

Welcome From CSW President, Michael P. Doyle

The Chemical Society of Washington is a vibrant organization, and I am honored to enter this year as its President. Thanks to Carol Henry, the Board of Managers, and section Councilors, we are positioned to begin 2011 with an exciting array of events. A full slate of dinner meetings is planned for the winter and spring, with the January 13th meeting being held at the American Chemical Society Headquarters and featuring Michael Rogers of the NIH who will speak on subjects that are of interest to all of our members, but especially to those in our large academic community. This meeting highlights one of the objectives for this year, and that is to *increase attendance by faculty and students from our area institutions*. In this time of recession, the opportunity to learn about career and funding opportunities from invited speakers, and especially CSW members from a broad range of academic, government, and industrial organizations, places those who attend our meetings at a distinct advantage. Applications for employment rise to the top of the pile when recommended by an employee who knows the applicant. And, make no mistake, these personal interactions can alert you to upcoming job opportunities before formally advertised online or in C&EN.

We need more participation in CSW events and programs. Dedicated contributors to ongoing activities will guide you to opportunities that will be suitable to you. Not only will you benefit CSW and those with whom you interact, but you will also demonstrate to the community that you are accepting responsibilities that transcend normal expectations. This is particularly useful for students (demonstration of communication skills, leadership capabilities) and faculty (broader impacts of science and community service), as well as government and industrial employees (connectivity with the broader community, mentoring opportunities). Please inform us if you are interested in:

- High School Education, including science fairs, National Chemistry Week, Chemathon, speaker at school events
- College/University Education, including awards, poster presentations, connection with undergraduate student members
- Membership (connections with current and potential new members, Younger Chemists Committee, Women Chemists Committee, Retired Chemists Committee)
- Meetings (2011 MARM, monthly CSW meetings)
- Publications (especially *Capital Chemist* reporters)

Send an email to csw@acs.com to identify your preference(s) with suitable contact information so that we can further discuss possibilities with you.



Continued on Page 5

Call for Posters for February Meeting

The Chemical Society of Washington invites local undergraduate students to present a poster on their research at the February meeting of the CSW, which will be held on the campus of the University of Maryland on February 10, 2011. This meeting will recognize student awardees from the Washington Section, and it presents an opportunity for undergraduate students to display their research to the broader chemical community. Students who present posters will be treated to dinner and to an exciting lecture on chocolate by Dr. William Hurst of the Hershey Company. Poster presentations will be reviewed by a CSW Scientific Committee, and awards consisting of full registration to the 2011 Middle Atlantic Regional Meeting of the American Chemical Society will be given. Those intending to give poster presentations at the CSW meeting on February 10 should send the title of their presentation to Mike Doyle at csw@acs.org on or before February 1, 2011.

The Capital Chemist™



*A Publication of the
Chemical Society of Washington
Section of the American Chemical
Society*

Volume 61 Number 1 Jan 2011

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Claims for missing issues should be sent to CSW at the above address. Member change of address should be sent to ACS, PO Box 3337, Columbus, OH 43210; phone 800-333-9511; e-mail: service@acs.org; or edit member profile online at www.acs.org.

GENERAL: The Capital Chemist (ISSN 0411-0080) is published monthly from January to December (except June, July, and August) by the Chemical Society of Washington, 1155 16th Street, NW, Washington, DC 20036. Periodical Postage is paid at Washington, DC and additional mailing offices. Subscription price is included in all membership fees; non-member subscription is \$10.00 per year.

ISSN 0411-0080

POSTMASTER: Send address changes to The Capital Chemist, 1155 16th Street, NW, Washington, DC 20036.

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THE CHEMICAL SOCIETY OF WASHINGTON PRESENTS: *1099th Dinner Meeting*

Thursday, January 13

ACS Hach Building (ACS Headquarters)

1155 16th Street, NW

Washington, DC

6:00 pm Social Hour

7:00 pm Dinner

COST \$20.00 Members & guests

\$10.00 Students

Menu includes: Chicken Picatta and Vegetable Lasagna, served with garden salad, roasted potatoes, vegetable medley, fresh-baked bread, and assorted cookies. Menu will be served buffet-style.

