

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

November 2010 Volume 95, No. 9



November Speaker

Dr. Susan Solomon

HIGHLIGHTS Chair's Column 159 Speaker's Abstract and Biography 161 **Electronic Elections** 162 PA Government and Legislative Affairs 163 **Upcoming ACS** Webinars 174-175 2010-2011 Calendar 180

ADVANCE NOTICE

JANUARY MEETING

Thursday, January 20, 2011 Iron Hill Brewery Tour West Chester, PA

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



CALL FOR NOMINATIONS

The 20th Annual Philadelphia Section, American Chemical Society AWARDS FOR EXCELLENCE IN PRE-COLLEGE 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 2011 will be accepted until Tuesday, February 1, 2011. 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 eight copies of the nomination materials may be mailed to:

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 2011 Section meeting with a certificate and an honorarium.

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

January Advance Notice
Call for Pre-College Teacher Nominations 156
Call of Undergraduate Teacher Nominations 158
Chair's Column
November Meeting
Speaker's Abstract and Biography 161
News Atoms
Notice of Electronic Elections 2010 162
PA Government and Legislative Affairs 163
Herb Bassow Memorial Chem. Demonstrations . 166
Nov/Dec Chemical Consultants Network 167-168
June 2010 Board Meeting
Philadelphia Section on LinkedIn
Nov/Dec Historical Events in Chemistry 172
Upcoming ACS Webinars
Young Chemists Committee Social 176
Directory of Services
Photos from the September Meeting at Yards 178
2010-2011 Calendar

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 19

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

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



CALL FOR NOMINATIONS



The 9th 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 2011 will be accepted until Tuesday, February 1, 2011. 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 eight copies of the nomination materials may be mailed to:

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 2011 Section meeting with an honorarium and a plaque.

From The Chair



Judith Summers-Gates
That's all she wrote.... Gee,
that cliché really applies in
this case given that this will
be my final Chair's column
in the Catalyst....

When I said that I wanted to be the "busiest Chair ever" in my campaign statement, that actually meant that a lot of other people were going to have to lend their support and talents to getting things accomplished for the Section this year. Thankfully, people stepped up and volunteered to make that happen. At the head of the line, as always, is our invaluable Mrs. Harper! Libby, I can't say "THANK YOU" enough because there was no way that I could have managed without you... Special thanks are also due to Doug Hausner who has been there when and wherever he was needed and who has been the "go-to" leader for our Younger Chemists. Kudos are also sent out to Kathy Shaginaw who continues to make things happen for our Women Chemists and future women chemists with her programs and outreach activities. John Northrop contributed his services for our

industry members and established our LinkedIn group that will serve as a useful tool for members who are facing employment challenges. Sheldon Miller has put much time and effort into launching our fledgling online job listing for students and it will continue to grow with time as we get more experience. We have some very dedicated Councilors who ably represent the Section at National meetings to see that our interests are being served. ACS meetings are becoming more of a marathon each year and travel is not for the timid in these post- 9/11 times.

It has been a year with a lot of challenges and a lot of changes, to say the least! Switching to an electronic newsletter has resulted in significant savings for the Section and our webpage is getting better every day under the care of a new Webmaster-Way to Go, Pubs Committee Members!! We are about to conduct our first electronic election that will hopefully have increased participation and also save us monies in the long run-Good Work, Tellers Committee!! Our Section has reactivated its financial planning/investment committee and they are prepared to make careful and timely decisions about the handling of our monies now that we have resumed control of the funds from National. I

extend my thanks to those on the Investment committee and Dave Cichowicz who has been there to handle the money transition without a hitch. The Board of Directors has been spending more time reviewing our annual budget and refining our budget process to ensure that we are meeting our responsibilities under the bylaws. We will continue to monitor and course correct through these tough economic times to safeguard our funds. Directors: The Section and I are grateful for your service.

MANY THANKS to our Past Chairs (especially the one I live with!) who have helped me during the year—your perspective and institutional memory are priceless resources! And, as we get ready to turn the page and launch the International Year of Chemistry in 2011, I ask you to give your support and energies to our Chair-Elect, John Tierney. He is already doing yeoman's duty on behalf of the Section by working to update our bylaws and you will be asked to vote on them in coming months. BRAVO, John! You have some great things planned for us next year and you can count on my help....

Wishing everyone in the Section good health and prosperity in the future.... JSG (Me).



