



Chemical Bond

Volume 60
Number 4
April, 2009

St. Louis Section, American Chemical Society

Picnic

Fun

Awards Night

Science Fairs

Probst Lecture

MONSANTO

HS Chem Teacher
nomination

Marcus competition

It's time to plan for the 5th Annual Member Picnic Saint Louis Section-ACS

Date: Saturday June 6, 2009

Time: 12 noon-5 pm

Location: Tilles Park (corner of
McKnight and Litzsinger in
Ladue) at the Skow Shelter

Bring the family! Just \$5 per person. Kids under 12 free.

Please reserve by June 1st so we can plan for food and drink,
and crowd control.

Questions and Reservations to Keith Stine
Department of Chemistry and Biochemistry
University of Missouri-Saint Louis
St Louis, MO 63121
phone: (314) 516-5346
kstine@umsl.edu



Need event reminders?

Would you like an e-mail reminder of upcoming ACS events and activities? Then join the ACS email reminders list to receive updates on ACS activities.

Email Alexa Serfis at barnoski@slu.edu and ask to be put on the list. You can also add or remove yourself from the list at the website, stlacs.org, and click on Event reminders-subscribe or Event reminders-unsubscribe. Subscription comes with a money-back no-spam guarantee.



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Meeting & Seminars

Board of Directors

St. Louis Section–ACS Board of Directors meets the second Thursday of each month, usually 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 vote on questions put to the Board; others in attendance have voice but no vote.

If you want to attend for dinner, contact Bill Doub (william.doub@fda.hhs.gov or 314.651.7514) at least a week in advance. Usual cost of dinner is \$24. Members wishing to become active in section activities are welcomed for their first dinner as guests of the section.

Date: Apr 9

Social hour: 5:30 pm

Dinner: 6:30 pm

Business meeting: 7:15 pm

Future meetings: May 14; Sep 10

Saint Louis University

Seminars start at 4pm in Room 12 Monsanto Hall, except as noted. All April topics were TBA at press time. For more information, contact the Chemistry Department, 314.977.2850.

Apr 3

Piotr Kaszynski
Vanderbilt University

Apr 17

Malika Jeffries-El
Iowa State University

Apr 24

Cristina De Meo
SIU–Edwardsville

SIU–Edwardsville

The 33rd William J Probst Lectures:

Mar 31

William A Eaton

National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

2 pm – *Protein Folding Dynamics*

7 pm – *Searching for a Cure for Sickle Cell Disease*

University of Missouri–St Louis

Fridays at 4 pm in 451 Benton Hall, unless otherwise specified. Refreshments 15 minutes prior to seminar time. For more information, contact the Chemistry Department, 314-516-5311.

Mar 30

David Schultz

North Carolina State University
Magnetic Spin-Spin Interactions in Complexes of Semiquinone Ligands: The Physical Organic Chemistry of Exchange Coupling

Apr 6

Andrew Holder

University of Missouri–Kansas City
TBA

Apr 13

V. Jo Davissou
Purdue University
TBA

Apr 20

Janet Braddock-Wilking
University of Missouri–St Louis
Preparation of Platinum Complexes with Group 14-containing Metallafluorenes and Metalloles

Apr 27
Stephen Harvey
Georgia Institute of Technology
*Assembly Mechanisms
of Small DNA and RNA Viruses*

May 4
22nd Distinguished Alumni Lecture
Don Hesse
University of Missouri–St Louis
*After Graduation: Fulfilling
the Scientist's Desire to Experiment,
Discover and Solve*

Washington University

Seminars are in McMillen 311 at
4 pm unless otherwise noted. For
more information, contact Lev Gelb,
gelb@wustl.edu

Apr 2
John D Norton
University of Pittsburgh
TBA

Apr 9
Janet Braddock-Wilking
University of Missouri–St Louis
TBA

Apr 16
Gary Sulikowski
Vanderbilt University
TBA

Did You Know?

ACS members can nominate for the
High School Chemistry Teacher
awards!

As a chemist, you are in a position
to recognize fantastic high school
teachers.

Has your high school student had
an exceptional chemistry teacher?
Have you met a great high school
chemistry teacher through outreach
or science fair activities?

