



SoFlacs



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South Florida Section ACS

February 2008

A NOTE FROM THE CHAIRMAN

Mike Elliott

First, let me wish everyone a healthy and happy 2008. We should congratulate our new leaders: I will continue on as Chair of the section, Rose Mary Stiffin of Florida Memorial University will assume the role of Chair-Elect, and Milly Delgado and Len Keller of Florida International University will continue capably serving the section as Secretary and Treasurer, respectively.

Owing to reapportionment of the number of Councilors, we now have 3, so joining Zaida Morales-Martinez will be the newly reelected Milly Delgado of FIU and the newly elected George Fisher of Barry University. Our Alternate Councilors will be George Duncan of the Broward County Sheriff's Crime Lab, Vic Shanbhag of Nova Southeastern University, and Richard Shreve of Palm Beach Community College. On behalf of SoFL-ACS, I would like to thank everyone for participating in the election process.

We are organizing an exciting series of events here in South Florida. Vic Shanbhag at Nova Southeastern University has graciously agreed to organize the high school Chemistry Olympiad competition, which is quickly becoming an important event in our community. I ask all interested parties to contact Vic at Shanbhag@nova.edu if you would like to participate at any level. As of this writing, the dates and locations for the local examination have not been set, but they should be sometime in March. We're working on seminars for March and April. Check the SoFL-ACS web site later for details: www.soflacs.org. Our section will also have its very popular Awards Banquet, again at the Biscayne Bay campus of Florida International University, on the evening of April 19.

I just returned from the ACS Leadership Institute in Dallas, which all new chairs and chairs-elect are expected to attend. I just learned about a new initiative that the ACS is launching, available to all members. The Leadership Development System "is a comprehensive leadership curriculum that provides ACS members with practical courses to advance your career, help you to be more effective in your position, and equip you with tools to more effectively lead ACS volunteer initiatives." One course, *ACS and You*, is already online, and several facilitated (face-to-face) courses on involving volunteers, innovation, and leading change will be available at national and regional meetings, with more to come in the future. If you are interested in finding out more about these courses, go to www.acs.org, follow the link for "Careers", and under the heading of "Center for Professional Advancement" click on "Leadership Development".

While I was in Dallas, I also met the organizer of this year's Florida Annual Meeting and Exposition. This year marks the 84th meeting of FAME, and the schedule and location are being changed this year to reinvigorate this very important conference. I encourage everyone, and in particular students, to consider participating in FAME this year, even if you do not have any work to present. Details about the conference can be found at <http://membership.acs.org/f/Florida/fame2008.html>. FAME 2008 will take place from Thursday, May 8 to Saturday, May 10.

Perhaps the biggest lesson I learned in Dallas was that although local sections often operate quite differently, many face the same situations. A common question among participants was, "What does our local section membership want to do?" To help me answer that question for South Florida, I invite you to e-mail me at melliott@fmuniv.edu and tell me what type of program you would like for us to have. I am sure that many of you have a great idea that we may be able to implement.

cut and save

FUTURE EVENTS - MARK YOUR CALENDAR

cut and save

Monday, February 11, 4:00 PM, SoFL-ACS seminar: Dr. Attila E. Pavlath (Past ACS President), Western Regional Research Center, USDA, Albany, CA. His presentation will be on "Edible Coatings on Food, or How to Keep Fruits and Vegetables Fresh after Light Processing" FLMU-FIU Cooperative Building Auditorium at Florida Memorial University, 15800 NW 42nd Ave., Miami. (Contact: melliott@fmuniv.edu).

March and April seminars to be arranged. Check the SoFL-ACS web site later for details: www.soflacs.org.

Friday, April 11, 8:00 AM - 2:00 PM, High School Science Olympiad/Chemathon at Barry University, Department of Physical Sciences. For more info, contact Dr. Tony Wallner, twallner@mail.barry.edu.

Saturday, April 19, 6:30 - 9:00 PM, SoFL-ACS Awards Banquet. Florida International University, Biscayne Bay Campus, North Miami.

May 8-10, FAME 2008 - Florida sections annual meeting and exposition. Orlando Sun Resort and Conference Center, Kissimmee, FL. Abstract submission deadline April 4. For more details at: <http://membership.acs.org/f/Florida/fame2008.html>



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CONGRATULATIONS TO

NCW Poster Contest Winners

During National Chemistry Week 2007, we received posters from elementary school students on the theme "The Many Faces of Chemistry". The following first place winning posters were sent to ACS for the national competition and received a blue ribbon and congratulations from SoFL-ACS:

3rd - 4th grade category: Stephanie Armas, Eagle Point Elementary School, Weston.

5th - 8th grade category: Jack Lundell, Eagle Point Elementary School, Weston.