The 2010 Ullyot Public Affairs Lecture

Sponsored by
The Philadelphia and Delaware Sections, American Chemical Society
The Department of Chemistry, University of Pennsylvania
The University of the Sciences in Philadelphia
The Chemical Heritage Foundation

Thursday, November 18, 2010

A Tale for Our Times: Something for Everyone about Climate Change and the Reasons for Climate Gridlock

Dr. Susan Solomon National Oceanic and Atmospheric Administration

6:00 PM

Ullyot Meeting Hall, Chemical Heritage Foundation 315 Chestnut Street, Philadelphia

The lecture is free to the public but registration is required. Reception from 7:00-8:00 PM (free with registration)

For lecture and reception reservations register online at www.chemheritage.org or contact Nancy Vonada at the Chemical Heritage Foundation (215) 873-8226 or nvonada@chemheritage.org on or before November 11. The museum at CHF will be open during the reception.

Parking: Reduced rate parking (\$6) with validation stamp from the Chemical Heritage Foundation is based on availability at The Bourse Garage on 4th Street between Chestnut and Market Streets (next to the Ritz Theater). Parking is also available at the garages under Independence Mall between 5th and 6th Streets and at 2nd and Walnut. **Public Transit:** SEPTA suburban trains stop at Market East, a 15-minute walk to the Chemical Heritage Foundation. The Market-Frankford subway has stations on Market Street at both 2nd and 5th Streets.

The Board of Directors will meet at 4:00 PM in the 6th Floor Conference Room at the Chemical Heritage Foundation.

SPEAKER'S ABSTRACT AND BIOGRAPHY

Dr. Susan Solomon

Senior Scientist, Chemistry and Climate Processes

National Oceanic and Atmospheric Administration

A Tale for Our Times: Something for Everyone about Climate Change and the Reasons for Climate Gridlock

Abstract: This talk aims to provide scientific information that can be useful for everyone who wants to better understand the dual challenges of the science of climate change, and why international agreement on climate change policy has proven particularly difficult. Manmade greenhouse gases are slowly forcing the climate system to change. Carbon dioxide emissions from fossil fuel burning are the dominant factor causing current climate changes now and for the next century, and some of today's emissions will still be in the atmosphere in a thousand years or more. This leads to a very long 'commitment' to future climate change, a topic that is attracting a great deal of

scientific interest. On the human side, global increases of greenhouse gases arise from a mix of different countries. both developed and developing, with different current emissions, infrastructure capabilities and past commitments that are among the factors influencing policy discussions. Comparisons will be briefly drawn between the success of policy on ozone depletion (Montreal Protocol) versus the apparent gridlock on climate change, and the lessons that may thereby be learned.

Biography: Susan Solomon is widely recognized as a leader in the field of atmospheric science. As a research scientist at the National Oceanic and Atmospheric Administration, she pioneered the theory explaining why the ozone hole occurs in Antarctica. She also obtained some of the first chemical measurements that helped to establish chlorofluorocarbons as its cause.

In 2007, as co-chair of the climate-science group of the Intergovernmental Panel on

Climate Change, Solomon provided key leadership on a comprehensive scientific assessment of climate change for policy makers and the public. In 2008 *Time* magazine deemed her one of the 100 most influential people in the world. Antarctica's Solomon Glacier was named in honor of her work.

Solomon is the recipient of numerous awards, including the National Medal of Science, the Grande Medaille of the French Academy of Sciences, Japan's Blue Planet Prize, and the Volvo Environment Prize. She is a member of the US National Academy of Sciences and the American Philosophical Society and a foreign associate of the French Academy of Sciences, the Royal Society, the Royal Society of Chemistry, and the European Academy of Sciences.

She received a PhD in chemistry from the University of California at Berkeley.

SUBPBISE

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.

NEWS ATOMS

Jeffrey W. Bode, associate professor in the chemistry department of the University of Pennsylvania, will receive the ACS Elias J. Corey award for outstanding original contribution in organic synthesis by a young investigator in 2011. The award is sponsored by the Pfizer Endowment Fund. James Shorter, assistant professor of biochemistry and biophysics in Penn's school of medicine, was awarded a **Grand Challenges Exploration** Grant from the Bill & Melinda Gates Foundation.

Deaths

Suzanne Elizabeth Trifiletti, research chemist with ICI Americas at 66. She worked on surface active agents for ICI's corporate research department. Trifiletti was a 46-year member of ACS.

Kevin Moriarty, medicinal chemist, April 15th at 54. He

worked on drug discovery in oncology and inflammation. He was employed by Ansaris Pharmaceuticals, 3-D Pharmaceuticals, Pharmacopeia, and Rhone-Poulenc Rorer.

Robert Feigin, applications chemist, April 23rd at 92. His work was largely in the fields of chelating agents, surfactants, textile science, lubricants, and household specialties. He worked at Mobil Oil, Geigy Industrial Chemicals, Globe Compound Co., and Tanatex Chemical. Feigin retired in 1985 after five years as technical director of Leatex Chemical. He then tutored high school math and science as a volunteer.

