

Chesapeake Chemist

*Maryland Section
American Chemical
Society*



~ Dr. Carole A. Bewley ~

Section Chief, Natural Products Chemistry Section, Laboratory of Bioorganic Chemistry,
National Institutes of Health
(<http://www.nih.gov/>)

“Natural Products from the Marine Environment-- Diversity, Origins and their Use as Anti-
Infectives”

Wednesday, December 9, 2009 – 6pm – Berkshire Marriott Hotel & Conference Center, Towson, MD

Message from the Chair

Dear Fellow Members,

We are headed into the new year for our Section, and as we end 2009 I would like to thank all of you who contributed to the great projects made available this year. A very special thanks to our Executive Committee for the many hours of dedication, especially as we form the core Committee for the upcoming 2012 Mid Atlantic Regional Meeting. Your local Section is truly blessed with a great group of professionals serving you totally on a volunteer basis. Please remember them in your thoughts and prayers.

The ACS, at the local level, survives due to the dedication of time and talents of volunteers. Our volunteers are among the world's more educated and gifted people. Scientists and educators who contribute to the advancement of science ... sometimes at great costs to their personal and professional states of life, and even sometimes in spite of even their health.

Many of us have been involved in ACS for many decades, seeing the National organization grow from the small tens-of-thousands to now over 160,000. We hope that the younger professionals coming into our ranks will continue to give of their time and talents to keep this great ... and oldest ... scientific organization growing and contributing to society. We also hope that businesses, houses of higher education, and the government agencies will see the benefits to both the business welfare and employee's professional growth to encourage active participation in the ACS.

Remember, we also have many projects in which you can become involved. Projects for younger children, high school students, college students, scouting, Younger Chemist, Women Chemist, National divisions in any field of Chemistry, National Chemistry Week, Public Relations, National legislation lobbying, and many more activities. Make this coming year an opportunity to become an active part of this great organization.

If you wish to have a better organization and improve the organization, do you not have some obligation to serve? With over 2,000 members, I see a bright future with all of us contributing even a small amount of time and to encourage our businesses to support this oldest, and highly professional association.

On behalf of the staff and members of the Maryland Section of the ACS, I thank you for your membership and wish each of you a very blessed and Happy and Holy Holiday Season. Happy Chanukah and Merry Christmas.

Sincerely,
Walter A. Roy, Jr.
2009 Chair, Maryland Section

December Meeting

Wednesday, December 9, 2009 - 6-9pm - Berkshire Hotel & Conference Center, 10 W. Burke Avenue
Towson, Maryland 21204

6:00-6:45pm	Registration / Networking & appetizers
6:45-8pm	Award & Speaker Presentation - 'Natural Products from the Marine Environment-- Diversity, Origins and their Use as Anti-Infectives'
8-9pm	Holiday Party/Social

Price: Members - \$20; Retired Members and Guests - \$15; Students - \$10
Contact: For questions, contact Dr. Shirish Shah - sshah@towson.edu - (410) 704-2720
Where: Berkshire Hotel & Conference Center, 10 W. Burke Avenue, Towson, Maryland 21204

~ Directions to meeting, Speaker Information & Abstract on Page 4 ~

ACS Maryland Section - Officers and Committee Chairs

Section Officers:

Chair 2009 - Walter Roy, McCormick & Company, Inc, (410) 771-7886; walter_roy@mccormick.com
Vice-chair (chair 2010) - Alvin Kennedy, Morgan State University, (443) 885-3115; alvin.kennedy@morgan.edu
Chair-elect (chair 2011) - Mike Zapf, McCormick & Company, Inc, (410) 771-7471 ; Mike_Zapf@mccormick.com

Secretary - Sara Narayan, Stevenson University - (443) 334-2326; snarayan@stevenson.edu

Treasurer - Liina Ladon, Towson University, Chemistry Department, 8000 York Road, Smith Hall Rm. 538, Towson, MD 21252, (410) 704-3054, lladon@towson.edu

Councilors:

Merle I. Eiss
McCormick & Co, Inc
meiss32@aol.com

Stephanie J. Watson
NIST
stephanie.watson@nist.gov

David Roswell
Loyola College
droswell@lovol.edu

Charles Rowell
retired
cfrowell35@verizon.net

Alternate Councilors: Shirish Shah (Towson), Paul Smith (UMBC), Joseph Topping (Towson)

