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# THE OCTAGON

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Volume 89, No. 7, October 2006

Lehigh Valley Section of the American Chemical Society

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### ***Meeting Announcement: 790<sup>th</sup> LVACS Meeting: Albright College***

**Date:** Wednesday October 25, 2006

**Location:** Center for the Fine Arts Mezzanine (social hour and dinner); Merner-Pfeiffer Hall of Science Room 221 (speaker).

**Reception:** 5:30 PM

**Dinner:** 6:30 PM

**Meeting:** Meeting: At the conclusion of dinner

**Talk:** At the conclusion of the meeting ~ 8:00 PM

**Menu:** Assorted Bread Sticks w/ Butter, Pear Salad with Spring Greens, Sauté Chicken Breast with Artichoke Hearts and Sun dried Tomatoes\* OR Grilled Fresh Fish Served with Sauce Maltaise\*, Wild Rice with Pine Nuts, Stir Fry Vegetables, Chocolate/Raspberry Mousse Parfait, \*Please specify a choice of entrée

**Cost:** : \$23.00, students and retirees \$12.00

**Contact:** Reservation by 4:00 P.M. Wednesday October 18, 2006 through Nancy Kerper at (610) 921-7720 or Pam Artz at partz@alb.edu (E-mail is preferred with LVACS as the subject). Please specify a choice of entrée.

**Directions:** Available on the web at <http://www.albright.edu/about/directions.html>

**Speaker:** Gaylen Bradley, Ph.D., Visiting Professor of Pharmacology and of Biochemistry and Molecular Biology Penn State College of Medicine, Hershey, PA..

Dr. Bradley came to Penn State College of Medicine as Visiting Professor of Humanities in 1999 to direct the intercampus course on Ethics in the Life Sciences. In 2000 he also became Senior Associate Director of Research Affairs at Penn State College of Medicine, where his primary role was to create a culture of conscience throughout the Milton S. Hershey Medical Center. He advised faculty on plans for management of personal financial interests and served as a member of the campus Conflict of Interest Review Committee until June 30, 2005

at which time he returned to active bench research. Prior to relocating to Penn State Hershey in 1999, he was Vice President for Academic Affairs at the University of Maryland Biotechnology Institute, and Dean of Basic Health Sciences and Chair of Microbiology and Immunology at the Medical College of Virginia, Virginia Commonwealth University. He received his baccalaureate training at Missouri State University with a BA in Chemistry and a BS in Biology. He received his MS and PhD from Northwestern University. He is a past chair of the SE Pennsylvania Section of ACS and is a member of the board of the Council of Scientific Society Presidents. He is married to Judith S. Bond, who is Professor and Chair of Biochemistry and Molecular Biology, Penn State College of Medicine and immediate past president of the American Society for Biochemistry and Molecular Biology. Dr. Bradley's research has used the tools of cell and molecular biology to study the mechanism of action of chemicals on a living system, interactions among chemicals within a living system, and interactions among living systems. He and his associates have published 200 technical reports. His current research is on the biologic function of metalloproteases in health and disease, in particular the interactions among the intestinal flora, the host immune system, and the genotype of the host in inflammatory bowel disease. Dr. Bradley has lectured on various aspects of responsible conduct of research at national scientific meetings, meetings of research administrators, research universities, and undergraduate colleges.

#### **Talk: : Issues in Scientific Ethics Today**

Hardly a day passes without seeing an article in Chemical and Engineering News or the popular press about breaches in responsible conduct of research. Charges of plagiarism have been levied at students, faculty and administrators. Research workers have been charged with allowing their personal financial interests to influence their design, conduct and reporting of research. Scientists, particularly

clinical investigators, have been alleged to endanger human participants in clinical trials. As a result, academic institutions, research organizations, and state and federal agencies have established rules to guide or prohibit conduct of research. The principles that guide responsible conduct or research will be explored. The processes for establishing regulations will be evaluated, as well as the factors that lead scientists to engage in unethical practices. The public holds scientists in high regard. Is the public trust warranted? This presentation will identify some of the current issues in scientific ethics and the principles that are invoked in reports addressing specific or general behavior of members of the