Howard C. Smith, research chemist, August 27th at 49. He was employed by Rohm & Haas, CB Research & Development, and the Sandoz Research Institute. The last four years he was an associate in-

vestigator for DuPont at the Experimental Station, working on high-efficiency batteries.

William J. Hopkins, retired research chemist, September 1st at 83. He was employed by the US Department of Agriculture for over 30 years and authored five patents and numerous technical papers in the field of leather and hides. He held a leadership position with the American Institute of Chemists.

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.

ELECTRONIC ELECTIONS – 2010

You should have received a postcard with instructions on how to participate in this year's election for Philadelphia Section leaders. The statements and biographies are posted on the website: http://philadelphia.sites.acs.org/elections.htm.

Voting is at http://www.surveymonkey.com/s/philadelphiasection2010 until 11:45 PM November 13, 2010. If you are unable to access a computer, you may vote by paper ballot if you request one by November 3, 2010

PENNSYLVANIA GOVERNMENT AND LEGISLATIVE AFFAIRS COMMITTEE

Science education is in crisis in the United States. Students in the United States place in the "mediocre middle" when compared to students in other developed nations. Not a high enough percentage of our graduating high school seniors go on to major in college in science and engineering to fill the needs of the job market.

Science and Mathmatics Education in Pennsylvania in 2010

The Pennsylvania Government and Legislative Affairs Committee of the American Chemical Society believes that:

Science, Technology, Engineering and Mathematics (STEM) subjects must be core subjects at all educational levels because they are essential elements of a well-rounded education.

All students have an equal right to an education, including a STEM curriculum, which will fully prepare them to be good citizens.

Pennsylvania's economic and technological strength will only be built on a diverse and highly skilled workforce of scientists, engineers, technicians and teachers that is drawn from every part of our Commonwealth.

Almost 50 years after the launch of Sputnik—and more than two decades after *A Nation At Risk*—American students are a long way from ranking first in mathematics and science.

According to the National Center for Education Statistics, about one-third of the fourth-graders and one-fifth of eighth-graders cannot perform basic mathematical computations, and US high school seniors recently tested below the international average for 21 countries in mathematics and science.¹ As a result, fewer American students than ever are graduating from college with math and science degrees.

US teenagers lag behind most developed countries in math and science literacy: In the 2003 OECD ranking of the mathematics and science performance of 15-year-olds in the 30 OECD countries, the United States ranked 18th and 24th, respectively, scoring below the OECD average for each. The rankings are similarly poor when the list is narrowed to the countries of the G8. To quote the 2005 OECD report, Education at a Glance: "With its relatively high expenditure and its relatively low student achievements at the school level, the United States education system is clearly inefficient."²

¹ National Center for Education Statistics

² Learning for Tomorrow's World – First Results from PISA 2003, Organization for Economic Cooperation and Development Program for International Student Assessment, Tables 2.5c and 6.6 http://www.pisa.oecd.org/document/55/0,2340,en 32252351 32236173 33917303 1 1 1 1,00.html.

Countries outperforming the US in science and math, on average, spend 10 percent less of their respective GDPs on primary and secondary education than we do.³ Obviously, there are other important educational elements that go beyond funding, such as the fact that nearly 70 percent of US middle school students are taught math by teachers with neither a major nor certification in this critical subject. Internationally, the average is 29 percent.⁴

The Educational Testing Service warns -

Over the next 25 years, as better-educated workers leave the workforce they will be replaced by workers who have lower levels of education and skill.

During the same period, nearly half of the projected job growth will be concentrated in occupations associated with higher education and skill levels.

Tens of millions of our students and adults will be less able to qualify for higher-paying jobs. They will be competing not only with each other and millions of newly arrived immigrants, but also with equally (or better) skilled workers in lower- wage economies around the world.

STEM education in Pennsylvania, as it is currently practiced, is insufficient. Students are not prepared for entry into the work force and not prepared for post-secondary education, including college.

Initiatives like *Science in Motion* and *Science: Its Elementary* have shown that outcomes can be improved. We need to be innovative and build on our successes to develop better teaching programs and better professional development and training for teachers.

Outcomes at all levels improve when STEM is introduced early. STEM education should begin when a student's curiosity about the world is just awakening. The *Science: Its Elementary* Initiative introduces elementary students to science but is in only a small percentage of Pennsylvania's schools.

Legislation to incorporate *Science in Motion* into the School Code is pending in the Senate⁵ and House⁶. Through resource sharing SIM brings equipment and experiments to students who would otherwise do with out. There are many more school districts that could use SIM than SIM's current budget will afford.

Pending legislation⁷ will create the *Pennsylvania MESA Initiative*. MESA is a giant step toward making good STEM education an integral part of every school's curriculum and equally accessible to every student in Pennsylvania. MESA is one of the country's most innovative and successful STEM programs. Part of MESA's mission is to work with underrepresented minorities including female students so that these students achieve their full STEM potential.

