomas White and elected to the office of Secretary is Dr. Robert Lascola. Tom will be continuing in the role he has served the Section this year, while Robert will be a new member of the Executive Committee. The formal terms for both begin January 1, 2000 and run through December 31, although both will participate in planning for next year that begins this December. If you see either Tom or Robert, please congratulate them on their election.

The voter turnout for the election was 2.4%, down by about a factor of three from last year.

As you may know, there were no candidates for the office of Chair-Elect; however, there were several write-in choices and the Elections Committee is polling them for interest. Section By-laws require a ballot of Section membership for any office - thus a ballot will be mailed to Section members at such time as a candidate is identified.

SUMMARY OF 2000 SECTION OFFICERS

Chair - Dr. Brian Anderson
Chair-Elect - open
Secretary - Dr. Robert Lascola
Treasurer - Dr. Tom White
Immediate Past Chair - Mr. Roy Beck
Councilor - Dr. Chris Bannochie
Alt. Councilor - Dr. Stephanie Myers
- Lewis Baylor



Continued from page 3.

The following folks offered their time and expertise at our events this year.

Girl Scout Event

ASU Chemistry Club

CSRA College Night

Dr. Donna Hobbs

Dr. Sam Myers

Mr. Richard Orthen

Mrs. Sonia Dyer

SEED

Mr. Kirk Shanahan

Mr. Joe Krupa

Ms. Rebecca Spencer

This list may not be complete, so if anyone was left off...your help was greatly appreciated. Thank you for your support.

- Roy Beck and Brian Anderson

Continued from page 4.

PRESENTATION ABSTRACT

The uses of intense radiation from laser sources for chemical modification and processing is a rapidly growing area of scientific interest to diverse fields ranging from materials science to medicine. Despite the developing applications and practical successes of this technology, analytical methods that have been developed to follow, *in-situ*, the chemistry and the kinetics of these processes are limited, especially for condensed-phase applications. The theme of this work is development of time-resolved laser spectroscopy methods to follow changes in molecular structure and energetics during the course of laser-initiated chemical reactions. Photothermal calorimetry methods are used to determine the energetics and kinetics of the process, while time-resolved Raman spectroscopy is used to probe changes in chemical structure. Example processes that can be monitored by this combination of techniques include energy transfer and reactions of excited-triplet states, both free radical generation and recombination reactions, and radical-chain kinetics.

SPEAKER BIOGRAPHICAL INFORMATION

Joel M. Harris is currently a professor of chemistry at the University of Utah. He received a B. S. degree in Chemistry from Duke University in 1972 and his Ph.D. in analytical chemistry at Purdue University in 1976. In that year, Harris was appointed to the faculty of the University of Utah. Harris's research has concentrated on the application of lasers to analytical chemistry and spectroscopy. In particular, he and his group have developed new measurement techniques in photothermal spectroscopy, trace-level chemical detection, and time-resolved fluorescence and Raman spectroscopies. They have also pursued multiple-component data analysis strategies in spectroscopy and kinetic studies of liquid/solid interfaces. Through these efforts,

Harris has published over 150 articles, chapters, and patents; he has delivered more than 180 invited lectures at scientific meetings, universities, and industrial settings. Harris has served on editorial boards of *Chemical Reviews*, *Critical Reviews in Analytical Chemistry*, *Progress in Photothermal and Photoacoustic Science*, *Analytical Chimica Acta*, and *Analytical Chemistry* and as guest editor of *Applied Optics*. Harris is currently editor-in-chief of *Applied Spectroscopy*. At the University of Utah, Harris won the Distinguished Teaching Award in the Department of Chemistry and the University's Distinguished Research Award; he has served as a department chair. From 1985-1989, Harris was an Alfred P. Sloan Research Fellow. In 1986, he won the Coblentz Award in Molecular Spectroscopy, and in 1991, Harris received the ACS Division of Analytical Chemistry Award in Chemical Instrumentation. In 1999, Harris received the Pittsburgh Conference Award in Analytical Chemistry.