### ***2006-2007 Meeting Schedule***

**November - Lehigh University**  
**January - Muhlenberg College**  
**February - Cedar Crest College**  
**March - Desales University - HS Teacher's Night**  
**April - Moravian College - Student Awards and Poster Session**  
**May - East Stroudsburg University**  
**Pub Night Rescheduled!**

### ***LVACS Officers - 2006:***

**Chair:** T. Michelle Jones-Wilson  
East Stroudsburg University  
East Stroudsburg, PA 18301  
**mjwilson@po-box.esu.edu** 570-422-3703

**Chair Elect:** Paul Bouis  
**pbmbi@rcn.com**

**Immediate Past Chair:** Tara Baney  
Merck & Co., Inc. West Point, PA 19486  
**tara\_baney@merck.com** 215-652-7486

**Secretary:** Chester Crane  
Bangor PA  
**ccrane9@yahoo.com** 610-588-0073

**Treasurer:** John Freeman  
East Stroudsburg University  
East Stroudsburg, PA 18301  
**jfreeman@po-box.esu.edu** 570-422-3446

**Councilor:** Carol Baker Libby  
Moravian College, Bethlehem, PA 18018  
**cblibby@cs.moravian.edu** 610-861-1629

**Councilor:** Pamela D. Kistler  
Cedar Crest College, Allentown, PA 18104  
**pdkistle@cedarcrest.edu** 610-437-4471 x 3508

**Alternate-Councilors:** Roger Egolf & T. Michelle Jones-Wilson (see above)

### ***Councilor's Report***

Report from the Council Meeting  
San Francisco, C, September 10-14, 2006

The Council received a petition for consideration concerning Multi-Year Dues. This petition will allow members paying full dues to pay for 2 or 3 years if they wish. Action is expected on this petition at the 2007 spring national meeting in Chicago.

The national meeting in San Francisco attracted over 15,600 registrants. As a result financial targets for the meeting were met and the Board voted to keep the registration fees for 2007 at their current level.

The Committee on Membership Affairs reported that a record 12,137 new applicants have been added to the Society's membership this year. The Membership Affairs Committee is also working on a petition to allow students to become full members of the society. The current proposal would allow students to vote but not to hold national office in the society.

On the recommendation of the Committee on Planning, the Board voted to adopt a revised ACS mission statement:

*"To advance the broader chemistry enterprise and its practitioners for the benefit of Earth and its people."*

The Council participated in a special discussion on the Society's vision of the future. The discussion focused on ensuring the American Chemical Society's future by engaging younger members throughout the Society's volunteer leadership.

Prepared 9/28/06 by:  
Dr. Pamela D. Kistler  
Councilor, LVACS

scientific community.

### ***Faculty Needed Immediately***

**Immediate need** for a qualified individual to take over an Organic I lecture and laboratory course at Raritan Valley Community College Monday and Wednesday evenings 6-10pm.

Please forward a cover letter and curriculum vitae to:

Dr. Paul Schueler  
Raritan Valley Community College  
P. O. Box 3300, Somerville, NJ 08876

### ***This Month in Chemical History***

Harold Goldwhite, California State University, Los Angeles  
hgoldwh@calstatela.edu

*Prepared for SCALACS, the Journal of the Southern California, Orange County, and San Geronio Sections of the American Chemical Society*

The name Edwin E. Slosson is probably not one that many of my readers will recognize. But in his time Slosson was the leading popularizer of science in the United States, and in many books and hundreds of articles helped give science a positive image in the public mind. When I came across a copy of Slosson's "Creative Chemistry" in a local thrift shop I felt I had to learn more about its author. The biographical material that follows is drawn from the Master's Thesis of David J. Rhees which I found on the web-site of The National Museum of American History (The Smithsonian).

Slosson was born in Kansas in 1865, and after a European tour upon graduation from high school he enrolled at the University of Kansas where he earned a B.S. degree in 1890, and an M.S. in 1892. His studies were eclectic and included chemistry, physics, geology, and psychology. He was elected to both Phi Beta Kappa and Sigma Xi. He then took a post as Assistant Professor of Chemistry at the University of Wyoming. The pay was sufficient to allow him to marry May Preston, the first woman to earn a Ph. D. at Cornell University.