³ OECD, 2000.

⁴ US Department of Education, Qualifications of the Public School Teacher Workforce: Prevalence of Out-of-field Teaching 1987-88 to 1999-00. Statistical Analysis Report, Table 1.

⁵ SB 766

⁶ HB 713

⁷ SB 1375, HB 2460

Improving STEM education now and ensuring that good STEM education is equally available to all students must be a priority if we are to ensure that the Commonwealth's students will have the STEM skills and knowledge necessary to successfully compete for the jobs of this new century. Adequate resources and facilities for students and training and professional development for teachers are essential to promoting science learning.

The STEM subjects are most effectively taught by teachers with undergraduate training in the STEM fields they are teaching. But, all too often STEM teachers did not major in a STEM field and have little or no undergraduate training in the course they are teaching. There is a critical need for many more STEM teachers with an undergraduate degree in a STEM discipline but there is little incentive for the best students to go into teaching.

There is great disparity in science, engineering and technology resources among schools in the Commonwealth. Good scientific equipment and experimental materials are essential to inquiry based learning. A school in one district with no equipment may be a few miles from a well equipped school in another. Because science is most effectively taught as a hands-on experience, every student needs access to laboratory and science equipment.

There is no index of the science and laboratory equipment in the Commonwealth's schools. Likewise, no one knows how many of the instructors teaching STEM courses are truly qualified and have undergraduate degrees in the STEM subject they teach. Test scores reveal the consequences of inadequate resources but give us no measure of the true extent of our schools' deficiencies. Pennsylvania, like other states, can continue to drift, rudderless, into the future or we can take stock of where we are and chart a course to universal STEM literacy. If Pennsylvania follows our present course of inaction we will relinquish our leadership in scientific research and technical development. Or, we can face unpleasant truths and make the choices, easy and hard, necessary to insure a decent future for our children and ourselves.

—Alan R. Heldon, Chair, Pennsylvania Government and Legislative Affairs Committee, ACS

Keep Receiving the Latest Issue of the Catalyst

Be sure that your email address
with the National Office is current
Email them at service@acs.org
You will need your membership number to submit changes
or

Log onto the ACS web site, www.acs.org, and click on "Edit my Profile" under the welcome line



The Philadelphia Section of the American Chemical Society PRESENTS

The Herb Bassow Memorial

Chemistry Demonstrations For

Children of All Ages

Saturday, December 11

See "Genie in the Bottle," the "Circle of Fire," "Hero's Fountain," "Lemonade," "Baggie Chemistry," "Instant Hot Lather," "Balloon-on-a-Stick," The "Incredible Shrinking Balloons," the "Sacrifice of the Gummy Bears," and much, much more.

Make Slime, Gak, Balloon-on-a-Stick, Float Bubbles, Do Baggie Chemistry, pH Art, Milk Art

Demonstrations 10-11 AM in Room 111

Hands-on Activities 11 AM-12 PM in Rooms 307 and 308

Loyola Hall, Immaculata University 1145 King Road, Immaculata, PA 19345

Directions: http://www.immaculata.edu/MapandDirections

Parking: Lots B and C

Free! Everyone Welcome!





CHEMICAL CONSULTANTS NETWORK

NOVEMBER 11, 2010 MEETING

JOINT MEETING WITH THE JOSEPH PRIESTLEY SOCIETY AT THE CHEMICAL HERITAGE FOUNDATION

Visit our web page at www.chemconsultants.org
Visit the CHF web page at www.chemheritage.org

Date & Time: Thursday, November 11, 2010. The meeting will begin at 10:30 AM with a Chemical Consultants Network - Joseph Priestley Society Joint Networking Reception, followed by lunch at 12:15 PM. Speaker Ryan Dirkx will take the podium at 1:00 PM. The meeting will adjourn at 2:00 PM.

Ryan Dirkx

Vice President, Research and Development, Arkema, Inc.

Location: The Chemical Heritage Foundation, 315 Chestnut Street, Philadelphia, PA 19106. Please note this is not CCN's normal location.

Reservation: There is a \$25 charge for the lunch and meeting. Registration Is Required: Log onto www.chemheritage.org and click "Events & Activities," or send an e-mail to eventregistrations@chemheritage.org, or call 215-873-8208; or contact Bob Kenworthy, Affiliate Consultant: 215-873-8292; Fax: 215-629-5392; bkenworthy@chemheritage.org. Reduced-rate parking is available at The Bourse garage on 4th Street between Market and Chestnut, and is based on availability. Pick up a parking voucher at the CHF registration desk.