- Brian Anderson

MAKING CENTS

As the year-end nears, we are holding pretty well to our budget. Both of our community outreach events should fall within budget. The Chemistry Olympiad cost slightly less than expected and National Chemistry Week should be close to the forecasted \$900. As always, the largest expense has been for guest speaker meetings. The feedback this year on the quality of these functions from members and nonmembers has been very positive. The most recent of these events, Italian wine tasting hosted by Wine World, was well attended and essentially covered the event cost. We should remain on budget if the trend continues at the Joel Harris meeting in November.

- Tom White

EDITOR'S CHOICE



THE DIGITAL REVOLUTION

This issue marks the end of my first full calendar year as Editor of The CSRA Chemist. One of the new features I instituted this year is an e-mail edition of this newsletter. This is an effort to reduce printing and postage costs for the Section, as well as speed up delivery of the newsletter. Anyone in the Section is eligible to trade in their paper copy of the newsletter for an electronic version. All you need are an e-mail account and Adobe Acrobat on your computer to read the PDF format file in which the newsletter comes. While I don't ever expect everyone to convert over to the electronic version, I think a level of one-third electronic and two-thirds paper is achievable. This would free up about \$500 additional dollars in our budget for other uses, while not sacrificing any of our communications ability. Right now, subscription to the electronic version is at 5% of the Section's membership.

The CSRA Chemist continues to be posted at the Section's web site, (see the URL on the back cover) if you ever need to go back and look at a story or issue again.

I would like to close with a quick thanks everyone who contributed articles to this year's newsletter, and a special thanks to Tom Crute, who once again braved rain, hail, snow and packs of wild dogs to get the newsletter to the post office. Well, OK, maybe just rain.

MEMBER'S CORNER

A number of new and transferred members have joined the Section in recent months.

Dr. Bill Crooks earned his B.Sc. from UNC Chapel Hill and his Master's and PhD. From Florida State. He currently works at the Savannah River Technology Center in the Actinide Chemistry Section. In his spare time he enjoys running, puttering around the house and spending time with his three-year old daughter.

Mark Kidd grew up in Greenville, South Carolina and received his B.Sc. in chemistry from Clemson. He also works at SRTC doing environmental compliance and acting as the chemical hygiene officer for the laboratory. He enjoys spending time with his six- and three-year old children, and enjoys fishing. He lives a stone's throw from Lake Murray Dam, which helps a lot!

Lisa Willadsen is a West Point graduate in chemistry and chemical engineering who has spent her career in the U.S. Army managing maintenance organizations. She is transitioning to civilian life and has been a substitute teacher for science at the middle school level. She has found that she really enjoys that challenge and plans to begin full time teaching in the spring.

Other new Section members include Mr. Glen Link, Jr., Mr. Samuel Morton, and Mr. Stephen Colohan. Please welcome these new members when you see them...perhaps at our next Section meeting!

- Joe Krupa

ACTIVITIES CALENDAR

All Year*	International Chemistry Celebration	Various	CSRA
February 15	Tour: GBI	GBI	Augusta
February 17*	SRS Technology Day	Civic Center	Augusta
March 16*	Lee Marek "Chemistry on 'The Late Show with David Letterman'"	Ft. Discovery	Augusta
March 27	Girl Scouts	Fair Grounds	Evans
May 11	Tour: Air Products	Air Products	Langley
May 1	Nat'l Science & Tech. Week	Ft. Discovery	Augusta
September 14	CSRA College Night	Civic Center	Augusta
September 18-19	Arts In The Heart	Riverwalk	Augusta
September 20	Dr. Mary Orna "Chemistry at the Art / Archaeology Interface"	Morris Museum	Augusta
October 19	Awards Meeting	N. Augusta Comm. Cen.	North Augusta
October 23	SEED	USC-Aiken	Aiken
November 7-13*	National Chemistry Week	Various	CSRA
November 18	Dr. Joel Harris "Time-Resolved Spectroscopy"	The Bowery	Aiken

* ACS-SR booth or activity, volunteers needed.

*** *The CSRA Chemist* By E-mail ***

Would you like to receive *The CSRA Chemist* by e-mail, instead of by paper mail? We would be happy to put you on the Section's e-mail list - you will receive the newsletter more quickly and the Section will save money on printing and mailing costs. The newsletter will be sent in PDF format and can be read with Adobe's Acrobat Reader, which is available free on the WWW. Drop the editor an email at: baylor@quixnet.net if you are interested in this new feature.

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