Members at Large: Lance Baird (JHU-APL), Maurice Iwunze (Morgan), Angela Wells Winstead (Morgan), Takashi Tsukamoto (JHMI)

Committee Chairs:

Student Awards (April) - George Farrant - (410) 455-4120; gfarrant@yahoo.com

MD ACS Student Grants - Travel & Student Affiliate Awards (February/March) - Paul Smith, pjsmith@umbc.com
or Louise Hellwig, Louise.Hellwig@morgan.edu

Remsen Award (May/June) - Lev Ryzhkov; lryzhkov@towson.edu

Braude Award (October) - Charles Rowell

Maryland Chemist Award (December) - Angela Sherman - (410) 532-5713; ASherman@ndm.edu

Maryland Service Award - Shree Iyengar - (410) 777-2266; ssiyengar@aacc.edu

Programs:

Archives - Ernie Silversmith - (443) 885-3214
Career Planning - Linh Cheong - (410) 762-1159
Earth Day - Paul Smith, Lance Baird
(Lance.Baird@jhuapl.edu)
Environmental Issues - Shirish Shah - (410) 704-2720
sshah@towson.edu & Lance Baird
Finance Committee - Jan Kolakowski - (410) 436-2755
jan.kolakowski@us.army.mil
Government Relations - Shirish Shah & Robert von Tersch - robert.l.vontersch@us.army.mil
Long Range Planning - Shekar Munavalli
MARM - Shirish Shah & Paul Smith
Membership - Merle Eiss
Minority Affairs - Alfred Amah - (410) 602-7164;
aamah@coppin.edu
Public Relations - Shirish Shah & Walter Roy,
Walter_Roy@mccormick.com
Retired Chemists - Alvin Bober, abober@verizon.net,
410-581-5321
Student Affiliate Liaison - Louise Hellwig
Women Chemists/Younger Chemists - Sara Narayan -
443-334-2326 / Amanda (Miller) Idstein -
aredmiller@cs.com

Educational Programs:

Chemistry Olympiad/Chem-a-Thon -
Shirish Shah & Mike Zapf,
Mike_Zapf@mccormick.com
Continuing Education/High School Education -
Shirish Shah / Ellen Pisciotta
Kids & Chemistry/Chemistry-in-the-Library -
Sue Procell, 410-436-4604,
suzanne.procell@us.army.mil / Sandy Young
National Chemistry Week (NCW) -
Shirish Shah & Sandy Young

Maryland Section on the Web: <http://mdchem.org>

Webmaster - Sandy Young (mdchem@mdchem.org)

Chesapeake Chemist Editor:

(mdchem@mdchem.org)

**Have a job to post?, a good news chemistry story? -
contact the Maryland Executive Committee through
e-mail via: (mdchem@mdchem.org).**

Directions to Burkshire Marriott Hotel & Conference Center:

10 W. Burke Avenue
Towson, Maryland 21204

- From the Baltimore beltway, I-695, follow to the York Road exit (south)
- You will proceed through the traffic circle to continue on York Road until Burke Avenue – turn right
- The Berkshire is immediately on the right side as you turn onto Burke Ave. (18-story building). Turn right into the Berkshire’s parking entrance. Turn the corner and make an immediate right into the P2 parking garage.
- (You may have to press the intercom button for admittance to the elevators.)
- Proceed to the front desk to get a parking pass required for your car.
- Look for signs posted in the lobby and elevators to locate the dining room.

Directions & map are also available on the MD ACS website (<http://mdchem.org/meetings/burkshire.html>).

Abstract: “Natural Products from the Marine Environment-- Diversity, Origins and their Use as Anti-Infectives”

The genetically encoded small molecules and proteins that chemists refer to as natural products have provided the foundation for pharmaceuticals and in turn improvements in human health and treatments. Historically these molecules have come from soil-derived bacteria and fungi, to yield antibiotics such as penicillin and rifamycin, and terrestrial plants, to yield anti-cancer drugs such as paclitaxel (Taxol™). Marine environments represent another vast source of new natural products whose structures differ from those found in terrestrial environments. The speaker will relate highlights from her career as a marine natural products and bioorganic chemist that include chemical, biological and biophysical studies of marine natural products that have relevance to infectious diseases.

