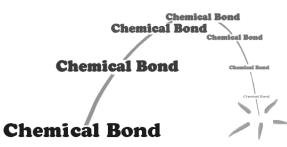


St. Louis Section, American Chemical Society



If you can't see the colors, check out the web*Bond*. If you can see the colors, check your meds. Either way, check page 10 for seasonal chemistry.



Last month, we announced in this space that the *Chemical Bond* would be going all-electronic starting with the January, 2010, issue.

We've already started down that road with print and web renditions in parallel starting last May. All the content of the print version is in the web version, plus

- full color photos and artwork where available
- easy navigation from the Table of Contents and between articles
- internet citations as links for convenient follow-up
- searchable content with your browser's Find function
- and all the other advantages we mentioned last month: more timely content ... searchable archive ... environmental benefits ... saving money for other programs

We know, though, that if the Bond doesn't arrive proactively in your postal mailbox every month, you can easily lose your connection to the Section and the local chemistry scene. So ...

- if you would like to **receive a reminder** each month when the web edition is posted, you can subscribe at www.stlacs.org/mailman/listinfo/ bond.remind (we're a little new at this listserv admin thing, so if you don't get a confirmation email shortly after subscribing, please send your subscription request to webmaster@stlacs.org, and we'll handle it manually)
- if you **don't have a computer** at home, remember that most public libraries offer free internet access. Go to www.stlacs.org and find the link to the current edition in the QuickLinks column on the left.
- if you **simply can't** access the web*Bond*, send a postcard or letter to St Louis Section-ACS

P.O. Box 220291

Saint Louis, MO 63122-0291

and ask to have the web*Bond* printed and mailed to you every month (Jan-May, Sep-Dec) at no charge. Be sure to include your full mailing address and your ACS member number. (You can just copy or cut out the printed address on the back cover of this issue. See p. 11 for instructions.) We will ask you to renew this request every year to be sure we have up-to-date information.

Chemical Bond

Volume 60

No. 8 November, 2009

The Chemical Bond is published January through May and September through December by the St. Louis Section–American Chemical Society. It is mailed free of charge to members of the section at their address on file at ACS National Headquarters. Changes of address for members will be made automatically upon notification to National ACS Headquarters; send old and new address with zip codes to ACS Subscription Service Department, 1155 16th St. N.W., Washington, DC 20036 or visit chemistry. org, log in, and go to Update my Profile. Allow eight weeks for change to take effect.

The domestic subscription rate for non-members/affiliates is \$15.00 per year. Subscription orders and changes of address for non-members/affiliates should be mailed to St Louis Section–ACS, 125 West Argonne Drive, St. Louis, Missouri 63122 or e-mailed to the Editor.

Interim Editor	Eric Ressner	314.962.6415 editor@stlacs.org
Asst Editor/Advert Mgr	Sue Saum	314.513.4808 ssaum@stlcc.edu
Business Mgr	Donna Friedman	314.513.4388 dfriedman@stlcc.edu
Website		www.stlacs.org
Webmaster	Eric Ressner	webmaster@stlacs.org
Correspondence, letters to the Editor, etc., should be sent to St. Louis Section–American Chemical Society P.O. Box 220291, Saint Louis, MO 63122 Copyright © 2009 American Chemical Society and the St Louis Section–ACS		

2	Chemical Bond be sure to keep up
4	Meetings and seminars
6	Continuity Dinner reservation form
8	Boy Scout Merit Badge Clinic story and pictures
9	Boy Scout/Girl Scout chemistry programs: future support up to you!
10	That time of year again
11	Internet-unready? opt for a mailed copy

In this issue



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, please contact Bill Doub (william. doub@fda.hhs.gov or 314.651.7514) at least a week in advance. Usual cost of the dinner is \$20; unemployed officers and chairs of major commitees \$10. Members wishing to become active in section activities are welcomed for their first dinner as guests of the section.

Date: Nov 12

Social hour: 5:30 pm

Dinner: 6:30 pm

Business meeting: 7:15 pm

Next month: Dec 10 Continuity Dinner (see page 6 for reservation)

POLYMER STANDARDS FOR GPC/SEC MOLECULAR WEIGHT ANALYSIS GPC/SEC COLUMN REPACKING

American Polymer Standards Corporation 8680 Tyler Boulevard, Mentor, OH 44060 Phone: 440-255-2211 Fax: 440-255-8397

Saint Louis University

Seminars start at 12 noon in Room 12 Monsanto Hall, except as noted. For more information, contact the Chemistry Department, 314.977.2850.

