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The Capital CHEMIST

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238th ACS National Meeting

Washington, DC August 16-20, 2009

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The Capital Chemist™

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WELCOME TO WASHINGTON, DC FROM CSW PRESIDENT CAROL HENRY

On behalf of the Chemical Society of Washington (CSW), I would like to welcome you to Washington, DC and the 238th ACS National Meeting. This has been a monumental year for our nation's capital and for CSW, the local section of ACS, as this year we celebrate our 125th anniversary. The first official meeting of CSW consisted of 33 men and today we are comprised of over 4000 men and women representing academia, industry and government, living and working in a wide geographic range covering DC, Maryland and Virginia.

As the nation's capital has been celebrating the 200th birthday of Abraham Lincoln, CSW has been excited to re-examine its ties to this extraordinary president. In January 1884, the first official CSW meeting of members was held in the offices of the Army Medical Museum located in Ford's Theatre. On a more fundamental level, President Lincoln had a strong commitment to, and belief in, the value of education as evidenced by this quote from his first political announcement: "Upon the subject of education, not presuming to dictate any plan or system respecting it, I can only say that I view it as the most important subject which we as a people can be engaged in." CSW shares this high value for education. We support several educational programs including National Chemistry Week, Chemists Celebrate Earth Day and numerous science fairs. In 2008, CSW held a highly successful community outreach workshop entitled, "Chemistry in Toxicology," and we have long participated in the Chemistry Olympiad, which we will have the honor of hosting in 2012. However, one of our primary outreach activities is project SEED, a summer research program for economically disadvantaged students. This year at the National Meeting CSW is teaming up with the Green Chemistry Institute (GCI) to promote this important program. We encourage you to stop by the GCI booth and help us in this endeavor.

I hope you find the National Meeting motivating and go home with fresh, new ideas about research and the discoveries being made not only in your area of expertise, but in all areas of chemistry. But remember, just outside the doors of the Convention Center is the splendor of our nation's capital. Washington, DC is filled with museums, memorials, theaters and venues to suit every interest. Be sure to stop by our Hospitality Booth where one of our CSW members will be happy to assist you with any questions you may have about the DC area and give you a souvenir of your visit to Washington.

Best wishes for a successful meeting and a wonderful stay in Washington.

Sincerely,
Carol Henry
President
Chemical Society of Washington

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Student Recruitment: Savelas Rabb, chair; Philip DeShong; James Zwolenik

Green Chemistry with Special Happenings: Jerainne Johnson, chair; Robert Wiacek, Twitter and Facebook ; Carol Henry; Kim Morehouse

The Capital CHEMIST

Special Issue for the 238th ACS National Meeting August 16-20, 2009 Washington, DC

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Cover Photo Credits Center photo of Lincoln Memorial: National Park Service Historic Photograph Collection. Top inset: Abraham Lincoln with the founders of the National Academy of Sciences signing the Academy's charter in 1863. The painting is by Albert Herter, photographed by Carol Highsmith. Courtesy of the National Academy of Sciences. Bottom right: Images of Ford's Theatre, historical and current. The theatre re-opened in July following extensive restoration. 2009 is the 125th anniversary of the first meeting of the Chemical Society of Washington, which was held in Ford's Theatre. Images courtesy of the National Park Service. Bottom left: William F. Hillebrand, the 19th President of the CSW in 1902. CSW's highest award, The Hillebrand Prize, was named for him in 1925. Photo from CSW archives.

ACS Chemistry for Life™

American Chemical Society

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OFFICE OF THE PRESIDENT

Thomas H. Lane
President, 2009

July 1, 2009

Dr. Carol Henry
President, Chemical Society of Washington
1155 16th St., NW
Washington, DC 20036

Dear Dr. Henry:

Thank you for the opportunity to welcome the attendees of the 2009 Fall ACS Meeting through *The Capital Chemist.*

I am in Washington often on Society assignments, recently for the dedication of the ACS headquarters as the Clifford and Kathryn Hach Building. There I had the opportunity to learn more about the section and the people who make it work; I am truly grateful for all you do in support of the mission of the Society.

The national meeting in Washington promises to be exciting indeed: in addition to the meeting itself, we will have an opportunity to join in the celebration of the 200th year of President Abraham Lincoln's birth, the contributions of Lincoln to science at the Federal level, the current restoration of Ford's Theatre, and notably, the 125th anniversary of the Chemical Society of Washington, which I understand held its first meeting in Ford's Theatre!

The overarching meeting theme is chemistry and global security. The location and the timing of the Washington, DC meeting present ACS with a unique opportunity to address questions related to this theme. With over 8,600 papers accepted in more than 800 technical sessions sponsored by 32 divisions, and 6 committees, the meeting promises to provide a broad range of symposia and topics, including: chemistry and global security; education and careers; emerging technologies; energy and sustainability; food safety and environment; and funding opportunities.

I hope to see many of you at the presidential events, especially "Chemistry and Global Issues: Challenges and Opportunities," the presidential plenary session on Sunday, August 16, 2009, 3:00-6:30 p.m. at the Washington Convention Center (Ballroom A). This symposium features Dr. Vahid Majidi, Assistant Director, FBI's Weapons of Mass Destruction Directorate; Dr. Mark Wrighton, Chancellor, Washington University, St. Louis; Dr. Stephanie A. Burns, CEO and Chair of the Board, Dow Corning; and Dr. Arden Bement, Director, National Science Foundation.

Carol, on behalf of the ACS with its more than 154,000 members, congratulations to the CSW for 125 years of dedicated service as you continue to -- in the words of the Society's objects -- "encourage in the broadest and most liberal manner the advancement of chemistry in all its branches." Please also thank my colleagues in CSW for being gracious hosts and good friends to the members visiting from all over the world. This is our moment to show that we are proud to be chemists!

All the best,

Thomas H. Lane

Thomas H. Lane, Ph.D.
President
American Chemical Society

Welcome

To Washington, DC

American Chemical Society

238th National Meeting and Exposition

August 16 – 20, 2009

As Mayor of the District of Columbia, it is my pleasure to welcome the American Chemical Society to Washington, DC, on the occasion of your 238th National Meeting and Exposition.

This meeting provides a unique opportunity to address questions related to chemistry and global security. Your ideas have created a scenario of how we can help to make our world a better place. As you take this opportunity to reflect on your past accomplishments, I extend an invitation for you to enjoy and visit the monuments, museums, diverse neighborhoods and to dine in our fine restaurants.

On behalf of the residents of the District of Columbia, you have my best wishes for a memorable event.

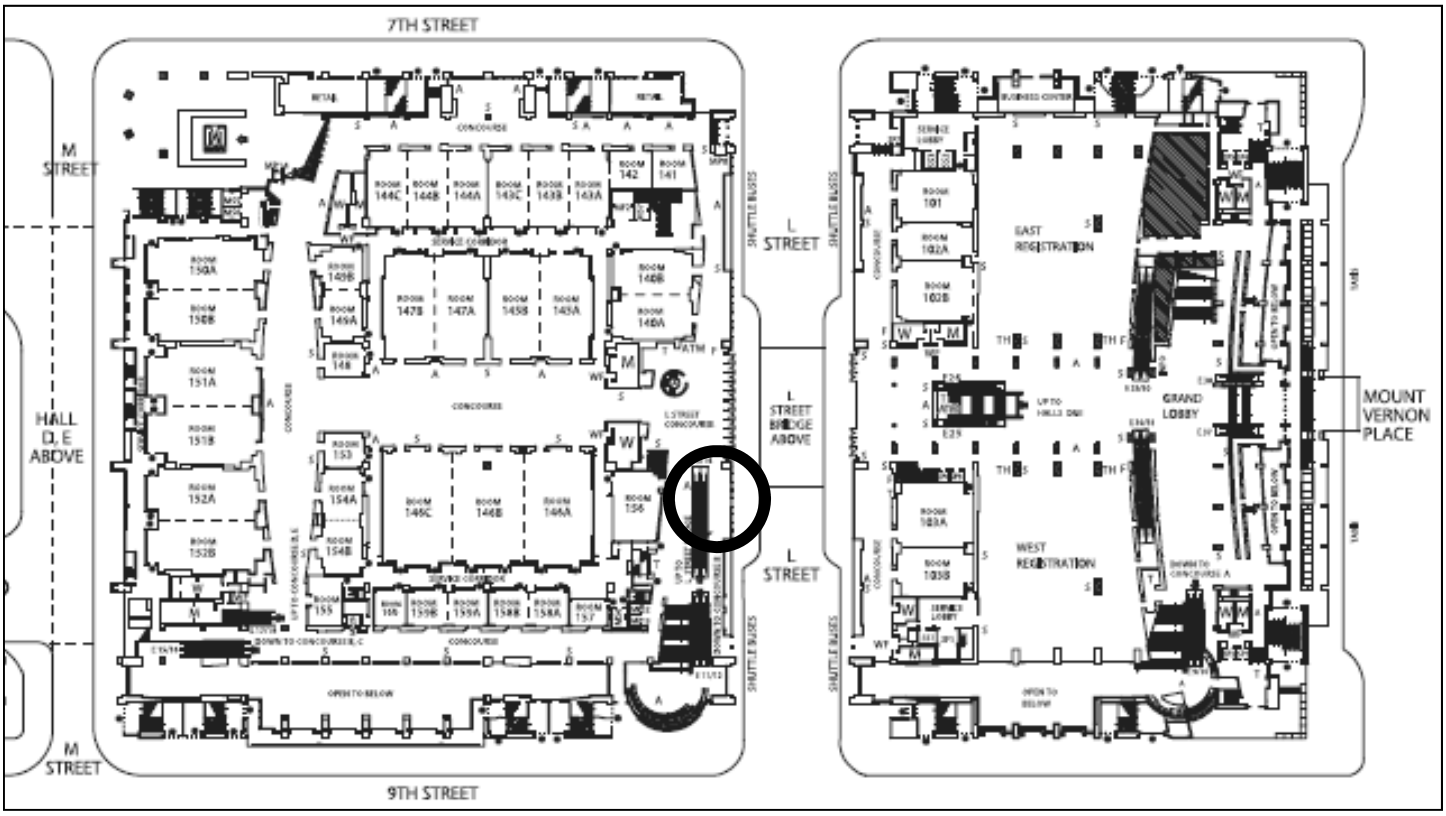
Adrian M. Fenty
Mayor, District of Columbia

CSW Hospitality Center: Welcome to Our Nation's Capital

Local Section volunteers are waiting for you at The CSW Hospitality Center. We are located inside the new Washington Convention Center, at the L Street Concourse (same side as the ACS Bus Stop - see map below). You've spent all year conducting business, perhaps buckyballs or nanoparticles, now you need to take time to "bond". Yes, you are still doing Chemistry; time to bond with your colleagues and guests.