About the speaker



Dr. Carole A. Bewley
Section Chief, Natural Products Chemistry Section
Laboratory of Bioorganic Chemistry, NIDDK
National Institutes of Health
Building 8, Room 1A-02
Bethesda, MD 20892-0820

Speaker Bio:

Carole Bewley is a Senior Investigator at the National Institutes of Health, and Chief of the Natural Products Chemistry Section in the Laboratory of Bioorganic Chemistry, NIDDK. She received her Ph.D. in Chemistry from Scripps Institution of Oceanography, UCSD, and was a Cancer Research Institute Postdoctoral Fellow in protein NMR. Her current research program focuses on bioactive marine natural products, protein-carbohydrate recognition and HIV entry. Dr. Bewley has received the National Institutes of Health Director’s Award, is an editorial board member of *Current Medicinal Chemistry–Anti-Infectives*, and is a chartered member of Synthetic and Biological Chemistry (CSR/NIH) and Molecular Libraries (NIH Roadmap) study sections. She has been an active member of the American Chemical Society for 15 years, serves as an expert reviewer for multiple ACS journals, and is a member of the Long Range Planning Committee, Division of MedChem for the ACS.

2009 Maryland Chemist of the Year Award Citation:

In acknowledgement and appreciation of her outstanding research accomplishments in natural products chemistry and in recognition of her significant contributions to marine natural products identifications, and their use as anti-infectives, and other medicinal agents.

Awarded this 9th day of December 2009 with the admiration and appreciation of her fellow professionals.

Maryland Chemist Award

The Maryland Chemist Award was established in 1962 to recognize and to honor, each year, a member of the Maryland Section for outstanding achievement in the fields of chemistry. The achievement, as originally stated, may be in pure or applied chemistry, chemical engineering, or chemical education. Some recipients have distinguished themselves in management. The section's Bylaw VIII (applicable section quoted below) establishes the rules of selection of recipients of the Maryland Chemist Award. Recommendations of the Awards Committee must be approved by the section officers.

"Recipients of the Maryland Chemist Award must have been members of the section for a minimum of five years and have made outstanding contributions to chemistry as defined in the Constitution of the Society (chemistry is defined in broad terms). The work on which the award is based should have been performed in Maryland."

A list of previous awardees can be found on the Maryland ACS website at: (<http://mdchem.org/mdchem.html>).

Nominations for the 2010 Maryland Chemist Award

The Maryland Chemist Award Committee is accepting nominations for the 2010 Maryland Chemist Award. Supportive documentation should include copies of the resume of the nominee and his/her list of publications. A short statement describing the outstanding contributions of the nominee to scientific research, education, industry, technology, etc., will be helpful and appreciated. Please send nominations to Dr. Angela Sherman. Nominations are **PREFERRED** to be sent in to the committee via e-mail: ASherman@ndm.edu. If you can not send your nomination via e-mail, please contact Dr. Sherman via e-mail or phone (410) 532-5713 to arrange for alternate delivery method. The deadline for submission of nominations is April 15, 2010.

MD ACS 2010 Election Results

Thanks to all the members for a successful electronic election. The election closed at midnight on November 13. We received 261 ballots (out of 2096 members). All following candidates were elected:

Chair-Elect	Takashi Tsukamoto
Secretary	Lance Baird
Treasurer	Holly Cymet

*Liina Ladon won the election, but cannot continue the position and so the second candidate will assume the post.
Members-At-Large: Suzanne Procell, Rose Pesce-Rodriguez, Angela Wells Winstead, Maurice Iwunze

Positions within the Section that are elected **every year** are:

- Chair-Elect
- Treasurer
- Secretary
- Members-At-Large (up to 5)

The Chair-Elect term is a 3 *year* term: the candidate is Chair-Elect for one year, and then moves to Vice-Chair for one year, followed by Chair for last year. The Chair progression makes it easier for the candidate to learn what is necessary to run the Section. A Councilor term lasts for 3 *years* and our Section has 4 *Councilor positions*. The next 2 Councilor positions will end in 2010 and so new positions for Councilor will be elected in 2010 for 2011.

ACS Maryland Section Survey

At the end of every year, we publish a section survey for the Maryland Section of the ACS. This survey helps us (the Maryland ACS Executive Committee) to gauge member satisfaction with various section efforts and plan for next year's activities. It is helpful when section members take a few minutes to respond and give positive feedback or constructive criticism.

You can submit your answers on-line through Survey Monkey by entering the following link into your internet browser: (http://www.surveymonkey.com/s.aspx?sm=IWPTyAhVXmajvtHVK3Lv3g_3d_3d).

