

The CSRA Chemist

Savannah River Section
of the

American Chemical Society

Vol. 48



No. 5

HAPPY NEW YEAR!

Professional Society Meeting
January 23 -- Eejay's, Aiken
--ACS Tour Speaker, Dr. Douglas J. Raber

“Science Policy: Advising the Federal Government on Terrorism”

January 23 meeting is at Eejay's at 6:30 pm. The cost is \$20.

Menu:

Choice of 10 oz prime rib, Chicken Monterey, fried or broiled shrimp (12), salad, baked potato, tea or coffee, and dessert. Contact Renee McCabe at 706-736-0479 by January 18 for reservations. (ACS reserves the right to bill no-shows)

LETS GET A CROWD - INVITE YOUR CO-WORKERS - COME OUT AND SUPPORT THE SECTION - See Meeting details inside.

CHECK OUT THE SERMACS WEB PAGES IF YOU HAVE NOT

Web: www.sermacs2006.org

Science Policy: Advising the Federal Government on Terrorism

ABSTRACT

The threat that our nation faces from terrorism began well prior to the horrific acts of September 11, 2001, as illustrated by the bombing of the New York World Trade Center in 1993 and the destruction of the Federal Building in Oklahoma City in 1995. National efforts to reduce the threat began soon after those attacks, and significant progress has been made in reducing the threat. Answers to the problem are difficult, however, and they require a combination of technical and societal responses. However, one thing is clear—chemistry will lie at the heart of whatever solutions are to be found. Specific proposals have been made to reduce terrorist threats as a result of several careful scientific studies. But the threat remains, and only a few of the recommendations have been implemented. This talk will assess the background of the studies (how they came about, what they recommended, and why) and the extent to which their recommendations have or have not been implemented. The assessment will include the several areas in which chemistry can play a major role in preventing or mitigating terrorist acts: explosives, biological agents, chemical agents, and radiological devices.

Audience Level Specialists (highly trained), Chemists, Students

ABOUT THE SPEAKER -- Dr. Douglas J. Raber

Douglas J. Raber is a science policy consultant with GreenPoint Science, which he formed in 2004. Previously, he served for thirteen years as Director and then Senior Scholar of the Board on Chemical Sciences and Technology at the National Academy of Sciences and its operating arm, the National Research Council (NRC). Before joining the NRC in 1989, he was a member of the faculty of the University of South Florida from 1970 to 1990, publishing some 70 research articles. Raber is active in ACS governance, serving recently on the C&EN Advisory Board, the Committee on Chemistry and Public Affairs, and the Committee on Science (which he previously chaired). He recently completed several terms as the Secretary of the U.S. National Committee for IUPAC and currently serves as Chair of the Chemical Technology Operating Council of the AIChE. Raber's responsibilities at the NRC centered on organizing and directing science and science policy studies, particularly in the areas of federal policy and its interrelationships with the chemical sciences. These efforts resulted in more than fifty reports and monographs that provide technical policy guidance on topics that encompass R&D opportunities, laboratory safety and management, nuclear waste disposal, and the threat of terrorism.

2006 Schedule of Events

Speaker/Event	Date	Location	Topic	Lead
Creech Award Presentation	TBD	TBD		Crawford
Douglas Raber (Greenpoint Science, NAS/NRC)	Monday 1/23/06	TBD	Acetone (Terrorism?)	McCabe/Bronikowski
Tech Days Local Speaker [Look for email]	2/14-15/06 Mid Month?	Ft. Discovery		Trammell
Boy Scout Merit Badge Class	February	TBD	TBD	Bronikowski
Chem Ed Outreach	TBD	Augusta Tech		Beck/Barnes/Trammell
		Augusta State	New Teaching Methods	Zuckerman
Science Olympiad Al Hazari (Univ. of Tennessee)	3/18/06 or 3/25/06 Wednesday 3/22/06	Augusta State USCA Ruth Patrick (?)	Periodic Fun	Bronikowski
ACS National Meeting	3/26-30/06	Atlanta		
Chemistry Olympiad	April	USCA		Fetterolf
ACS National Meeting	9/10-14/06	San Francisco		
CSRA College Night	September	Augusta Civic Center		Myers
Creech Award Science Education Enrichment day (SEED)	Sept - Dec October		Coord. & Selection	Barnes
Tracy Hamilton (Univ. Alabama-Birm.)	Wednesday 10/11/06	USCA		Barnes
National Chemistry Week	10/18- 23/06	Aiken Brewery (?) Ft. Discovery/ Other Venues	Zymurgy	Bronikowski
ACS-SR Elections SERMACS 2006	October 11/1-4/06			Trammell
		Augusta Radisson Riverfront		Barnes Bannochie
Awards & Wine/Dinner/Other	December	TBD		Bronikowski

