

Official publication of the Philadelphia Section, ACS http://philadelphia.sites.acs.org/



February 2012 Volume 97, No. 2



February Meeting Student Poster Session **Temple University**

HIGHLIGHTS Chair's Column 26 Leap Day Networking **Event** 30 Seeking Section Award Nominees 34 Book Review 37 39 2012 MARM 2012 Calendar 42

ADVANCE NOTICE

MARCH MEETING

Thursday, March 15, 2012

Edgar Fahs Smith Lecture William H. Miller, University of California, Berkeley **University of Pennsylvania**

See the MARCH issue of *the Catalyst* for details, call the Section Office at (215) 382-1589 or email PhilaACS@aol.com.

STOP WASTING \$\$\$ on vacuum pumps!!

Rebuilding is smart.

A new pump costs four times what rebuilding costs.

Rebuilding is easy.

Just call 978 667 2393 for service second-to-none.

Mass-Vac does the job right.

- Factory trained technicians.
- Rebuilt and new pumps in stock.
- No-hassle parts and labor guarantee.
- Complete line of filtration and trap systems.

Because a really old, really healthy vacuum pump is a beautiful thing!



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



ACS Philadelphia Section Founded April 15, 1899

STAFF

EDITOR-IN-CHIEF

Robin S. Davis

EDITORS

News Atoms: Alan Warren

Proof Editors: Georgia Arbuckle-Keil

Marge Matthews Alan Warren

ADVERTISING MANAGER

Vince Gale

PUBLICATIONS COMMITTEE

Chair: Marge Matthews

Anthony W. Addison Georgia Arbuckle-Keil Robin S. Davis Vince Gale Robert Gates Judy Summers-Gates Kendra Luther Victor Tortorelli Alan Warren

CONTENTS
March Advance Notice
Chair's Column
Call for Judges
Twelfth Annual Student Poster Sessions 26
February Meeting
News Atoms
Delaware Valley Science Fairs 30
Additional Alternate Councilors for 201230
Leap Day Networking Event
Seeking Pre-College Teaching Award Nominees . 31
Seeking Undergraduate Teaching Award
Nominees
Chemical Consultants Network
Seeking Philadelphia Section Award Nominees 34
December 2011 Board Meeting Minutes 35
Book Review
Local ACS on LinkedIn
Historical Events in Chemistry

Published monthly except July, August and December by the Philadelphia Section of the American Chemical Society. All views expressed are those of the editors and contributors and do not necessarily represent the official position of the Philadelphia Section of the American Chemical Society. Editorial matters should be sent to the attention of the Editor-in-Chief c/o the Philadelphia Section ACS, Department of Chemistry, University of Pennsylvania, 231 South 34th Street, Philadelphia, PA 19104-6323 or philadelphia, Pa 19104-6323 or philadelphia.

Advertising: Vince Gale, MBO Services, P.O. Box 1150, Marshfield, MA 02050

phone: (781) 837-0424; email: cust-svc@mboservices.net.

From The Chair



Rick Ewing

It has been a mild winter indeed. My purchase of new winter boots, rated for conditions as cold as -40°C and the new snow-blower pretty much guaranteed no snow in January. We usually have a less elaborate January meeting because of the unpredict-

able weather. At our January board meeting we initiated planning for the up-coming fall National meeting, initiated the Section's Award committee for 2012 and supported moving a request from YCC for a National ACS innovation grant. The local section will participate in the 2012 Science Carnival on the Parkway, Saturday, April 21st, during the April 20th through April 29th Philadelphia Science Festival. Our LinkedIn membership continues to grow, with over 200 local section members registered.

If interested, please join LinkedIn ACS – Philadelphia Section Group at:

http://www.linkedin.com/gro ups?mostPopular=&gid=336 6988.

February brings one of our premier events to the Section, the Annual Poster Session at Temple University on February 23rd. This is a well attended event with students from high school, college and graduate school presenting their research, net-working and enjoying the company of colleagues. I'm genuinely looking forward to the event!

ACS Philadelphia Section's 12th Annual Poster Session

Is this email not displaying correctly? View it in your browser.



The Philadelphia Section Younger Chemists Committee

ACS-Philadelphia Section Announces a <u>call for judges</u> for the Twelfth Annual Student Poster Session!

if interested, please contact either

<u>kdlammers@gmail.com</u>, <u>cmcinnis@dow.com</u> or

<u>doug.hausner@gmail.com</u>



FEBRUARY MEETING

THE PHILADELPHIA SECTION, AMERICAN CHEMICAL SOCIETY

presents

Thursday, February 23, 2012

THE ANNUAL STUDENT POSTER SESSION

5:00 - 8:00 PM

Great Court, Mitten Hall Temple University 1913 North Broad Street Philadelphia, PA 19122

Refreshments will be served

Reservations Required; cost: \$15.00

RESERVATIONS should be made by calling Mrs. Libby Harper at the Section Office, (215) 382-1589 or emailing PhilaACS@aol.com, by **5:00 PM** on **Thursday, February 16th**. Cancellations, if necessary, cannot be accepted after **NOON on Tuesday, February 21st**. **UNCANCELLED RESERVATIONS WILL BE BILLED**.