If you are reading a printed copy of this newsletter and do not have access to the internet, please snail mail your survey responses to Maryland ACS, re: Annual Section Survey, 2904 White Avenue, Baltimore, MD 21214 by December 31, 2009. **Thank you for taking the time to give your input!!** We hope to publish the results of the survey in the February Chesapeake Chemist.

Survey Contents:

1. Please enter your ACS member number here. (While we will not keep these, we will use this to ensure that only Maryland ACS members submit the survey and that the survey is only submitted once.)

2. Did you participate in any Maryland ACS event this calendar year?

If 'yes', please just write 'yes' and continue with the survey & answer the other questions below.

If 'no', please let us know why. Did some of the monthly meeting topics sound interesting but you are just busy with work/family? Is there a problem with meeting locations? Or for any other reason... please let us know in this available space! There is no other portion of the survey that you need to fill out.

Survey questions found here for those members who participated in Maryland Section ACS events.

Please take a few minutes to look over and evaluate the activities that you took part in this year, marking each with a number from 1 (Best) to 5 (Worst) or N/A if you did not take part in the activity.

Activities & Communication:

Regular and Award Dinner Meetings:

- ____ Student Awards (April)
- ____ Remsen Award (May)
- ____ Braude Award (October)
- ____ MD Chemist Award (December)

- ____ Reception & Presentation (alternative dinner meeting - February and November)

Outreach Events:

- ____ Chemistry-in-the-Library
- ____ Kids and Chemistry
- ____ National Chemistry Week

General Events:

- ____ Earth Day Celebration

Section Communication:

- ____ Chesapeake Chemist
- ____ MD ACS website (<http://mdchem.org>)

High School & College/University Events:

- ____ Chemistry Olympics
- ____ Chemagination

- ____ SAACS (Chemistry Clubs at Colleges and Universities)
- ____ SAACS Bowling event
- ____ SAACS Social at Dave N' Busters
- ____ Grants available to undergraduates for ACS travel, outreach, etc

Other or Comments: _____

Student Affiliate (SA) Corner

Loyola University – Dr. Elizabeth Dahl

For National Chemistry Week, the Loyola College Chemistry Club made brightly colored and sweetly scented soap to sell to faculty and students. This activity has become one of our most popular and is only one of many that we do. Additional Chemistry Week activities included a bake sale, a periodic table of baked goods, and slime making in the student center. As the holidays approach, the club is planning on selling more soap to use as gifts for the holidays.



The Chemistry Club invited Lauren Woodward-Hoffman, a graduate student at Johns Hopkins, to give a seminar on Mole Day as part of the Science Seminar Series. The students learned a lot from her seminar “An Introduction to Medicinal Chemistry.” After the seminar the Club members and the Chemistry Department held a Meet and Greet so that the students could get to know each other and the faculty.

Morgan State University – Dr. Louise Hellwig

Morgan State University Chemistry Club hosted a visit by two classes (see photo of one class) of about 28 students each from Hamilton Middle School to Morgan State University’s Chemistry Department. Each class got a tour of a two research labs, one belonging to Dr. Richard Williams and one where Chem Club president, Charlee McLean, described her research. The middle schoolers enjoyed a wonderful Chemistry Demo show by Dr. Ernest Silversmith (photo) and attended about 15 minutes of Dr. Alvin Kennedy’s General Chemistry lecture, before winding down at the Student Center. Their teacher, Ms. Jodie Kavanaugh, felt the students got a good taste of what chemistry is like in college.



In line with our goal of becoming a Green chapter, Chem Club heard a presentation by Jennifer Young of ACS about “Green Chemistry”. One of our graduate student members, Abel Biebele, attended the local section meeting featuring Mr. John Quinn Nov. 18, along with several professors from our Chemistry Department.

University of Maryland – Baltimore County – Dr. Tara Carpenter

The UMBC student affiliates were featured on the National website (<http://undergrad.acs.org/spotlight.vp.html>) for their activities this Fall. Read more about it on the National Website!!

National Meeting Travel Grants Available for Student Affiliates

Active Student Affiliates chapters with students presenting posters at the Spring 2009 national meeting can apply for a \$300 travel grant. Applications are due by January 15, 2010. Information is available on the [National ACS website](#).

Applications are Being Accepted for the 2010 Undergraduate Student Travel Awards

Students can apply to receive up to \$500 for travel and expenses to attend a National ACS Meeting or up to \$300 to attend a Regional ACS Meeting. Open to undergraduate student affiliates of the ACS who are enrolled full time in a college or university in the Maryland Section.