October 2010 Page 167





CHEMICAL CONSULTANTS NETWORK DECEMBER 8, 2010 MEETING

Visit our website at www.chemconsultants.org

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

Strategies for Making Every Marketing Call a Home Run

Carol Wenom, Whitaker Technical Service

Abstract: Do you represent yourself if the best way possible when you meet and greet your prospective clients? Attend this meeting and learn more about how to polish your professional image and improve your odds of success in the competitive consulting marketplace.

Biography: Carol Wenom is vice president and a partner in the Whitaker Companies, an Engineering/Technical recruiting and search company. Ms. Wenom has been recognized with numerous honors and awards at local, state and national levels including membership in The Pinnacle Society - the nation's premier consortium of top recruiters. Ms. Wenom currently serves on the Executive Board of the National Association of Personnel Services (NAPS) and has served as its Chairman of the Board from 2008-2010. She also currently serves as a Founder and Director for the Rocky Mountain Association of Recruiters. Carol received her Bachelor's degree from Syracuse University in 1973 with a dual major in English and Communications.

Location: The Cynwyd Club, 332 Trevor Lane, Bala Cynwyd, PA 19004. MAP

<u>Reservation</u>: To make or cancel a dinner reservation, e-mail <u>CCNReservations@aol.com</u> or call the Philadelphia Local Section 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, <u>Thursday, December 2</u>, \$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.

622nd BOARD OF DIRECTORS'
MEETING

Monday, June 14, 2010
McCall Meeting and Conference
Center

Highland Park, PA 19083

This is the edited version of the minutes. A full copy of the minutes can be obtained from the Section Office.

Present: D. Cichowicz, E. Davis, R. Gates, M. Matthews, T. Straub, J. Summers-Gates, K. Thrush Shaginaw, J. Tierney, V. Tortorelli. K. Lysko.

Present on the phone: R. Ewing.

Also: L. Harper.

Excused: M. Cichowicz, D. Cook, A. DeMasi, K. Yoder Luther, S. Miller, M. Prushan, W. Smith, and D. Thomas.

The meeting was called to order by Chairman J. Summers-Gates at 2:30 PM.

There were no minutes from the May meeting to approve.

COMMITTEE REPORTS:

Nominations: A full slate of candidates is not available at this time. There are 11 of 12 Coun-

cilor candidates and 5 of 12 Director candidates. Candidates for Chair-Elect are Bill Smith and Rick Ewing, and for Treasurer are Dave Cichowicz and Marge Matthews. The drop-dead date for a slate is July 1st. The slate will be approved by an email vote.

Education Committee: Richard Wang, a student from Central Bucks South High School, has been chosen for the International Chemistry Olympiad study camp at the Air Force Academy in Colorado. National would like copies of any coverage of this (perhaps his local paper or the *Inquirer* neighborhood section).

199 outstanding achievement in chemistry certificates were sent to 189 high schools this spring.

A location is needed for the December demonstration program, preferably suburban. Immaculata University was suggested as a possibility.

We need extension plaques for the Scholastic Achievement Award for schools which have filled theirs. The price until July 31st is \$241.30 each. V. Tortorelli requested a standard order of two per year be put in the budget and that three be ordered now.

WCC: A CD of photos from March's *Chemistry's Past and Your Future* program is available. A Local Section Innovative Project Grant has been applied for.

OFFICER REPORTS:

Chairman (J.Summers-Gates):

It is hoped that the September meeting will be at Yards Brewery off Delaware Avenue in Philadelphia; negotiations are incomplete. Directions in *the Catalyst* should include public transportation. Their specialty is green brewing.

International Year of Chemistry (IYC) 2011: The theme is water. Our plans are to be at the National office by June 18.

Water test kits will be available from Washington.

Science Cafés are urged to be held on Tuesday, February 1st. We will plan to host one. Sharon Haynie may have information.

National wants multiple activities at each section.

The theme of PAGESTM in April could focus on IYC and perhaps a science café can be also run at the

DON'T FORGET TO PAY YOUR LOCAL SECTION DUES!
ONLY \$10 SUPPORTS ALL OF YOUR LOCAL PHILDELPHIA SECTION
ACTIVITIES!

college while the girls are involved in PAGESTM.

Chair Elect (J. Tierney): Attempting to set a schedule of events for 2011. The meetings will be on the third Thursday of the month. The January meeting is planned for the Iron Hill Brewery in West Chester. The annual poster session will be moved to February at Temple U. with Doug Hausner the liaison.

There has been an attempt to fix parts of the bylaws – a group needs to meet to move this forward. There was an extended discussion about ballots, bylaws, and mailing lists (see below).

Secretary (M. Prushan): no report.