Slosson ran a one-person chemistry department at Wyoming for the next 13 years and spent his summers at the University of Chicago, working under the direction of Julius Stieglitz, a pioneer of physical organic chemistry. Slosson received his Ph.D. in 1902. During this period, doubtless in his copious free time, he began contributing articles to various journals,

particularly the periodical "The Independent" edited by Hamilton Holt. Slosson was offered the position of Literary Editor of this journal, gave up chemistry, and turned to full-time writing. Over the next seventeen years he helped expand the subscription base of "The Independent" from a few thousand subscribers to over one hundred thousand. During this period Slosson himself wrote between 3000 and 6000 words a week for the periodical.

One of his most popular series of articles was on "Great American Universities" and this was collected and published as a book in 1919. It is said that Woodrow Wilson especially admired the chapter on Princeton which was very critical of that institution. A further series on aspects of chemistry was collected and published in 1919 as "Creative Chemistry." The copy I have was published by Garden City Publishing Co., Inc., New York and is dedicated to Slosson's first teacher [of chemistry?] Professor E. H. S. Bailey of the University of Kansas, and to his last teacher, Stieglitz. "Creative Chemistry" became a best-seller and during the following decade sold over 200,000 copies.

Slosson became Editor at Science Service in 1920. In that same year, after the results from Eddington's solar eclipse expedition testing Einstein's theory of relativity became known, he wrote one of the first popular treatments of the theory: "Easy Lessons in Einstein". Slosson's total output was prodigious. It included 18 books; and over 2000 signed articles of which over 400 were on science. He was the best known popularizer of science in the United States.

In 1929 Rollins College in Florida was about to appoint Slosson "Professor of Things in General" when, unexpectedly, he died.

### ***Mark Your Calendars - Biography of a Scientist***



On February 6, 2007, NOVA, PBS, will present "Forgotten Genius" in recognition of Black History Month. At the recent ACS national meeting there was a great daylong symposium about the upcoming movie about Percy Julian: the Forgotten Genius. The symposium covered both the history of the man and the making of the movie. Julian, grandson of Alabama slaves, was the first African American elected to the

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National Academy of Sciences. In 1916, Julian applied to and was accepted into DePauw University in Greencastle, Indiana. At DePauw, he began as a probationary student, having to take higher level high school classes along with his freshman and sophomore course load. He proved himself well, going on to be named a member of the Sigma Xi honorary society as well as a Phi Beta Kappa member. Finally, upon graduation from DePauw in 1920, he was selected as the class valedictorian. Though at the top of his classed, he was discouraged from seeking admission into a graduate school because of potential racial sentiment on the part of future coworkers and employers. Instead, he took the advice of an advisor and took a position as a chemistry teacher at Fisk University, a Black college in Nashville, Tennessee.

After two years at Fisk, Julian was awarded the Austin Fellowship in Chemistry and moved to the distinguished Harvard University in Cambridge, Massachusetts. Finally given an opportunity at graduate level work, Julian excelled. He achieved straight A's, finishing at the top of his class and receiving a Masters Degree in 1923. Even with this success, Julian was unable to obtain a position as a teaching assistant at any major universities because of the perception that White students would refuse to learn under a Black instructor. Thus, he moved on to a teaching position at West Virginia State College for Negroes, though he would not find happiness in this situation. He left West Virginia and served as an associate professor of chemistry at Howard University in Washington, D.C. for two years.

Julian obtained his MS at Harvard, but due to the prejudices of in the 1920's he had to go to Europe to earn his PhD. In 1929, Julian qualified for and received a Fellowship from the General Education Board and traveled to Vienna, Austria in pursuit of a Ph.D. degree. While in Vienna, Julian developed a fascination with the soybean and its interesting properties and capabilities. Focusing on organic chemistry, he received his Ph.D. in 1931 and returned to the United States and to Howard University as the head of the school's chemistry department. Julian soon left Howard and moved back to DePauw where he was appointed a teacher in organic chemistry.