FREE PARKING is available in lot #1 between 15th and Broad Streets, south of Norris Street after 3:00 PM. For map and directions, see http://www.temple.edu/maps/

The Board of Directors will meet at 4:00 PM in room 108A in Barton Hall.

NEWS ATOMS

Joseph Subotnik, assistant professor of chemistry at the University of Pennsylvania, was named as a Hewlett Packard outstanding junior faculty member by the Computers in Chemistry division of ACS.

DEATHS

Lewis J. Brown, retired chemist formerly with Pennwalt, May 21, 2010 at 99. He joined Pennwalt in 1950 as a research chemist and retired after 26 years in 1976. He was a 50+ year member of ACS.

Joseph Marton, retired paper industry chemist, June 1, 2010 at 91. Born in Hungary he spent several years following WWII in reconstruction activities in the chemical industry.

After the 1956 revolution he was a research fellow in Sweden where he became involved in lignin chemistry. In 1960 he immigrated to the United States to join West Virginia Pulp and Paper as a research chemist. He was a 1978 fellow of the Technical Association of the Pulp and Paper Industry (TAPPI) and published several papers in their journal. In 1986 he received TAPPI's Harris O. Ware prize. He retired as senior research associate in 1987 and then worked as a consultant for 20 years. He was a 50+ year member of ACS.

George E. Raynor, Jr., retired research chemist formerly with FMC, November 25, 2010 at 73. Following service in the US Army Chemical Corps he joined American Viscose in 1962 and later became director of R&D of the Avicel Division in Princeton. He then worked for FMC in new business development, retiring after 45 years.

Chester A. Bishof, retired chemist, April 6, 2011 at 82. He worked for Betz Laboratories in the field of corrosion inhibition. He was a 50+ year member of ACS.

Irving Kassman, April 9 2011 at 92. He was a 64-year member of ACS. No further details are available.

Julius E. Dohany, chemist, May 17, 2011 at 84. Born in Yugoslavia, he studied in Budapest but fled after the Hungarian revolution to Switzerland where he earned his doctorate. In 1963 he immigrated to the US and joined Pennwalt working on polyvinylidene fluoride. He authored a chapter on fluorine-containing polymers in the Kirk-Othmer Encyclopedia of Chemical Technology. Dohany retired after 25 years with Pennwalt as director of fluorochemicals R&D.

Henry F. Campbell, June 19, 2011 at 67. He was a pharmaceutical research chemist and then had a second career in the hospitality industry after earning a degree in restaurant management.

Maryanne R. Andrews, June 26, 2011 at 67. She held degrees in chemistry and food science.

John P. Barker, retired chemist, November 1, 2011 at 89. He was employed by General Aniline and Film, Nopco Chemical, and then Celanese Polymer Co. where he was section head of polyvinyl acetate emulsion applications. He then moved to M&T chemicals to work on resin applications with vinyl plastisols. In 1964 he joined American Olean Tile Co. as a development engineer, retiring in 1990. For 10 years he served as chairman of the North Penn Water Authority Board.

He was a 60-year member of ACS.

Rohm and Haas executive, December 4, 2011 at 90. After serving in the US Army Field Artillery with actions in New Guinea and the Philippines in WWII, he joined Rohm and Haas in 1949. In 1957 he moved to Paris to oversee the company's operations in Europe. He returned to the US in 1964 and was named vice president of production. He became president

and CEO in 1978 and held those positions until he retired in 1986.

Felley was active in community affairs as director of the Greater Philadelphia Chamber of Commerce, chairman of the Greater Philadelphia First Corporation, and chairman of the Philadelphia Horticultural Society.

Alan R. Bandy, R. S. Hanson professor of chemistry at Drexel University, December 24, 2011 at 71. He was author or co-author of numerous technical articles. His research interests included analytical chemistry of industrial gases, impurities in reagent gases, and more recently, atmospheric processes that cool the earth. In the 1980s he developed an experimental design to better understand the chemical and meteorological dynamics of the effects of chemical compounds in the atmosphere. For over 30 years he was leader or principal investigator in many programs, sponsored by NSF, NASA, ONR and NOAA, that used aircraft and ground sites to study the marine atmosphere.

Joseph S. Schmuckler, professor of chemistry and science education in the graduate school at Temple University, December 26, 2011. He taught high school chemistry at Haverford High

School for 15 years. He also worked part time for Sun Oil, Sadtler Research Laboratory, and taught part time at the University of Pennsylvania. Schmuckler joined the Temple University faculty in 1968 where he began teaching physical sciences and pedagogical courses of science education K-12. In the 1980s he edited a column in the ACS Journal of Chemical Education.

Joe Schmuckler authored and co-authored a number of books and articles, directed primarily to chemical education and the teaching of the sciences, and lectured widely in Europe, Korea and China. In 1980 he began directing a faculty-graduate student exchange program between Temple and academic institutions in the People's Republic of China. In 1988 he was awarded honorary professorship in chemical education at the Tianjin Normal University and the Shanghai Teachers University. In the 1980s and 90s he was a writing team leader for the ACS-NSF chemistry program "Chemistry in the Community" (CHEM COM). With his colleague David Majerich he developed a compendium of lecture-demonstrations from the late 1800s to 2003, for use in teaching science teachers K-12. He served as a science exhibit consultant to the Franklin Institute, the Academy of Natural Sciences, the Wagner Free Institute, the Philadelphia Zoo and the Please Touch Museum.