Treasurer (D. Cichowicz): There has been no reimbursement for Councilor travel costs to the spring national meeting yet. Councilors will be reimbursed only for original receipts. A report was presented. There was an error in the Priestley bill that has been corrected with a credit to the Section. A motion was made and seconded (Tortorelli, Davis) to accept the June Treasurer's Report; motion approved unanimously.

Doug Hausner submitted a receipt for parking (\$15) for the May Drexel U. event where he manned an information table for the Section. Although YCC has no money allocated in the bud-

get, the cost of this will be put against the YCC line item.

OTHER BUSINESS:

Publications Committee: M. Matthews proposed that the Section hire a new web master, J. Tierney's recommendation of Matt Bodek at \$75 per hour, although he is more expensive. We will get a contract with a renewal date and a probationary period. We may have to draw up the contract ourselves. M. Matthews will proceed and the board will approve the contract if acceptable.

There was discussion of an electronic election, perhaps using SurveyMonkey. A special list of eligible voters is needed from National. (Ask National why voters on the special list are eligible to vote or not.) Does the list include email addresses? ACS member number can be used as voter identification.

The Tellers Committee will find SurveyMonkey or another service. Candidates' biographies and statements will be on the Section website. A postcard will be sent to members on the eligible voter list. T. Straub will write the postcard as to where and how to vote, send it by September 1 with votes to be cast by October 1st.

Graduate School Forum and ACS Nano Grant: The date is October 25th at Villanova Uni-

versity. Six people are needed to run the forum and apply for an ACS nano grant.

Letters are to be sent to graduate schools inviting their participation.

Will A. DeMasi write the grant proposal for National? The deadline is June 30th. J. Summers-Gates will ask A. DeMasi.

Someone is needed to contact the undergraduates and reach out to other sections.

A. Addison and G. Arbuckle-Keil were suggested as possible helpers. K. Lysko, V. Tortorelli, and J. Tierney offered assistance. Merck used to sponsor this event; they should be approached again.

ACS 2009 Annual Report: Chair Summers-Gates received feedback on the annual report. The comments from National were very positive. The only suggestion is to do more long-range planning. Chair Summers-Gates will follow-up with Sharon Haynie. National also hopes to fix the SOLAR program used for this report.

There being no other business, the meeting was adjourned by Chair Summers-Gates at 4:00 PM.

Respectfully submitted,

Kathy Thrush Shaginaw on behalf of Michael Prushan

Secretary

Philadelphia Section ACS Group on LinkedIn

As many members of ACS are already aware, the website LinkedIn (http://www.linked-in.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

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.





Historical Events in Chemistry by Leopold May The Catholic University of America Washington, DC

- November 3, 1921 American Association of Textile Chemists and Colorists was founded on this date.
- November 7, 1867 Marja S. Curie (later Marie), who was born on this date, discovered radium with her husband, Pierre Curie, 1898 and polonium in 1898. She shared the Nobel Prize in Physics in 1903 with Pierre Curie in recognition of the extraordinary services they rendered. In 1911, she was awarded the Nobel Prize in Chemistry in recognition of her services to the advancement of chemistry by the discovery of the elements radium and polonium.
- November 15, 1953 Stanley L. Miller published a paper "A production of amino acids under possible primitive Earth conditions" in *Science*, **1953**, *117*, 528-529 describing an experiment in which he added together methane, ammonia, water, and hydrogen and subjected the mixture to a high-frequency spark for a week, which produced milligram quantities of glycine, alanine, and other amino acids.
- November 21, 1824 Hieronymus T. Richter who was born on this date, co-discovered indium with Ferdinand Reich in 1863. Because Reich was colorblind, he had Richter, the school metallurgical chemist, do the spectroscopic examination. Richter placed some of the material on a loop of platinum wire and heated it with a Bunsen burner. Richter observed a brilliant indigo line, which did not correspond to any known element. Because of this characteristic indigo blue emission spectral line, the new element was called Indium.
- November 23, 1837 One hundred years ago in 1910, Johannes D. van der Waals was awarded the Nobel Prize in Physics for his work on the equation of state for gases and liquids. He formulated deviations from the ideal gas law (Van der Waals' Equation) and was a researcher on intermolecular attraction (Van der Waals' Forces), electrolytic dissociation, and capillarity. He was born on this date.

