



Chemical Bond

Volume 56
Number 9
December 2005

St. Louis Section, American Chemical Society



**Ted Gast and Greg Wall accept a Proclamation for
National Chemistry Week signed by the Mayor.**

Message from the Outgoing Chair...

Dear Members, Volunteers, and Friends,

Well, it has been quite a ride. I want to thank everyone: all the officers, committee chairs, organizers, coordinators and volunteers who gave up many hours of their precious free time for their efforts in making all of our activities stellar. I know that I can not mention all of the great activities during the year, but have selected a few highlights starting in January with the change of venue for our board Meetings from the Alumni Center to Glen Echo. In February, we were honored to have Bill Carroll come to town for a Round Table Discussion titled: *Do chemists have an independent identity?* We had a lively debate and it set the stage for a great year. Then, Recognition Night in March and the first annual ACS/AICHE joint meeting, *It's candy ... how hard can it be?* Evidently candy, and the simple Hershey Kiss are not as simple as they appear. April was full, as usual, with Chemical Progress Week, Awards Night for our high school and college chemistry students, and the St. Louis Award Symposium and Banquet in honor of the 2005 recipient, Professor Wesley R Harris. The year continued at a mad dash as we flew kites in June at our First Annual (!) Section Picnic. After a well-deserved summer break, in August & September we enjoyed *Her Lab in Your Life*. And, I was privileged to attend a ceremony at the mayor's office with Greg Wall to receive a National Chemistry Week Proclamation signed by the Mayor. State & National Proclamations followed as well. It was especially nice to end National Chemistry Week with a second visit by Bill Carroll on his whirlwind tour, *The Joy of Toys*. Finally, I was delighted to present the Midwest Award to Jerry Atwood in Joplin, MO during our ACS Regional Meeting.

I also want to remember all of the ongoing activities, speakers, groups and events like those planned for Kids 'N Chemistry. And, for all those events and people which were not specifically mentioned, your contributions are greatly appreciated. I also would like to thank my officers and outgoing past chair Bijan Khazai for making my term run so smoothly. Next, a heartfelt thanks to committee chairs, directors, and councilors. Special thanks to Lisa Balbes, Donna Friedman, Keith Stine, Greg Wall, Sue Dudek, Steve Kinsley, Andrea Reaka, my wife and family, and finally all members of the section for your trust and support. I made it my personal goal not to disappoint anyone, I sincerely hope that has been the case. In conclusion I'm delighted to state that I'm leaving the section in the very capable hands of Alexa Serfis and Steve Kinsley, as chair and chair-elect.

Ted Gast

2005 Chair, St. Louis Section of the American Chemical Society

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Meeting & Seminars

Board of Directors

St. Louis Section—ACS Board of Directors meets on the second Thursday of each month, at the **Glen Echo Country Club** (map available on website). Meetings are open to all members, and all are encouraged to attend. Elected officers and chairs of major committees have the right to vote; others in attendance have voice but no vote. If you want to attend the dinner, please contact Ted Gast (ted@cfgastco.com) at least one week prior to the meeting date. The cost of dinner is \$18. Members wishing to become active in section activities are welcomed to their first dinner for free, compliments of the section.

Date: January 12

Social hour: 5:30 pm

Dinner: 6:30 pm

Business Meeting will start during dinner.

Future meetings: February 9

March 9

NMR Discussion Group

The NMR group has an email listserv. To join, send email to sarahj@wustl.edu with "subscribe NMR Discussion Group" in the subject line. The schedule is also posted on-line at:

<http://www.chemistry.wustl.edu/seminars.stlnmr.html>.

For more information contact:

Mark Conradi (Physics) at 935-6418 or msc@wuphys.wustl.edu

Joel Garbow (Radiology & Chem) 362-9949 or garbow@wustl.edu

Sophia Hayes (Chemistry) at 935-4624 or hayes@wustl.edu

University of Missouri- St. Louis

Seminars are held on Mondays at 4:00 pm in Room 451 Benton Hall unless otherwise specified. Refreshments 15 minutes prior to seminar time. Please check the website at: <http://www.umsl.edu/chemistry>.



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from p. 8 of September 2005

Great Global Library

by Jack Bornmann

The city of Alexandria was established by Alexander the Great from Macedonia on a portion of the Nile delta where it flows into the Mediterranean Sea. At one time it was the capital of Egypt. Alexandria was also the home of a famous library. This library contained over 500,000 scrolls and had special rooms for individual and group study of scholars.