The Hospitality Center will provide you with area information and maps. We'll share with you the best kept secrets of Washington, DC, Maryland, and Northern Virginia: The Greater Washington Metropolitan Area, a unique area of the world! We'll tell you about all the places you can visit, and help you discover the art, theater, literature, history, great shopping areas, museums, libraries, universities, government buildings and agencies, historic buildings possessing unique treasures, various type of galleries, memorials and monuments, embassies, chanceries, diplomatic residences, neighborhoods full of international flavor, the Metrorail system, state-of-the-art sport complexes, local activities, and much more. We'll even provide you with your first meeting souvenir!

Welcome to a very eclectic part of the world…from Shakespeare to Einstein, from politics to art, from tuxedos to jeans, the old and the new, indoors or outside, from the White House back to your house. Make this trip an adventure to remember. (Look for the Hospitality Center in the area marked with the dark circle on the map.)



CSW Appreciates Supporters, Cooperators and Volunteers

The Chemical Society of Washington Section of the American Chemical Society notes with pride its financial support, its co-sponsorships, its cooperative arrangements and its volunteer work with the following organizations and groups at the 238th National ACS Meeting in the District of Columbia:

ACS President Thomas H. Lane and the ACS Committee on Community Activities: Celebrating the Elements: An ACS Community Outreach Event

ACS Undergraduate Education Program

ACS Office of High School Chemistry and Greater Washington High School Teachers' Groups

ACS Special Program: High School Teacher's: Essential (2) Chemistry

ACS Division of Chemical Education, High School/ College Interface Luncheon

ACS *Journal of Chemical Education*

ACS National Women Chemists Committee

CSW and ACS Project SEED

ACS Green Chemistry Institute

A Chemist's Guide to Sightseeing in the DC Area

Seen all of the monuments? Not really in the mood to greet your congressperson? *The Capital Chemist* understands, and has prepared the following compilation of scientific and science-related tourist sites in the area. Some charge admission fees, although The Smithsonian is notable in that all sites have free admission (parking may not be free, though). *The Capital Chemist* realizes that most CSW members and National Meeting attendees are highly web-savvy and Metro friendly, so the relevant information accompanies listings as available. Most DC sites are within walking distance of the convention center, some longer than others.

Alexandria (VA) Archaeology Museum
Website: http://oha.alexandriava.gov/archaeology
Metro: Yellow or Blue Line, King Street

American Center for Physics Gallery, College Park, MD
Website: www.acp.org
Metro: Green Line, College Park/UMD

Art Science and Technology Institute/Holography Museum
Address: 2018 R St NW, Washington
Metro: Red Line, Dupont Circle

Audubon Naturalist Society (three area sanctuaries)
Website: www.audubonnaturalist.org

Drug Enforcement Administration Museum
Website: www.deamuseum.org
Metro: Yellow or Blue Line, Pentagon City

International Spy Museum
Address: 800 F Street NW, Washington (easy walk from convention center)
Website: www.spymuseum.org

Library of Congress
Address: 101 Independence Ave, SE, Washington
Website: www.loc.gov
Metro: Orange and Blue Lines, Capitol South

Marian Koshland Science Museum (Editor's Thumbs-up)
Address: 6th and E Streets, NW, Washington (easy walk)
Website: www.koshland-science-museum.org
Metro: Red, Green and Yellow Lines, Gallery Place

National Aquarium in DC
Address: 14th and Constitution Avenue, NW
Website: www.nationalaquarium.com
Metro: Orange and Blue Lines, Federal Triangle (others are also close)

National Archives
Address: Constitution Ave. NW between 7th & 9th Streets
Website: www.archives.gov
Metro: Yellow or Green Line, Archives/Navy Memorial

National Geographic Society, Explorers Hall
Address: 1145 17th Street NW, Washington
Website: www.nationalgeographic.com
Metro: Red Line, Farragut North

Smithsonian Institution
Website: www.si.edu

Smithsonian Museum Group:
- African Art Museum
- Air and Space Museum and Udvar-Hazy Center
- American Art Museum and its Renwick Gallery
- American History Museum
- American Indian Museum
- Anacostia Community Museum
- Cooper-Hewitt, National Design Museum
- Freer and Sackler Galleries
- Hirshhorn Museum and Sculpture Garden
- National Zoo **(Editor's Thumbs-up)**
  - Metro: Red Line, Cleveland Park or Woodley Park
- Natural History Museum
- Portrait Gallery
- Postal Museum
- Smithsonian Institution Building, aka The Castle (visitor information)

Stabler-Leadbeater Apothecary Museum
Address: 105-107 South Fairfax Street, Alexandria, VA
Website: http://oha.alexandriava.gov/apothecary
Metro: Yellow or Blue Line, King Street

The Textile Museum
Address: 2320 S Street, NW, Washington
Website: /www.textilemuseum.org
Metro: Red Line, Dupont Circle

US Botanic Garden (Editor's Thumbs-up)
Address: 245 First Street SW, Washington
Website: www.usbg.gov
Metro: Red Line, Union Station

US Department of the Interior Museum
Address: 1849 C St NW, Washington
Website: www.doi.gov/interiormuseum
Metro: Blue or Orange Line, Farragut West

US National Arboretum
Address: 3501 New York Avenue, NE, Washington
Website: www.usna.usda.gov
Metro: Blue and Orange Lines: Stadium Armory Station (bus transfer recommended)

New National Children's Museum Opening Scheduled for 2013 at National Harbor

The Capital Children's Museum, operated for 30 years in Capitol Hill, closed in 2004. A new museum, renamed The National Children's Museum, is scheduled to open in 2013 at National Harbor in Prince George's County (just in time for the Spring 2014 ACS National Meeting in Washington!). The museum opened a sneak-preview center, called the Launch Zone, at the harbor complex in April and introduced a redesigned Web site, www.ncm.museum.

ACS President Lane's Challenge: 10,000 New Members by December 31

ACS President Thomas H. Lane has set a challenge for every local section and technical division to help recruit 10,000+ new ACS members by December 31, 2009.

Dr. Lane's Statement: "In these difficult times, individuals working in the chemical sciences need to actively participate in the ACS and its local sections and technical divisions. No other organization comes close to offering the level of support and opportunity in the chemical sciences as the ACS, from career guidance to research findings to networking. Therefore, we need to get the message out and make sure chemical scientists and engineers understand why there has never been a better time to be an ACS member.

"The campaign officially launched on April 15, 2009, and will run through the end of the year. For full details, including how your local section can earn a $1,000 reward, visit www.acs.org/MAC. Also included are resources to help you with this challenge, such as the Membership Recruitment Toolkit and the "ACS Elevator Speech," offering quick talking points to recruit new members in just 30 seconds.

"With the commitment of every local section, we will meet and surpass the President's Challenge. Remember, we're all in this together...working as a team, we will make this happen; and together we can help our fellow scientists and engineers succeed!"

ACS President Thomas Lane
Credit: Cutts Photography

Call for 2009 CSW Award Nominations for Teaching and Service

CSW Community Service Award

This CSW award is given each year in recognition of outstanding service by a CSW member to the public. The award, a certificate, will be presented at the December CSW dinner meeting. Written nominations should describe why the candidate is deserving of the honor. Please send nominations by **September 15, 2009.**

E. Emmet Reid Award

The E. Emmett Reid Award is given annually by the Middle Atlantic Region (MARM) of the ACS to honor excellence in teaching chemistry at a liberal arts college which does *not* confer the Ph.D. degree. The award consists of a $250 honorarium and a plaque. Nominating documents should include the nominee's curriculum vitae, list of publications, and an evaluation of the nominee's achievements as a teacher. These documents should clearly demonstrate the candidate's attributes including, but not necessarily limited to:

- ♦ Quality of the candidate's teaching;
- ♦ Quality of research studies undertaken with students;
- ♦ Curriculum development work;
- ♦ Publications with student co-authors;
- ♦ Ability to inspire/ challenge students;
- ♦ Extra-curricular work in chemistry;
- ♦ Courses taught, presentations made, awards received.

Up to three seconding letters, while not mandatory, may be included. Please submit materials by **November 2, 2009.**

Leo Schubert Award

The Leo Schubert Award recognizes outstanding teaching of high school chemistry. The award was established in 1979 to honor Dr. Leo Schubert who died that year. Dr. Schubert devoted much of his career to developing programs for high school teachers and students. The award consists of an honorarium ($500) and a certificate, which will be presented at the December CSW dinner meeting. Nominations for the award must be comprehensive and include details such as innovation in teaching, writing curricula, outside teaching, papers published, involvement in science fairs and post graduate study. Please send nominations by **June 1, 2009.**

Charles L. Gordon Award

The Charles L. Gordon Award recognizes exemplary service to the Science of Chemistry and to the Chemical Society of Washington. Charles Gordon was an editor of *The Capital Chemist* for many years and served CSW in many ways. The award, a plaque, will be presented at the December CSW dinner meeting. Written nominations should include a description of the accomplishments on which the nomination is based. Please send nominations by **September 15, 2009.**

All nominations should be mailed or emailed to CSW at the contact information listed on page 2. All winners and their guests (with the exception of the E. Emmett Reid Awardee,) will be the guests of the CSW at the December CSW dinner meeting.

Nominations are Open for the 2009 CSW Hillebrand Award

Nominations are invited for the 2009 Hillebrand Prize, awarded annually for original contributions to the science of chemistry by a member or members of the CSW.

The Hillebrand Prize is the most prestigious honor given each year by CSW and is recognized nationally as a mark of significant accomplishment in chemistry. The Hillebrand Prize originated in 1924 and is named for Dr. William F. Hillebrand (1853-1925), an internationally recognized pioneer in analytical chemistry and one of Washington's most distinguished chemists. The prize carries an honorarium of $2000. Many previous Hillebrand Prize winners have won numerous other national and international awards, including three who have received the Nobel Prize.

The nomination letter must be limited to 1000 words. Two seconding letters may be sent, limited to a maximum of 500 words. The package should also contain a curriculum vitae, a list of publications, and a proposed citation of not more than 25 words.

The nomination package should be submitted by e-mail, preferably as PDF file(s) to csw@acs.org. Nominations will be active for three years.

In accordance with the CSW Standing Rules, both the nominee and the nominator must be current members of CSW, but this restriction does not apply to seconding letters. If you would like to verify the eligibility of an individual as a nominee or nominator, please contact the CSW Administrator, at csw@acs.org. **All materials must be received by October 15, 2009.** The awardee will be announced before the end of the year, and the Prize will be presented at a CSW dinner meeting in March 2010.