Consider nominating a teacher
for the 2009-2010 High School
Teaching Award. While exemplify-
ing excellence in teaching chemistry
at the high school level, the nominee
also should have contributed to
other aspects of teaching, such as
professional growth, curriculum
development, course materials prep-
aration, workshop participation,
chemical or educational research,
publications and other activities. A
candidate must work within the
geographic region of the St Louis
Section-ACS and may not not be a
past winner of the award.

Please contact Virginia Kirwin to
obtain nomination forms and to ver-
ify eligibility: vkirwin@att.net or
636.225.5513.

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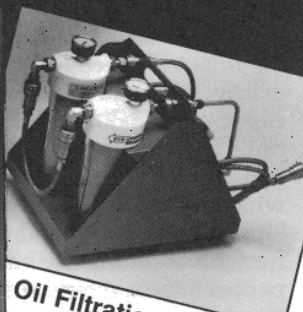
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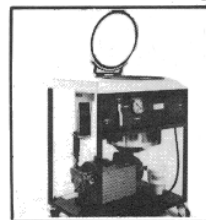
Vacuum Inlet Traps



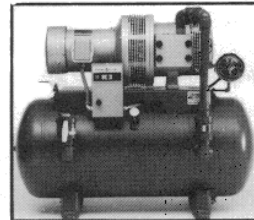
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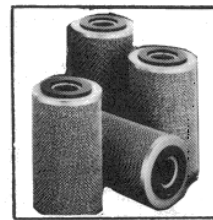
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Bond Briefs

Judge at a Fair

Science Fair season is upon us. Sheryl Loux, coordinator for the Saint Louis Section, is seeking volunteers to judge science fair projects in chemistry. *Your participation as a judge would be greatly appreciated!* To volunteer, contact Sheryl J Loux at 636.237.5149 or sjloux@gmail.com.

Upcoming events are:

Tuesday, May 5

Greater St Louis

Elementary Science Fair

Queeney Park Recreation Complex
Ballwin, MO 63011

6 to 8:30 pm—Participation Awards distributed to chemistry related projects. No judging.

Wednesday, May 6

Greater St Louis

Secondary Science Fair

Queeney Park Recreation Complex
Ballwin, MO 63011

3 to 8:30pm—judging

Free dinner for judges on site.

Marcus Award competition to be held at SLU

The 2009 Leopold Marcus Award competition will be held Wednesday, April 1 at 4 pm in the Pere Marquette Gallery on the campus of Saint Louis University. The gallery is located on the second floor of DuBourg Hall.

The award is administered by the Department of Chemistry at Saint Louis University and the St. Louis Section—ACS. The competition consists of presentations based on the undergraduate research projects of senior chemistry majors at Saint Louis University. The winner of the award is determined by vote of the professional chemists in the audience.

All ACS members are invited to attend. Refreshments will be available after the competition. For further information, contact Bruce Kowert at 314.977.2837 or kowertba@slu.edu.

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Spotlight on Saint Louis: Monsanto

Many St. Louis area chemists may be surprised to learn that Monsanto is a relatively new company.

While Monsanto shares the name and history of the company founded in St. Louis in 1901 by Edgar M. Queeny, today's Monsanto, created in 2000, is entirely focused on agriculture and supporting farmers around the world in their mission to feed, clothe and fuel our growing population. Today's Monsanto applies innovation and technology to help farmers worldwide produce more while conserving more.

Monsanto's Sustainable Yield Initiative focuses on increasing global food production in the face of growing demand, limited natural resources, and a changing climate. The company also establishes new partnerships with businesses, citizen groups, and governments to help increase food, feed, fuel and fiber. By helping farmers grow yield sustainably, they can be more successful, produce healthier foods, better animal feeds and more fiber, while also reducing agriculture's environmental impact.

Monsanto's seeds and traits businesses work to meet farmer demand by offering seeds with the best possible germplasm, or improved genetics, for a higher yield. The company sells both national and regional seed brands for large-acre crops such as corn, cotton, soy and canola, as well as small-acre crops such as vegetable seeds. Monsanto also broadly licenses its seed and trait technologies so farmers have access to its products in brands they prefer.

