



# THE FILTER PRESS

Newsletter of the Georgia Section of the American Chemical Society

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## Chemical Literacy: An Oxymoron?

*Professor Conrad Stanitski  
University of Central Arkansas*

Nearly 100% of U.S. secondary school graduates have taken a biology course in high school. That number drops by half with respect to chemistry, and half again in terms of physics. Using data, humor, examples, and perspectives, this talk describes several aspects of chemical literacy (and scientific literacy in general) among the general American public. But, the American public is not alone in those who misinterpret or fail to understand chemical and other scientific concepts. The talk also features several examples of major errors committed by noted scientists in making predictions regarding newly discovered scientific phenomena.

Conrad Stanitski is a professor of chemistry and department chair at the University of Central Arkansas, Conway, AR. He received his B.S. in science education from Bloomsburg State College; M.A. in chemical education from the University of Northern Iowa; and, Ph.D. in inorganic chemistry from the University of Connecticut and has taught at several different institutional levels -- high school, liberal arts colleges, and state universities. An active author, he has written chemistry textbooks for general chemistry, for allied-health science students, and for

non-science majors. He also edited the third edition of the Chemistry in the Community (ChemCom) textbook, an ACS secondary school chemistry program. He is the recipient of the CMA CATALYST Award for Excellence in Teaching, the ACS Western Connecticut Section Visiting Scientist Award, the Gustav Ohaus-NSTA Award for Creative Innovations in College Teaching, the Thomas Branch Award for Teaching Excellence, the Samuel Nelson Gray Distinguished Professor Award from Randolph-Macon College, and the Distinguished Alumni Award from Bloomsburg University. He also served as vice president for academic affairs (Mount Union College) and as executive assistant to the president (Franklin and Marshall College).◆

## Filter Press Editor Wanted

The Filter Press is looking for a new editor. Some experience with page-layout software (Microsoft Publisher, QuarkXPress, or similar) required. Contact Matthias Pohl (mtpohl@tmqservices.com) or David Sherrill (sherrill@chemistry.gatech.edu) if interested.◆

**Thursday, April 21, 2005, at Morehouse College, Atlanta**



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## Reshape the Georgia Local Section!

*By Rigoberto Hernandez*

Good management of our Section's funds over the years, and a very well organized SERMACS meeting in Atlanta in 2003 has placed our Georgia Local Section in a substantially stronger financial position than ever before. This, in turn, is a call to action for the Section to undertake new initiatives. How should the Section respond to this opportunity? More generally, what resources in money and volunteer time should our Section emphasize over the next decade?

To address this question, the Section's Executive Committee has formed the Investment and Strategy Advisory Committee (ISAC). To help inform the decisions of the Executive Committee, ISAC plans to issue a survey in the coming months directed to you, the members, soliciting your collective wisdom on the general strategy that the Section should adopt. The survey will include a few necessary questions capturing the Section's demographics, but will focus on Section member's potential interests. These will be useful in order to help us realign existing committees, create new ones, and set priorities and tasks for the Section based on your likely interest in identifying and, especially, in taking active part in these opportunities. The survey information will not be shared with any other parties, will remain confidential, and will not be used for any internal or external marketing purposes.

By taking part in the survey, you will have the opportunity to affect the future of the Georgia Local section significantly. The survey will be short and painless! Look for detailed announcements in future issues of the Filter Press. In the meantime, as chair of ISAC I welcome any comments or suggestions from you, the members. Please contact me at [hernandez@chemistry.gatech.edu](mailto:hernandez@chemistry.gatech.edu). ♦

### **THE FILTER PRESS**

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## April Meeting

### Chemical Literacy: An Oxymoron?

*Professor Conrad Stanitski*  
*University of Central Arkansas*

Date: Thursday, April 21, 2005

Time: 6:00 – 6:30 PM Arrive  
6:30 – 7:30 PM Buffet Dinner  
7:30 – 8:30 PM Meeting and Presentation

Location: Morehouse College. Dinner in the President's Dining Room, Kilgore Hall, and lecture in Room 111, Merrill Hall.

Directions: For a campus map, see <http://www.morehouse.edu/aboutmc/visitingmc/index.php>

From the North/Downtown: Take I-75/85 South to I-20 West. Take Exit 55B, which is Lee Street/Ft. McPherson/Atlanta University Center. Turn right at the traffic light onto Westview Drive and proceed two blocks to the campus guard house.

From the South/Hartsfield International Airport: Take I-75/85 North to I-20 West. Take Exit 55B, which is Lee Street/Ft. McPherson/Atlanta University Center. Turn right at the traffic light onto Westview Drive and proceed two blocks to the campus guard house.

From any direction, you will enter the campus through the south gate, at the south guard house. The Morehouse Security will direct you to the nearest parking (which will probably be the parking deck to your right).

Security will also direct you to the President's Dining Room, in Kilgore Hall (Bldg. 14 on the map). After dinner, the lecture will be in Merrill Hall (Bldg. 22 on the map) Room 111.