Open Events to consider/schedule (April, May, and September are open months):

YCC/Silver Circle activity – Bowling party or Augusta Lynx game, etc. –
McWhorter/other

Local Tours/ Speakers Please send your suggestions to Mike Bronikowski

Message from the treasurer --

“As you may have noticed, there has been a slight increase in your voluntary dues to the local section the past two years. The extra income from this increase is being used fully to fund SERMACS 2006. The voluntary dues not only aid in funding SERMACS, but also our local meetings costs. Please help us out and pay the small \$10.00 fee when paying your yearly dues to the ACS. In 2007, our voluntary dues will revert back to the \$7.50 fee of past years.”

Eric J. Zuckerman
Department of Chemistry and Physics
Augusta State University
(706) 667-4513
ezuckerman@aug.edu

NATIONAL AWARDS - CALL FOR NOMINATIONS

The American Chemical Society Awards Program is one of the means by which the Society meets its obligation "to encourage...the advancement of chemistry in all its branches, the promotion of research in chemical science and industry, [and] the improvement of the qualifications and usefulness of chemists." The continuing excellence of the ACS awards program requires that a number of highly qualified chemistry professionals be nominated and that great care be taken in preparing the nominations.

Nominating Procedure for ACS National Awards

Nominations for 56 national awards administered by the ACS to be presented in 2007 are being solicited.

- Forms for nominations and supporting information, and a detailed description of ACS national awards are available at <http://chemistry.org/awards>.
- Any individual may submit a nomination for an award, unless that individual is a member of the selection committee for the same award. However, selection committee members may submit nominations for other awards.
- Nominations and inquiries concerning awards should be directed to the Office of the Awards Programs, awards@acs.org.
- The deadline date for all nominating material for 2007 ACS National Awards is February 1, 2006. Earlier transmittal is encouraged.

WCC Activities at 2006 Spring ACS National Meeting in Atlanta, GA [editor: WCC is for Women Chemists]

- WCC Local Section Networking Lunch, Sunday, March 26, 12:00–1:30 p.m.
- Women in Industry Breakfast, Monday, March 27, 7:30–9:00 a.m.
- WCC Reception/Eli Lilly Travel Grant Poster Session, Tuesday, March 28, 11:30 am–12:00 p.m.
- WCC Luncheon, Tuesday, March 28, 12:00–1:30 p.m.
- 3rd Annual WCC Golf Classic Tournament, Wednesday, March 29, 12:00 noon

For more information about these WCC national meeting activities visit the WCC Web site at <http://membership.acs.org/W/WCC/>

The American Chemical Society ACS Directory of Graduate Research 2005 is the most comprehensive source of information on faculty and their research at departments of chemistry, chemical engineering, biochemistry, polymers and materials science, marine science, toxicology, medicinal/pharmaceutical chemistry, and environmental science in the U.S. and Canada. It lists faculty member biographical information, area of specialization, titles of all papers published within the last two years as well as faculty and department contact information. Published in odd-numbered years by the ACS Committee on Professional Training, the 2005 edition of the Directory contains current faculty information for the 2005-2006 academic year. The DGR 2005 (item 39753, US \$89 each) can be ordered from the ACS Office of Society Services or the ACS Online Store. For more information, call 1-800-227-5558 or 1-202-872-4600, or send e-mail to help@acs.org