Joe was active for many years in the Philadelphia Section ACS serving on the education committee and the educational topical group, as a director, and as an alternate councilor. He received service awards from the Section in 1967 and 1993. He was named outstanding chemistry teacher by the Philadelphia Chamber of Commerce in 1963 and received the outstanding science teacher in the state of Pennsylvania award in 1963 and 1967. In 1968 he was recognized with awards in chemical education by the Manufacturing Chemists Association and the Chemical Industry Council. In 1969 he received the ACS James Bryant Conant award in high school chemistry teaching. At Temple he received the Christian Lindback award for distinguished teaching in 1976, and in 1986 was recognized for his work with minorities in science education by receiving the George Washington Carver award. In 1988 he was given a distinguished alumnus award from the University of Pennsylvania, and in 1989 earned the Great Teacher award of Temple University. Dr. Schmuckler donated his letters and working papers to Heritage the Chemical

Foundation. He was a 57-year member of ACS.

Note: News Atoms seeks to report on people in the field of chemistry in the greater Philadelphia area. If you have news about new hires, significant promotions, honors and awards, and those who have recently passed away, send it by email to philcatalyst@aol. com or by mail to the Philadelphia Section ACS.

Delaware Valley Science Fairs

Judging for the Delaware Valley Science Fairs will be starting in early March. Judges and mentors are always needed. Check the website www.dvsf.org for more information and to volunteer.

Additional Alternate Councilors for 2012

Robert J. Levis Russell Phifer

SURPRISE

our editor by calling and saying you appreciate the quality and content of our newsletter. Our editor works hard to maintain a publication of interest to our membership. Oh, and by the way you could also give credit to our advertisers who financially support us.

THE ACS PHILADELPHIA SECTION

LEAP DAY NETWORKING EVENT

Wednesday, February 29, 2012

6:00-8:00 PM

Iron Hill Brewery 1460 Bethlehem Pike (PA Route 309) North Wales, PA 19454

Come and network with your fellow ACS members as we continue to encourage our members to connect with one another in an informal and easy-going setting. You may be surprised at what you'll discover and how you can help others, too. Please join us!

Free to all ACS members from all regions

To register for this event, please visit http://acsphillycareerservices.eventbrite.com

Further information about the event can be obtained by calling Mrs. Libby Harper at the Section Office, (215) 382-1589, or by e-mail at PhilaACS@aol.com.

Iron Hill Brewery is located at The Shoppes at English Village on Bethlehem Pike (PA Route 309) and is readily accessible from the PA 309/FortWashington Expressway, the Pennsylvania Turnpike and US 202. Plenty of free parking is available in the shopping center parking lot.



CALL FOR NOMINATIONS

The 21st Annual Philadelphia Section, American Chemical Society AWARDS FOR EXCELLENCE IN PRECOLLEGE TEACHING

The Philadelphia Section of the American Chemical Society will honor two outstanding science teachers from the Delaware Valley with its Awards for Excellence in Pre-College Science Teaching. One award will be given to a full-time educator involved in teaching science in grades K-8. The second award will be given to a full-time educator at the secondary level (grades 9-12) who teaches chemistry. Nominees must teach in the Philadelphia Section's geographic area (Philadelphia, Montgomery, Delaware, Chester, Bucks, Burlington and Camden counties).

Nominations for 2012 will be accepted until Thursday, March 1, 2012. The nomination package should consist of a letter of nomination, the nominee's resume and at least two letters of recommendation. Other supporting information, such as students' comments, is welcome. However, the total nomination package should not exceed 30 pages. The nomination package may be emailed to PhilaACS@aol.com or a copy of the nomination materials may be mailed to:

Mr. John P. Northrop Chair, Awards Committee Philadelphia Section, ACS Department of Chemistry University of Pennsylvania Philadelphia, PA 19104-6323

For more information, please contact the Philadelphia Section, ACS office: phone (215) 382-1589 or email: PhilaACS@aol.com

Award recipients will be honored at our May 2012 Section meeting with a plaque and an honorarium.



CALL FOR NOMINATIONS



The 10th Annual Philadelphia Section, American Chemical Society AWARD FOR EXCELLENCE IN UNDERGRADUATE TEACHING IN CHEMICAL SCIENCES

The Philadelphia Section of the American Chemical Society will honor an outstanding undergraduate teacher from the Delaware Valley with its Award for Excellence in Undergraduate Teaching in Chemical Sciences. The award will be given to a full-time educator involved in teaching an undergraduate course in the chemical sciences (chemistry, biochemistry). Nominees must teach in an institution that is within the Philadelphia Section's geographic area (Philadelphia, Montgomery, Delaware, Chester, Bucks, Burlington and Camden counties).