In late 1935, Julian was hired by the Glidden Company as chief chemist and the Director of the Soya Product Division. Julian was the first Black scientist hired at this level and paved the way for other Blacks. The Glidden Company was a leading manufacturer of paint and varnish and was counting on Julian to develop compounds from soy-based products which could be used to make paints and other products. The scientist did not disappoint, coming up with

products such as aero-foam which worked as a flame retardant and was used by the United States Navy and saved the lives of countless sailors during World War II. Julian next developed a method for hormone extraction from soy beans. These hormones helped prevent miscarriages in pregnant women and were used to fight cancer and other ailments. He continued by developing a synthetic version of cortisone, a product which greatly relieved the pain of suffered by sufferers of rheumatoid arthritis. So significant was his work that in 1950 the City of Chicago named him Chicagoan of the Year. The honor should have signaled Julian's acceptance by his white counterparts in his field and his community, but soon after he purchased a home for his family in nearby Oak Park, the home was set afire by an arsonist on Thanksgiving day 1950. A year later, dynamite was thrown from a passing car and exploded outside the bedroom window of Percy's children. Despite the fact that many residents of the town relied upon his methods to relieve their pain and provide for their safety, some still could not stand to have him as their neighbor simply because he was Black.

After years of struggling for respect in his field and his community, Julian finally was recognized as a genius and a pioneer. He received countless award and honors including the prestigious Spingarn Medal from the NAACP and was asked to serve on numerous commissions and advisory boards. Percy Julian died of liver cancer in 1975 and is known worldwide as a trailblazer, both in the world of chemistry and as an advocate for the plight of Black scientists.

The NOVA preview clip of the movie was of the high quality one would expect for a NOVA documentary. Our own Ned Heindel (Lehigh University) participated in the symposium, talking about the chemistry that Julian developed.

### *News from National ACS*

#### **Regional Meetings**

#### **41st Midwest Regional Meeting set for Quincy, Illinois**

The ACS Midwest Regional Meeting (MWRM 2006) will take place at the Oakley-Lindsay Center in Quincy, Illinois, October 25–27, 2006. Rooms have been reserved at a special meeting rate at two hotels within easy walking distance to the Oakley-Lindsay Center. They are the Holiday Inn, 217-222-2666, and the Hampton Inn, 217-224-8378.

Symposia will reflect the diversity in the ACS and the interdisciplinary nature of chemistry: A Women in Chemistry program organized and chaired by ACS President E. Ann Nalley, Solid State/Materials/Nano



Science, chaired by Raymond Schaak of Texas A&M, Chemical Education, chaired by Roger Festa of Truman State University, a special symposium constructed around the Midwest Regional Industrial Innovation Awardee, Intellectual Property and Technology Transfer, organized by Alan Erlich of Weiss, Moy and Harris, PC, Biotechnology, and more. General technical sessions will include Analytical, Biochemistry, Chemical Education and Undergraduate Research, Green Chemistry, Inorganic, NMR, Organic, Physical, Polymer.

Visit their web site often as the program evolves. For additional information, please contact the co-chairs, Dawood Afzal, afzal@truman.edu, 660-785-4642 or David Wohlers, wohlers@truman.edu, 660-785-4625.

### **34th Northeast Regional Meeting (NERM) will meet in Binghamton, NY**

NERM 2006, hosted by the Binghamton Local Section, will be held October 5 -7. Visit the meeting web site at [www.nerm2006.org](http://www.nerm2006.org) frequently as they update the program. This is an exciting year for regional meetings because in addition to having all abstracts placed online on CAS, ACS Books will be looking for symposia to publish in their ACS symposium series.

NERM will have a different look this year as the meeting is being co-sponsored with the Materials Research Society (MRS) and the Institute of Electrical and Electronic Engineers/Components, Packaging, and Manufacturing Technology Society (IEEE/CPMT). All three groups are contributing to an exciting program of interdisciplinary research from both academia and industry.

Scheduled are symposia on Nanotechnology, Polymer Materials & Green Chemistry, Molecular Solids, Flexible Electronics, Life Science and Biotechnology, Chemical Education and Information Sciences. Traditional symposia will focus on Organic, Inorganic, Physical, Analytical, & Biochemistry. Visit the web site for a more detail description of their programming plans.