NEW for 2005! *DGRweb*, the searchable, online version of the DGR, is now available free of charge at <http://chemistry.org/education/DGRweb>. Also new to DGRweb 2005 are the upgraded interface and functionality which allow advanced searches for both faculty and institutions. Search for faculty includes specific research area, academic rank, gender, and state, and the search results produce complete contact information for faculty including direct links to faculty email addresses and web pages. Institutional searches provide all departmental contact information along with statistical data on the number of faculty and students in the department and a complete list of faculty active in graduate research. DGRweb 2005 also includes access to the complete 1997, 1999, 2001, and 2003 databases.

CERTIFICATES FOR UNDERGRADUATES

The [ACS Committee on Professional Training](#) (CPT), among many other activities in postsecondary education, administers the ACS approval process for undergraduate programs in chemistry. All graduates of an ACS-approved program who have completed the requirements for certification described in the ACS guidelines are certified annually to the Society by each program chair. Every certified graduate is eligible to receive a certificate from ACS that recognizes that the graduate has completed a bachelor's degree that meets the Society's criteria for professional education and membership. Faculty members and graduates can request certificates from the Office of Professional Training by sending an email to cpt@acs.org. Upon certification, every graduate is eligible for full membership in the ACS by applying online at www.chemistry.org/membership or by contacting Debora Fillinich at d_fillinich@acs.org in the ACS Membership Activities Office.

REPORT RELEASED ON HBCUs**The CPT report on Workshop on Historically Black Colleges and Universities (HBCUs) and African American-Serving Institutions now released.**

The Committee on Professional conducted a workshop focused on increasing participation of African American undergraduates in chemistry and understanding the barriers to obtaining ACS approval of chemistry programs at HBCUs and African American-serving institutions. The primary focus of this workshop was how to better utilize the ACS approval process for undergraduate chemistry programs to both increase the number of HBCUs and other African American- serving institutions holding ACS approval and to aid in the recruitment and retention of African-American undergraduate students in chemistry. The workshop generated many insightful recommendations for specific actions that could be taken either by CPT or by other governance groups within the ACS to advance undergraduate education of African Americans in chemistry. The report from this workshop can be downloaded from the CPT website at <http://chemistry.org/education/cpt> or ordered at no charge from the Office on Professional Training at cpt@acs.org or (202) 872-4589.

WCC Travel Awards Available _____

The Eli Lilly & Company is once again sponsoring a program to provide funding for undergraduate, graduate, and postdoctoral women chemists to travel to scientific meetings in 2006 to present the results of their research. Grants may be applied only for registration, travel, and accommodations, and are restricted to travel to meetings within the United States. Grant funds are limited, but there are some funds set aside for undergraduates. Only U. S. citizens and permanent residents are eligible. Applications should be limited to one per research group. Awards will be given with preference to the following order: (1) any applicant who will be making her first presentation (regardless of format) at a national or major meeting, (2) graduate or postdoctoral applicants who have not presented at a national or major meeting since leaving undergraduate school. Women who have received a prior award under this **program are ineligible.**

The deadline is February 1, 2006 for receipt of applications for meetings between July 1 and December 31, 2006. For application and more information visit the WCC Web site <http://membership.acs.org/W/WCC/> or write wcc@acs.org

UPDATED RESOURCES FOR GRADUATES

The Experiential Programs in Chemistry (EPiC) activity has released two updated career-related resources for chemical science undergraduates.

The first is the release of the 2006 *Directory of Experience Opportunities*. The *Directory of Experience Opportunities* lists co-op, fellowship, internship, work abroad, and study abroad opportunities which are meant specifically for students of the chemical sciences. These opportunities can greatly enhance undergraduate education by allowing students to learn and practice science in an applied context. ACS Student Affiliates may receive a print copy of the publication at no cost by contacting the Experiential Programs in Chemistry administrator via e-mail at epic@acs.org. Both Student Affiliates and non-Student Affiliates may view the *Directory* online at www.chemistry.org/education/epic. The online database is searchable by area of interest, geographic region, and type of experience desired.