Nominations for 2012 will be accepted until Thursday, March 1, 2012. The nomination should consist of a letter of nomination, the nominee's resume and at least two letters of recommendation. Other supporting information, such as students' comments, is welcome. However, the total nomination package should not exceed 30 pages. The nomination package may be emailed to PhilaACS@aol.com or the nomination package may be mailed to:

Mr. John P. Northrop Chair, Awards Committee Philadelphia Section, ACS Department of Chemistry University of Pennsylvania Philadelphia, PA 19104-6323

For more information, please contact the Philadelphia Section, ACS office: phone (215) 382-1589 or email: philaACS@aol.com

The award recipient will be honored at our May 2012 Section meeting with an honorarium and a plaque.





CHEMICAL CONSULTANTS NETWORK FEBRUARY 8, 2012 MEETING

Visit our website at www.chemconsultants.org

Date and Time: Wednesday, February 8th, at the Cynwyd Club, Bala Cynwyd, PA; Networking, 5:30 PM; Dinner, 6:30 PM; Talk and Business Session, 7:30 PM.

Effective PowerPoint Presentations

Tim Malloy

Abstract: Good software alone does not make for good presentation design. In fact, quite the opposite! There are strict rules to designing presentations you must follow, and innumerable pitfalls that will sap the strength of even superb speakers, ruining an otherwise well-delivered show. Much of the difficulty many people have in presenting well begins with incorrect presentation design. Learn how to design presentations that can make any presenter look good and sound good, even with minimal prep and practice time. Save your next audience from "Death by PowerPoint."

Biography: Tim Malloy has been providing presentation coaching for over 15 years, helping folks feel comfortable with themselves in front of others which is key to a successful delivery. His career in sales and training has put him in front of groups of 500 or more people at a time which provided the background that make him so effective. He holds MSFS, CLU and ChFC degrees from the American College as well as a BS and MBA degree in marketing from Saint Josephs University. His leisure time finds him on his sailboat on the Chesapeake Bay, with his three sons or playing a very average round of golf.

Location: The Cynwyd Club, 332 Trevor Lane, Bala Cynwyd, PA 19004. From I-76, drive S on City Line Ave. (US Rte. 1). Turn right on Conshohocken State Rd. (Rte. 23); stay in right lane. After second light watch for white left-turn arrows painted on street (about 0.14 mile). Do not follow Rte. 23 left at turn but instead go straight ahead onto Llandrillo Rd. (passing to the right of Valley Press printing). After one block bear left onto Trevor Lane at stop sign. Clubhouse and parking are on the left. Please park in lot if space is available; otherwise park on Trevor Lane. If lost, call the club at 610-667-4524, ext. 2. ____

Reservation: To make or cancel a dinner reservation, e-mail cCNReservations@aol.com or call the ACS office at 215-382-1589 (leave message on voicemail if necessary). Fee, including food and beverages (wine, beer & sodas), is \$25 by the deadline, Thursday, Feb 2nd, \$35 afterwards. Late reservations and walk-ins subject to availability. No-shows will be invoiced. Please advise of any special food requirements. There is no charge for talk only; registration is suggested using contact information above.



NOMINATIONS INVITED FOR THE 2012 PHILADELPHIA SECTION AMERICAN CHEMICAL SOCIETY AWARD

The Philadelphia Section invites its members and regional and topical groups to consider recommending candidate(s) for the Philadelphia Section Award.

This Award recognizes an individual, "who, by conspicuous scientific achievement through research, has made important contributions to man's knowledge and thereby aided the public appreciation of the profession." Any member of the American Chemical Society, Philadelphia Section, may be nominated for this award. Recent awardees include: Larry Sneddon (University of Pennsylvania), Eric Borguet (Temple University) and John J. Baldwin (Vitae Pharmaceuticals).

INSTRUCTIONS FOR SUBMITTING NOMINATION

- (1) The nominator should provide detailed biographical data of the nominee, showing educational and employment data, a list of publications and a record of other accomplishments pertinent to consideration for this award.
- (2) One or two seconding letters (at least one of which should be from a person in an organization other than that of the nominee) should be requested in support of the nomination.
- (3) Nominators and seconders should be identified with addresses and telephone numbers so that they can be contacted, if necessary, for additional information.
- (4) Unsuccessful nominees from previous years may be renominated. In fairness to the nominee, however, renominations must be accompanied by an updating of the nominee's biographical data and list of accomplishments in order to make the nomination competitive. Unsuccessful nominees who have been considered three years in a row should not be renominated for the fourth year in succession without prior consultation by the nominator with the chair of the Awards Committee.

Nomination forms are available from the Section Office. Contact the Administrative Secretary, Mrs. Libby Harper at:

Philadelphia Section, ACS
Department of Chemistry
University of Pennsylvania
Philadelphia, PA 19104-6323
(215) 382-1589; email PhilaACS@aol.com

The completed packet of nomination materials may be emailed to PhilaACS@aol.com or mailed by **March 29**, **2012** to Mr. John P. Northrop, Chair, Awards Committee, at the Uection Office address above.