Make reservations by **Monday, January 10, 2011, 12:00 noon**, to the CSW office: csw@acs.org or 202-659-2650. Please designate the names in your party. The public is invited to attend. You may attend the talk only, but reservations are appreciated. **Those who make a reservation but are unable to attend should send a check for the cost of their meal to the CSW office.**

Directions: The ACS Hach Building is located at the corner of M & 16th Streets in Northwest Washington, four blocks north of the White House. Please note that 16th Street is two-way, and M Street is one-way westbound.

Parking: Parking is available on the street after 6:30 p.m. or in nearby commercial parking garages (if you use a parking garage, please confirm that it is open past 10:00p.m., as some close earlier).

METRO: Blue/Orange Line: McPherson Square or Farragut West, Red Line: Farragut North.

8:00 p.m. Featured Speaker: Michael E. Rogers, Ph.D, Director, Pharmacology, Physiology, and Biological Chemistry division, National Institute of General Medical Sciences (NIGMS) (*please click to see bio*)

Title: An Evolving NIH and Chemistry

Abstract: The National Institutes of Health (NIH) mission is to conduct, support, and apply research to improve human health. This research runs the spectrum from basic laboratory studies to disease-oriented clinical trials, and it includes a substantial amount of research and research training in chemistry that has biomedical implications. The largest supporter of chemistry research within NIH is the National Institute of General Medical Sciences (NIGMS), however support of chemistry research is spread among many of the funding institutes and centers of NIH. NIH is a complex organization, now encompassing 27 separate institutes and centers, each with its own mission and interests and offering an array of programs and funding mechanisms. The NIH is also an evolving organization. From 1998 to 2003, it experienced a budget doubling, which was followed by a period of modest budget increases, and then, a rapid infusion of \$10B in a single year through the American Recovery and Reinvestment Act of 2009



Continued on Page 3

Project SEED 2011 Overview and Opportunities

The Chemical Society of Washington will once again participate in the American Chemical Society's 2011 Project SEED Program. This program places economically disadvantaged high school students in a variety of research environments (academic, industrial, and governmental) for a period of eight-to-ten weeks during the summer months. For the past 41 years, Project SEED has helped high school students expand their education and career outlooks by providing opportunities for students who historically lack exposure to scientific careers.

Under Project SEED, high school students participate in a scientific research project in chemistry under the direct supervision of a mentor scientist. If selected, these students are offered two exciting research opportunities:

- The Summer I program will provide first-time participants (rising juniors and seniors) a fellowship award of \$2,800. The Summer II program will provide Project SEED Summer I students with an additional summer of scientific

research. These students will receive a fellowship award of \$3,300. Additionally, Summer II students will be eligible for a travel grant of up to \$100 to present their research at an ACS or other scientific meeting contingent on availability of funds.

Those interested in participating as mentors for the 2011 program need to send research proposals before **January 27, 2011** (proposals are sent to CSW, but are approved by a national Project SEED committee).

High school science teachers are needed as sponsors to identify excellent chemistry students to participate in Project SEED and assist in the application process. These students must be economically disadvantaged, enrolled in high school and have taken one year of high school chemistry. Applications for Project SEED Summer I or II program/Student Financial Statement are due **April 2011**.

Please note that while the research

mentors under Project SEED receive no financial remuneration from ACS, many chemists and chemistry departments have been willing to participate in the Project SEED experience nonetheless. Their willingness is derived from the positive aspects that Project SEED creates in terms of developing scientific understanding in young people from diverse cultural backgrounds, the enthusiasm that the young student brings to the research group themselves, and the opportunity to serve the community in which their institution is located.