Past Awardees of the CSW Hillebrand Award (Nobel Prize Winners in Bold)

2008 - Michael Kurylo
2007 - Ira W. Levin
2006 - Robert Tycko
2005 - Carter T. White
2004 - Catherine Fenselau
2003 - Kenneth A. Jacobson
2002 - Russell J. Hemley
2001 - Louis J. Stief
2000 - Akbar Montaser
1999 - Michael T. Pope
1998 - Ad Bax and James A. Ferretti
1997 - Derek Horton
1996 - William A. Eaton and H. James Hofrichter
1995 - Millard H. Alexander
1994 - Edith Wilson Miles
1993 - Frances S. Ligler
1992 - Richard J. Colton
1991 - Seymour Kaufman
1990 - Marilyn E. Jacox
1989 - Miral Dizdaroglu
1988 - David E. Ramaker
1987 - N. Bhushan Mandava and Malcolm J. Thompson
1986 - Celia W. Tabor and Herbert Tabor
1985 - Kenner C. Rice
1984 - Ying-Nan Chiu
1983 - William J. Bailey
1982 - Jimmie Reed McDonald
1981 - Alexander J. Fatiadi
1980 - Elizabeth Weisburger
1979 - Donald M. Jerina
1978 - James R. Griffith and Thressa C. Stadtman
1977 - John William Daly
1976 [Award not accepted]
1975 - Ming Chang Lin
1974 - Elizabeth F. Neufeld
1973 - Daniel P. Schwartz
1972 - Frederick A. H. Rice
1971 - Nicolae Filipescu
1970 - Herbert A. Sober and Elbert A. Peterson
1969 - Isabella L. Karle and **Jerome Karle**
1968 - Earl R. Stadtman
1967 - Everette L. May and Nathan B. Eddy
1966 - Arthur A. Westenberg and Robert M. Fristrom
1965 - **Marshall Nirenberg**
1964 - Ellis R. Lippincott, Jr.
1963 - Martin Jacobson and Morton Beroza
1962 - Philip H. Abelson
1961 - Sidney Udenfriend
1960 - Frank T. McClure
1959 - Leon A. Heppel
1958 - Bernhard Witkop
1957 - Jesse P. Greenstein
1956 - Francis O. Rice
1955 - Roger G. Bates
1954 - William A. Zisman
1953 - Bernard L. Horecker
1952 - Dean Burk
1951 - Horace S. Isbell
1950 - Henry Stevens, E. Jack Coulson and Joseph R. Spies
1949 - Lyndon F. Small
1948 - Edgar R. Smith
1947 - Nathan L. Drake
1946 - John I. Hoffman
1945 - Stephen Brunauer
1944 - Raymond M. Hann
1943 - Ben H. Nicolet
1942 - J. Frank Schairer
1941 - Michael X. Sullivan
1940 - Ferdinand G. Brickwedde
1939 - Ralph E. Gibson
1938 - Raleigh Gilchrist and Edward Wichers
1937 - Sterling B. Hendricks
1936 - **Vincent du Vigneaud**
1935 - Oliver R. Wulf
1934 - Frederick D. Rossini
1933 - Edward Wight Washburn
1932 - F. B. La Forge and Herman L. J. Waller
1931 - Gustav F. Lundell
1930 - Claude S. Hudson
1929 [No Award]
1928 - James H. Hibben
1927 - Edward P. Bartlett
1926 - George W. Morey
1925 - Richard Fay Jackson

CSW President Carol Henry presents the 2008 Hillebrand Award to Michael Kurylo at the March Dinner Meeting.

Deciphering the Genetic Code: A National Historic Chemical Landmark

A plaque recognizing the latest ACS National Historic Chemical Landmark will be presented to the National Institutes of Health on November 12. The Landmark honors the deciphering of the genetic code by Marshall Nirenberg and his colleagues in the 1960s.

Following the determination of the structure of DNA by Watson and Crick in 1953, the central problem in chemical biology was just how the four different bases [A, U, C, G] in a transcribed RNA coded for the 20 amino acids that form proteins. It was clear that there could not be a 1:1 or a 2:1 relation, but a sequence of three DNA bases provides 64 [4 x 4 x 4] combinations and could in principle encode all 20 amino acids. The big question was: What are the specific relations?

Marshall Nirenberg, 1968 photo

In 1961, Marshall Nirenberg and his postdoctoral fellow, Heinrich Matthaei at NIH, developed a suitable cell-free system in which they found that single-stranded RNA with uracil at every base position contributes to the formation of a polypeptide with only phenylalanine incorporated. The obvious conclusion from this observation was that the trinucleotide UUU encodes for phenylalanine in proteins; this discovery provided the first word of the genetic code and electrified the chemical biology community. The task then was to identify all 64 coding relations.

The complete unraveling of the genetic code was completed in 1966 after a long series of research accomplishments by Nirenberg and his group, including development of novel methods to improve the efficiency of separation and analysis. Major advances were made by Philip Leder (now at Harvard) and Thomas Caskey (now at the University of Texas). There were also extensive contributions from a large number of senior NIH scientists. These scientists (including Leon Heppel, Maxine Singer, Robert Martin and others) took time from their own research to synthesize particular polynucleotides and specific nucleotide triplets and contributed these materials to Nirenberg.

The elucidation of the genetic code provided the "Rosetta stone" that stands at the base of all subsequent developments in biotechnology. Nirenberg's work established the chemical relationship and mechanism by which proteins are synthesized in all living organisms on the planet. The impact of the deciphering of the genetic code was far-reaching, because all subsequent achievements in synthesizing proteins by recombinant DNA depend on knowing the relationships between RNA and the proteins expressed by RNA. Thus, the entire biotechnology industry and the development of much molecular medicine owe their origins to the deciphering of the genetic code.

Nirenberg's seminal achievement was recognized by the CSW in the award of the Hillebrand Prize in 1965 and by presentation of the Nobel Prize in 1968 to Nirenberg, together with H. Gobind Khorana for work on nucleotide synthesis and Robert Holley for studies of transfer-RNA. Dr. Nirenberg continues to carry out research at NIH.

ACS President Thomas Lane is scheduled to make the presentation of the NHCL plaque, along with other ACS officials. The presentation ceremony at NIH will be accompanied by a symposium entitled "Genes to Proteins: Decoding Genetic Information," which will combine some historical information with presentation of cutting edge research by several leading figures in the field.

— Contributed by Ted Becker, CSW Member

What is the Genetic Code?

DNA, which is the chemical component of chromosomes and assorted extrachromosomal pieces, is composed of sequences of nucleotides. Segments of DNA are copied into segments of messenger RNA (mRNA) with pretty much the same nucleotide sequences, with a few small differences.

The sequences of mRNA are used as a guide for the synthesis of proteins. Since proteins are composed of sequences of amino acids, chemically distinct from nucleotides, there must be a **MOLECULAR CODE** by which a small bit of nucleotide sequence is recognized within an mRNA sequence, that corresponds to an amino acid to be incorporated into the sequence of a protein.

Nirenberg and others deduced that the minimum number of nucleotides that must comprise the molecular information for one amino acid to be incorporated is three, but other features of the genetic code remained to be demonstrated. It was soon found that the genetic code is:

• Continuous and non-overlapping - every nucleotide within a coding sequence is used once, and only once;

• Degenerate - most amino acids can be encoded by two or more nucleotide sequences; this became obvious when it was found that 64 trinucleotides were possible coding units for 20 amino acids (and the "stop" signal, for ending synthesis of a protein)

Presidential Green Chemistry Challenge Awards Winners Announced in June

The 2009 Presidential Green Chemistry Challenge Awards winners were announced in June. The awards are given to recognize research that can make significant contributions to pollution prevention. The awards were presented at an awards ceremony at the Carnegie Institution for Science in Washington.

The Presidential Green Chemistry Challenge Awards program is administered by the U.S. Environmental Protection Agency. Judging is by an independent panel of technical experts convened by the ACS and its ACS Green Chemistry Institute®.

The Presidential Green Chemistry Challenge Awards are given in five categories. The 2009 Award winners and their categories are:

• Academic Award: Krzysztof Matyjaszewski, Ph.D., Carnegie Mellon University, Pittsburgh, PA.

• Small Business Award: Virent Energy Systems, Inc., Madison, WI.

• Greener Synthetic Pathways: Eastman Chemical Company, Kingsport, TN.

• Greener Reaction Conditions: CEM Corporation, Matthews, NC.

• Designing Greener Chemicals: Procter & Gamble Company, Cincinnati, OH; jointly with Cook Composites and Polymers Company, North Kansas City, MO.

Academic Award: Atom Transfer Radical Polymerization: Low-impact Polymerization Using a Copper Catalyst and Environmentally Friendly Reducing Agents. Hazardous chemicals are often required in the manufacture of important polymers such as lubricants, adhesives, and coatings. Matyjaszewski developed an alternative process called "Atom Transfer Radical Polymerization (ATRP)" for manufacturing polymers. The process uses chemicals that are environmentally friendly, such as ascorbic acid (vitamin C) as a reducing agent, and requires less catalyst. ATRP has been licensed to manufacturers throughout the world, reducing risks from hazardous chemicals.

Krzysztof Matyjaszewski, Carnegie Mellon University

Small Business Award: BioForming® Process: Catalytic Conversion of Plant Sugars into Liquid Hydrocarbon Fuel. Virent's process is a water-based, catalytic method to make gasoline, diesel, or jet fuel from the sugar, starch, or cellulose of plants that requires little external energy other than the plant biomass.

The process is flexible and can be modified to generate different fuels based on current market conditions. It can compete economically with current prices for conventionally produced petroleum-based fuels. Using plants as a renewable resource helps reduce dependence on fossil fuels.

Greener Synthetic Pathways: A Solvent-Free Biocatalytic Process for Cosmetic and Personal Care Ingredients. Esters are an important class of ingredients in cosmetics and personal care products. Usually, they are manufactured by harsh chemical methods that use strong acids and potentially hazardous solvents; these methods also require a great deal of energy. Eastman's new method uses immobilized enzymes to make esters, saving energy and avoiding both strong acids and organic solvents. This method is so gentle that Eastman can use delicate, natural raw materials to make esters never before available.

Greener Reaction Conditions: Innovative Analyzer Tags Proteins for Fast, Accurate Results without Hazardous Chemicals or High Temperatures. Each year, laboratories test millions of samples of food for the presence of protein. Such tests generally use a large amount of hazardous substances and energy. CEM has developed a fast, automated process that uses less toxic reagents and less energy. The new system can eliminate 5.5 million pounds of hazardous waste generated by traditional testing in the United States each year. What's more, it differentiates between protein and other chemicals used to adulterate food, such as melamine.

Designing Greener Chemicals: Chempol® MPS Resins and Sefose® Sucrose Esters Enable High-Performance Low-VOC Alkyd Paints and Coatings. Conventional oil-based "alkyd" paints provide durable, high-gloss coatings but use hazardous solvents. Procter & Gamble and Cook Composites and Polymers are developing innovative Chempol® MPS paint formulations using biobased Sefose® oils to replace petroleum-based solvents. Sefose® oils, made from sugar and vegetable oil, enable new high-performance alkyd paints with less than half the solvent. Paints with less hazardous solvent will help improve worker safety, reduce fumes indoors as the paint dries, and improve air quality.

More information on the Presidential Green Chemistry Challenge Awards is available at http://www.epa.gov/opptintr/greenchemistry/pubs/pgcc/past.html.