635th BOARD OF DIRECTORS'
MEETING

Thursday, December 8, 2011
The Hunt Room, William Penn
Inn

Ambler, PA 19002

Present: J. Tierney, R. Ewing, K. Lysko, D. Cichowicz, M. Cichowicz, E. Davis, J.P. Northrop, C. Palmer, K. Thrush Shaginaw, J. Summers-Gates, W. Smith and T. Straub.

Also: L. Harper, C.J. Bruner, D. J. Wolf, A. Heldon, M. Tunick, S. Fleming and J. Falcone.

Excused: D. Cook, A. DeMasi, D. Hausner, K. Luther, M. Matthews, S. Miller, D. Thomas and V. Tortorelli

Meeting was called to order by Chairman J. Tierney at 5:35 PM.

Minutes for the October 2011 meeting were approved with amendments.

As L. Harper was not present when the meeting was called to order, the Chair moved to change the order of business and went straight to "Salary" on the Agenda.

COMMITTEE REPORTS:

Salary: The Salary Committee met and discussed, following the previously set precedent, and approved a bonus for L. Harper plus a raise in accordance with the Philadelphia Area Cost of Living Index (October 2011 – latest numbers).

Government Affairs: A. Heldon reported that the state government officially recog-

nized 2011 as the International Year of Chemistry. His discussion included the need for scientists to educate politicians about scientific facts and that scientists need to be involved in this arena. He suggested that we contact the Committee of Economic and Professional Affairs to give them our views. This office has been changed to the Office of Public Affairs. E. Davis commended A. Heldon for his active participation in the government affairs on behalf of the Section.

Tellers: T. Straub reported that the election results were approved by the board. However there are three 1-year alternate councilor positions to be filled. He recommended J. Nikelly, R. Gates and M. Forman be approved. A motion to approve the above alternate councilors was unanimously approved.

Women Chemists: Kathy Shaginaw reported from the national conference she attended. The next PAGESTM event is Saturday, April 21, 2012.

OFFICER'S REPORTS:

Chair: J. Tierney brought to the table the revised 2011 Bylaws for consideration. He met with D. Cichowicz, R. Ewing, and S. Fleming to review the changes from the 1996 version. J. Tierney went over numerous changes that he included after he sent the revised Bylaws to the board earlier to review and comment. He received comments from board members and committee members and incorporated the suggestions resulting in clarified committee descriptions and designations. He

realigned the bylaws to reflect the operation of the board and Section at this time, and the current National ACS requirements. He will send the newly revised Bylaws again to the Board for approval of the proposed changes. J.P. Northrop suggested having eight meetings of the Board per year and eliminating the specified dates for purposes of flexibility. Catalvst publication dates are changed because of its online format. A December issue may be included. A number of changes involved eliminating the specific communication method "by post" due to the advent of online technology and ever-changing media options.

Chair Elect: R. Ewing reported that the National ACS has asked us to participate in a pilot program for welcoming new members into our Section. The procedures have not been decided upon. A possible scenario would be to call each one and perhaps invite them to a board meeting dinner. He mentioned it would depend on the number of people joining in a year. L. Harper pointed out that the ACS National provided contact information but that it was often outdated.

J. P. Northrop will be attending the ACS National Leadership Training Conference as the 2012 chair-elect. J. Summers-Gates mentioned that the Awards Committee needs an increase in membership but she is waiting for people to reply to fill the list; J.P. Northrop will be chair. The MARM will be held at University of Maryland, Baltimore and she proposed as al-

ternate representative Eric Williamsen from Ursinus College. K. Lysko made the motion to approve him, R. Ewing seconded and the board approved him unanimously.

T. Straub reported that the section received a 25-year participation award for the Chemistry Olympiad. He asked if we wanted to continue participation. R. Ewing said that would be fine and mentioned it was in Washington, DC this year.

Secretary: K. Lysko gave J. Tierney an award letter and pin from the National ACS recognizing his valued service for 2011 as Chair of the Philadelphia Section of the American Chemical Society and the Board echoed its thanks as well.

Treasurer: D. Cichowicz presented the October Treasurer's report. He informed the board that the Section received a \$5000 grant from Merck Co. for the promotion of chemistry. It must be spent by November 1, 2012. D. Cichowicz has sent a letter of thanks to Merck for the award. He mentioned that we have been reimbursed by National ACS for the councilors' expenses. \$39,000 is left in the budget at this point, mostly due to the Communications Committee. A motion to approve the Treasurer's report was made by R. Ewing and seconded by J.P. Northrop. It was approved unanimously.

D. Cichowicz also presented the 2011 budget. He added the \$5000 from Merck Co. in line

4140. He included a \$1000 Speaker's Bureau request. The Science Café item still has \$300 for it. We will let the students at the U. of the Sciences know this as they were planning to do another Science Café. In addition, J. Falcone mentioned that our investment plan had gained 6% and that he would be recommending movement money into various categories. He also mentioned warehousing items listed in red in the budget except line item 2090 which we will retain. D. Hausner would like the Poster session to be considered as a separate category in the budget instead of in the Programs category, and to make sure it has money allocated to it. The budget will be approved in January.