Second, as part of the *Chemical Careers in Brief* series, the ACS Education Division has translated four career briefs into Spanish. The career briefs are two- or four-page overviews of different occupations within the chemical sciences, and include information on the educational requirements, employment outlook, salaries, and skills necessary to pursue a career in a given field. The four career briefs currently available in Spanish are: *Environmental Chemistry*, *Food & Flavor Chemistry*, *Forensic Chemistry*, and *Oil and Petroleum Chemistry*. The entire series of chemical briefs is available online at www.chemistry.org/vc2.

The Steering Committee for SERMACS 2006 meets monthly and invites your participation as a local ACS-SR Member. For more information see SERMACS2006.org or email Chris Bannochie, General Chair, SERMACS2006@srs.gov.

Interested in organizing a session at SERMACS 2006? Contact SERMACS Program Chair Tom Crute (tcrute@aug.edu)

ACS-SR MEMBERS: Is your employer well represented at local section activities? If the answer is NO... YOU may be eligible for FREE registration for SERMACS 2006!

The local section has 12 grants available to cover the registration fees for local ACS-SR members. Check SERMACS2006.org for application info in March.

TRAVEL GRANTS AVAILABLE FOR STUDENT AFFILIATES CHAPTERS

The [ACS Student Affiliates](#) (SA) Program is pleased to announce the [2006 National Meeting Travel Grant](#) for active SA chapters. The SA program will offer up to 75 travel grants of \$275 for the spring national meeting to offset travel costs including transportation, registration, lodging, and food.

Applications are available on the SA website (chemistry.org/education/saprogram.html), or from the SA Program office. For grant consideration, a chapter must:

- have at least one paid student affiliate present a research or chapter poster in one of the Division of Chemical Education's undergraduate poster sessions (abstracts submitted to other technical divisions are not eligible);
- be an active Student Affiliates chapter: have submitted an annual report to the SA program at least once in the past three years and have at least six dues-paying national student affiliates in the chapter;

Travel grants will be awarded on a first-come, first-served basis until the deadline is reached or the specified number of grants has been awarded. For additional information, contact Alicia J. Chambers, Education Associate, at 800-227-5558, ext. 6176, or a_chambers@acs.org.

YOUNGER CHEMISTS COMMITTEE NEWSLETTER

News Flash: The YCC Newsletter Has Gone Electronic!

The YCC newsletter will only be sent electronically. Sign up for our e-mail notification system! It's easy—just visit our Web site and follow the signup link! Even if you choose not to receive our e-mails, you can always read the newsletter on our Web site, chemistry.org/ycc

See you on the Internet!

[Editor Note: Unfortunately, Norman Johns has had to move out of leading the younger chemists this year. Apparently he had a birthday that makes him ineligible. The chair would like to hear of anyone interested in the job.]

YOU CAN HELP SHAPE THE FUTURE

You can demonstrate your commitment to chemistry and our next generation of scientists by contributing to programs that directly impact individual lives. Your contribution to one or more of the following programs will help and support the academic achievement of aspiring young chemists and improve our world for the better through chemistry.

- A gift to [Project SEED](#) will help a young economically disadvantaged high school student experience hands-on research in a lab alongside a scientist-mentor
- A contribution to [ACS Scholars](#) helps an underrepresented minority student with financial need pursue a chemical science degree.
- A number of you recognize your high school chemistry teacher as the reason you are in chemistry today. Your support will help a teacher be the best he or she can be in the classroom by attending [ACS Teacher Training](#) workshops.
- Your contribution to the [ACS Green Chemistry Institute](#) will positively impact human health and our environment by

promoting sustainability through green chemistry principles.