Chemical Sciences Symposium Student Poster Winners

The following students won certificates and cash awards for their research posters presented at the SoFL-ACS Chemical Sciences Symposium on November 10, 2007:

First Place: Cidya Grant, Florida Atlantic University, "Photo-synthetic Pigment Ratios in Relation to Photic Flux."

Second Place: Ximena Vial-Kluge, University of Miami, "Osteoconductive Porous Gelatin Scaffolds with Embedded MIAMI Cells for Bone Repair."

Commendable: Alexander Li, Palmetto Senior High School, "Electrochemical Studies of N,N'-Bis(ferrocenyl)urea: Electrolyte and Solvent Effects on Electronic Communication."

Newly Elected Officers for 2008

Congratulations to the newly elected SoFL-ACS officers for 2008: Dr. Michael Elliott, Florida Memorial University (FMU) was re-elected as Chair; Dr. Rose Stiffin (FMU) was elected as Chair-Elect; Len Keller (FIU) was reelected as Treasurer; Milagros (Milly) Delgado was re-elected National Councilor, and George Fisher was elected to the newly apportioned Councilor position. Zaida Morales-Martinez continues as Councilor. Elected as Alternate Councilors were: George Duncan, Broward Sheriff's Crime Lab; Vic Shanbhag, Nova-Southeastern University; and Richard Shreve, Palm Beach Community College.

ACS Scholars Program

The ACS Scholars Program is now in its 13th year. Scholarship recipients must be majoring in or planning to major in a chemical science and intending to pursue a career in that science. The scholarship is renewable and valued at up to \$5000 per academic year. For further information, call 1-800-227-5558, ext. 6250, or send an e-mail message to scholars@acs.org or write to us at American Chemical Society Scholars Program, 1155 16th Street, NW, Washington, DC 20036. The following students from South Florida are current ACS Scholars:

Jesus Acosta, Miami - Chemical Engineering, University of Florida
Timothy Adams, Satellite Beach - Biochemistry, University of Florida
Beatriz Brando, Weston - Chemistry, Harvard College
Nicole Brenner, North Miami Beach - Chemistry, Yale University
Steven Lopez, Miami Beach - Biochemistry, New York University
Kristina Marrero, Miami - Chemical Engineering, Northwestern Univ.
Kristen Matinez, Miami - Chemical Engineering, MIT
Lauren Simmons, Miami - Chemical Engineering, MIT

Death Notice - Henry Hubinger

We sadly report the passing of a dear colleague, Henry Hubinger (1925-2007), Associate Professor Emeritus of Chemistry at the University of Miami, on December 7 in Lake Worth. Henry joined the faculty of the Department of Chemistry at U.M. in 1954 as an instructor and retired in 1984 at the rank of Associate Professor. Henry was also an alumnus, receiving his M.S. in chemistry from former department chair Harry Schultz. For those who knew Henry, you know that his smile was ever present. For those who were not fortunate enough to know Henry, he served as unofficial Associate Chair of chemistry for many years, and, with Curt Hare, oversaw the smooth running of the freshman chemistry program in the 1970s and 80s until his retirement. Henry is survived by his wife Gloria, sons Bert and Scott, and daughter Lynn.

FIU Chemists Receives \$4M Grant

Dr. Kathleen (Kelly) Rein, FIU Chemistry professor, received an additional \$4 million grant from the National Institute of Environmental Health Sciences (NIEHS) to study marine toxins. During the initial five years (2001-2006) of the program, she partnered with the NIEHS Marine and Freshwater Biomedical Sciences at the University of Miami Rosenstiel School of Marine and Atmospheric Science. Due to the success of the initial research project, her research group was the only group that received renewal funding in partnership with the NIEHS NSF Center for Oceans and Human Health at the University of Miami.

The grant money will be used to research two areas: the first being the study of naturally-occurring algae such as "red tide," a typical algal bloom commonly found in the Gulf of Mexico. Researchers will study how the human body processes the algae when exposed to it. "In Florida especially, these organisms flourish in our subtropical climate. As our population grows, we will turn to more surface water, which can have may risky organisms," Rein said.

The second area of research will be the analysis of trace metals such as mercury, which is made in industrial plants and introduced into the environment through pollution. "We study the fate of environmentally and biomedically important trace metals. We look at how these trace metals react with human cells," said Yong Cai, Associate Professor of Chemistry at FIU and another main researcher on the grant.

New ACS Strategic Plan for 2008 and Beyond

The "ACS Strategic Plan for 2008 and Beyond," which was released in January at www.acs.org/strategicplan, provides a blueprint for how we can work together to advance our vision of "Improving people's lives through the transforming power of chemistry." It marks both the culmination of a careful deliberative process and the launch of an extremely exciting path towards creating the ACS of the future.

