



Chemical Bond

Volume 52
Number 6
September, 2001

St. Louis Section, American Chemical Society



American Chemical Society

1876-

125 and counting

Celebrate October 5th (see p. 2)

ACS Turns 125

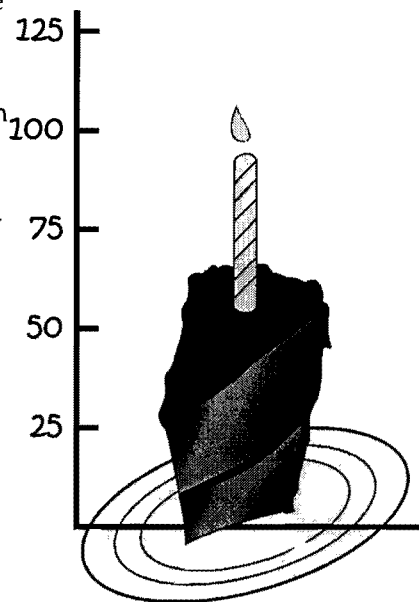
Join in the festivities for the 125th birthday of the American Chemical Society. ACS Members, their families and guests are cordially invited to attend the St. Louis branch of the nationwide celebration.

The event will be held on Friday, October 5, 2001, from 4–7 pm, at Kemoll's Restaurant, 1 Metropolitan Square, St. Louis. The event begins with a social hour including an open bar and hors d'oeuvres, followed by some brief remarks and, finally, an anniversary cake and coffee.

The American Chemical Society is the world's largest scientific society with membership of over 150,000. The Society is recognized as a world leader in fostering scientific education and research, and promoting public understanding of science. This celebration gives us the opportunity to acknowledge the role that the Society has played in advancing our profession of Chemistry.

To facilitate planning and to help defray expenses, there is a fee of \$5 in advance, or \$10 at the door. A commemorative souvenir will be presented to attendees with advance reservations, while supplies last.

Reservations are due by Friday, September 28, 2001. Please send checks, payable to St. Louis Section–ACS along with the form below. For more information, call Samir El-Antably at (314) 664-5522.



Celebration Reservation 125th Birthday of the American Chemical Society

Member name _____

Number attending _____ x \$5 = Amount remitted _____

Reservation must be received by September 28th.

Please mail with check payable to St. Louis Section–ACS to:

Dr. Samir ElAntably
P.O. Box 50168
St. Louis, MO 63105
or phone (314) 664-5522

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Meeting & Seminars

Board of Directors

St. Louis Section-ACS Board of Directors meets the second Thursday of each month at the Alumni Center, University of Missouri-St. Louis. 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.

Date: Sep 13

Social hour: 5:30 pm

Dinner: 6:30 pm

Business meeting: 7:15 pm

Future meetings: Oct 11, Nov 8

Saint Louis University

Seminars start at 3:30 pm in Room 204 Macelwane Hall. Refreshments follow. For more information, contact Dana Spence, spenced@slu.edu.

University of Missouri-St. Louis

Refreshments at 3:45; seminars at 4 pm in B-451 Benton Hall. For further information, contact Prof. Keith Stine, 314-516-5346, kstine@jinx.umsl.edu.

Washington University

Seminars are in McMillen 311 at 4 pm unless otherwise noted. Coffee is available outside the seminar room 20 minutes prior to the talk, and refreshments follow.

Thursday, Aug 30
Randall Halcomb
Colorado Univ.-Boulder
Synthesis of Glycopeptides and the Natural Product Phomactin

Thursday, Sep 6
241 Compton Hall
Dr. Klaus Woelk
Institute of Theoretical and Physical Chemistry
University of Bonn, Germany
Drifting, Diffusing, and Dispersing: Reactions and Research in Toroid NMR Detectors

Thursday, Sept. 13
Dr. Olivier Nicaise
St. Louis University
TBA

Thursday, Sept. 27
Dr. Jef de Brabander
Univ. of Texas-Dallas
McMillen 311, 4pm
TBA

Computational Chemistry Discussion Group

Locations vary, but the time is generally 5:30 for refreshments, and 6 pm for the talk. For more information, contact Marcia Fenley, 314-862-0451, sfenley@artsci.wustl.edu or Philippa Jayatilke, 314-647-1099, pjayat@tripos.com