It's easy being green! Recycle this issue and all recyclable materials.

Historical Dates in Chemistry: Birthdates, Prizes, Breakthroughs

Contributed by Dr. Leopold May,
Catholic University of America, Washington, DC

1984 (25 years ago)

On March 14, 1984, the first atom of hassium (Hs, element 108) was observed at GSI Laboratory, Darmstadt.

On March 19, 1984, Chemical Abstracts published the ten millionth abstract in volume 100, issue number 12.

1959 (50 years ago)

Emilio Segrè shared the 1959 Nobel Prize in Physics with Owen Chamberlain for their discovery of the antiproton. Segrè codiscovered technetium with C. Perrier in 1937, and astatine with D. R. Corson and R. MacKenzie in 1940.

Arthur Kornberg shared the 1959 Nobel Prize in Physiology or Medicine with Severo Ochoa for their discovery of the mechanisms in the biological synthesis of ribonucleic acid and deoxyribonucleic acid.

1934 (75 years ago)

Frédéric J. Joliot (Joliot-Curie), H. Halban and L. W. Kowarski proved experimentally that neutron emission occurs in nuclear fission. In 1935, Joliot shared the Nobel Prize in Chemistry with his wife Irène Joliot Curie for production of artificial radioisotopes.

Arnold O. Beckman founded Beckman Instruments in 1934. He developed the pH meter, possibly the most widely used instrument in the chemical sciences.

Harold C. Urey was awarded the Nobel Prize in Chemistry in 1934 for the discovery of deuterium. He was the first to isolate heavy water (D2O) in 1932.

1909 (100 years ago)

Arthur Clay Cope was born on June 27, 1909. He was a researcher in synthetic organic chemistry including medium-sized ring compounds. In 1972 the ACS Board of Directors accepted responsibility for administering The Arthur C. Cope Award, and The Cope Scholar Awards were established in 1984, all created under the terms of his will.

On July 2, 1909, Fritz Haber demonstrated the process of nitrogen fixation to Badische Aniline und Soda Fabrik.

On October 19, 1909, Marguerite Catherine Perey was born. A French physicist, Perey discovered element 87, later to be named francium, in 1939 by purifying samples of lanthanum that contained actinium. She was a student of Marie Curie. In 1962, she – not Curie – was the first woman to be elected to the French Académie des Sciences.

On December 1, 1909, the first production of calcium cyanamide in North America was started by American Cyanamide Co.

1884 (125 years ago)

Casimir Funk was born on February 23, 1884. He isolated nicotinic acid from rice polishing and used it as a remedy for pellagra, and pursued the idea that diseases such as beriberi, scurvy, rickets and pellagra were caused by lack of vital substances in the diet.

Peter Joseph William Debye was born on March 24, 1884. He was a researcher in dipole moments and powder method of x-ray diffraction, and was awarded the Nobel Prize in Chemistry in 1936.

Otto F. Meyerhof was born on April 12, 1884. He was a researcher on muscle metabolism and in 1922, he shared the Nobel Prize in Medicine with Archibald V. Hill. The Embden-Meyerhof pathway, the most common metabolic route for conversion of glucose to pyruvate, is named for Meyerhof and Gustav Embden.

Theodor Svedberg was born on August 30, 1884. He was a researcher on the ultracentrifuge for determining molecular weights and sizes of proteins for which he was awarded the Nobel Prize in Chemistry in 1926.

Saint Elmo Brady was born on December 22, 1884 in Louisville, Kentucky. He was one of the first African Americans to obtain a Ph.D. degree in chemistry in the United States, at the University of Illinois in 1916.

1859 (150 years ago)

Svante A. Arrhenius was born on February 19, 1859. He devised a theory of electrolytic dissociation and was a researcher in viscosity and reaction rates. In 1903, he was awarded the Nobel Prize in Chemistry for his electrolytic theory of dissociation.

In 1859, Gustav R. Kirchhoff, with Robert Bunsen, invented the spectroscope with which they discovered cesium (Cs, element 55) in 1860, and rubidium (Rb, element 37) in 1861. He contributed greatly to the field of spectroscopy by formalizing three laws that describe the spectral composition of light emitted by incandescent objects (Kirchhoff's Laws).

Pierre Curie was born on May 15, 1859. He discovered the phenonemon of piezoelectricity. He and his wife, Marie Curie, codiscovered polonium and radium and in 1902, they shared the Nobel Prize in Physics in recognition of their joint researches on the radiation phenomena discovered by Henri Becquerel.

On December 2, 1859, Ludwig Knorr was born. He and Carl Paal devised the Paal-Knorr synthesis, a chemical reaction where 1,4-diketones are converted to either furans, thiophenes or pyrroles. The Knorr quinoline synthesis and Knorr pyrrole synthesis are also named after him.

1834 (175 years ago)

Dmitri I. Mendeleev was born on February 7, 1834. He discovered the periodic nature of elements and devised a version of the Periodic Table that is most like the standard periodic tables used today. Although other scientists had also been working on their own tables of elements, most agree that Mendeleev's accurate prediction of the elements unknown at the time qualifies him for deserving the majority of the credit for the periodic table. ***(Continued, page 18)***

The Capital Chemist's Guide to Downtown DC Restaurants

The Capital Chemist has a culinary side, and offers the following restaurant guide for your ACS National Meeting dining excursions.

Restaurants were chosen based on placement in the Top 100 in the 2009 washingtonian.com ratings (rating number in parentheses) and proximity to the convention center. "Very expensive" and wheelchair inaccessible restaurants, according to washingtonian.com, were omitted. Of course, there are scores of restaurants to consider; check with the CSW Hospitality Booth for more choices.

Acadiana (98)
901 New York Ave., NW
Cuisines: Cajun/Creole, American, Southern
Price Range: Expensive
www.acadianarestaurant.com

Art and Soul (77)
415 New Jersey Ave., NW
Cuisines: American, Southern, Modern, Breakfast
Price Range: Expensive
www.artandsouldc.com

Bistro Bis (22)
15 E St., NW
Cuisines: French, Breakfast
Price Range: Expensive
www.bistrobis.com

Brasserie Beck (61)
1101 K Street, NW
Cuisines: Belgian, Modern
Price Range: Moderate
www.beckdc.com

Cafe Atlantico (70)
405 Eighth St., NW
Cuisines: Nuevo Latino, South American, Dim Sum
Price Range: Expensive
www.cafeatlantico.com

Cafe Du Parc (32)
1401 Pennsylvania Ave., NW
Cuisines: French, Breakfast
Price Range: Expensive
cafeduparc.com

Central Michel Richard (13)
1001 Pennsylvania Ave., NW
Cuisines: French, American
Price Range: Expensive
www.centralmichelrichard.com

DC Coast (94)
1401 K Street, NW
Cuisines: Seafood, American, Modern
Price Range: Expensive
www.dccoast.com

Etete (80)
1942 9th Street, NW
Cuisines: Ethiopian, Vegetarian/Vegan
Price Range: Inexpensive
www.eteterestaurant.com

Hank's Oyster Bar (86)
1624 Q Street, NW
Cuisines: Seafood, American, Modern
Price Range: Moderate
www.hanksdc.com

Jaleo (46)
480 Seventh St. NW
Cuisines: Spanish/Portuguese, Tapas/Small Plates
Price Range: Moderate
www.jaleo.com

Johnny's Half Shell (39)
400 N. Capitol St. NW
Cuisines: Seafood, American, Southern, Modern
Price Range: Moderate
www.johnnyshalfshell.net

Mio (56)
1110 Vermont Ave., NW
Cuisines: American, Modern
Price Range: Expensive
www.miorestaurant.com

Oyamel (64)
401 Seventh St., NW
Cuisines: Mexican, South American, Tapas/Small Plates
Price Range: Moderate
www.oyamel.com

Poste (Hotel Monaco) (27)
555 Eighth St., NW
Cuisines: American, Modern
Price Range: Expensive
www.postebrasserie.com

Proof (59)
775 G St., NW
Cuisines: Modern
Price Range: Expensive
www.proofdc.com

PS7's (69)
777 I Street., NW
Cuisines: American, Modern
Price Range: Expensive
www.ps7restaurant.com

Rasika (18)
633 D St., NW
Cuisines: Indian, Vegetarian/Vegan
Price Range: Expensive
www.rasikarestaurant.com

The Source (10)
575 Pennsylvania Ave., NW
Cuisines: Pizza, Chinese, American
Price Range: Expensive
www.wolfgangpuck.com/restaurants/fine-dining/3941

Zaytinya (37)
701 9th Street NW
Cuisines: Greek, Mediterranean, Spanish/Portuguese, Tapas
Price Range: Moderate
www.zaytinya.com

ACS Publications from DC Area Research Groups

This feature of *The Capital Chemist* is a compilation of selected publications in ACS journals, appearing recently, from area institutions. * - denotes corresponding author.

Dalia I. Hammoudeh†, Ariele Viacava Follis†, Edward V. Prochownik‡ and Steven J. Metallo*† (2009) "Multiple Independent Binding Sites for Small-Molecule Inhibitors on the Oncoprotein c-Myc," *J. Am. Chem. Soc.*, **131** (21), 7390–7401. († - Georgetown University, Department of Chemistry, and ‡ - Children's Hospital of Pittsburgh, The University of Pittsburgh Cancer Institute, and University of Pittsburgh Medical Center.) Featured in June 1, 2009 issue of *Chemical and Engineering News*.

Donald E. Jennings*†, Paul N. Romani†, Gordon L. Bjoraker†, Pedro V. Sada, Conor A. Nixon†§, Allen W. Lunsford†‡, Robert J. Boyle, Brigette E. Hesman, and George H. McCabe (2009) "$^{12}C/^{13}C$ Ratio in Ethane on Titan and Implications for Methane's Replenishment," *J. Phys. Chem. A*, Article ASAP, Publication Date (Web): June 24, 2009. († - NASA Goddard Space Flight Center, Greenbelt, MD; § - Department of Astronomy, The University of Maryland; ‡ - The Catholic University of America, Washington, DC.) Part of the special issue "Chemistry: Titan Atmosphere".

Douglas G. Hayward* and Jon W. Wong (2009) "Organohalogen and Organophosphorous Pesticide Method for Ginseng Root - A Comparison of Gas Chromatography-Single Quadrupole Mass Spectrometry with High Resolution Time-of-Flight Mass Spectrometry," *Anal. Chem*, **81**, 5716–5723. (US FDA, College Park, MD). Featured thumbnail illustration on *Analytical Chemistry* web site.

Anna K. Eaton and Richard C. Stewart* (2009) "The Two Active Sites of *Thermotoga maritima* CheA Dimers Bind ATP with Dramatically Different Affinities," *Biochemistry*, **48**, 6412-6422. (Department of Cell Biology and Molecular Genetics, University of Maryland.) Featured thumbnail illustration on *Biochemistry* web site.