The meeting will feature a keynote address by Professor Mark Tobin, the Charles E. and Emma H. Morrison Professor of Chemistry, the Vladimir N. Ipatieff Professor of Catalytic Chemistry, and Professor of Materials Science and Engineering at Northwestern University. His lecture, New Materials and Processes for Organic Transistors, Inorganic Transistors, and Printer Electronics, will examine the challenges of rationally assembling individual molecules into organized supramolecular structures with nanoscale level control. He will present approaches to these challenges, with the ultimate goal being the ability to fabricate electronic circuits by printing techniques.

For further information, please contact the co-program

chairs: Mark D. Poliks at [mpoliks@eitny.com](mailto:mpoliks@eitny.com) or 607-755-2064; or Omowunmi A. Sadik at [osadik@binghamton.edu](mailto:osadik@binghamton.edu) or 607-777-4132.

### **19th Rocky Mountain Regional Meeting set for October 14 – 18, 2006**

Tucson will be the host city for the Rocky Mountain Regional Meeting (RMRM 2006) to take place in the DoubleTree Reid Park. RMRM is taking full advantage of its location by sponsoring a golf tournament, so pack your clubs. Visit the web site at [www.rmacs2006.arizona.edu/meeting.html](http://www.rmacs2006.arizona.edu/meeting.html) for details.

The theme of the meeting, Chemistry at the Borders, reflects the interdisciplinary nature of the chemical research on which the meeting is based, as well as the geographic location of the meeting. These include: chemistry of drug development; chemistry in the wild, Wild West; pathways and natural products; materials chemistry for electronics and photonics; chemical education; chemistry in silico; chemical biology; astrochemistry; and environmental chemistry.

Symposia are planned on bioinspired chemical sensing; the chemistry of terrorism; chemistry and the environment; the chem in biochem: enzymes and mechanisms; chemical biology of cancer; digital technologies for teaching chemistry; a little chemistry: polymers and nanostructured materials; if it's material, it's chemistry; chemistry out of this world; technology transfer; chemical origami: conformation in chemistry and biochemistry; intellectual property; drug formulations; worlds apart: DNA and DNA enzymes; and fibers, films, and tires: polymers in modern life. Visit our web site, [www.rmacs2006.arizona.edu/meeting.html](http://www.rmacs2006.arizona.edu/meeting.html), for frequent updates as the program evolves.

Two full-day symposia are planned to honor Victor J. Hruby and David F. O'Brien for their contributions to interdisciplinary chemical research within the region. Dr. Hruby will be present, and Neal Armstrong will lead the O'Brien symposium. There will be a luncheon in honor of each of these gentlemen during each symposium.

An in-depth program is planned for pre-college teachers, with workshops on Photoelectron spectroscopy and ionization energies for chemical educators; Biological mass spectrometry - MS analysis of large and small molecules; advanced technologies and methodologies for high school chemical education; and Science education strategies for elementary and intermediate educators.

### **58th Southeast Regional Meeting scheduled for Augusta, Georgia**

November 1 – 4 are the dates for the Southeast Regional Meeting (SERMACS), at the Augusta Marriott Riverfront Hotel & Suites on the banks of the Savannah River. What

would a regional meeting in Augusta be without a golf tournament? SERMACS is no exception as it plans to hold an opening day golf tournament. Sign up online at their web site at <http://www.sermacs2006.org>. Please check back as the program develops!

The ACS-Savannah River Section is hosting the meeting in collaboration with the American Institute of Chemical Engineers (AIChE) – Central Savannah River Section. Highlights include: symposia on linking polymer chemistry and engineering; functional polymers and biomacromolecules; nuclear medicine; chemistry of aging, chemistry of drug abuse; chemistry of explosives; analytical symposia on surface-enhanced vibrational spectroscopy, laser-induced ablation and plasma spectroscopy, beryllium analysis, and modern developments/applications of mass spectroscopy; organic symposia on advances in organic synthesis and organic catalysis; issues in meeting future energy needs; frontiers of nucleic acids chemistry; bioremediation; food safety sensors; biosensor systems for chemical/biological threat agent reduction; agrochemical applications in the southeast; and symposia on nuclear fuel cycle processing, radiochemical separations and ceramics/glass chemistry.