CSW members can participate in this program by donating funds (matched by the ACS), informing local High School teachers about this program, or volunteering to mentor a student in their lab during the summer of 2011. Forms and other information on the Project SEED program can be found on the ACS website (www.acs.org/education), following the links to High School and then Project SEED. For further assistance contact the CSW office at csw@acs.org

January Dinner Meeting Speaker Abstract

(Continued from Page 2) to be allocated over two years. In recent years, NIH has undergone organizational change, initiating the National Institute for Biomedical Imaging and Bioengineering in 2002 and this year changing a center to an institute, the National Institute on Minority Health and Health Disparities. It has also created a number of trans-NIH initiatives, including setting up a program for seedling research that is relevant to the interests of multiple institutes. It has overhauled its peer review system, created a new program for fostering clinical research, and initiated efforts to promote more collaborative research and more highly innovative research. Additional changes are under way, including a proposed new institute focused on substance use, abuse, and addiction research. This entity would integrate relevant portfolios of the National Institute on Drug

Abuse and the National Institute on Alcohol Abuse and Alcoholism as well as tobacco research programs from the National Cancer Institute. Also under active discussion is the proposed establishment of a new center for advancing translational sciences that would incorporate selected translational research programs now located within the National Human Genome Research Institute, the National Center for Research Resources, and other NIH components. It could also house the new Cures Acceleration Network, which was authorized by the Affordable Care Act but has not yet received an appropriation. Through all of these changes and likely changes to come, opportunities for the support of chemistry by NIH should remain strong, both for basic discovery and the growing need for improved analytical tools, molecular probes and imaging agents, all

contributing to the improved understanding of the processes of life.



Michael Rogers, NIGMS, NIH

January Anniversaries in Chemistry

January 18, 1861: One hundred and fifty years ago, Hans Goldschmidt was born. In 1893, he discovered the aluminothermic process (Goldschmidt Process) and patented it in 1895. He was interested in producing very pure metals by avoiding the use of carbon in smelting but realized its value in welding.

January 22, 1936: Seventy years ago, Alan J. Heeger was born on this date. He shared the Nobel Prize in Chemistry in 2000 with Alan G. MacDiarmid and Hidaki Shirakawa for their discovery and development of conductive polymers.

January 23, 1929: Twenty-five years ago in 1986, John C. Polanyi shared the Nobel Prize in Chemistry with Dudley R. Herschbach and Yuan T. Lee for their contributions concerning the dynamics of chemical elementary processes. He was born on this date and is a researcher using infrared chemiluminescence to follow excited reaction products.

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



Pictured left to right: Carol Henry, Fenella France, Library of Congress (December CSW speaker), Kim Morehouse

The Retired Chemists Group

offers a social program of luncheons and outings available to all. Check the new web site:

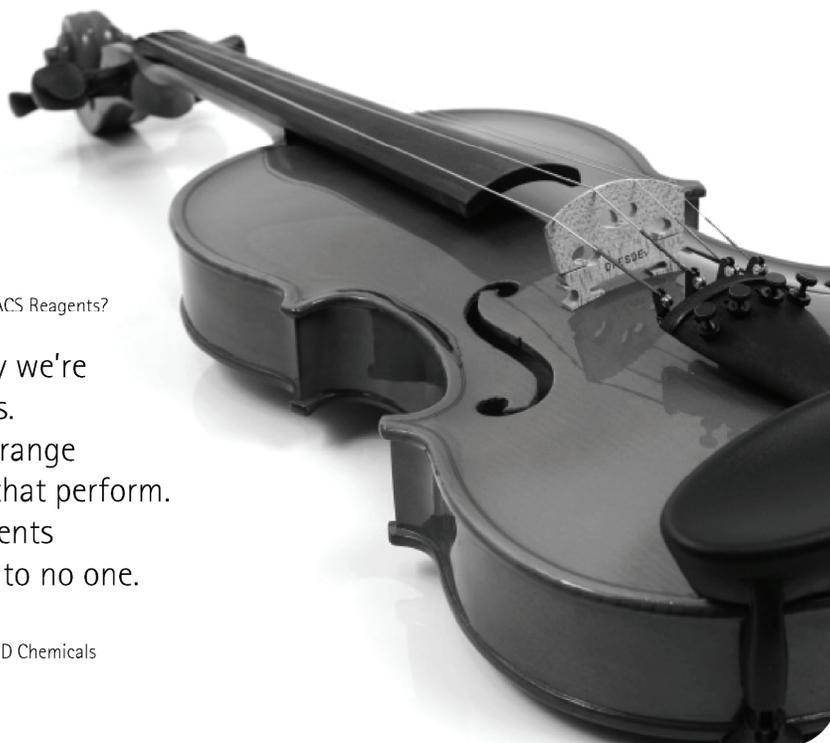
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Welcome From CSW President