For more information on these programs or to make a gift, please contact Mary Bet Dobson or Kathy Fleming, ACS Development Office, 1155 16th Street, NW Washington, DC 20036, 1-800-227-5558, ext 6210 or visit www.chemistry.org/gifts

IMPROVE YOUR PROFESSIONAL SKILLS

ACS's Webcast Short Courses Team the Technology and Convenience of Internet Learning with the Dynamism of Live, In-Person Training—

ACS now offers Internet-based training courses to help you quickly learn the information that you need to succeed in your job. In the convenience of your home or office, you can learn new techniques, improve your lab skills, and hone your leadership and communication skills.

Class size is limited and averages 10 students per course. This ensures that you will receive individual attention and can communicate easily with the instructor and other course attendees.

To obtain more information or to register online for a course, go to <http://chemistry.org/elearning>! Or call (800) 227-5558, ext. 4508, or (202) 872-4508.

The following courses will be offered in 2006:

- A Pharmacology Primer for Chemists
- Basic Statistical Analysis of Laboratory Data
- Chiral Separations
- HPLC Tech for Analysis of Proteins and Peptides
- Effective Technical Writing
- Fourier Transform Infrared Spectroscopy
- From Beaker to Barrel
- Gas Chromatography Basics
- HPLC Basics
- Infrared Spectral Interpretation, Basic
- Infrared Spectral Interpretation, Intermediate
- Infrared Spectral Interpretation: Special Topics
- Innovation Acceleration Methodologies
- Interpretation of Mass Spectra
- Introduction to Chemistry for Technicians
- IR Sample Preparation
- Leadership in Science: Managerial and Technical Skills
- Organic Chemistry Refresher
- Toxicology for Chemists

SERMACS 2006 – Augusta, GA

November 1-4, 2006

*“Linking Chemistry in the Southeast”*Web: www.sermacs2006.orgEmail: sermacs2006@srs.gov**SERMAC Contacts:**Chris Bannochie bmerup@comcast.net (803) 725-8088Tom Crute tcruise@aug.edu (706) 667-4517**SECTION CONTACTS**www.acs-sr.org

Position	Name	Email	Work Phone
Chair	Dan McCabe	daniel.mccabe@srnl.doe.gov	(803) 725-8238
Chair Elect	Michael Bronikowski	michael.bronikowski@srnl.doe.gov	803) 725-1669
Past Chair	Mark Barnes	mark.barnes@srnl.doe.gov	(803) 725-2104
Treasurer	Eric Zuckerman	ezuckerman@aug.edu	(706) 667-4513
Secretary	Scott McWhorter	scott.mcwhorter@srnl.doe.gov	(803) 725-8130
Councilor	Chris Bannochie	bmerup@comcast.net	(803) 725-8088
Alt. Councilor	Stephanie Myers	smyers@aug.edu	(706) 667-4514
Career Development	Tom Crute	tcruise@aug.edu	(706) 667-4517
Membership	Robert Lascola	robert.lascola@srnl.doe.gov	(803) 725-2380
Public Relations	Kim Crapse	kim.crapse@srnl.doe.gov	(803) 725-6107
Chem. Olympiad	Monty Fetterolf	montyf@aiken.sc.edu	(803) 648-6851
Nat. Chem. Week	Bill Trammell	wtrammell@knology.net	(706) 854-0090
Industrial Relations	Roy Beck	roy.beck@srs.gov	(803)-952-3008
YCC	Norman Johns	norman.johns@srs.gov	(803) 952-3572
Technician Affiliates	Bertha [Bert] Carter	bertha.carter@srs.gov	(803) 725-3953
Pubs. Editor	Bill Spencer	william02.spencer@srnl.doe.gov	(803) 725-5256
Webmaster	Jessica Coughlin	leohorse@bellsouth.net	(803) 952-2737
Distribution	Lewis Baylor	ldbaylor@knology.net	(803)-652-7270

**American Chemical Society
Savannah River Section
c/o Lewis C. Baylor
Equitech Int'l Corp.
903 Main Street South
New Ellenton, SC 29809**

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