Environmental Science/Technology Discussion Group

Contact Dr. Kwok-Keung Au ("Amos") for information: call 618-239-0547 or e-mail amos@bellevillelab.com

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36th MWRM, 2001

In the "can they top it" department, plan to attend this year's ACS Midwest Regional Meeting:

October 10-13, 2001
Burnham-Yates Conference Center
The Cornhusker Hotel
Lincoln, Nebraska

Organizers and volunteers for last year's meeting, hosted by the St Louis Section, can kick back and relax as the Nebraska Section picks up the hosting reins.

The hotel/conference center is at 333 S. 13th St. in downtown Lincoln, Nebraska, about 10 minutes from Lincoln Municipal Airport.

- Advances in Chemical Education
- Chemical Education (7-12 Content Integration)

Special Events

- Midwest Award Banquet
- High School Chemistry Award Address
- Employment Clearinghouse
- Diversity Committee Luncheon (combined Younger Chemists and Women Chemists)
- Regional Director's Breakfast

Hosted by the Nebraska Section

Michael D. Mosher, General Chair (mosherm@unk.edu)
Pat Dussault, Co-Program Chair (dussault@unlserve.unl.edu)
David Berkowitz, Co-Program Chair (dbb@unlserve.unl.edu)
Meeting web site: <http://wendigo.unl.edu/mwrm>

Symposia

- Frontiers in NMR Spectroscopy
- Asymmetric Organic Synthesis
- Functional Foods and Their Role in Consumer Health
- Surface Science
- Recent Advances in Environmental Analysis
- History of Chemistry

- Midwest Regional Steering Committee Luncheon
- University of Nebraska-Lincoln Alumni Reception
- Undergraduate activities hosted by the University of Nebraska at Kearney ACS Student Affiliate
- Exhibition of scientific equipment, products, and services

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If It Tastes Like Sucrose....

by Jack Bornmann

During the summer siesta of the *Chemical Bond*, there was an article in the Wall Street Journal that had annoying news. At least it was annoying to me. The article appeared on page B5 of the April 27, 2001 is-

Letters & More

sue of the WSJ. The headline was "Food Industry Shuns Bioengineered Sugar."

The "problem" is genetically modified (GM) sugar beets. Roughly half of the granulated sugar consumed in the United States comes from sugar beets.

When I was a kid I thought that sugar beets were simply a sweet variety of the red table beets that

my mother loved and my brother hated. Actually sugar beets are white and considerably larger than red beets. The other source of sugar, of course, is sugar cane.

There are basically two types of genetically modified sugar beets in the U.S. One has been modified to be tolerant to Monsanto's Roundup herbicide and the other is tolerant to the Liberty herbicide produced by the French pharmaceutical company, Aventis.

Food companies, such as Hershey and M&M/Mars, have told farmers not to use the GM plants to make sugar for their companies. It has become a matter of economics and not reason. With no place to sell the sugar produced by their GM sugar beets, farmers are forced to plant ordinary sugar beets. The food companies are not afraid of

see *Sucrose*, p. 8



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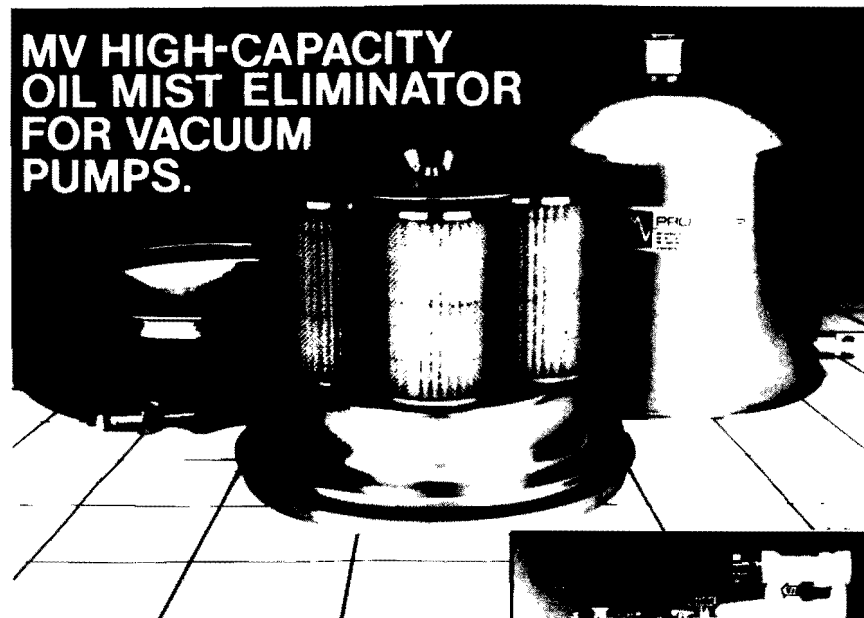
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Sucrose, from p. 6