- November 30, 1948 Chlorotetracycline, a broad-spectrum antibiotic, was isolated by B. M. Duggar, American Cyanamid Corporation, on this date.
- December 1, 1743 Martin H. Klaproth, who discovered cerium with J. Jacob Berzelius and William Hisinger, was born on this date. He also discovered zirconium in 1789, uranium from pitchblende in 1789, and chromium that had been discovered previously by N. L. Vauquelin in 1797.
- December 6, 1835 One hundred and seventy-five years ago, Rudolf Fittig was born on this date. He synthesized organic compounds, e.g., lactones, with B. C. G. Tollens; synthesized toluene; discovered diphenyl, phenanthrene, 1872, and coumarone, 1883.
- December 7, 1810 Two hundred years ago, Theodor Schwann was born. He named and investigated pepsin, 1836, coined the word metabolism; discovered the striated muscle of the upper esophagus and the myelin sheath of peripheral axons, called Schwann cells; and was the founder of modern histology.
- December 13, 1935 Seventy-five years ago on this date, F. Victor Grignard died. He developed the magnesium reagent used in organic chemistry and was awarded the Nobel Prize in 1912 for the discovery of the so-called Grignard reagent, which in recent years has greatly advanced the progress of organic chemistry.
- December 16, 1929 Bruce N. Ames developed the Ames Test, an indicator of carcinogenicity of chemicals that measures the rate of mutation by a chemical in bacteria. He was born on this date.
- December 17, 1908 Fifty years ago, Willard F. Libby was awarded the Nobel Prize in Chemistry for his method to use ¹⁴C for age determination in archaeology, geology, geophysics, and other branches of science. He was born on this date.
- December 25, 1761 In 1791, Rev. William Gregor discovered titanium. He also analyzed minerals and was born on this date.

Additional historical events can be found at Dr. May's website, http://faculty.cua.edu/may/Chemistrycalendar.htm

ACS WebinarsTM CLICK * WATCH * LEARN * DISCUSS Learn more and register at www.acswebinars.org



ACS Virtual Career Fair

Interview and network – without travel costs or hassles! FREE Registration! www.acs.org/vcf
November 2-3, 2010



Lead Yourself and Your Team through Mergers, Acquisitions, and Restructuring

Layoffs. Restructuring. Outsourcing. Right sizing. Sound familiar? Learn how to make smart choices in your career during the transition!

John Ferguson, Vice President of Change Management/Mergers & Acquisitions at PRITCHETT. November 11, 2010



November 18, 2010

How Chemical Policy Reform Can Spur Green Chemistry Learn about the latest Green Chemistry policy developments and how they may affect chemical professionals, chemical industries, and the future of green chemistry!

Richard Denison, PhD, Senior Scientist at Environmental Defense Fund.

Connect with subject matter experts and global thought leaders in chemical sciences, management, and business on relevant professional issues every Thursday from 2-3 PM ET. After a short presentation, the remainder of the hour belongs to you for live Q&A!



$ACS\ Webinars^{\rm TM}$ CLICK * WATCH * LEARN * DISCUSS Learn more and register at www.acswebinars.org



Venture Capital Outlook in 2011 – Crystal ball, smoke screen, and the reality

Join an expert panel to learn the future of venture capital in 2011! *David Porter, Apposite Capital*.

December 2, 2010



Chemicals & the Economy Year End Updates – Impact and Outlook for Executives and Scientists

Learn how understanding the economy and chemical industry trends can help you better plan for your career and business!

Paul Hodges, International eChem.

December 16, 2010

Connect with subject matter experts and global thought leaders in chemical sciences, management, and business on relevant professional issues every Thursday from 2-3 PM ET. After a short presentation, the remainder of the hour belongs to you for live Q&A!





Philadelphia Young Chemists Committee Monthly Social

at the

Philadelphia Field House

1150 Filbert Street
Philadelphia, PA 19107
215-629-1520

www.fieldhousephilly.com

2nd Thursday of each month from 5:30 PM -7:00 PM Entertainment and drink specials available

Come out to socialize and network with other Philadelphia area chemists at the Younger Chemists Committee (YCC) monthly social. Each month we will be meeting at the Field House in Center City. There will be food and drink specials as well as access to the game room (when available). The Field House is conveniently located within the PA Convention Center and public transportation is just a few steps away. The Broad Street Line is directly below the Field House and the Market East Station is in walking distance. The Field House is also accessible from Filbert Street, across from the Reading Terminal Market.

Hope to see you there!

The Philadelphia Section of the YCC

www.PhilaYCC.org

For parking information, including discounted lot information visit:

www.fieldhousephilly.com/parking.php

DIRECTORY OF SERVICES

SEARCHING FOR THAT SPECIAL JOB?

There are many companies and organizations searching for chemical and biochemical personnel to fill important jobs in their organizations.

- Companies for laboratory and management positions
- Universities & Colleges for teaching positions and laboratory personnel
- Hospitals for technical and research personnel

There are several web sites that may help you search for these open positions.

- www.mboservices.net
- http://membership.acs.org/p/ philadelphia/jobs/

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

Service 500MHz

*Mass

*Elemental Analysis

NuMega Resonance Labs

numegalabs.com P-858-793-6057

WANT MORE ARTICLES

When you tell our advertisers that you saw their ads here they have more confidence in our newsletter's viability as an advertising medium. They advertise more. This supports our many activities.