November 6 **Dr. Dana Dattelbaum** Los Alamos National Laboratory *TBA*

November 19, 9:10 am Busch Student Center 253B-C **Sigma Aldrich Seminar Dr. Ronald A. Siegel** University of Minnesota Top-down and Bottom-up Strategies for Sensors and Dynamic Hormone Delivery

ELEMENTAL ANALYSIS C, H, N, O, S, P • Halogens • Ash • Metals

TOC • TOX • BTU • Molecular Weights ICP • ICP/MS • IC Custom Analysis • Problem Solving

LABORATORIES, INC.

Quality Analytical Services Since 1936

4630 Indiana Street • Golden, CO 80403

Phone: (303) 278-4455 • Fax: (303) 278-7012

Chemistry@huffmanlabs.com

www.huffmanlahs.com

9

VISA

Univ of Missouri–St Louis

Mondays 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. All topics were *TBA* at press time.

November 9 Sophia Hayes Washington University November 16 Xumu Zhang Rutgers University November 30 Renee D. Jiji University of Missouri–Columbia

Washington University

Seminars are in McMillen 311 at 4 pm unless otherwise noted. For information, contact Lev Gelb, gelb@wustl.edu. At press time, all topics were *TBA*.

November 5 Walter D. Loveland Oregon State University Synthetic paths to the heaviest elements November 12 Stephen M. Holmes University of Missouri-St Louis TBA November 19 Richard L. Axelbaum Washington University TBA

Come to the Continuity Dinner

Every December, the St. Louis Section holds a fancier than average board meeting to celebrate the year's achievements, recognize certain members, and pass the gavel to the new slate of section officers. There is also the Henry Godt Memorial Lecture, recapping the past year, which is given by a surprise speaker.

For many members, this is the only event they attend each year. Please join us on December 10 at Glen Echo Country Club: social hour and open bar (beer, wine, soft drinks) at 5:30 p.m; dinner at 6:30 and the meeting will begin during dinner. Cost is \$30.00 per person. Please send the reservation form on page 6 with your payment by December 1.



Chemical Bond

You are cordially invited to attend the

2009 Continuity Dinner Thursday, December 10, 2009 at Glen Echo Country Club 3401 Lucas and Hunt Rd St. Louis, MO 63121 5:30 pm Social hour, open bar (beer, wine, soft drinks) 6:30 pm Dinner and meeting

Please send reservations by December 1st to:

Dr. William Doub US FDA 1114 Market St., Rm. 1002 Saint Louis, MO 63101 (314) 539-3816



Make checks payable to St. Louis Section-ACS

Name(s)

Number attending _____ × \$30 each = amount remitted \$_____

Choice of entrée (number of each): fish _____ or steak ____



micron inc.

Analytical Services

Complete Materials Characterization Morphology Chemistry Structure

SEM - TEM - EPA - ESCA - AUGER XRF - XRD - FTIR - DSC - TGA

3815 LANCASTER PIKE, WILMINGTON DE.19805 PHONE 302 - 998 - 1184, FAX 302 - 998 -1836 E-MAIL MICRONANALYTICAL@COMPUSERVE.COM WEB PAGE WWW.MICRONANALYTICAL.COM

A good vacuum system

needs a great vacuum trap:

Posi-Trap

positive flow vacuum inlet traps!



- No "blow-by" ... ever!
- Filter elements matched to **your** application.
- **Easy** cleaning and changing.

When you want the best, you want MV Products.



A Division of Mass-Vac, Inc.

247 Rangeway Road, PO Box 359, North Billerica, MA 01862 978 667 2393 Fax 978 671 0014

sales@massvac.com www.massvac.com

Chemical Bond

Success Again—Chemistry Merit Badge 2009

On September 19th, 47 Boy Scouts from all over St Louis and part of Illinois came to Jost Chemical Company to learn about chemistry and earn a merit badge. They learned about the four main fields of chemistry, made Cartesian divers, separated solutions, got oil and water to mix, and took a tour of a working chemical manufacturing plant.

The 25 professional chemists and chemistry students who helped at the event found the boys to be "interested, polite, cooperative, and generally a lot of fun." The event was sponsored by the St Louis Section–ACS and Jost Chemical Company. Door prizes were furnished by Monsanto and AmerenUE Pure Power.



Bill Doub introduces the four main fields of chemistry. Ed. note: Four? Can you say "Biological"?



Happy Scouts show off their hands-on activities.

The Scouts need your help!

The ACS-St. Louis Section sponsors chemistry clinics for local Boy Scouts and Girl Scouts.