The application should include:

- The meeting you plan to attend along with location, dates
- An estimated budget (cost for travel, registration, lodging, and meals)
- A 250 word essay describing your motivation for attending the meeting (if you plan to present, include a brief description of the work to be presented)
- A letter of support from a faculty member in your department

Review of applications will begin January 15th but will continue through the year until all funds are utilized. Applications should be mailed to: Dr. Paul Smith, UMBC, Department of Chemistry and Biochemistry, 1000 Hilltop Circle, Baltimore, MD, 21250 or sent via e-mail: pjsmith@umbc.com.

Student Awards - April 2010

For many years the section has hosted a student awards meeting where hard-working students who are excelling in their chemistry studies are recognized. The section will be soliciting one nominee from each college/university within the Maryland Section boundaries to honor at the Student Awards Meeting in April 2010 (tentatively scheduled for April 18th, 2010). If you are curious as to the Maryland Section boundaries, which do NOT encompass the entire state of Maryland, please refer to the map at (<http://www.mdchem.org/section.html>). The Maryland ACS Points-of-Contact for this event are Dr. Crystal Yau (cyau@ccbcmd.edu) and Dr. George Farrant (gfarrant@yahoo.com). Nominations (full student name, school attending, and digital photo) will be due to Drs. Yau and Farrant via e-mail no later than Friday, February 1, 2010.

International research for undergraduates

ACS is accepting applications for the [International Research Experience for Undergraduates](#) exchange program. U.S. students can pursue summer research in France, Italy, Germany, and the United Kingdom. European students can conduct summer research at selected REU sites in the United States. The deadline to apply is January 31, 2009.

Apply now for ACS Scholars support

The American Chemical Society Scholars Program is still accepting applications for the 2009-2010 academic year.

Complete information and the online application form can be found on the [ACS Scholars program web site](#).

Interested applicants can also inquire by phone at (800) 227-5558, ext. 6250 (toll-free), or 1-202-872-6250, or by e-mail at scholars@acs.org. Application Period: November 1, 2009 – March 1, 2010. Applications and supporting documents are due by March 1, 2010.



K-12 Educational Outreach

We know that people have limited time. But taking the time to mentor others, as all of us were once mentored by someone, is a truly fulfilling experience. If you have any questions or are thinking about helping out with a future event, please feel free to contact us at (mdchem@mdchem.org).

Things are often pretty slow during the winter season. We have a few Educational Outreach events coming up for National Engineering Week, which is February 14-20, 2010.

Wednesday, January 20, 2010 - 2:30-4pm APG Youth Center, Harford County National Engineering Week Activities

Wednesday, February 3, 2010 - 6-8pm Pleasant Plains Elementary, Baltimore County Science Night

Chemists Celebrate Earth Day 2010: "Plants - The Green Machines!"

The ACS Office of Community Activities (OCA) would like to remind you that **CHEMISTS CELEBRATE EARTH DAY (CCED) will be celebrated on April 22!** The CCED theme for 2010 is "Plants - The Green Machines!" Hopefully you are planning to celebrate on campus anytime during the week of April 22nd. The 2010 CCED edition of *Celebrating Chemistry* will be available online through the CCED home page in late January. It will contain hands-on activities and articles geared for students in grades 4-6. The CCED Order Forms will also be primed and ready to receive your orders in early January. Email updates regarding the order form and other relevant CCED information will be on the way soon. So get a head start on planning your activities for Chemists Celebrate Earth Day 2010! Stay tuned to www.acs.org/earthday for updates and the latest information as CCED is soon approaching!

Saturday, April 10, 2010 - 11am-12pm East Columbia Library, Howard County Earth Day events

Saturday, April 10, 2010 - 2-3pm Central Library, Howard County Earth Day events

Friday, April 16, 2010 - 2:30-4pm APG Youth Center, Harford County Earth Day events

Saturday, April 17, 2010 - 11am-12pm Perryville Public Library, Cecil County Earth Day events

Saturday, April 24, 2010 - 11am-12pm Savage Library, Howard County Earth Day events

Saturday, April 24, 2010 - 2-3pm Elkridge Library, Howard County Earth Day events

Friday, May 14, 2010 - 11am-12pm Glenwood Library, Howard County Earth Day events

Friday, May 14, 2010 - 2-3pm Miller Library, Howard County Earth Day events

Earth Day Community Event

The Maryland ACS will once again be participating in the Herring Run Watershed - Project Clean Stream Clean-Up Event on **Saturday, April 3rd, 2009**. Gloves, bags, and rakes are provided to assist in the clean-up. There is also an area available for breaks and snacks/drinks are provided. Please mark your calendars and plan to join us for this important event!! For questions about this event, please contact Maryland ACS POCs: Paul Smith, UMBC, (pjsmith@umbc.edu) or Lance Baird, JHU-APL, (Lance.Baird@jhuapl.edu).