Ford's Theatre and the Creation of CSW and ACS in the 1800's

The Army Medical Museum in the Unused Theatre Housed the First Meeting

On August 27, 1863, John T. Ford opened a theatre on 10th Street in Washington. It was the largest, most attractive theatre in the city and it did quite well. Alongside he built a three-story house, the first floor of which housed Peter Taltavul's "Star Saloon," the second story a cloak room and lounge for dress circle patrons, and the third floor living quarters for Ford's brothers. Doorways connected all three floors of the house with the theatre.

On the evening of April 14, 1865, President and Mrs. Abraham Lincoln rode from the White House to attend a performance of Tom Taylor's comedy, *Our American Cousin*. The actor John Wilkes Booth came in the back door of the theatre and made a roundabout way to Taltavul's. He drank whiskey in the saloon, reentered the theatre, and shot the President.

The assassination ended the first phase in the life of the theatre. When Ford reopened his theatre, public opinion forced cancellation of the performance. Ford never held a performance there again. There was a shortage of office space in Washington and he sold his property to the government. A contractor erected three floors in the interior of the theatre. The Army medical department moved records into the first and second floors, and its Medical Museum into the third. In the adjacent house the medical department converted Taltavul's saloon and the upstairs rooms into a chemistry laboratory and offices for medical officers. The laboratory remained in its location for 21 years, until it moved into the Army Medical Museum building still standing at Independence Avenue and 7th Street.

Washington in those days did not have the many meeting halls it has now. One of the few meeting places for scientific organizations was the Army Medical Museum. Photos show the museum as a large room with lots of space between the glass exhibit cases that contained specimens from Civil War battlefields. The Philosophical Society of Washington met in the museum. The Cosmos Club (a private social club founded in 1878 by men distinguished in science, literature and the arts) held its charter meeting there. Medical societies met there. And in early 1881 a number of men assembled there to organize the Chemical Society of Washington.

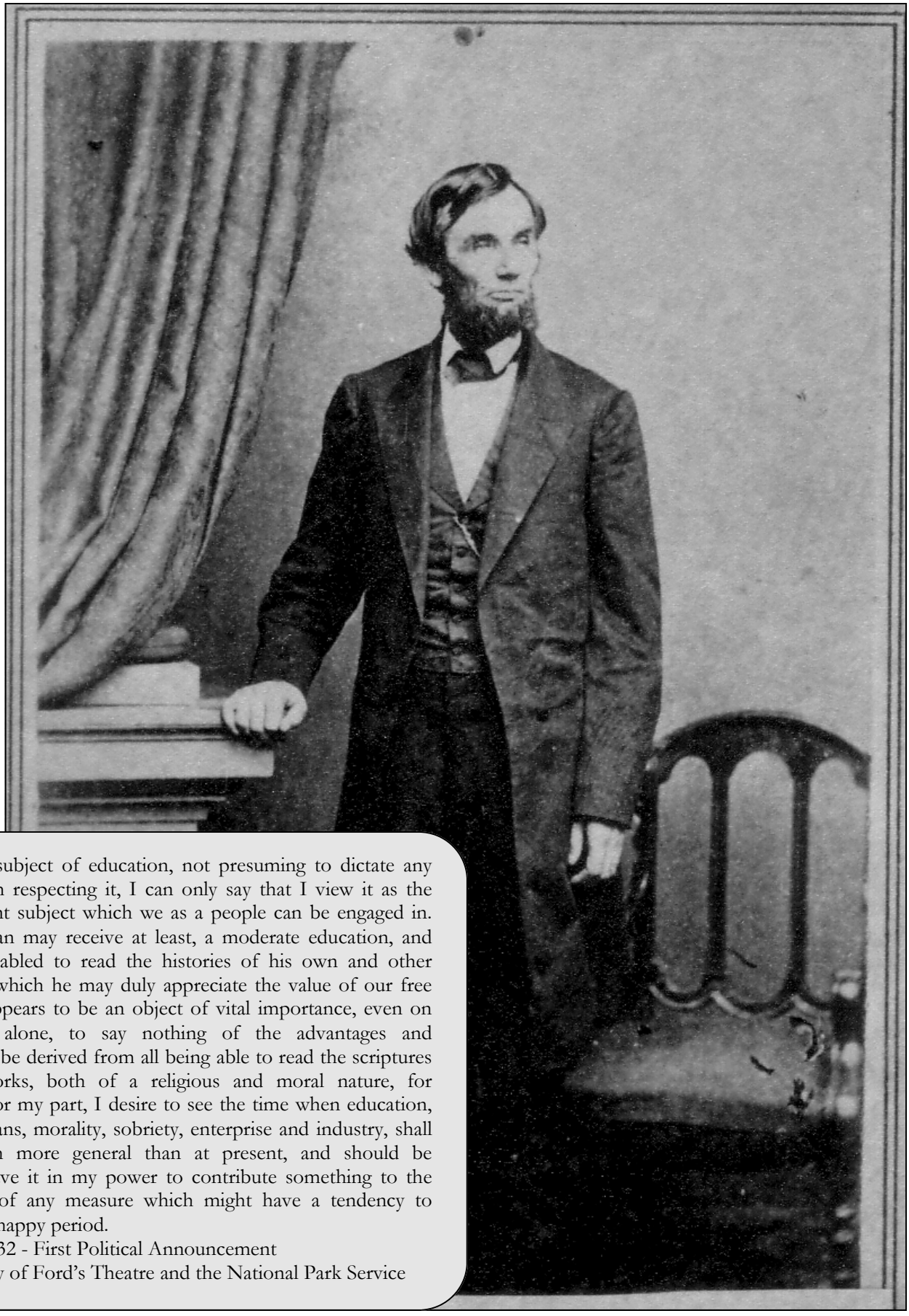
In Washington around 1880 there were perhaps 60 or so chemists working for the Patent Office, Department of Agriculture, Geological Survey, Treasury Department, National Museum, Howard University, Bureau of Education, Columbian University (now George Washington University), Army Medical Museum, Georgetown University, and the high school. One of these men was William Manuel Mew of the Medical Museum. Mew had lived in Washington for twenty years and knew most, if not all, of the chemists in the city. Mew may have been the prime mover in starting the Society. If not, he at least hosted the organizational meeting.

On January 12, 1884, a group of 13 men met in the office of Dr. Mew in the Army Medical Museum, at the site of Ford's Theatre. At that time these men drew up and approved a constitution for a new Chemical Society of Washington. On January 31, 1884, a group of 33 men met, again in Mew's office, to hold the first official meeting of the CSW. This is usually taken as the founding date of the CSW, perhaps because all of the 33 founders took their date of membership as January 31 rather than January 12. The CSW began in 1884 but did not affiliate with ACS until the 70th meeting in 1893. The CSW has kept its original name and appended the fact that it is an ACS local section.

There had been discussion in other places of formation of a national society of chemists; it had been discussed at the Centennial Celebration of Priestley's birth, and also proposed as a subsection within the American Association for the Advancement of Science (AAAS). Several other local chemical societies had been organized, and this included the New York City chemists, calling themselves the "American Chemical Society." Chemists from areas outside New York objected to that group representing itself as the national organization because of the rule in its constitution which forbade non-New York residents from being officers.

The AAAS was to meet in Washington in 1891, and Frank Wigglesworth Clarke, the second CSW president in 1885, was heading the Chemistry Division. Harvey W. Wiley, the third CSW president in 1886, was also instrumental in the creation of the Association of Official Agricultural Chemists (AOAC); Wiley arranged to have the AOAC meet in Washington at the same time. Clarke invited the existing American Chemical Society (New York) to hold its third out-of-town meeting immediately following the AAAS meeting. Clarke's invitation was accepted, and there was thus concentrated with the CSW a distinguished array of national leaders of chemistry. During the last session of the AOAC meeting, Dr. Wiley presented a carefully drafted constitution for a new federation of chemical societies, the Association of American Chemists. At the meetings of the AAAS and ACS-NY which followed, the proposal was considered, and the final decision led to the formation of the ACS as we know it today, with CSW as the fourth chartered local section.

Information in this article has been reprinted from two articles in the centennial edition of *The Capital Chemist*, May 1984. Contributors to the articles were Merriam Jones, 1984 CSW Archivist; Anne Keller, 1984 *Capital Chemist* Managing Editor; and Wyndham D. Miles, former historian of the NIH.



Upon the subject of education, not presuming to dictate any plan or system respecting it, I can only say that I view it as the most important subject which we as a people can be engaged in. That every man may receive at least, a moderate education, and thereby be enabled to read the histories of his own and other countries, by which he may duly appreciate the value of our free institutions, appears to be an object of vital importance, even on this account alone, to say nothing of the advantages and satisfaction to be derived from all being able to read the scriptures and other works, both of a religious and moral nature, for themselves. For my part, I desire to see the time when education, and by its means, morality, sobriety, enterprise and industry, shall become much more general than at present, and should be gratified to have it in my power to contribute something to the advancement of any measure which might have a tendency to accelerate the happy period.

-- March 9, 1832 - First Political Announcement

Image courtesy of Ford's Theatre and the National Park Service

ACS Rename Headquarters Building in Honor of Clifford and Kathryn Hach

ACS has renamed its Washington headquarters building in honor of Clifford and Kathryn Hach, whose Colorado-based scientific foundation donated $33 million to ACS in support of high school chemistry teaching. Society officials said the donation is the largest ever for ACS.

The Clifford and Kathryn Hach Building of the ACS was officially dedicated in ceremonies on Wednesday, June 3, at 1155 16th St., NW, the home of ACS since 1941.

Kathryn Hach-Darrow, who co-founded the Hach Scientific Foundation in 1982 with her late husband Clifford, said the ACS was chosen for the gift because "it represents permanence and stability, and it truly embraces chemistry on a national level." The foundation was based in Fort Collins, CO.

ACS is renowned for its many education programs serving a wide spectrum of learners, from grade school to graduate school and beyond. The new funding will supplement existing ACS programs by further enhancing the teaching of high school chemistry, including a scholarship program for undergraduate chemistry majors interested in a career teaching chemistry, a grant program for chemists who have a degree in chemistry but wish to pursue careers teaching chemistry, and outreach grants to chemistry teachers.

"The combined programs of the Hach Scientific Foundation and the ACS offer a complete suite of opportunities for high school teachers, from pre-service education through ongoing professional development," said Judith L. Benham, Ph.D., Chair of the ACS Board of Directors.

ACS President Thomas H. Lane, Ph.D., said "The Hach Scientific Foundation demonstrated tremendous foresight in addressing the needs of pre- and in-service teachers. Many chemists cite their high school chemistry teachers as the reason they chose chemistry as a profession. As the world's largest scientific society, ACS has an obligation to promote K-12 teaching as a viable and valued career path. Becoming a teacher requires hard work, dedication and passion. As a nation we need to be encouraging our most talented young people to consider a career in teaching."