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.

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

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.

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

Voice 302-998-1184, Fax 302-998-1836 Web Page: www.micronanalytical.com

E-Mail micronanalytical@compuserve.com



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, melting point KF Aquametry, Titrimetry

P.O. Box 927 • 29 Samson Ave. • Madison, NJ 07940 • 973.966.6668 • F 973.966.0136 www.robertson-microlit.com • email: results@robertson-microlit.com

Rapid Results • Quality • Accuracy • Competitive Pricing

ADVERTISING INDEX

ACS 161, 177 EMD Chemicals Inc. 178 **Huffman Laboratories** 177 MASS VAC, Inc. 171 Micron Inc. 177 NuMega Resonance Labs, Inc. 177 Robertson Microlit Labs 177 Villanova University 179

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

DIRECTORY OF SERVICES







Section members at the September meeting at Yards Brewery received a tour of the facilities. Photos courtesy of Anthony Addison.

Villanova University's Master's Program in CHEMISTRY

Villanova offers a Master of Science degree in Chemistry for both part- and full-time students. The program is ideal for working professionals with complex schedules who wish to advance their careers with a graduate degree.

Spring 2011 evening courses include:

- Organometallics
- Nanomaterials
- Organic Structure Analysis
- Advanced Analytical Chemistry
- Advanced Biochemistry

Graduate courses at Villanova can be taken for professional development or as credit towards a master's degree in chemistry.

Villanova has been ranked by U.S. NEWS & WORLD REPORT as the Best Regional University in the North for nearly two decades!

Apply now for spring 2011!

For more information please contact:

Dr. Eduard Casillas, Program Director 610.519.5236 eduard.casillas@villanova.edu www.gradchem.villanova.edu





PHILADELPHIA SECTION, ACS

2010-2011 CALENDAR OF EVENTS

Date	Event	Locations	
Saturday, November 6	Women Chemists Committee: P.A.G.E.S. TM	Chestnut Hill College	
	(Philadelphia Area Girls Enjoying Science)	Philadelphia, PA	
Monday, November 8	Delaware Valley Mass Spectrometry Discussion	Villanova University	
	Group: Dr. Gary Kruppa, Bruker Daltonics:	Villanova, PA	
	Emerging Clinical Applications of Mass	http://science.widener.edu/svb/msdg/	
	Spectrometry for Microbial Identification and		
	Tissue Imaging		
Wednesday, November 10	Madeleine Joullié Lecture: Mohammad	University of Pennsylvania	
	Movasaghi, MIT	Philadelphia, PA	
Thursday, November 11	Chemical Consultants Network + Joseph	Chemical Heritage Foundation	
	Priestley Society: Ryan Dirkx, Arkema	www.chemconsultants.org	
Thursday, November 18	Ullyot Public Affairs Lecture: Susan	Chemical Heritage Foundation	
	Solomon, NOAA: A Tale for our Times:	Philadelphia, PA	
	Something for Everyone About Climate Change	http://Philadelphia.sites.acs.org	
	and the Reasons for Climate Gridlock	or www.chemheritage.org	
Thursday, December 2	Chromatography Forum: Tivadar Farkas,	D'ignazio's Town House	
	Phenomenex: Current Challenges in Achieving	Media, PA	
	State-of-the-Art HPLC Performance	http://www.cfdv.org	
Wednesday, December 8	Chemical Consultants Network: Carol Wenom,	The Cynwyd Club	
	Whitaker Technical Service: Strategies for	Bala Cynwyd, PA	
	Making Every Marketing Call a Home Run	www.chemconsultants.org	
Thursday, December 9	Philadelphia Organic Chemists Club:	University of Pennsylvania	
	Christopher Welch, Merck & Co.: The Use Of	Philadelphia, PA	
	Platform Chemical Technologies For Accessing	http://www.pocclub.org/	
	Pharmaceutical Enantiopurity At Merck		
Saturday, December 11	Herb Bassow Memorial Chemical	Immaculata University	
	Demonstrations and Hands-on Activities	Immaculata, PA	
2011			
Thursday, January 20	Iron Hill Brewing Co.	West Chester, PA	
Thursday, February 17	Student Poster Session	Temple University	
		Philadelphia, PA	
Thursday, March 17	Edgar Fahs Smith Memorial Lecture: Ada	University of Pennsylvania	
	Yonath, Weizmann Institute of Science	Philadelphia, PA	
Thursday, April 24	Scholastic Achievement Awards	McCall Golf and Country Club	
		Upper Darby, PA	
Thursday, May 19	Section Teaching Awards	TBA	
Thursday, June 16	Honoring our 50-Year Members	TBA	