Plants & People Sundays at the Rawlings Conservatory

The Howard Peters Rawlings Conservatory & Botanic Gardens in Druid Hill Park runs various programs on Sundays. The 2nd (Exploration Station), 3rd (Story Hour), and 4th (Ask a Scientist) Sundays are programs directed towards K-12 students and often include hands-on science activities.

Where: Howard Peters Rawlings Conservatory & Botanic Gardens, 3100 Swan Drive, Baltimore, MD 21217 (by the zoo)

When: Almost every Sunday

For more information, visit their website or call (410) 396-0008 for details on the upcoming Sunday program!! (http://www.baltimorecity.gov/government/recnparks/special_facilities.php#Howard)

Other Educational Outreach Programs

With recognition of the decreasing numbers of trained STEM professionals that are US citizens, the general decline of hands-on activities in Science, Technology, Engineering, and watering-down of Mathematics in many K-12 programs, and many people's general lack of understanding of STEM topics in society, the Department of Defense has coordinated many of their programs into single websites that contain a wide-range of educational outreach programs, internships, and scholarship opportunities available for K-12, undergraduate, graduate students and beyond.

Information on the wide-variety of programs through the **US Army Educational Outreach Program (AEOP)** can be found on their website (<http://www.usaeop.com>).

Information on the wide-variety of programs through the **National Defense Education Program (NDEP)** can be found on their website (<http://www.ndep.us>).

Many of the programs/opportunities that are listed on these two sites are available to students for participation in Maryland locations.

RE-SEED (*Retirees Enhancing Science Education through Experiments and Demonstrations*)

Since 1991, the RE-SEED program at Northeastern University has trained retired scientists and engineers and others with backgrounds in science or mathematics to provide classroom assistance to K-12 science teachers. There are over eighty volunteers assisting science teachers in the greater Boston area. After taking part in a comprehensive training program, participants typically assist in school classrooms one day a week for most of the academic year.

The RE-SEED Program is part of the Center for STEM (science, technology, engineering and mathematics) Education at Northeastern University. Other programs focus on science teacher training and student assistance in science learning.

Northeastern University has assisted in the formation of more than fourteen regional volunteer centers where over 600 RE-SEED volunteers have worked in schools in about 100 communities throughout the country, offering approximately 600,000 hours of their time. You can learn more about RE-SEED by visiting their website, www.reseed.neu.edu or by calling Paul Conroy at 617-373-8388 or by email to pa.conroy@neu.edu.

The Center for STEM Education, Northeastern University, 1135 Tremont St., Suite 940 RP, Boston, MA 02120