Letters & Words & More

Many of the scrolls were gifts from scholars from all over the world. Alexandria had a special technique for increasing its holdings. Each and every visitor had to hand over any scroll or written material. The confiscated material was quickly copied (by hand) and the copies were returned to the original owner. The library kept the original material. The Great Library of Alexandria, or simply The Great Library, was built next to the Museum (the temple to the Muses). When the Great Library ran out of space, the excess scrolls were stored in the Museum. And, when the Museum could hold no more, the Library stored the infrequently used scrolls in a warehouse close to the docks.

The Library at Alexandria had copies of nearly every great book produced in the known world. It attracted scholars and students from all over the world. But, a fire destroyed this wonderful library. The exact cause of the fire is not known. As a bibliophile, I almost come to tears when I think of the loss of all those ancient scrolls. Still today, when reading about ancient scholars, there

are occasional references to works at the Great Library, which is no longer in existence.

The Great Library of Alexandria was destroyed, but we are developing a modern version. Several groups are busy scanning every book and publication they can lay their hands on. After scanning and doing optical character recognition (OCR) the materials are made available through the Internet. The goal is to get a digital copy of everything ever published and make it available to everyone with access to the Internet. Many scholars traveled to Alexandria to reach the stored scrolls. Now, instead of going to the great scholarly material, that material will come to us.

You will be able to download scholarly (and not so scholarly) materials. You will be able to store it on your computer or on any of your memory devices. You will be able to print it out as space consuming matter. You will be able to highlight and save special passages to quote in your own writings.

Google will take 20 million books from libraries across the US, scan them and make them available to all. The vast holdings of the Library of Congress will be included. Individuals and non-profit organizations are doing the same thing. The Great Global Library of the Internet will not only be accessible by all, but they will be able to use search engines to find books, words, and phrases. These search engines will take the place of the old card catalogs that held a dominant place and role in libraries of the past.



After a long career as the Editor and then a Staff Writer for the CHEMICAL BOND, John A. "Jack" Bornmann is retiring. We will miss your "Letters, Words, & More" column. Best wishes to you!

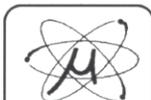
St. Louis Chemical Science and Technology Award 2005 Call For Nominations

The St. Louis Science and Technology Award will be presented to a chemist in the St. Louis area who has demonstrated a high degree of professionalism and scientific contribution. Criteria used to judge the award include technical proficiency, presentations, coaching/teamwork and additional professional activities. The award will consist of a plaque, a check for \$500.00 and dinner for the awardee and a guest at the annual Chemical Progress Week Awards Night. The award will be presented to the winner at the Awards Night event, which will be held in April of 2006.

The Chemical Science and Technology Award will be presented to a person whose training includes successful completion of an Associate, Bachelor or Masters degree in chemistry or a chemistry-related curriculum.

Letters of nomination must be received by Joel Krauser, Pfizer Corp., mail code T2A, 700 Chesterfield Parkway West, Chesterfield, MO 63017 by December 20, 2005. Nominations, including seconding letters, must not exceed six pages. The nominating letters should address the criteria above. A current work address, phone number and fax number must be provided for each nominee. Please include an e-mail address. Nominees need not be a St. Louis Section member to be eligible for this award. This award is administered by the St. Louis Section of the American Chemical Society (ACS).

For more information contact: Joel Krauser at 314-274-8430,
FAX 314-274-4426, joel.a.krauser@pfizer.com



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National Chemistry Week



The Joy of Toys

October 16-22, 2006

Do you remember what your first toy was? Was it round? Did it go up and down? Do you still have your favorite toy? Without chemistry, we would not have these things we call toys. Toys are just an application of the things we have learned through chemistry. As the theme of National Chemistry Week, we celebrated one of the many wonderful things in which that chemistry has been used to enrich our lives. This year's celebration started out on Monday with Ted Gast, Steve Kinsley, Misti Ritter (Academy of Science), and Greg Wall going to City Hall to meet with Mayor Slay for the signing of the Mayoral proclamation. On Saturday, we had our Chemistry Expo at the St. Louis Science Center in the May Exhibition Hall. We had participants from academics, industry, institutions and government. Additionally, we had a poster exhibit of the history of toys, a collection of toys from the Eugene Field Toy Museum, and an exhibit entitled "Mickey's Molecule: Disney and the Art of Science Storytelling". With greeters at the entrances, we opened the doors at 11 AM. We had 11 booths with activities demonstrating amorphous metal, bioluminescence, ferrofluid, states of matter, phosphorescent and fluorescent materials, instant snow polymer, solid state models, lizards Tessellation puzzle, Hoberman sphere, DNA from strawberries, liquid dispensing, and paper chromatography along with plenty of handouts ranging from nanomoles, Avogadro temporary stickers, NCW stickers, bookmarks, growing dinosaurs, and periodic tables. These activities ran all day and we had approximately 1000 visitors. There was also a special visit from Bunsen and Beaker.