Dinner: Northern Italian Buffet. Field greens, marinated tomato and mozzarella salad, chicken Italian, vegetable lasagna, green beans, assorted cheesecakes, sweet iced tea and water.

Cost: \$16 per person; \$8 for high-school teachers or full-time students with ID. Payment should be made to the ACS Georgia Section and will be collected at the door.

RSVP: David Sherrill, 404-894-4037, or [Sherrill@chemistry.gatech.edu](mailto:Sherrill@chemistry.gatech.edu) (preferred). Dead line for reservations and cancellations is 5:00 PM on Thursday, April 14. ♦

## Section Members Honored

Justin Gallivan, Section Executive Committee Member-at-Large and faculty member in the Emory University Department of Chemistry has been named the 2005 Beckman Young Investigator. The Arnold and Mabel Beckman Foundation makes grants to non-profit research institutions to promote research in chemistry and the life sciences, broadly interpreted, and particularly to foster the invention of methods, instruments and materials that will open up new avenues of research in science. The Beckman Young Investigators (BYI) Program is intended to provide research support to the most promising young faculty members in the early stages of academic careers in the chemical and life sciences.

James Kindt, Emory University Department of Chemistry, and Marcus Weck, Georgia Tech School of Chemistry and Biochemistry, both Georgia Section ACS members, have been named 2005 Alfred P. Sloan Research Fellows. This year, 116 fellows were selected from nominations of young American and Canadian faculty members in the sciences and economics.

Each Sloan Fellow will receive \$45,000 over a two-year period that can be used without restriction in research of the fellow's choice. The awards, established in 1955, are the oldest program of the Alfred P. Sloan Foundation and are designed to give support and recognition to early-career scientists and scholars.

Weck will use the award to support his work in developing self-assembling, multifunctional raw materials. Weck explained that nature uses only a few building blocks to make a wide array of complex materials, such as DNA and proteins. His work involves trying to mimic nature's design motifs in making new materials. "The amount of complexity you can get with these self-assembling motifs is potentially much higher than what you can get with covalent chemistry-based systems," said Weck. Rigoberto Hernandez, Councilor for the Section, was a Sloan Fellow in 2000. ♦

## Councilors Report - March 2005 ACS Meeting

*By Lissa Dulany, Lihong D'Angelo, Don Hicks  
and Rigoberto (Rig) Hernandez*

All four councilors attended the Spring 2005 ACS meeting in San Diego. We continue our efforts to keep ACS moving toward a more membership oriented organization, rather than a publishing institution, and thus build the value of ACS to individual chemists. This is accomplished by activity in national ACS governance affairs where we serve on Board/Council Committees such as the one on Committees (Lissa), Constitution and Bylaws (Don), Chemistry and Public Affairs (Lihong), and Divisional Activities (Rig). Lissa Dulany was elected in 2004 to the Committee on Committees (CONC) which functions as the human resources arm of ACS through its recommendations for appointments to other Board and Council committees. In this role, Lissa is the CONC liaison to the Chemical Abstracts Committee (CAC) and the Membership Affairs Committee (MAC). She spent four days in San Diego at meetings of CAC, MAC, and CONC. In his Divisional Activities Committee (DAC), Rig Hernandez is now co-chair of the joint DAC/LSAC (Local Section Activities Committee) subcommittee. Among other functions, they are charged with encouraging more technical programming at Regional ACS Meetings like that at the Georgia Section's record-setting SERMACS 2003. During two days of meetings of the standing Committee on Constitution and Bylaws (C&B), Don found that the Georgia Section's proposed new Bylaws governance document has been approved by C&B and is ready for members to vote on its approval. Lihong went to Washington April 4 to attend a meeting the Board Committee on Chemistry and Public Affairs (CCPA).

In our view, some important results of the Council meeting included the unanimous approval of a 2006 dues increase to \$127, which will have a temporary \$5 local Section/division surcharge added (instead of previously approved \$6). This could be eliminated if ACS finances continue to improve. The ACS financial report showed that after a low of \$135 million

in 2002, the 2004 unrestricted reserves were back up to \$185 million ...nearing the \$207 million in 2000. One male (John Kozarich, Chairman, ActivX Biosciences) and one female (Catherine "Catie" Hunt, Leader of Technology Partnerships, Rohm & Haas) candidate were elected to run for 2006 ACS President-Elect. They join (once again) a petition candidate George E. Heinze, retired from Johnson & Johnson, who was also introduced to Council. Council also voted to continue the committee on Project Seed, and approved a request from the Membership Affairs Committee to form a task force to recommend significant changes in ACS membership requirements. The latter is necessary as the ACS definition of what constitutes a "chemist" may need to shift to keep up with the changing profiles of chemists in various chemistry-related disciplines, and to make ACS more welcoming to those working at the periphery of chemical sciences. Membership could increase significantly if our somewhat complicated membership requirements are simplified. For 30 minutes at one point, Councilors gave President Carroll many ideas about how to preserve the chemist's job market share and attract good college students in 2015.