December Historical Events In Chemistry

By: Leopold May

- December 1, 1909 One hundred years ago on this date, the first production of calcium cyanamide in North America was started by American Cyanamide Co.
- December 2, 1859 One hundred and fifty years ago, Ludwig Knorr was born. He synthesized heterocyclic compounds.
- December 6, 1778 Two hundred years ago in 1809, Joseph L. Gay-Lussac discovered the law of combining volumes of gases. He was born on this date.
- December 7, 1909 One hundred years ago on this date, the patent for the first thermosetting man-made plastic from a reaction of phenol with formaldehyde was granted.
- December 9, 1919 William N. Lipscomb, researcher on boranes, was among the first to describe 3-dimensional structure of enzymes and proteins. In 1976, he received the Nobel Prize in Chemistry for his studies on the structure of boranes illuminating problems of chemical bonding. He was born on this date.
- December 12, 1866 Alfred Werner, who was born on this date, was a researcher in coordination chemistry. He was awarded the Nobel Prize in Chemistry in 1913 for linkage of atoms in molecules, complex inorganic compounds, stereochemistry, & coordination theory of valency.
- December 14, 1909 One hundred years ago, Edward L. Tatum was born on this date. He discovered the genes that regulate certain chemical processes and shared the Nobel Prize in Physiology or Medicine (1958) with George W. Beadle for their discovery that genes act by regulating definite chemical events and Joshua Lederberg for his discoveries concerning genetic recombination and the organization of the genetic material of bacteria.
- December 16, 1809 Two hundred years ago, Antoine F. de Fourcroy died. With Antoine L. Lavoisier and Claude L. Berthollet, he devised chemical nomenclature. He described salts such as calcium chloride and was born on June 15, 1755.
- December 17, 1920 Allied Chemical and Dye Corp. incorporated.
- December 19, 1813 Thomas Andrews, who discovered that every gas has a critical temperature above which it cannot be liquefied, was born on this date.
- December 20, 1890 Fifty years ago in 1959, Jaroslav Heyrovsky received the Nobel Prize in Chemistry for his discovery and development of the polarographic methods of analysis. He was born on this date.
- December 22, 1884 One hundred and twenty-five years ago, St. Elmo Brady, the first black man to earn a Ph. D. in chemistry, was born on this date. He received his degree in 1916 from the University of Illinois and authored three monographs on *Household Chemistry for Girls*.
- December 24, 1834 One hundred and seventy-five years ago on this date, Augustus G. Vernon-Harcourt invented the standard lamp of 10 candle-power using pentane.
- December 26, 1838 Clemens A. Winkler discovered germanium (Ge, 32) in 1886. He also researched the analyses of gases and was born on this date.
- December 29, 1800 Charles Goodyear, who was born on this date, invented the vulcanization of rubber. It was in the year 1839, by an accident, that he discovered the true process of vulcanization, which cured not the surface alone but the whole mass. He was trying to harden the gum by boiling it with sulphur on his wife's cook stove when he let fall a lump of it on the red-hot iron top. It vulcanized instantly.
- December 31, 1921 Gilbert Stork, did research in alkylation, acylation,, and vinyl ring radical cyclization. He also developed the theory of concerted polyene cyclization and was born on this date.

For more historical facts on chemistry, visit Dr. May's website at <http://faculty.cua.edu/may/>.

An informal association, Society for the Propagation of the Music of the Chemist-Composers, has been formed to publicize the music of chemist-composers. For information, see <http://faculty.cua.edu/may/SPMCC.htm>.

Job Hunting Corner

Job Hunting?

We don't always have job posts in the Chesapeake Chemist. But if you have a position available locally, you are welcome to send them to us for posting in the Chesapeake Chemist. If you are job hunting, remember to put your membership to work by using the ACS job bank: (ACS Careers: www.acs.org/careers).

ACS offers special benefits for unemployed members

During these tough economic times it's more important than ever to belong to the American Chemical Society. Unemployed members can tap into a host of valuable benefits and services that help them get back in the workforce. And, members in good standing may qualify for an unemployed member dues waiver, allowing them to renew their memberships and keep their member benefits at no cost. Contact ACS at service@acs.org, 800-333-9511 or 614-447-3671 for complete details.

Other valuable benefits that help ACS member get back in the workforce include:

- Free registration at ACS National Meetings and registration fees at Regional Meetings of just \$25. Meetings offer ACS Career Fairs with on-site interviews.
- Special discounts for ACS/Harvard courses, ACS ProSpectives and Short Courses, and the ACS Leadership Development System.
- Membership in the ACS Network, your online resource to connect and communicate with friends, colleagues, and potential employers
- Free Guidance from ACS Career Consultants - ACS mentors offer resume reviews, job search strategies, and interview tips that make you stand out from the rest.
- Free access to InterviewStream, an online tool that will sharpen your interview skills
- Members-only access to the ACS Salary comparator.
- And more!

Contact ACS customer service today at service@acs.org, 800-333-9511 or 614-447-3671 today and let us know how we can help.

Call for Volunteers for Committee Positions

Interested in how your dues get used and want to work on interesting member programs/projects? If you want to get involved with the Maryland Section Executive Committee and/or with section activities, we want to hear from YOU! The Maryland ACS Executive Committee meets 4 times during the year to discuss and plan activities. Please feel free to contact the chair, vice-chair, or chair-elect via e-mail to get more information on various areas/activities that you are interested in or that we would like to start or expand in the future. The amount of time to commit would be up to you but might be around 2 hours per month, depending on the activity. We are always looking for individuals with budget/financial, editing, and planning skills.