(Continued from Page 1) The Chemical Society of Washington is going electronic, and we need your help to complete the task. Already, taking the Capital Chemist online will save us a considerable portion of our budget that we can spend on programs and projects that benefit our members. However, there is an unmistakably large number of members in our section that have not provided us with their email addresses and will be left out of electronic contact. They can request a mail copy, but printing and mailing copies of the Capital Chemist costs money that we hope to spend elsewhere. As volunteers, the officers and managers of CSW are always looking for ways to economize and reduce funds. CSW dues are spent on communication, professional enrichment, and service to our community.

The next step in our efforts to go electronic will be electronic balloting, and this is complicated by the CSW operating documents. Our concern (especially in Washington) is doing the change "by the book". Once implemented, we hope to expect up to 25% of our members voting in annual elections, instead of the current 2.5%.

As mentioned in last month's *Capital Chemist*, CSW is the sponsor of the 2011 Middle Atlantic Regional Meeting (MARM) of the American Chemical Society. Many years have passed since CSW has hosted this event, and we hope to have a very successful event. The 2011 MARM will be held May 21-24, 2011 on the campus of the University of Maryland, College Park. This meeting will feature national and international leaders in the chemical sciences and will include a broad selection of symposia in

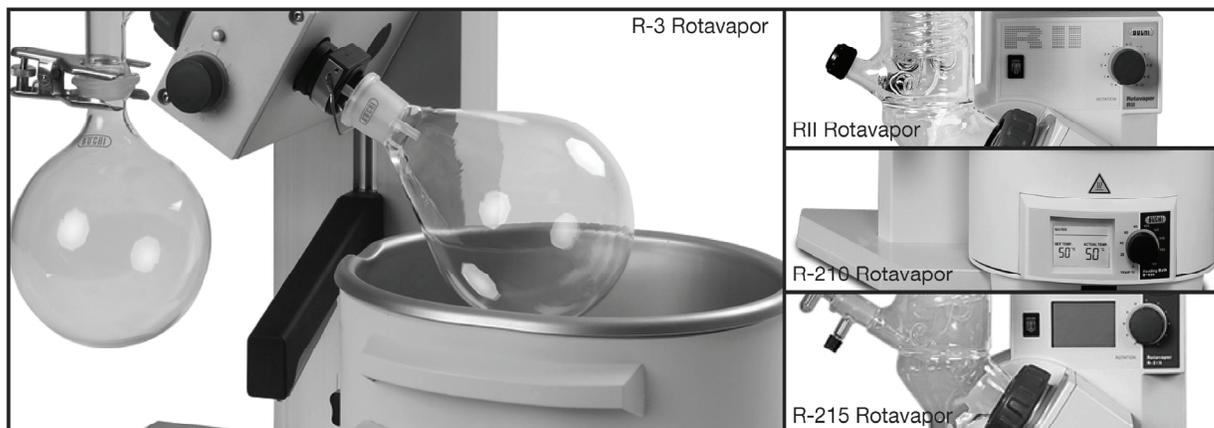
biochemistry/organic chemistry, inorganic/materials chemistry, analytical/physical/theoretical chemistry, and career/education/professional areas. Workshops will be presented and there will be events that feature career development, funding opportunities, and education. Visit the website at: <http://www.marmacs.org>.

It's easy to become a CSW volunteer!

Email csw@acs.org to inquire about upcoming opportunities today!