Congressman Reuben Hinojosa, (D-TX), chair of the House Subcommittee on Higher Education and a strong supporter of science education, was scheduled to speak at the dedication. He and Senator Mark Udall (D-CO) praised the Hach Foundation's long legacy of contributions to educating and training chemists.

Clifford Hach and Kathryn Carter met as undergraduates at Iowa State University in the early 1940s and married in 1943. Clifford, an analytical chemist, and the media-savvy Kathryn, began the Hach Co. in 1947. The company's first product was a water-analysis system invented by Clifford that tested calcium and magnesium in water. Over the next half century, the company developed and sold reagents and instruments that simplified quantitative analysis. Clifford died in 1990 and nine years later Kathryn sold the company to Danaher Corp., where it continues under the Hach name.

Invest in Yourself by Attending ACS ProSpectives Conferences

- Staying current in the latest advances in drug development & design is perhaps the best job security you can have
- Smaller conferences guarantee great networking opportunities
- Numerous case studies mean you learn in context
- Register early and save $$

Tactical Approaches to the Challenge of Drug Failure (Formerly Topics & Tactics in Current Drug Design) - Oct. 4-6, 2009 in Philadelphia, PA at the Crowne Plaza Philadelphia Center City. Co-chairs: Nick Meanwell of BMS, Milind Deshpande of Achillion.

Process Chemistry in the Pharmaceutical Industry with Special emphasis on Continuous Manufacturing - Nov. 2-4, 2009 in Durham, NC at the Sheraton Imperial. Co-chairs: Vittorio Farina of Johnson & Johnson, Mohammed Movassaghi of MIT. Continuous manufacturing program developed by James Evans of the Novartis-MIT Center for Continuous Manufacturing and Kevin Bittorf of Vertex.

Please check www.acsprospectives.org regularly to obtain the most complete, up-to-date information available on all 2009 conferences, including confirmed speakers and abstracts as they become available.

If you have any questions, please email acsprospectives@acs.org or call 1-(800) 227-5558 and ask for ACS ProSpectives.

ACS/CSW Leadership Course Scheduled for November

Mark your calendars! On Saturday, November 7, CSW will be hosting a 4-hour leadership course from the ACS Leadership Development System, called "Engaging and Motivating Volunteers". The course is aimed at giving you practical tools for engaging and motivating volunteers, which you can use both in your professional career as well as in your volunteer activities, like the CSW. The workshop is especially targeting newly involved members of CSW. Information about how to apply and participate will be forthcoming in a future issue of *The Capital Chemist*..

Maintain Cutting-Edge Skills with ACS Continuing Education Courses

According to a recent article in the Wall Street Journal, "maintaining cutting-edge skills" ranked among the top 5 tips for avoiding being a target for layoffs. ACS offers courses designed to help chemical scientists and technicians keep current in today's competitive marketplace. Our Short Course Circuits, ACS National Meeting Courses, and Laboratory/Lecture Courses are offered in convenient locations around the country to minimize travel costs and time spent away from the office.

Short Course Circuits

The ACS Short Course Circuit offers the opportunity to take advantage of a wider range of course offerings in a single location and network with a variety of your colleagues.

September 14-18, 2009 | Seattle, WA Circuit

Courses in Analytical Chemistry, Organic Chemistry, Engineering, Management, Cheminformatics, Polymer Chemistry, Quality Assurance and Toxicology

September 21-25, 2009 | Chicago, IL Circuit

Courses in Analytical Chemistry, Biochemistry, Organic Chemistry, Medicinal Chemistry, Engineering and Quality Assurance

October 12-16, 2009 | Central New Jersey Circuit

Courses in Analytical Chemistry, Biochemistry, Organic Chemistry, Medicinal Chemistry, Engineering, Management and Quality Assurance

October 18-20, 2009 | Louisville, KY Circuit in conjunction with the 2009 FACSS meeting

Courses in Analytical Chemistry, Organic Chemistry, Laboratory Safety and Quality Assurance

November 2-6, 2009 | La Jolla, CA Circuit

Courses in Analytical Chemistry, Organic Chemistry, Medicinal Chemistry, Laboratory Safety, Management, Cheminformatics, and Quality Assurance

December 7-11, 2009 | Houston, TX Circuit

Courses in Organic Chemistry, Laboratory Safety, Engineering, Management, Cheminformatics, Polymer Chemistry and Quality Assurance

Laboratory/Lecture Courses

Get in-class and hands-on experience with Laboratory/ Lecture Courses from the ACS.

October 4-9 | Virginia Tech, Blacksburg, VA

Fundamentals of Polymers and Interfaces for Adhesives, Composites, and Sustainable Structures

Get Involved in the ACS Celebration of IYC 2011: Support the US Commemorative Stamp Campaign

The ACS is working to urge the United States Postal Service to adopt chemistry as a theme for a commemorative stamp in 2011 in view of the contributions of chemistry to the well-being of humankind in the US and worldwide and on the occasion of the 2011 International Year of Chemistry (IYC).

The USPS gets 50,000 subject requests per year and awards only 25 commemorative stamps per year. Your efforts to contribute to this cause this year are very important and very much appreciated!

How to get involved:

•Visit www.acs.org/iyc2011 to download the petition

•Distribute the petition for signature among your colleagues, students, and friends (all chemists and friends of chemistry are encouraged to sign!)

•Mail or fax completed petitions to the ACS Office of International Activities no later than November 1. (see petition for fax number and address)

To learn more about IYC 2011 and to contribute ideas to the ACS celebration of this historic event, visit www.acs.org/iyc2011.

Want to Improve the Public's Appreciation for Chemistry? Become a Chemistry Ambassador!

Chemistry Ambassadors is a new ACS program that invites members to help improve public awareness and appreciation for chemistry in the communities where they live.

Some of you are already doing this through NCW and other activities, we applaud you. But we also know that many of our members are not able to be active in their local sections, yet they are concerned about the public's appreciation for chemistry. If you feel you don't have time to become personally involved in making a difference, we ask you to think again. Chemistry Ambassadors is custom made to fit your schedule and your interests, no matter how little time, or how much you can afford to spend.

If someone asks what you do for living, do you have a response that's comfortable for you and relevant for the other person? Are you willing to provide ACS scholarship information to a high school guidance counselor? How about science podcasts for younger students? Willing to send a letter to your elected official to influence science policy? Sample scripts and letters will be provided, along with audience-appropriate messages about chemistry. And if you have more time, we have more suggestions and more tools.

Going to the national meeting? Stop by one of our workshops on Monday or Tuesday afternoon to learn more about the program. To register, e-mail Keith Lindblom at k_lindblom@acs.org.

ACS Network: The Largest On-line Global Chemistry Community

Today over 17,000 chemists and chemical practitioners worldwide have already joined the ACS Network and are using the power of this on-line community to establish connections, collaborate with colleagues and to share their knowledge and expertise. The ACS Network is a professional networking and collaboration platform that connects scientists, ideas and opportunities.

The ACS Network's suite of tools allows members to build on-line profiles, form and join groups, participate in discussions, get email alerts, share documents and collaborate with other network members having similar interests. The ACS Network can help you:

• Manage your career, meet people and find opportunities.

• Interact and collaborate with peers in a trusted environment.

• Sharpen your skills, learn and grow in your profession.

• Do your work, gain insights and research and gather information.

• Become a leader in your field and get recognized by your peers.

Thousands of chemists world-wide have already established the ACS Network as the premier on-line community for chemistry and the chemical sciences. Join the ACS Network (www.acs.org/acsnetwork) today and make it your #1 online destination to connect, communicate and collaborate within the world of chemistry.

CSW's Twitter and Facebook Sites for the ACS National Meeting

As part of the 238th ACS National Meeting, CSW will be utilizing two social networking sites, Twitter and Facebook. All are welcome to join, both members and non-members alike, as we are utilizing these sites to welcome and help attendees during this convention.

• What is Twitter? Twitter is a micro-blogging service that allows users to send and receive text messages, up to 140 characters in length. Updates are delivered to other users who have signed up to receive them and are displayed on those user's profile pages. Twitter is a free service and users can sign up at www.twitter.com.

• How is Twitter useful? Users can, if they choose, receive messages via their cell phones as a text message, avoiding the internet altogether, and allowing large groups of people to be connected in real time. For example, the following message could be sent to users during the conference, appearing on their cell phones as "CSW_ACS_238th: The 238th ACS National Meeting will be held in Washington DC on Aug. 16-20, 2009" (CSW_ACS_238th is the username that identifies the source of the message). Please note that standard text message fees may occur if you decide to receive Twitter messages through your cell phone.

• CSW's Twitter site: http://twitter.com/CSW_ACS_238th

• What is Facebook? Facebook is a social networking website which allows a user or a group to create an online profile. Other users and groups can then be as added as followers, allowing them to view your profile, as well as receive messages and updates. As with Twitter, Facebook is a free service and users can sign up at www.facebook.com.

• How is Facebook useful? A group can be created and used for discussions and event planning, enabling users to share information and discuss specific subjects. In addition, a group has various privacy setting, limiting information to those who have been allowed to join. And as with Twitter, applications exist that allows users to receive messages via their cell phones.

Historical Dates in Chemistry: Birthdates, Prizes, Breakthroughs

(Continued from page 12)

Hugo Joseph Schiff was born on April 26, 1834. He discovered condensation products of aldehydes and amines, which are now known as Schiff bases, and invented a color test to distinguish aldehydes from ketones.

Charles W. Eliot, a teacher of chemistry and president of Harvard University, was born on March 20, 1834.

Augustus George Vernon Harcourt was born on December 24, 1834. A kineticist, he observed that the rates of chemical reactions increase with increasing temperature, tending to double in rate as the temperature is increased by 10°C.

1809 (200 years ago)

In 1809, Étienne-Louis Malus discovered the polarization of light. The next year, he developed the theory of double refraction of light in crystals.

Antoine François, comte de Fourcroy, died on December 16, 1809. With Antoine L. Lavoisier and Claude L. Berthollet, he devised chemical nomenclature.

1709 (300 years ago)

On March 3, 1709, Andreas S. Marggraf was born. He isolated zinc from calamine, distinguished between potash and soda by flame test, found alumina in clay, and discovered beet sugar in beetroot.

Anne Wallin to Address October CSW Monthly Dinner Meeting

Dr. Anne Wallin, Director of Sustainable Chemistry for Dow Chemical Company, will address the CSW meeting following the monthly dinner at Front Page Restaurant in Arlington on Wednesday, October 14. Details of the dinner meeting will be published in the October issue of *The Capital Chemist*.

In the critical role of Director of Sustainable Chemistry for Dow, Dr. Wallin leads the 2015 Sustainable Chemistry Goal project team which is integrating Sustainable Chemistry across all disciplines, functions, and businesses in Dow. She also leads the company's Life Cycle Assessment Expert Group. Sustainable Chemistry is a corporate critical program which will guide and inform Dow's portfolio and investment decisions over the coming decade.