Why do we need a new plan?

This new plan will ensure that ACS remains the leading professional society in chemistry for our members and our science. To do this, we need to select priorities from among all of the possible strategic directions that might be pursued. Building on our 132-year history of successful operations, there is much that must be continued, and our strategy recognizes that. At the same time, the world of chemistry and our members is changing quickly. The new strategic plan recognizes these trends and challenges, and charts a course that will enable us to respond.

Process of generating the plan

The ACS Board of Directors worked diligently throughout 2007 to develop the plan. Starting with input from thousands of members, the Board and Senior Staff held a workshop in June of last year. Over the rest of the year, feedback was sought from governance volunteers and staff, and carefully considered adjustments were made. At its December meeting, the final plan was approved.

Components of the plan

The plan supports the centrality of the ACS vision: "Improving people's lives through the transforming power of chemistry," and mission "To advance the broader chemistry enterprise and its practitioners for the benefit of Earth and its people." It articulates core values for the Society, including a passion for chemistry, a focus on members, and an emphasis on professionalism and diversity. Based on an environmental scan, the strategic plan identifies the key issues that will have a major effect on present and future generations of chemists and related practitioners. These trends include globalization, the changing nature of chemistry, its public image, government activity, new technologies and changing lifestyles.

Six focused goals

The centerpiece of the new strategic plan is the six strategic goals of providing indispensable resources, engaging global community, affecting world challenges, communicating chemistry, advocating for the profession and maintaining financial health. Each goal is accompanied by explanatory text and specific strategies.

Opportunity for revision and evolution

Finally, please note that the plan is not "set in stone". The Board and its Planning Committee intend to let the plan evolve from year-to-year. If you have suggestions, ideas, or approaches that should be included, please email them to strategicplan@acs.org at any time.

Reflections on the History of Computing in Chemical Education at The University of Miami

Carl H. Snyder, Professor of Chemistry Emeritus, The University of Miami

A quarter century ago I returned from a sabbatical at Queen Elizabeth College, London, England, to learn that IBM was inviting faculty to write proposals for personal computers to be used in teaching. A limited number would be awarded, for a limited time, at a remarkably low price. The objective was to stimulate the introduction of computers into teaching. I applied, was approved, and with financial support from the University's College of Arts and Sciences, its Department of Chemistry, and my own bank account, I bought an IBM 8088 and began my long journey into academic and personal computing, one that lasts to this day, well into my second year of retirement.

The computer, my first, arrived early in 1984. It contained two 5 1/4" floppy drives, one to read from a floppy bearing programs, the other to write user-created files on a second floppy. (Hard drives were rare or nonexistent at the time.) You booted from your boot-floppy holding the operating system, DOS 3.1 at the time, then replaced that floppy with the one holding the program you would use. All this time the second drive held a floppy with plenty of empty space for the files you intended to create. The computer also provided a CPU that, by today's standards, crawled along and had virtually no memory.

But it worked! The days of the typewriter and the desk calculator soon faded back into those of the ink pen and the slide rule. And, with increasing velocity, we moved computing into the world of chemical education. I wasn't the first member of my department to use computing in coursework, but I did my share in bringing it into general use and moving it along. As my standard word-processing program I chose WordPerfect; for numerical work, the spreadsheet program Quattro. Both were DOS versions. Windows wasn't in common use at the time. As a sideline I became proficient in DOS. Initially I used my new computer principally to write letters and other documents, prepare examinations, and handle calculations and numerical student records, and to store all these electronically.

Then came electronic communications, with the Web and with email. In the mid-1990's I was introduced to the World Wide Web by Mosaic, the first browser in general use. Mosaic was soon replaced by Netscape. Now we have a variety available, including Firefox, Internet Explorer, Netscape, and Opera. In using these I learned the great unspoken secret of computer usage: incompatibility. Some of these browsers are faster than others with particular Web pages. But some of the fastest just won't show an individual page's graphics. I know of no way of telling ahead of time which will work and which won't.

With email I discovered a highly effective way to establish and maintain communication with students outside the classroom and even beyond the campus and beyond office hours. With the advent of email a wonderful new term entered my vocabulary, asynchronous communication. Very early in the advent of electronic communication, a colleague in UM's division of Information Resources (now Information Technology) worked with me to introduce email into CHM 101, a chemistry course for nonscience students. At the time we were at the cutting edge of this powerful new technology, at least at the University of Miami, and were successful in adopting it and moving it along. You can read all the details of what we did and how we did it in Paper 11 at www.wam.umd.edu/~toh/ChemConference/.