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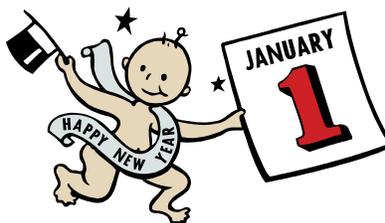
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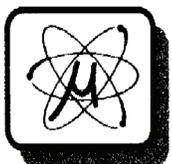


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DC Area Chemistry Seminar Schedules

Listed below are chemistry-related seminar schedule web sites from area universities, that were up-to-date as of press time. More will be posted as they become updated. Contact the department to find out about general public admission, directions to campus, and parking.

Viewing the PDF? Just click!

Carnegie Institution of Washington:

<http://www.gi.ciw.edu>

Georgetown Chem:

<http://chemistry.georgetown.edu/news/seminars.html>

GWU Biochem:

<http://www.gwumc.edu/biochem/biochemevents.html>

GWU Chem:

<http://www.gwu.edu/~gwchem/seminars.cfm>

GMU Computational Materials Science Colloquium:

<http://cmasc.gmu.edu/seminar/schedule.html>

Maryland Biotechnology Institute:

<http://www.umbi.org/home.php>

Maryland Chem:

<http://www.chem.umd.edu/seminars>

Maryland Chem Eng:

www.chbe.umd.edu/events/seminars.html

ACS Publications from DC Area Research Groups

This feature of *The Capital Chemist* is a compilation of selected publications from area institutions that appeared recently in ACS journals.

Raffaele R. Perrotta, Arthur H. Winter, and Daniel E. Falvey (2010). "Photochemical Heterolysis of 3,5-Bis(dimethylamino)benzyl Alcohols and Esters: Generation of a Benzyl Cation with a Low-Energy Triplet State," *Organic Letters*, Article ASAP, Publication Date (web): December 15, 2010. (Department of Chemistry and Biochemistry, University of Maryland, College Park)

Alison M. W. Reed and Steven J. Metallo (2010). "Oriented Protein Adsorption to Gold Nanoparticles through a Genetically Encodable Binding Motif," *Langmuir*, 2010, 26 (24), pp 18945–18950, Publication Date (Web): November 29, 2010. (Chemistry Department, Georgetown University)

Nikolai Lebedev, Igor Griva, Gary S. Kedziora, Anders Blom, and Joel M. Schnur (2010). "The Effect of Water on Electron Transfer through Conductive Oligo(phenylene vinylene) Quinones," *J. Phys. Chem. C*, Article ASAP, Publication Date (Web): December 8, 2010. (Center for Bio-Molecular Science and Engineering, Naval Research Laboratory, Computational and Data Sciences, George Mason University, High Performance Technologies, Wright Patterson Air Force Base, QuantumWise A/S, Copenhagen, Denmark, and College of Science, George Mason University)

E. Mamontov, A. Faraone, E. W. Hagaman, K. S. Han, and E. Fratini (2010). "A Low-Temperature Crossover in Water Dynamics in an Aqueous LiCl Solution: Diffusion Probed by Neutron Spin-Echo and Nuclear Magnetic Resonance," *J. Phys. Chem. B*, 2010, 114 (50), pp 16737–16743, Publication Date (Web): November 30, 2010. (Neutron Scattering Science Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee 37831-6473, United States, National Institute of Standards and Technology Center for Neutron Research, Department of Materials Science and Engineering, University of Maryland, College Park, Chemical Sciences Division, Oak Ridge National Laboratory, CSGI and Department of Chemistry, University of Florence)

CSW Calendar

January Dinner Meeting
Thursday, January 13, 2011

Location: ACS Hach Building Speaker: Dr. Michael E. Rogers, NIGMS

February Dinner Meeting
Thursday, February 10, 2011

Location: University of Maryland
Speaker: Dr. William J. Hurst, Hershey Company

March Dinner Meeting
Thursday, March 10, 2011
Location, Speaker: TBD



Dr. Mary Catherine Cross, the CSW 2010 Schubert Award winner for High School Teaching

Do you have story ideas for the *Capital Chemist*?
Email them to csw@acs.org!