Dr. Wallin began her career at Dow in Research and Development as a process chemist in the Agricultural Chemicals department. After several years, she moved to Environment, Health and Safety where she held a variety of roles in both research and development and manufacturing. Dr. Wallin joined Dow Public Affairs in 1999, becoming the issue leader for Dow's chlor-vinyl businesses and leading a leveraged global network and representing Dow in several major trade associations.

Anne is a native of Wyoming and holds a bachelor's degree in chemistry from Carleton College. She received a Ph.D. in organic chemistry from the University of Illinois at Urbana-Champaign and was a post-doctoral fellow at G.D. Searle. She is a member of the External Advisory Boards for

the Graham Environmental Sustainability Institute and the Center for Sustainable Systems at the University of Michigan. Dr. Wallin is also a member of the California Green Ribbon Science Panel. She is a co-author of several publications and patents.

Business and Entrepreneurship Opportunities for Chemists

SAVE THE DATE! From Invention to Venture: Women and Entrepreneurship

The ACS's Women Chemists Committee (WCC) and the National Collegiate Inventors and Innovators Alliance (NCIIA) invite you to attend an afternoon workshop on the basics of technology venturing with special emphasis on the key challenges facing women as they pursue a start up opportunity, license or otherwise transfer technology.

Sessions include panel discussions and feature the opportunity for entrepreneurs to "speed pitch" to VIPs and speakers. You do not have to be a member of the American Chemical Society to attend the workshop.

Registration will be available through ACS national meeting registration or through NCIIA for those not attending the meeting. For more information, including speakers and prices, visit http://www. invention2venture. org/wcc09. We hope you will be able to attend!

Date: Sunday, August 16, 2009, 1 pm - 5 pm

Location: Convention Center, Room 152

ACS Small & Medium Business Webinar Series

"What You Need To Know About Changes in VC Landscape and Capital Raising Process"

A half-hour presentation followed by Q&A with speaker Josh Wolfe, Co-founder and Managing Partner of Lux Capital, a venture capital firm focused on founding, seed and early stage investments in the physical and life sciences. Raising capital is by far the most unpleasant task entrepreneurs and small businesses will ever have to perform. The landscape for venture capital funding has also shifted in the last year. This is an opportunity for scientists, professionals, entrepreneurs, and small/medium businesses to learn first hand from an experienced venture capitalist and scientist on how to successfully adapt to changes to the capital raising process. Join us to learn how to find the right funding sources and the venture capitals that can be your partners to success. To register: https://www2. gotomeeting.com/register/715740658

Date: Thursday, August 27, 2009, 2 pm - 3 pm

Short Courses at the ACS National Meetings

Short Courses are held at each National Meeting and the Washington, DC meeting is no exception. Every meeting offers the opportunity to take advantage of a wide range of course offerings before and during the meeting.

August 15-20 - Washington, DC – ACS Fall National Meeting: Courses in Analytical Chemistry, Biochemistry, Organic Chemistry, Medicinal Chemistry, Laboratory Safety, Engineering, Management, Cheminformatics, Polymer Chemistry, Intellectual Property, Quality Assurance, and Toxicology. See www.proed.acs.org.

New Chemistry Guidelines for Two-Year Colleges from ACS

With the rise in cost of higher education and a greater need for workforce development, two-year colleges are playing an increasingly vital role in the US educational and economic landscape. To provide guidance to those who directly or indirectly support excellence in postsecondary chemical education, ACS has released the new ACS Guidelines for Chemistry in Two-Year College Programs (www.acs.org/2Yguidelines). Originally published in 1988, the guidelines are the result of observations, communication, and cooperation among the chemistry community. The newest version of the guidelines was prepared by a task force of faculty from two-year and four-year institutions with valuable feedback from chemistry faculty and administrators.

In the new guidelines:

- the vision of excellence for students, faculty, and programs has been made more explicit,
- the emphasis on faculty development and student skills has been increased, and
- the organization mirrors that of the new ACS Guidelines and Evaluation Procedures for Bachelor's Degree Programs, in order to facilitate student transfer.

The credible articulation of chemistry courses among higher education institutions is essential for student success. The guidelines are intended to assist colleges with the formation of essential alliances that facilitate the successful transfer of students. The development of such partnerships between faculty and programs at receiving and transferring institutions fosters student success and could lead to further opportunities for collaboration.

Additional materials are being prepared to accompany the guidelines. These supplements will explore critical issues and effective practices. Your feedback regarding the topics and the content of the supplements is welcome and can be emailed to CommCollChem@acs.org.

Chem-Mystery

A possibly amusing amalgamation of chemistry, wordplay and trivia

What do the following elements have in common?

- Neon
- Aluminum
- Argon
- Calcium
- Scandium
- Manganese
- Cobalt
- Molybdenum
- Indium
- Lanthanum
- Neodymium
- Protactinium
- Mendelevium
- Meitnerium

Hint: The list could be expanded to include Niobium and Praseodymium. (Answer, page 27)

Just When We Were All Ready to Stop Saying "Nucular"

The misspelling "flourescent," the bane of existence for spell-checkers and spectroscopists alike, has reappeared in the scientific lexicon, in none other than an ACS journal title.

"Flourescent Switch Constructed Based on Hemin-Sensitive Anionic Conjugated Polymer and Its Applications in DNA-Related Sensors," B. Li, *et al.*, *Anal. Chem.* (2009), **81**, 3544–3550.

Actually, a search for "flourescent" in entire article content, using the ACS Publications search site, yields 65 hits (including five hits at *J. Agric. Food Chem.*, in which cases specialists in the chemistry of milled grain products might be excused), but this is the lone example of the usage in an article title.

The Capital Chemist sincerely hopes that "Nucular Magnetic Resonance" is not close behind.

Hosting a High School Event and Need Materials?

ChemMatters, published by the ACS Education Division, is the award-winning magazine for high school chemistry, which demystifies chemistry in students' everyday lives. Each of the four yearly issues brings intriguing stories which inform students about creative applications of chemistry or real-life mysteries solved by chemistry. Each issue also includes a free, web-based Teacher's Guide containing background information, follow-up hands-on activities, classroom demonstrations, and other resources to facilitate student comprehension. Twenty-five years of the *ChemMatters* magazine are now also available on CD. This collection is great for class projects, library research, and science fair information. For more information about these great resources visit www.acs.org/ChemMatters . To receive a limited number of free copies of *ChemMatters* contact Marta Gmurczyk at m_gmurczyk@acs.org or 202-452-2105.

High School Chemistry Teachers will be *"Essential$_2$ Chemistry"* in the ACS National Meeting Teachers Program at Grand Hyatt

At the ACS National Meeting, with more than 11,000 scientists expected to attend, and over 7,000 presentations slated, leaders in chemical education are also a part of the technical program, presenting papers and symposia on key aspects of teaching and learning chemistry.

The High School Teachers Program will be held at the Grand Hyatt, 1100 H Street. The main program events will be held on Sunday, August 16, with related events later in the week.

Sunday Morning Program At 9:00 am, Erica Jacobsen, John Moore, Laura Slocum, and Linda Fanis will start the program with several National Chemistry Week resources available through *The Journal of Chemical Education* and ways that teachers can use them. This will be followed by Clinton Harris, who will share additional ACS resources for celebrating National Chemistry Week with students. Rick Moog will follow with a discussion of hands-on, minds-on Process Oriented Guided Inquiry Learning (POGIL) in high school chemistry classrooms.

At lunch, in a feature of each national meeting, the High School/ College Interface Luncheon brings together educators from different levels with the goal of facilitating an exchange of ideas. This activity is organized by the ACS Division of Chemical Education (CHED). The luncheon speaker, James Saunders, will take a look at the biology and chemistry of chocolate production.

Pre-college registrants should not purchase a ticket to the High School/ College Interface Luncheon; tickets for pre-college registrants to this event are generously provided by ACS President Thomas H. Lane and the Dow Corning Foundation.

Sunday Afternoon Program Tom Greenbowe will share lessons learned from the 2009 Advanced Placement (AP) Chemistry reading and how these will impact the 2010 and 2011 AP Chemistry examination. Tom will then be joined by Eleanor Siebert, Larry Funck, and Fred Vital in a discussion on identifying student misconceptions exhibited on the AP Chemistry examination. David A. Laviska, Sarah M. Sparks, Keisha Stephen, and Alan S. Goldman will follow with a look at the evolution of an innovative university to high school program. C. Marvin Lang and Don Showalter complete Sunday afternoon's program with exciting demonstrations for the high school chemistry classroom.

Teachers attending the national meeting may also be interested in the following workshops (check meeting program for times and locations):

Monday Morning: The Polymer Science of Everyday Things Workshop This hands-on workshop for middle school and high school science teachers will address the polymer science of everyday things through the lens of the National Science Education Standards. This workshop will focus on three topics: Aviation Polymers; Coatings for Automotive Plastics; and Nanocomposites for Transportation.

The first 40 registrants for the Polymer Science of Everyday Things workshop will have their registration fee for the entire ACS meeting paid by the workshop sponsors. Contact absalamone@aol.com for more information. This workshop is sponsored by the ACS Polymer Division, Intersociety Polymer Education Council, Royal Society of Chemistry, UK Technology Strategy Board, ACS Polymer Division Industrial Advisory Board, and the National Science Foundation.

Monday Afternoon: Lab Safety Workshop for High School Science Teachers This workshop will help high school science teachers develop and implement safe lab practices while achieving their goals of experiential science teaching. Topics to be covered include: 1) Regulatory framework for safety and resources to develop your program; 2) Storage, compatibility and labeling; 3) Risk assessment and hazard communication; 4) Case Studies - the good, the bad and the ugly; 5) How chemicals get into the body and what you should do about it.

There is an additional $20 registration fee for the Lab Safety Workshop for High School Teachers. If teachers also attend the Sunday events and/or the morning workshop (Polymer Science of Everyday Things) this registration fee will be reimbursed by CHED. This workshop is sponsored by the Division of Chemical Health and Safety and CHED.

Tuesday Morning: Schools Chemical Cleanout Campaign (SC3) This symposium will introduce the EPA's School Chemical Cleanout Campaign, and explore ways of partnering with local businesses and other chemical professionals to manage your laboratory chemicals. This workshop is sponsored by the Division of Chemical Health and Safety, CHED and the Division of Small Chemical Businesses.

General Information

All attendees must register for the meeting in order to participate in the technical sessions and programs. Registration provides full access to the special High School Chemistry Day program on Sunday as well as the entire ACS meeting.

The cost for registration for pre-college teachers is $90. No additional fees apply for a late registration. Registrants will need to pick up badges at ACS Attendee Registration in the convention center. Attendees can track professional development for sessions attended at the meeting. Upon submission of ACS forms, participants will be mailed a certificate documenting their participation.