the sugar from GM beets, they are afraid of the protestors (who may not even be consumers of that particular food). Irresponsible protestors could shut down a food company because of an irrational fear that somehow the sugar has been modified. Refer back to the WSJ headline quoted above.

"Cheese and crackers, got all muddy!" This situation is ridiculous. Genetically modified seeds produce a plant which has been altered to be tolerant to herbicides, but the sugar inside the beet has not been modified. Sugar, i.e. sucrose, has a specific structure which was identified a long time ago by Emil Fischer and his fellow scientist. They identified all the related saccharides. I was once advised by an older and presumably wiser professor of physical chemistry not to buy pure sucrose from the chemical supply house. Sucrose/sugar sold in food stores is already so purified that it can be accepted as a standard material. If a GM sugar beet produced anything other than sucrose, it would be immediately detected.

Sucrose is simple enough that I could draw the structure in my dreams. How can we modify it? If

you move one of those hydroxyl groups to the other side of the ring, you would change the optical rotation and optical activity is a standard test of sugar. We would know if a change had been made.

The genetic modification changes the plant, not its sugar.

By the way: Recently my wife and I accidentally picked up a bottle of pickled beets with raspberry flavoring. It was a mistake. The bottle said "Pickled Beets" in big letters and "Raspberry flavoring" in small letters on another part of the label. We threw it away and prayed that Monsanto never decides to create a GM red beet which tastes like raspberries.

If you have any comments or want to contact me, my new e-mail address is jbornmann@msn.com.

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Complaints Welcome

(Volunteers Also Welcome)

Do you have a complaint about the way your local section is run? Is there something we're not doing enough, or doing too much? We want to know! Any and all feedback is welcome. Please let me know what you think we should be doing differently. But be warned: if you complain, you might be invited to help fix the problem....

On that note, I am looking for volunteers to chair standing committees and subcommittees for next year. We have a lots of committees, so whatever your area of interest, we have a place for you! We have standing committees that deal with Awards, Education, Professional Activities, Programs, Publicity & Public Relations, as well as

for special activities. Remember, this organization will only be as good as YOU make it.

Contact Lisa Balbes at 314-966-5298 or lisa@balbes.com and get involved!

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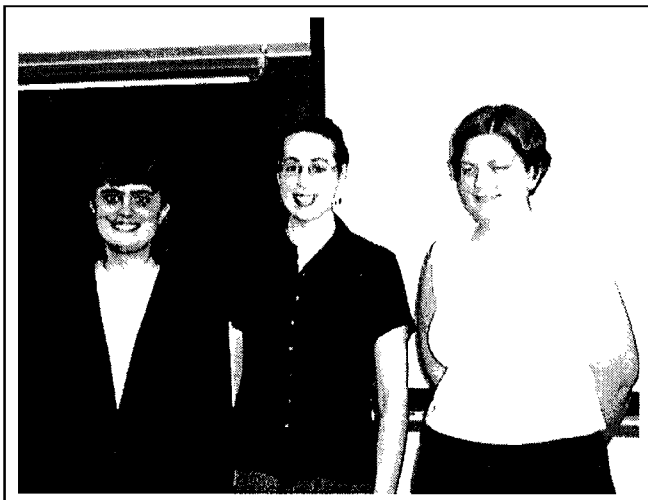
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St. Louis Chemical Technician Award Seeks Nominees

The St. Louis Section Chemical Technician Award is presented to a chemical technician in the St. Louis area who has demonstrated an extremely high degree of professionalism. Criteria used to judge the award include technical skills, safety and housekeeping, relationship with coworkers, publications and presentations, reliability, communication skills, innovation and contribution to team efforts, and additional professional activities. The award consists of a plaque, a check for \$250, dinner for the awardee and a guest at the Chemical Progress Week Awards Night ceremony, and nomination for the National Chemical Technician Award. The award will be presented at Awards Night in April, 2002.