A discussion followed about increasing the budget for the upcoming National meeting in Philadelphia in August 2012. W. Smith asked what money are we responsible to pay. L. Harper will check what we actually paid for the previous meeting in Philadelphia. L. Harper mentioned we paid for Catalyst announcements of the meeting and bobble-head pins. R. Ewing will do some calling to get an idea of the money that will need to be spent. R. Ewing asked that \$5000 be put in 2012 budget for the meeting expenses. J. Falcone said this would be fine and they will change the 2012 budget which will be approved in January.

OTHER BUSINESS:

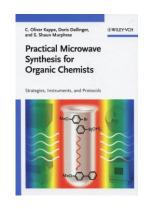
1. J.P. Northrop reported that Americorps has requested ACS help for the Penrose Elementary School on Martin Luther King Day, January 16, 2012 to present science demonstrations. It will take about 35-45 minutes for 30-40 students and their parents. He is planning to do it and J. Tierney said he would help. J. Summers-Gates mentioned that a science kit has experiments that would be appropriate. J. Tierney will also ask for student volunteers from the local universities. J.P. Northrop asked for an increase in the Speaker's Bureau budget for next year. He also applied for a \$1000 grant to the Career Services Committee and he received it.

- 2. L. Harper asked for approval to give the Penn building staff end of year gratuities including a slight raise for one long term person taking over a higher position. D. Cichowicz moved to approve \$210 for this; E. Davis seconded and the board approved the motion.
- 3. The Board expressed its thanks and gratitude to J. Tierney for doing a great job as Chair this year especially with his incredible revisions of the Bylaws. The Bylaw document will be circulated and approved by the Board and sent to National ACS for review at a later date.
- 4. J.P. Northrop moved to end the meeting and K. Lysko seconded the motion. Meeting was adjourned at 6:30 PM by Chairman, J. Tierney.

Respectfully submitted, Kathie Lysko, Secretary

BOOK REVIEW—Alan Warren

Practical Microwave Synthesis for Organic Chemists by C. Oliver Kappe, Doris Dallinger, and S. Shaun Murphree. 310 pages, 6 ³/₄ by 9 ¹/₂ inches, hardbound, Wiley-VCH Verlag, Weinheim, Germany, 2009. ISBN 978-3-527-32097-4, \$80 from John Wiley, 111 River Street, Hoboken, NJ 07030.



This book is intended as a "how to" for beginners and more experi-

enced microwave users. Following in the legacy of the Bunsen burner, oil bath, heating mantle and hot plate, microwave irradiation is the heating method of the 21st century. Microwave theory is reviewed. Equipment has evolved from the microwave oven to a series of instruments dedicated to chemical synthesis. Devices by Biotage, CEM, the Liberty Peptide Synthesizer and various multimode instruments are examined.

Microwave processing techniques are presented with the transition from solvent-free open-vessel reactions to the use of organic solvents with sealed vessels, scale-up, conventional vs microwave heating, and batch vs continuous flow synthesis. One chapter reviews practical issues including choice of solvent, time and temperature, microwave instrument software, reaction monitoring, and safety issues among others.

The final chapter presents 27 experimental protocols. Half of them use single-mode sealed vessels on a small reaction scale. Each protocol lists reagents, equipment and conditions. A few examples are Grignard reaction, Diels-Alder reaction, imine synthesis, aspirin synthesis, Fischer indole synthesis, and solid-phase peptide synthesis among many others.

Literature references are given at the end of each chapter. An index concludes the book. The authors present a good overview of the tools and methods for microwave-assisted organic synthesis (MOAS).

Philadelphia Section ACS Group on LinkedIn

As many members of ACS are already aware, the website LinkedIn (http://www.linkedin.com) is an excellent networking site dedicated to keeping working professionals in touch with one another. As a result, and in an effort to assist in any way that we can, the Philadelphia Section of the ACS has established a group open for all to join. Within this group, discussions can be facilitated as well as the opportunity for new jobs and internships to be posted.

If you already have a profile in LinkedIn, feel free to go to the Groups Section and search for "American Chemical Society - Philadelphia Section." Send a message to the group administrator to become a member. If you are not already on LinkedIn, we highly recommend that you join. Establishing an account is free and easy to set up. For additional information or assistance, please feel free to contact J.P. Northrop, Liaison Committee, at

john.northrop@anton-paar.com

To join, please click on the following link:

http://www.linkedin.com/groups?mostPopular=&gid=3366988

February Historical Events In Chemistry

by Leopold May

February 1, 1905	Seventy-five years ago, Emilio Segré with C. Perrier disovered technetium (Tc, 43). With D.R. Corson and K.R. MacKenzie he codiscovered astatine in 1940 and demonstrated the antiproton with others in 1955. He shared the Nobel Prize in Physics (1959) with Owen Chamberlain for their discovery of the antiproton.
February 7, 1905	Ulf von Euler, who was born on this date, shared the Nobel Prize in Medicine or Physiology in 1970 with J. Axelrod and B. Katz for discoveries concerning humoral transmitters in nerve terminals and the mechanism for their storage, release and inactivation.
February 9, 1871	Edward C. C. Baly, who showed that sugar and other organic compounds are formed from water, carbon dioxide, and ammonia under the influence of light, was born on this date.
February 9, 1950	Californium was discovered by ion exchange chromatography on this date at the University of California, Berkeley.
February 11, 1914	Alwin Mittasch and Christian Schneider filed an application resulting in US patent 1,201,850, describing catalytic production of methanol from carbon monoxide and hydrogen.
February 14, 1878	Father Julius Nieuland, who was known as the "Father of Acetylene Chemistry," was born on this date. He is a discoverer of neoprene and was the first PhD in Chemistry from Catholic University in 1905.
February 19, 1955	One atom of mendelevium (Md, 101) was produced by the bombardment of one billion atoms of ²⁵³ Es on this date.
February 20, 1937	Seventy-five years ago, Robert Huber, researcher on the three-dimensional structure of proteins involved in photosynthesis, was born on this date. In 1988, he shared the Nobel Prize in Chemistry with Johann Deisenhofer and Hartmut Michel for the determination of the three-dimensional structure of a photosynthetic reaction centre.
February 25.1898	Seventy-five years ago, William Thomas Astbury used x-ray diffraction patterns to study the structures of nucleic acids and wool in both the stretched and unstretched forms. He was born on this date.

February 27, 1901

Fifty years ago, Linus C. Pauling was awarded The Nobel Peace Prize. He was born on this date. He was a researcher on structure of molecules, valency, and resonance. He received the Nobel Prize in Chemistry in 1954 for his research into the nature of the chemical bond and its application to the elucidation of the structure of complex substances.

Additional historical events can be found at Dr. May's website:

http://faculty.cua_Hlt188259233_Hlt188259236_Hlt188259245_Hlt188259251.BM_1_BM_2_B M_3_BM_4_edu/may/Chemistrycalendar.htm.



<u>43rd MARM – "Chemistry on the Chesapeake"</u>

May 31 - June 2, 2012

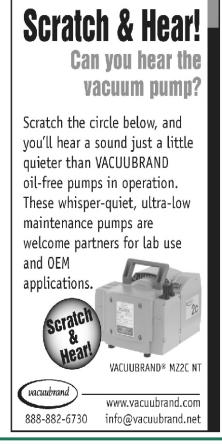
To be held at the *University of Maryland, Baltimore County*

Sponsored by the Maryland Section of the ACS

EDUCATION

DIRECTORY OF SERVICES





DIRECTORY OF SERVICES

PROMOTE YOUR PRODUCTS AND SERVICES • ADVERTISE IN THE CATALYST

The Catalyst readership is greater Philadelphia's largest source for chemical and biochemical buyers. The Catalyst reaches more than 5,400 readers each month. It has been estimated that these buyers annually purchase more than \$150,000,000 of:

- EQUIPMENT
- SUPPLIES
- CONSULTING SERVICES

Placing an advertisement in The Catalyst is the lowest cost method of reaching this select audience.

For further information and other options for promoting your company's products and services visit:

www.mboservices.net

tele our advertisers

Membership surveys show that you want more articles in our newsletter. If you tell our advertisers that you saw their ad here, they will provide more financial support and this will allow us to add more articles.

ELEMENTAL ANALYSIS

- ♦C,H,N,O,S,P
- ♦ Halogens
- ♦Ash ♦Metals ♦TOC ♦TOX
- ♦BTU ♦ICP ♦ICP/MS ♦IC

Custom Analysis ◆ Problem Solving

HUFFMAN

Laboratories, Inc Quality Analytical Services Since 1936

4630 Indiana Street Golden, CO 80403 Fon:303-278-4455 Fax: 303-278-7012

Chemistry@huffmanlabs.com www.huffmanlabs.com

RService 500MHz

Mass

*Elemental Analysis

NuMega Resonance Labs

numegalabs.com P- 858-793-6057

CAREER DEVELOPMENT

Being a part of one of our teams can help you develop organizational and meeting skills as well as help you to network with people from the largest area companies. Public Relations. such as sending out meeting notices and press releases, can help you to develop a network and help you get noticed!

All committees are looking for new members and several are looking for "take charge" chairs. Some, like the Teller's Committee, involve minimal work-one night per year and pizza provided. Others, like positions on Publications or Social Committees, involve one or two hours per month.

Committee details can be found at: http://www.membership.acs.org /p/philadelphia

or by calling Mrs. Libby Harper at the Philadelphia section office 215-382-1589.



Robertson Microlit Laboratories

Where speed and accuracy are elemental

Elemental CHN, S, X, Analysis (same day service) Metals by ICP-OES, ICP-MS, A/A FTIR, UV/VIS Spectroscopy Ion Chromatography

Bioavailability Polarimetry DSC, TGA, melting point KF Aquametry, Titrimetry

• 973.966.6668 • F 973.966.0136 1705 U.S. Highway 46 • Suite 1D • Ledgewood, NJ 07852 · email: results@robertson-microlit.com www.robertson-microlit.com

Rapid Results • Quality • Accuracy • Competitive Pricing



Micron Analytical Services

COMPLETE MATERIALS CHARACTERIZATION MORPHOLOGY CHEMISTRY STRUCTURE

SEM/EDXA • EPA/WDXA • XRD XRF • ESCA • AUGER • FTIR • DSC/TGA Registered with FDA • DEA **GMP/GLP Compliant**