Celebrate National Chemistry Week with CSW, October 18-24

The elements are important parts of everyday life and are the basis of the entire universe and of life on Earth. They compose the graphite in pencils, the tungsten in light bulbs, neon lights, copper for cooling applications, the sodium in table salt—the list literally never ends! 2009 is the 140th anniversary of Mendeleev's Periodic Table of the Elements, and is a wonderful opportunity to investigate and appreciate the discovery and use of the elements in every aspect of our lives.

Each year the ACS National Chemistry Week (NCW) campaign reaches millions of people with positive messages about the contributions of chemistry to their daily lives. It is the one time during the year that chemists, regardless of background, unite with the common goal of spreading the word that chemistry is good for our economy, our health, and our well-being.

CSW, along with the ACS Office of Community Activities, is planning several events for this year's NCW, October 18-24. Volunteers are needed for this outreach activity. Some ways that you can contribute to the NCW campaign are: performing chemical demonstrations at a neighborhood school; conducting hands-on activities with children at museums, malls, or libraries; or writing articles or letters to the editor of your ***(Continued, page 23)***

Kids from the St. Mary Star of the Sea School, Indian Head, MD, enjoy NCW activities

Dr. Richard Anderson, USDA, to Address Retired Chemists Group Luncheon

The CSW Retired Chemists Group will hold its Fall 2009 luncheon on Wednesday, September 9, at Pier 7 Restaurant in Washington. The speaker will be Richard Anderson, Ph.D., of the USDA Human Nutrition Research Center in Beltsville, MD, who will speak on the topic, "Benefits of Cinnamon in the Prevention of Diabetes and Alzheimer Disease."

Dr. Anderson, a lead scientist at this Center, is investigating the role of natural products to improve the function of insulin. He received his Ph.D. in Biochemistry from Iowa State University and did his postdoctoral training at Harvard Medical School. He is a recognized expert in the nutritional and biochemical role of chromium in human nutrition. He is currently conducting studies to determine the role and mechanism of action of polyphenols on insulin sensitivity and brain functions, which includes studies on Alzheimer disease and strokes. His work has been the subject of numerous articles in the press, including a front page article in USA Today, and he has appeared on ABC Evening news. He has published more than 190 scientific papers and has given more than 175 presentations at national and international meetings throughout the world.

Dr. Richard Anderson, USDA

Dr. Anderson will speak on the benefits of cinnamon and extracts of cinnamon for people with elevated blood sugar, diabetes and cardiovascular diseases. He will also speak on his recent work regarding cinnamon in the alleviation and prevention of Alzheimer disease and strokes.

The RCG Social will begin at: 11:15 am with a Cash Bar. Luncheon ($26.00 per person) will be served at noon: entrée choices are: 1) medallions of N.Y. sirloin, 2) breast of chicken Tarragon, 3) broiled fillet of sole & scallops, 4) seafood Newburg with rice pilaf and 5) vegetarian plate. Entrees accompanied by potato du jour, vegetable du jour, and mixed green salad. Menus also include ice cream log with fresh strawberry sauce, rolls & butter, coffee (regular or decaf), tea or milk.

RESERVATIONS: CHECKS must be received by September 5, 2009. Make them out to Retired Chemists Group or RCG and send them to Dr. Paul H. Terry, 3102 Craiglawn Road, Beltsville, MD, 20705. Please be sure to give the name of everyone attending, their choice of entrée, and a contact telephone number. If you have any questions call Paul at 301-572-5362.

DIRECTIONS: By Metro, walk from either Waterfront (closer) or L'Enfant Plaza stations, both are on the Green Line. By car, turn onto Water Street from Maine Ave., park under the hotel where the Pier 7 restaurant is located. The first 2 hours are free. Be sure that your parking ticket is validated at the RCG registration table. After 2 hours the charge is $1.00 per hour.

Celebrate National Chemistry Week with CSW

(Continued from page 22) local paper. If you would like to lead an activity at your local school or library, CSW will provide you with some grade specific materials to hand out to the students, as well as some simple demonstrations that you can use.

As part of the NCW 2009 celebration, CSW will be sponsoring a local NCW poster contest. All entries must be received by the local NCW coordinator no later than Monday, October 26, 2009. Entries should be mailed to the NCW Coordinator at the CSW office. Winning entries from each grade category will be forwarded to the ACS for the national competition. Additional information on the poster contest, as well as NCW, is available on the ACS web site (www.acs.org/ncw).

More information about local activities will be posted on the CSW web site (www.csw-acs.org) as it becomes available. For further information, or to volunteer, contact the CSW NCW coordinator, Kim M. Morehouse via e-mail at : Kim.Morehouse@FDA.HHS.GOV, or by phone at 301-436-1889 (day) or 301-384-7311 (evening).

Try out an ACS Webcast - it's easy, economical and convenient

Few companies are immune from the economic hardships in the headlines and many budgets have been trimmed. But it is still crucial to your career to engage in continuing education to expand your skills and stay abreast of new topics. So save your time and money and take a look at the courses available online through ACS. ACS offers a wide variety of webcast short courses and our summer/fall schedule is open for registration now.

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New Website for ACS Members in Industry

Boilthisdown.org is a New Resource for Streamlined Information Access

To focus on the specific information needs of chemists and chemical engineers working in industry, ACS Industry Member Programs has launched a new web site, Boil This Down.

Once, the challenge was getting access to information; today, we're drowning in information. Boil This Down will separate the wheat from the chaff, so you can quickly access the information you need to be successful:

- Quickly grasp the Top News of the day affecting chemists and chemical engineers employed by industry (as reported by the world's top scientific and business publications)
- Provide ACS industry members employed by small and mid-size companies with information targeting their specific needs.
- Highlight Featured Articles published in scientific and business publications that help you become a better manager and scientist;
- Identify and access the ACS programs, products, and services of greatest value to the Society's industry members.

The site has many rich features that allow you to comment on articles, rate them, and share or post them to other sites. The interactivity of the site was purposefully designed to allow for a continuous process of improvement through readers' comments and ratings of the various articles, features and ACS programs. Please visit Boil This Down at http://boilthisdown.org and let us know what you think.

Current profiles featured on the web site include:

- David Porter, Managing Partner of Apposite Capital and a chemist by training. He's a driving force in finding "the next big discovery" and turning scientists into successful entrepreneurs.
- Al Altomari, who helped launch Barrier Therapeutics spin out from Johnson & Johnson in 2002. At Barrier, Al successfully led the company from inception to Initial Public Offering, and finally sale of the company at a premium to Steifel Laboratories in 2008.
- Dr. Barry Streusand, a chemist entrepreneur who started Applied Analytical. Under Dr. Streusand's guidance, Applied Analytical is now one of the premier analytical services laboratories with global strategic alliance partners.

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Chem-Mystery Answer: All of the chemical symbols for these elements are also two-letter state abbreviations (the list could be expanded to include New Brunswick and Puerto Rico).

Advertisers in this issue:

It's a green thing... conserve!

Stop by the ACS Green Chemistry Institute's booth, #1428, at the Expo and show your support for the CSW's green initiative by purchasing a tote or wrist band. Proceeds will go towards funding the local Project Seed and ACS GCI's green chemistry educational programs. For more details see a CSW representative at the Hospitality Booth, just inside the main entrance of the Convention Center on L St. NW.

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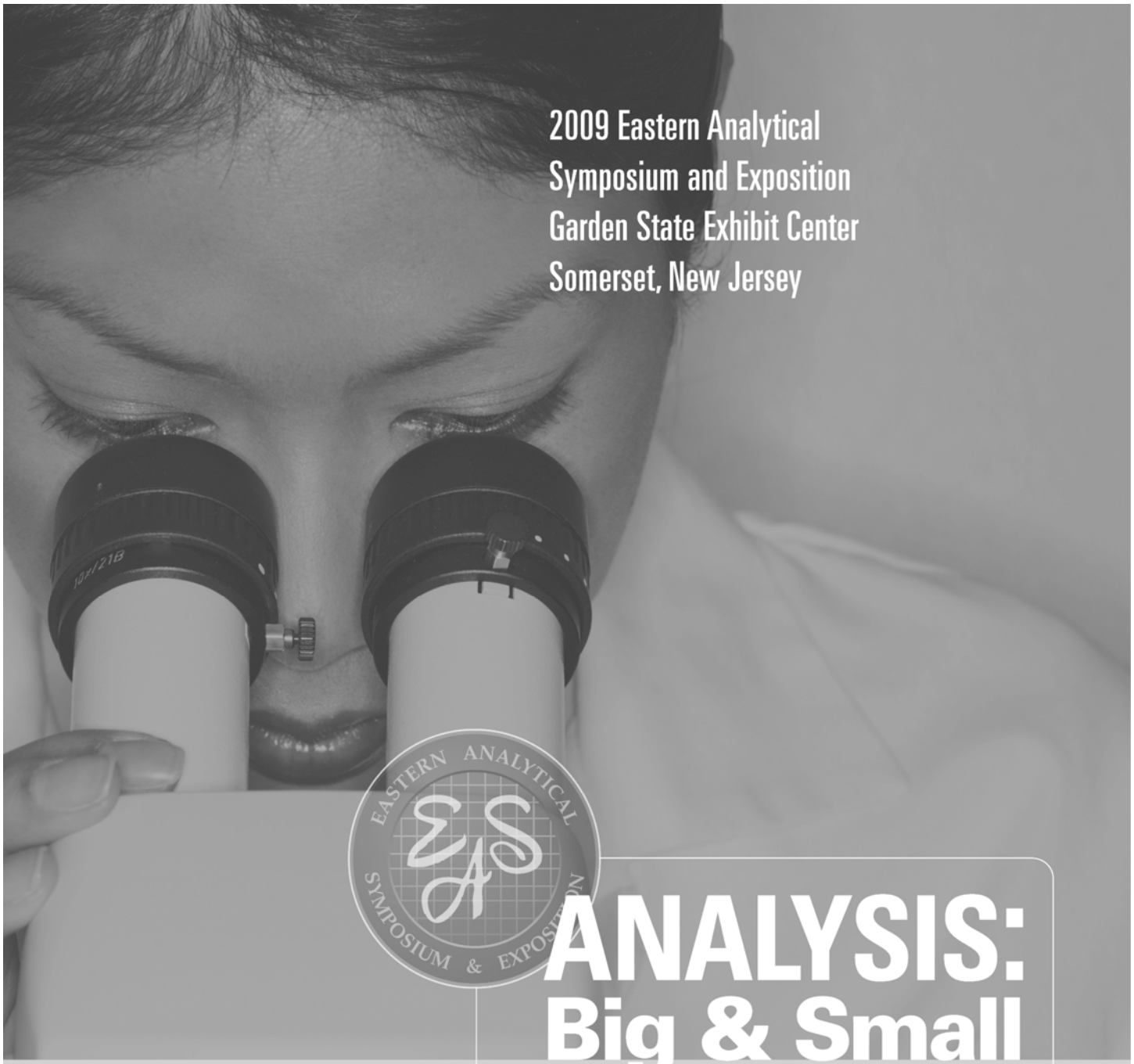

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