The day was capped off by a visit from Dr. Bill Carroll, President, American Chemical Society as one of his last visits on his Extreme Tour. He joined in and participated in our activities through the end. Afterwards, we had a reception for Dr. Carroll in the Academy of Science's meeting room with a special showing of "Mickey's Molecule" a recreation of one of the rides from Disneyland in which you are reduced to the size of a water molecule. As Event Coordinator, I want to personally thank all of the approximately 200 volunteers from the 12 different organizations who participated throughout the day and made this Chemistry Expo as spectacular as ever. Next year we will be celebrating National Chemistry Week from October 22-28, 2006, the theme is "It's Your Home: It's All Built on Chemistry", and the Chemistry Expo will be on October 28, 2006 at the St. Louis Science Center.

Until then,
Greg Wall

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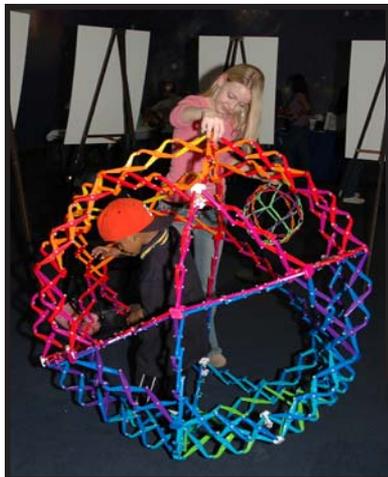


Highlights from National Chemistry Week include a visit from ACS President Bill Carroll.

Photos by Eric J. Voss.



Left: Southern Illinois University Edwardsville (SIUE) students Jessie Mueller (left) and Jermel Liddell (center) welcome ACS President Bill Carroll (right) to the St. Louis Science Center during National Chemistry Week Expo at the St. Louis Science Center on October 22, 2005.



Above: ACS President Bill Carroll explains instant snow polymer to St. Louis Science Center visitors Richard (left), Emmarisol (center), and Mirella Torres (right).



Above Left: SIUE student Kim DeRosier helps a boy discover how a Hoberman sphere is like the pores in re-entrant foam at the NCW Expo.

Left: ACS President Bill Carroll enjoys NCW Expo with St. Louis Section Treasurer Lisa Balbes (center) and Councilor Donna Friedman (right).

Note from the Treasurer...

In order to close the section's books in a timely manner, all expenses for the fiscal year 2005 must be turned into the treasurer by Monday, December 19th. Expenses beyond that date may not be paid unless prior arrangements are made.

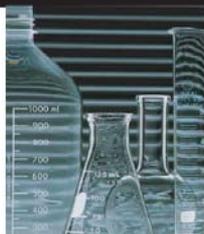
Also, all committee chairs for 2006 should have their budget requests into the treasurer by December 19th. Any committee or subcommittee not turning in a request will be assumed to need no funding for FY 2006.

Thanks!

Lisa Balbes, lisa@balbes.com

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Battle of the Burets

An extended National Chemistry Week came to a close on Wednesday, October 26th as Francis Howell North High School's Chris Cahall and Erin Futrell (shown in photo) took top honors in the "Battle of the Burets". Francis Howell's coach Donna Malkmus had her teams trained to the peak of perfection as Cahall and Futrell completed their winning titration in under 2.5 minutes with a perfect score for accuracy.

Would any of our ACS members like to challenge these two?????



This titration contest is sponsored each year by the St. Louis Section of the American Chemical Society and the Chemistry Department of the St. Louis Community College at Florissant Valley. Twenty-two teams from 11 schools entered into this test of speed and accuracy. Three teams emerged from the preliminary rounds to compete for the championship honors. The three teams vying for top honors were:

Chris Cahall and Erin Futrell	Francis Howell North High School (Donna Malkmus)
Max Altman and Cong Yu	Clayton High School (Nathan Peck)
Luke Hogan and Dave Minks	Trinity High School (Frank Cange)

We would like to thank our friends at
Ricca Chemical's SpectroPure Division
for preparing the titrants used in this contest.

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