A chemical technician is a person whose training includes successful completion of an Associate or Bachelor Degree in a chemistry or chemistry-related curriculum, or equivalent experience. The primary work of a chemical technician is experimentation and/or correlating information to help solve chemical problems and/or



...not a photo of Chemical Technician nominees...but rather from April's Undergraduate Research Symposium, the three speakers: Melissa Burgess of SIUE, Katherine Block of UMSL, and Katherine Grant of SLU.

discover new chemical knowledge.

Nominations must be received by October 31, 2001. Nominations, including seconding letters, must not exceed six pages. The nominating letters should address each of the criteria above. A current work address and phone number must be provided for each nominee, along with a fax number and an E-mail address if available.

Chemical technicians need not be a TECH Division Affiliate or ACS member to be eligible for this award. This award is administered by the St. Louis Section of the American Chemical Society (ACS).

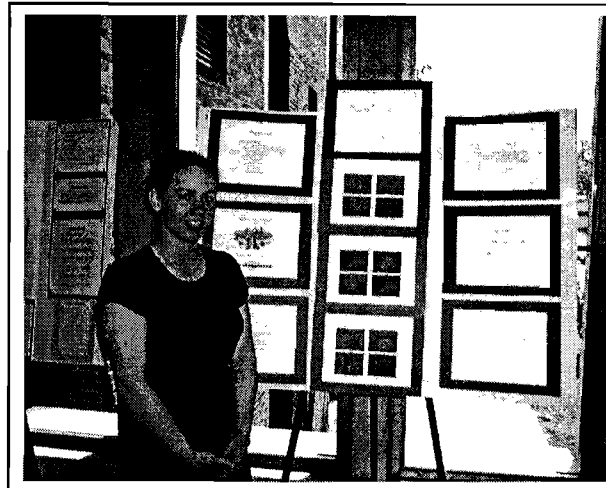
To submit a nomination or for more information contact:
Susan S. Dudek
Pharmacia
800N. Lindbergh
St. Louis, MO 63167
phone 314-694-2464
fax 314-694-5216 or
e-mail susan.dudek@pharmacia.com

Workshop for the ideal job

Late in the last millennium, I concluded that there isn't an ideal job out there for everyone. What

Career Corner

employers want is often too much at odds with what employees



More from the Undergraduate Research Symposium: Erin Berring poses with the poster describing work she did with Professor Alexa Serfis of SLU.

want. Personally, I want a job like the one Albert Einstein had at Princeton, to be paid just for thinking about things. What're the odds?

For each of us to learn about who we are, how we make decisions, our communication style, and every detail of what we want in a job (or a career) is of great value. For one thing, an interview is rather too late to pause and sort it all out. For another, you can real-

ize a great deal more of your potential after you map out what it is.

Your local section is hosting a **Career Self-management Workshop** **Saturday, September 15th** **Sheraton Clayton Plaza Hotel**

The meeting begins at 8:30 am, with a professionally trained career management speaker from the national ACS. After luncheon there

will be an opportunity for r, sum, review and more. The Sheraton is at 7730 Bonhomme.

If you are a student, you should attend. Your first job tends to set your course on the sea of life; it isn't irrevocable, but it's pretty important.

If you are further along in your working life and haven't been to a similar seminar in, say, ten years, then you should attend.

You may learn

something to your advantage, and you will surely get energized.

Please send your commitment to attend and check for \$18.00 to St. Louis Section-ACS
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A copy of your ACS student membership dues receipt or dues waiver can be substituted for the check.

For more information, my e-mail is P355by113@aol.com, and my

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