3815 Lancaster Pike Wilmington DE. 19805 E-Mail micronanalytical@compuserve.com Voice 302-998-1184, Fax 302-998-1836 Web Page: www.micronanalytical.com

ADVERTISING INDEX

7 12 1 21 11 10 11 10 11 12 2		
ACS 30	, 40	
Drew University	39	
EMD Millipore	24	
Huffman Laboratories	40	
Mass-Vac, Inc.	24	
Micron Inc.	40	
NuMega Resonance Labs, Inc.	40	
Robertson Microlit Labs	40	
Vacuubrand		

Advertising: Vince Gale, MBO Services, P.O. Box 1150, Marshfield, MA 02050; phone: (781) 837-0424 email: vincegale@mboservices.net

Page 40 February 2012



Advanced MaterialsStories of Innovation

February 22, 2012, Philadelphia É Á 出 ÁJT

Material innovation has been essential to the evolution of technology throughout history, empowering humans to solve vexing societal problems. How are today's scientists taking on contemporary challenges?



Moderator
Ivan Amato
Author of Stuff: The Materials
the World Is Made Of

Free and open to the public. To register or learn more, visit **chemheritage.org/materials**.

With experts from Arkema, Inc. • The Dow Chemical Company • DuPont Eastman Chemical Company • ExxonMobil Chemical Company • Styron



PHILADELPHIA SECTION, ACS 2012 CALENDAR OF EVENTS

Date	Event	Locations
Wednesday, February 8	Chemical Consultants Network: Tim Malloy: Effective	The Cynwyd Club
	PowerPoint Presentations	Bala Cynwyd, PA
		www.chemconsult.org
Thursday, February 9	Joseph Priestley Society: Craig Rogerson, Chemtura	Chemical Heritage Foundation
	Corporation: Focused Innovation: The New Chemtura	Philadelphia, PA
		www.chemheritage.org
Monday, February 13	Delaware Valley Mass Spectrometry Discussion Group:	Villanova University
	Charles N. McEwen, University of Sciences: New Ionization	Villanova, PA
	Approaches in Mass Spectrometry and How They Might Work	http://science.widener.edu/svb/msdg/
February 17-25	AIChE: Engineers Week in the Delaware Valley	http://www.dvewc.org/events.php
Tuesday, February 21	Chromatography Forum of the Delaware Valley: Mark	D'ignazio's Towne House
	Schure, Dow What is Separation Orthogonality and How Do	Media, PA
	You Measure it? Designing and Optimizing Separations	http://www.cfdv.org/
Wednesday, February 22	Chemical Heritage Foundation and Discover Magazine: Ivan	Chemical Heritage Foundation
	Amato, Moderator: Advanced Materials: Stories of Innovation	Philadelphia, PA
		www.chemheritage.org
Thursday, February 23	Student Poster Session	Temple University, Philadelphia
		http://philadelphia.sites.acs.org
Thursday, February 23	Philadelphia Organic Chemists Club: Daniel Paone, Merck:	Chemistry Building
	Discovery of Telcagepant (MK-0974): The First Orally	University of Pennsylvania
	Bioavailable Calcitonin Gene-Related Peptide (CGRP)	Philadelphia, PA
	Receptor Antagonist for Migraine Treatment	http://www.pocclub.org/
Thursday, February 29	Career Services Committee: Leap Day Networking Event	Iron Hill Brewery
		North Wales, PA
		http://acsphillycareerservices.eventbrite.com/
Thursday, March 15	The Edgar Fahs Smith Lecture: William H. Miller,	University of Pennsylvania
	University of California, Berkeley	Philadelphia, PA
		http://philadelphia.sites.acs.org
Wednesday April 11	Chromatography Forum of the Delaware Valley (CFDV):	Holiday Inn
	Two One-day Short Courses: HPLC Troubleshooting and	Fort Washington, PA
	Supercritical Fluid Chromatography	http://www.CFDV.org
Thursday, April 12	Chromatography Forum of the Delaware Valley: Spring	Holiday Inn
	Symposium	Fort Washington, PA
		http://www.CFDV.org
Thursday, April 19	Undergraduate Awards	McCall's Meeting and Conference Center Upper Darby, PA
April 20-29	Philadelphia Science Festival	http://www.philasciencefestival.org/
Saturday, April 21	PAGES™ Program (Philadelphia Area Girls Enjoying	Chestnut Hill College, Philadelphia, PA
	Science) for Sixth Grade Girls	http://www.pagesprogram.org./
Saturday, April 21	Philadelphia Science Carnival: Science on the Parkway	http://www.philasciencefestival.org/
Thursday, May 17	Teaching Awards	TBA
Thursday, June 21	Fifty-Year Luncheon	TBA

ACS Spring National Meeting March 25-29, 2012, San Diego, CA

43rd MARM, Chemistry on the Chesapeake, May 31 – June 2, 2012, University of Maryland, Baltimore ACS Fall National Meeting, August 19-23, 2012, Philadelphia, PA