After some passionate discussion, formation of a new Council Committee on Ethics was approved by a significant majority. It will have no adjudicatory function, and shall serve the Society by raising ethical awareness and standards while providing a common source for ethics education. ACS is broadening access to research in its journals via two experimental policies defining how to view free digital versions of articles beginning one year after publication. After actively promoting it to government agencies, visa processing has been improved for U.S. visits by international scientists. A starter kit is now available to help Local Sections form a "Silver Circle" Senior Chemists Group. On the lighter side, this year's T-shirt contest winner had the Periodic Table of Elements on it with the words "CHEMISTS DO IT ON THE TABLE - - -" shown above, and "- - - PERIODICALLY!" shown below the Table. ♦

## Call for Nominations

The Committee on Minority Affairs is soliciting nominations for the Stanley C. Israel Regional Award for Advancing Diversity in the Chemical Sciences.

Nominees for this award may come from any professional setting: academia, industry, government or other independent facility. ACS local sections and divisions also are eligible for nomination. The awardees will have increased the participation and leadership of persons from diverse and underrepresented minority groups, persons with disabilities, and women through mentoring, hiring, promotion and/or other activities that lead to greater inclusiveness within the chemical sciences.

These awards are for each of the Regional Meetings taking place in the calendar year. For information please contact Stephanie R. Allen, ACS Department of Diversity Programs, (800) 227-5558, ext. 6262.♦

## Call for 2005 OCA Nominations

The Overcoming Challenges Award (OCA) acknowledges the efforts of women and undergraduates who have overcome economic, personal, and/or academic hardships in pursuit of an education in the chemical sciences. The award consists of a plaque, a \$250 honorarium, and \$1,000 for travel expenses to the fall ACS National Meeting where the award is presented. Award candidates must be women matriculating as an undergraduate chemical science major/minor in a two-year program or at a four-year school not granting a doctoral degree in chemical-related disciplines. Nominations are due May 1, 2005, and should be sent to: Women Chemists Committee, American Chemical Society, 1155 16th Street, N.W., Washington, DC 20036. For additional information, contact the WCC at [wcc@acs.org](mailto:wcc@acs.org) or visit <http://membership.acs.org/W/WCC>.♦

## CHED Teaching Excellence

### Award Endowment Campaign Begins

Are you ready to support great science teaching? If so, then plan to join those who have already made contributions to the Division of Chemical Education (CHED) Teaching Excellence Endowment. Glenn

Crosby, chair of the Endowment Task Force, kicked off the fund raising campaign at the Southeast Regional ACS Meeting in November 2004, announcing that over \$30,000 had been already been collected toward the goal of raising \$300,000. The funds will provide an endowment in perpetuity, ensuring that each year one high school teacher of chemistry and the chemical sciences in each of the ten ACS regions will receive at least a minimum of \$1,000 as the teaching excellence award. In 2004, the Executive Committee of CHED voted to match the first \$100,000 in contributions to the fund on a 1:1 basis.

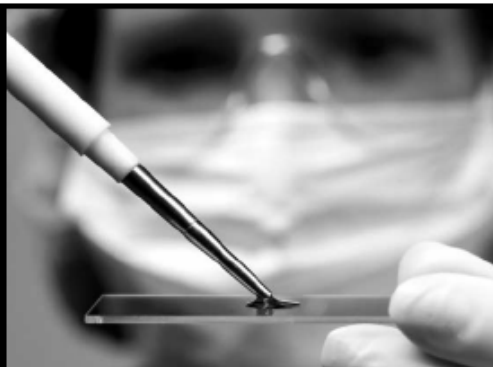
Crosby hopes to obtain gifts from many individuals to demonstrate to the high school teacher community that there is an influential group of scientists and engineers that appreciates excellence in science teaching and wishes to reward those who excel in that demanding profession. In addition, the intent of this award program is to establish a firm presence of the Division of Chemical Education in all ACS regions and to promote greater involvement of high school teachers in the activities of the ACS.

Contributions to help fund the award, which will be known as the Division of Chemical Education Regional Award In High School Teaching, can be made by sending a check, payable to the American Chemical Society, to the ACS Department of Meetings and Expositions Services, c/o CHED HS Fund, American Chemical Society, 1155 16th St., NW, Washington, DC 20036. Please visit [chemistry.org/meetings/regional](http://chemistry.org/meetings/regional) or <http://divched.chem.wisc.edu/> for a downloadable contribution form, or call 800-227-5558 ext. 8072.♦

## Safety Publications from ACS

The ACS Joint Board-Council Committee on Chemical Safety (CCS) is pleased to announce the availability of the seventh edition of Safety in Academic Chemistry Laboratories (SACL). This edition has two volumes: volume 1 for college and university students; and volume 2 for faculty, graduate teaching assistants, and administrators. All of these publications may be ordered from ACS (single copies are free) and may be viewed in PDF on the Committee website, <http://chemistry.org/committees/ccs>.♦

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