The Boy Scouts earn their Chemistry Merit Badge in a half-day event. The target age group is 11-13 or so. Approximately 40 boys learn about the scientific method, laboratory safety, industrial chemistry, and some fundamental chemical principles. The boys have a great time, and there is always a waiting list. Numerous section members and college student affiliates assist with this event, providing supervision, lectures, demonstrations, and hands-on activities. The event starts early in the morning and finishes with lunch and merit badge counselor review in the early afternoon. The past two years, it has been held on a Saturday in September at Jost Chemical Company.

The Girl Scout Chemistry Interest Project is geared toward high school girls. This event has been held at Saint Louis University, and can accommodate 10 participants. College student affiliates assist with this nearly day-long event that has taken place on a Saturday in October or November. The girls learn about UV-vis spectroscopy and apply it to analyze sunscreen; they discuss scientific ethics; they learn about some hot topics in chemistry; and they take an experiment in pH testing into the community to satisfy their service requirement. The event starts in the morning—lunch is provided—and concludes late in the afternoon.

In the past, these clinics have been supported by a grant from national ACS. The grant has expired. These events are enormously popular, but we are unable support them fully without additional funding, either donations or a participant fee (definitely not our preference). About \$800 will cover the expenses of the two programs at the current level of participation. More funding would allow us to accomodate more kids.

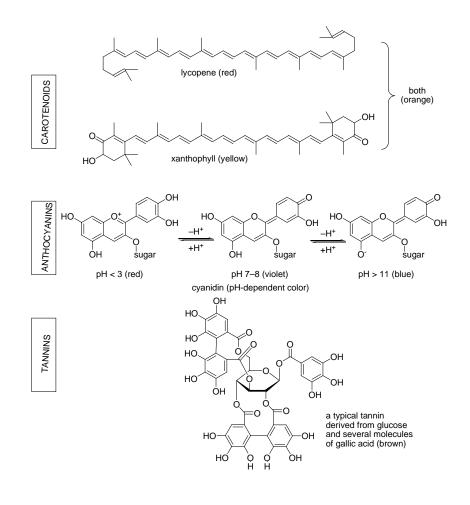
If you would like to make a donation to support these programs, please contact the Section Chair. No donation is too small, and your support is greatly appreciated.

William Doub, Section Chair US FDA 1114 Market Street St Louis, MO 63101-2045 phone: (314) 539-3816 fax: (314) 539-2113 email: william.doub@fda.hhs.gov and ucr1975@sigmaxi.net (please send to both addresses)

It's that time of year again ...

...when trees turn colors and leaves drop. If you haven't raked, blown, or mulched yet, you have a thick carpet of red, orange, yellow, and brown leaves on your ground. If you have, those leaves are only in your gutters.

The pretty colors show up when leaves quit producing chlorophyll as the weather turns colder. No longer masked by abundant green chlorophyll, these less abundant pigments can now show their true colors.



Will you be needing the web*Bond* printed and mailed to you?

If you won't be able to access the web*Bond* on the internet starting in January, we'll print it and mail it to you on request. It won't be as pretty as the booklet format you're used to, but it will provide all the information you need to keep up with Section news and activities.

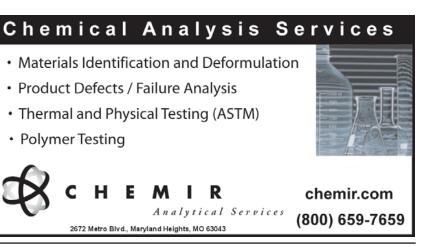
Please help us adhere to the spirit of our web-only *Bond*. Request mailing only if you *can't* get to the internet. Cut this item out—your contact information will be on the other side—confirm your request below, and mail to:

St Louis Section–ACS P.O. Box 220291 Saint Louis, MO 63122-0291

Yes, please mail a printed copy of the web*Bond* to me at the address on the other side. This request is effective for all issues in 2010 or until I send you other instructions.

Printed name

Signed



Chemical Bond

November, 2009



Look for the new 2009-2010 Aldrich Handbook of Fine Chemicals – now available!

Find the world's largest selection of new and innovative products for chemical synthesis, materials science and drug discovery research.

Also receive the Sigma-Aldrich Labware Catalog.

Reserve your two-volume set now by visiting sigma-aldrich.com/aldrichcat.

sigma-aldrich.com

SIGMA-ALDRICH"

St. Louis Section American Chemical Society 125 West Argonne Drive Kirkwood, MO 63122 Rush—Dated Material Inside

Non-profit U.S. Postage PAID St. Louis, MO Permit No. 850