A few years later, 1997, I was approached by the School of Continuing Studies to offer this same course, CHM 101, as the first distance education course within the College of Arts and Sciences. (It was actually the second at the University. The School of Business beat us out by one year.) For this experiment we used NetMeeting, one of a type known as collaborative communication programs. The course was a huge success, or so I thought. But difficulties in giving secure examinations and, probably more important, a low initial enrollment doomed it from the administration's viewpoint. It was never repeated, nor was any other such course tried in the Chemistry Department. (I can't speak for other areas of the University.) You can find more details in a paper titled "An Innocent Tries Distance Education," available at www.chem.vt.edu/confchem/1999/b/snyder.

The growing importance of computing in classroom education -- the use of computing within a variety of undergraduate chemistry courses -- led the Department to introduce a course that was, itself, dedicated to examining chemical applications of computing. In 1998 a group of colleagues and I began teaching CHM 256, Computing in Chemistry, a conglomeration of chemical computer applications, including spreadsheet calculations, web-based research, web-page creation, email newsgroups, molecular modeling, etc.

During the following six years, a period that saw faculty departures, tightening teaching loads, and persistently low enrollments in the course -- roughly half a dozen students at each offering -- I became the sole teacher and ultimately the course was cancelled. (I like to think there was no connection at all between these last two events.)

While all this was going on, from my own introduction to computers in 1984 onward, I continued to add to the computing in my own courses, mostly in ways that have by now become standard: a Web page for each course; PowerPoint lecture notes, both presented in class and posted on the Web page; old, Web-based multiple-choice practice examinations, with interactive choices; Web links to reference materials; and full-time (but asynchronous) email availability to students.

Although it doesn't have much to do with chemical education itself, shortly before retirement I also began a history of the Chemistry Department itself, now available on the Web at www6.miami.edu/chem/history/. I'm sorry to say I have yet to bring it up to date.

In conclusion I'll point out that much of what you've just read also appears in a paper I wrote for the Fall, 2007, newsletter of the ACS Committee on Computers in Chemical Education, "Computing In - And Beyond Chemical Education, A Personal View." You can find it, along with related graphics and actual links to some of the Web postings, at www.science.widener.edu/~bramer/ccce/snyder/CHS_CHED.HTM.

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RETIREMENT SUPPORT GROUP

An increasing number of chemists are approaching normal retirement age or are thinking about or facing early retirement. Surviving and thriving in retirement takes planning. This planning should start at least several years before being faced with critical decisions regarding post-retirement activities and plans and how those will be funded. The ACS Committee on Economic & Professional Affairs (CEPA) is sponsoring a Special Interest Group on Retirement Planning. The group will meet from 1:30 to 4:00 on Sunday April 6, 2008 at the 234 National Meeting in New Orleans. Think about retirement as another job search. You are looking for ways to spend the rest of your life. What will you do with your time? If you do not have a set plan think about putting together a resume that includes your objective, your skills, and your work or hobby experience. Come join the discussion group to learn and share ideas for planning your retirement. We can help each other by answering questions and exchanging information. Time will be set aside for the exchange of concerns and ideas. Presenters will include experts in private and governmental retirement and healthcare plans. We plan to have Lisa Balbes, author of "Nontraditional Careers for Chemists" talk about how to prepare for a second career in consulting. In addition a representative from the ACS Member Insurance Group will discuss what the ACS offers for retired chemists. For more information contact Herb Silverman at agman@cox.net.

Officers of the South Florida Section ACS for 2008

Chair: Michael J. Elliott, Florida Memorial University, Miami, FL 33054, (305) 626-3704, melliott@fmuniv.edu.

Chair-Elect: Rose Mary Stiffin, Florida Memorial University, Miami, FL 33054, (305) 626-3697, rsiffin@fmuniv.edu.

Secretary: Milagros Delgado, Department of Chemistry, Florida International University Biscayne Bay Campus, AC1-382A, North Miami, FL 33181, (305) 919-5966; delgadam@fiu.edu.

Treasurer: Leonard Keller, Department of Chemistry, Florida International University, Miami, FL 33199, (305) 348-3081; kellerl@fiu.edu.

National Councilors: Zaida Morales-Martinez (2009), 305 386-3206, moralesz@fiu.edu; Milagros Delgado (2010), FIU, 305 919-5966, delgadam@fiu.edu; George Fisher (2010), Barry University, 305-899-3430, gfisher@mail.barry.edu.

Alternate Councilors: George Duncan, Broward County Sheriff's Crime Lab, 954 831-6147, george_duncan@sheriff.org; Vic Shanbhag, Nova Southeastern University, 954 262-8331, shanbhag@nova.edu; Richard Shreve, Palm Beach Community College, 561 512-0737, shreve@chemist.com.

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NATIONAL ACS WEB SITE: <http://www.chemistry.org>

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