Special symposia on the schedule include the Henry Hill Award and Cope Scholar Award symposia; AIChE symposia on thermochemical routes to hydrogen production, advances and nanoscale catalysis design for hydrogen storage, and chemical processing in the commercial chemistry industry and the Department of Energy.

A diversity forum and reception will serve as an opportunity for interaction with numerous invited minority scientific and engineering societies. Invited organizations include: AISES (American Indian Science and Engineering Society), AWIS (Association for Women in Science), NOBCCHE (National Organization for the Professional Advancement of Black Chemists and Chemical Engineers), NOGLSTP (National Organization of Gay and Lesbian Scientists and Technical Professionals), NSBE (National Society of Black Engineers), SACNAS (Society for the Advancement of Chicanos and Native Americans in Science), SHPE (Society of Hispanic Professional Engineers), SWE (Society of Women Engineers) and WITI (Women in Technology International).

### **62nd Southwest Regional Meeting planned in Houston**

Hold the dates of October 19 – 22 to attend the Southwest Regional Meeting in Houston, Texas, at the Marriott Westchase. Visit the SWRM web site at [www.chem.uh.edu/swrm06/](http://www.chem.uh.edu/swrm06/) to view the frequent meeting updates. Attendees are encouraged to take advantage of the registration discounts for early registrants.

The meeting's theme is "Nano Scale—Giga Vision", and

sessions will include biochemistry, medicinal chemistry, chemical education, analytical, inorganic, organic, polymer, and physical chemistry. Featured topics include Nanoscience, Biochips, Anticancer Carbohydrates, Catalysis and Kinetics of Polymers, Carbon Black in Tires, Chemical Utilization of Solar Energy, Chemical Safety on the Gulf Coast, and Bio-Nano Environmental Techniques, just to name a few.

Other topics for SWRM 2006 include Chemical Utilization of Solar Energy, Bridging the Scale: Study of Large Biomolecular Complexes at Multiple Scales, Advanced Oxides, Relaxation and Transport in Strongly Non-Equilibrium Media, Molecular Motors, Modeling Chemical Dynamics in the Quantum Regime, Signal Proteins, Computational Chemistry and Drug Design, Surface Microscopies: AFM, STM, and Small Chemical Businesses.

### **2006 ACS National Election**

The Committee on Nominations and Elections (N&E) is pleased to announce that ACS members will have the option of voting for president-elect and other members of the board of directors either using the traditional paper ballot or electronically over the Internet. The slate of candidates for the fall 2006 ballot appears below. View the candidate statements on C&EN online or linked at [www.acs.org](http://www.acs.org).

#### **Candidates:**

##### **PRESIDENT - ELECT 2007**

Dr. Bruce E. Bursten, Univ of Tennessee, Knoxville, TN  
Dr. Yorke E. Rhodes, (Retired), New York Univ, New York, NY  
Dr. Bassam Z. Shakhshiri, Univ of Wisconsin, Madison, WI  
Dr. James A. Walsh, (Retired), John Carroll Univ, Treasure Island, FL

##### **DISTRICT DIRECTORS, 2007-2009**

###### **District I**

Dr. Thomas R. Gilbert, Northeastern Univ, Boston, MA  
Dr. Anne T. O'Brien, Consultant, (Retired, Wyeth), Tarrytown, NY

###### **District V**

Dr. John E. Adams, Univ of Missouri, Columbia, MO  
Dr. Judith L. Benham, (Retired), 3M Company, Woodbury, MN

##### **DIRECTORS- AT- LARGE, 2007-2009 \***

Dr. William H. (Jack) Breazeale, Jr.,  
(Retired), Francis Marion Univ, Mt. Pleasant, SC  
Dr. Paul R. Jones, Univ of North Texas, Denton, TX  
Dr. Dennis Chamot, National Research Council, Washington, DC  
Ms. Valerie J. Kuck, Adjunct Professor, (Retired, Bell Labs), Upper Montclair, NJ  
Dr. Peter K. Dorhout, Colorado State Univ, Ft. Collins, CO  
Dr. Dorothy J. Phillips, Waters Corporation, Milford, MA  
Dr. Marinda Li Wu, Science is Fun! Company, Orinda, CA

\*Only voting councilors will receive ballots for the director-at-large elections.