Monsanto's Agricultural Productivity segment consists primarily of

crop protection products and residential lawn-and-garden herbicide products. The Roundup® family of agricultural herbicides is the flagship of Monsanto's agricultural chemicals business. Roundup agricultural herbicides and other glyphosate products are used as part of an environmentally responsible weed control program and fit with the vision of sustainable agriculture and environmental protection. These products complement Monsanto's seed business and play a vital role in improving productivity for farmers.

Monsanto's Industrial, Turf and Ornamental Group provides integrated weed control solutions to industrial and large non-farm operations, such as parks, golf courses, zoos, and roadsides.

For more information, visit www.monsanto.com.

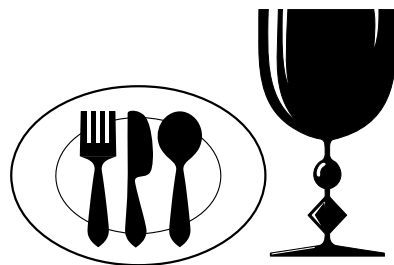
**The Saint Louis
Section gratefully
acknowledges
Monsanto's generous
gift in support of the
Saint Louis Award.**

Awards Night 2009

Monday, April 20: A banquet honoring the winners of the High School Chemistry Contest, the Leopold Marcus Award, the High School Teaching Award, the Chemical Science and Technology Award, and the outstanding junior chemistry students at area colleges.

CJ Muggs, 101 W Lockwood Ave,
Webster Groves.

5:30 social hour, 6:30 dinner, 7:30 program. Please return the reservation form by April 15th.



Awards Night Reservation Form

Member name: _____

Number attending _____ × \$20 = _____ (amount remitted)

Please make check payable to: Saint Louis Section-ACS
and mail with form by April 13th to:

Pat Burrell-Standley
1716 Eldon Ridge Court
St Louis, MO 63017

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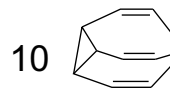
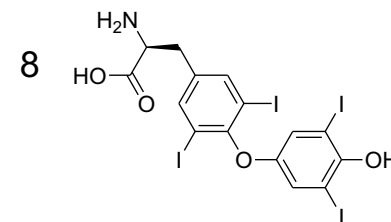
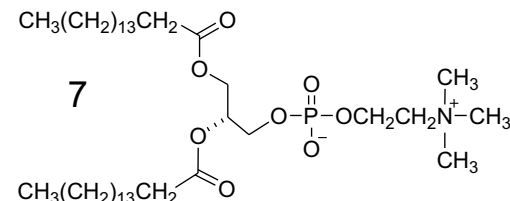
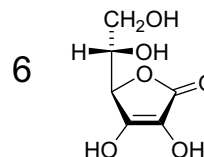
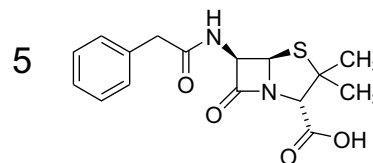
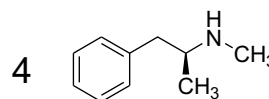
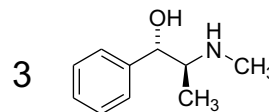
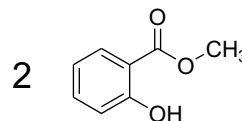
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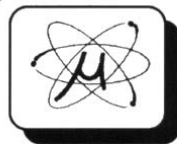
Fun with Molecules

From the relatively well known to the fairly obscure. Answers on facing page, but don't look until you've taken a shot at the ID. If, after looking at the name, you never heard of it, Wikipedia will have a reasonably thorough exposition.

1 $\text{N}=\text{O}:$



- 1 Nitric oxide, extremely simple but important neurotransmitter
- 2 Methyl salicylate, oil of wintergreen
- 3 Pseudoephedrine, the easiest precursor to ...
- 4 Methamphetamine
- 5 Penicillin G
- 6 Ascorbic acid, Vitamin C (a- = without, scorb = scurvy). Where is the acid group?
- 7 Lecithin, a natural emulsifier, in PAM® cooking spray
- 8 L-Thyroxine (one of the thyroid hormones)
- 9 Cubane and prismane, two quite completely useless but rather hard-to-synthesize hydrocarbons
- 10 Bullvalene



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