Our Section is always looking for volunteers for our various committees. We are currently looking to fill positions for:

- Archivist
- Young Chemist Chair
- Women's Chemist Chair

Please contact **Walter Roy** (Walter_Roy@mccormick.com, 410-771-7886) or **Alvin Kennedy** (alvin.kennedy@gmail.com, 443-885-3794)



Fall 2009 - Important Dates



December 9, 2009

Maryland Chemist of the Year Award and Reception – Dr. Carole Bewley, NIH – Presentation on ‘Natural Products from the Marine Environment-- Diversity, Origins and their Use as Anti-Infectives’ – Burkshire Marriott, Towson, MD



Spring 2010 - Important Dates



February 2010

Section Meeting – Details To-Be-Announced

March 10, 2010

March Section Meeting – Chem Extravaganza! – Student Affiliates & MD ACS Member Chemistry Challenge & Social – UMBC

March 21-25, 2010

239th National ACS Meeting & Exposition, San Francisco, CA

(<http://chemistry.org/meetings>)

April 3, 2010
(Saturday)

MD ACS Earth Day Community Event – Project Clean Stream – Herring Run Park (Argonne Drive & Harford Road), Baltimore, MD

April 18, 2010

Student Awards Meeting – *Date is tentative* – Burkshire Marriott Hotel & Conference Center

April 22, 2010

Earth Day

May 28, 2010 (Friday)

New 50-year member luncheon celebration – Belmont Conference Center– directions at:

(<http://mdchem.org/meetings/belmont.html>)



Summer 2009 - Important Dates



June 2010

Remsen Award Meeting – Date to be determined Awardee: TBD – Johns Hopkins University, Baltimore, MD – directions at: (<http://mdchem.org/meetings/JHU.html>)

June 2010

Student Affiliate National Meeting Travel Grant application deadline for August meeting.

July 2010

MD ACS Annual Picnic, McKeldin Area, Patapsco State Park – Directions at:

(<http://mdchem.org/meetings/patapsco-mckeldin.html>).

August 22-26, 2010

240th National ACS Meeting & Exposition, Boston, MA (<http://chemistry.org/meetings>)

REMINDER: Receiving the Chesapeake Chemist

Hopefully, if you are reading the Chesapeake Chemist this month, you are receiving it via e-mail from us. We went to electronic only mailings to our MD ACS membership in October 2006. Please remember that we are dependant on the National ACS records for your correct, current e-mail.

Changing your e-mail address? Moving out of the MD ACS area? E-mail changes can be updated either by:

- E-mailing us at mdchem@mdchem.org – give us your member #, full name, and e-mail changes and we can ensure that your records are updated with National ACS.
- **Contacting the National ACS membership division: 800-333-9511 (US only)** or service@acs.org

To ensure that you receive the Chesapeake Chemist, please add the MD ACS e-mail (mdchem@mdchem.org) to your accepted e-mail address list IF you have a spam filter.

If you are a member who currently doesn't receive the Maryland ACS Chesapeake Chemist but download it from our website, it is possible that National ACS does not have your e-mail address on file. If you want to receive the Chesapeake Chemist via e-mail, please e-mail us at mdchem@mdchem.org – give us your member #, full name, and e-mail address and we can ensure that your records are updated with National ACS.

The current edition and previous editions of the Chesapeake Chemist can ALWAYS be obtained via our website: <http://mdchem.org> - please see the Newsletter Archive link on the right-hand side of the website.

Get Involved, Stay Involved

As you know, the American Chemical Society offers many ways for its members and non-members to get involved at the local, regional and national levels. There are opportunities for everyone, whether you are a student, or just starting your career, or a seasoned professional. Are you interested in getting involved, but don't know where to start? Are you already involved with one or more ACS activities but need help finding resources? Please visit (<http://www.acs.org/getinvolved>) to find a streamlined list of links of helpful procedures and resources specifically geared towards your area of interest.

Alternately, you can contact the Maryland ACS Section directly... Like working with students? Have a talent for encouraging students in science? Have ideas for outreach events? Sign up for our volunteer news. Contact us at mdchem@mdchem.org.



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The Chesapeake Chemist is e-published monthly September through June by the Maryland Section of the American Chemical Society. Send submissions to the editor in electronic format. The Maryland Section is not responsible for opinions expressed herein. Editorials express the opinions only of the authors. The editor is not responsible for all unsigned material.