

Special September CSW Meeting with Featured Speaker Dr. William F. Carroll, Jr.

Dr. William F. Carroll, Jr. will be the featured speaker during a special September meeting. The meeting will be held at ACS Hach Building on September 18, 2013. This event will be free and light refreshments will be available. Please note that the presentation will begin at 6:30 pm.

Dr. William F. Carroll, Jr. holds a Ph.D. in Organic Chemistry from Indiana University, Bloomington, IN. He received an M.S. from Tulane University in New Orleans, and a B.A. in chemistry and physics from DePauw University in Greencastle, IN. He is currently Vice President, Industry Issues for Occidental Chemical Corporation and also Adjunct Professor of Chemistry at Indiana University.

Bill is Chair of the Board of Directors of the American Chemical Society, and also a Past President (2005). In 2009, he was chair of the Council of Scientific Society Presidents. On behalf of OxyChem he has chaired numerous committees for industry associations, including the American Chemistry Council and the Vinyl Institute. He has served on expert groups commissioned by the United Nations Environment Programme, the US Environmental Protection Agency and three states—most recently the California Green Ribbon Science Panel.

Bill has received the Henry Hill Award, sponsored by the ACS Division of Professional Relations, the Michael Shea Award from the Division of Chemical Technicians, Distinguished Alumni Awards from both Indiana and DePauw and the Vinyl Institute's Roy T. Gottesman Leadership Award. He is the 2012 recipient of the Harry and Carol Mosher Award from the ACS Santa Clara Valley Section.

He holds two patents and has over sixty-five publications in the fields of organic electrochemistry, polymer chemistry, combustion chemistry, incineration, and plastics recycling.



Speaker Abstract, "Natural Gas: Where It Comes From, How We Get It, Where It Goes and What It Means"

Our economy is dependent upon fossil fuels, but the types and mix are changing. Moreover, fossil fuels are not just for burning; they are the raw materials that drive the chemical industry, over a half-trillion dollar contributor to our economy. This presentation spotlights natural gas and its recent rise in popularity as both a fuel and a raw material. There are comparisons to other fossil sources of carbon and discussion of generation, recovery and uses, and comparisons to other countries' use. We'll touch a couple of controversial topics as well.

Meeting details can be found on page 2.

Celebrate National Chemistry Week October 20-26, 2013

Contributed by Kim Morehouse, CSW NCW Coordinator

Energy is needed for our day-to-day activities, from exercising, powering the lights, or to charge your cell phone. Energy is harnessed through a number of sources such as oil, natural gas, nuclear, wind, and water. Some of these sources are renewable while others are not. This year's National Chemistry Week theme, "Energy Now & Forever," will focus on what energy is, how it is produced, and identify renewable sources of energy.

Each year the American Chemical Society's (ACS) NCW campaign reaches millions of people with positive messages about the contributions of chemistry to their daily lives. NCW is a community-based annual event that unites ACS

local sections, businesses, schools, and individuals in communicating the importance of chemistry to our quality of life. 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.

The Chemical Society of Washington (CSW), along with the ACS Office of Community Activities, is planning several NCW events. Volunteers are needed for these outreach activities. We are in the early stages of these plans and will post additional information on the CSW website and will provide additional information in the October issue of the

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THE CHEMICAL SOCIETY OF WASHINGTON PRESENTS: *1120th Evening Meeting*

Wednesday, September 18, 2013
ACS Hach Building (ACS Headquarters)
1155 16th Street, NW
Washington, DC

Agenda

6:00 p.m.: Check in

6:30 p.m.: Speaker, Dr. William F. Carroll, Jr.

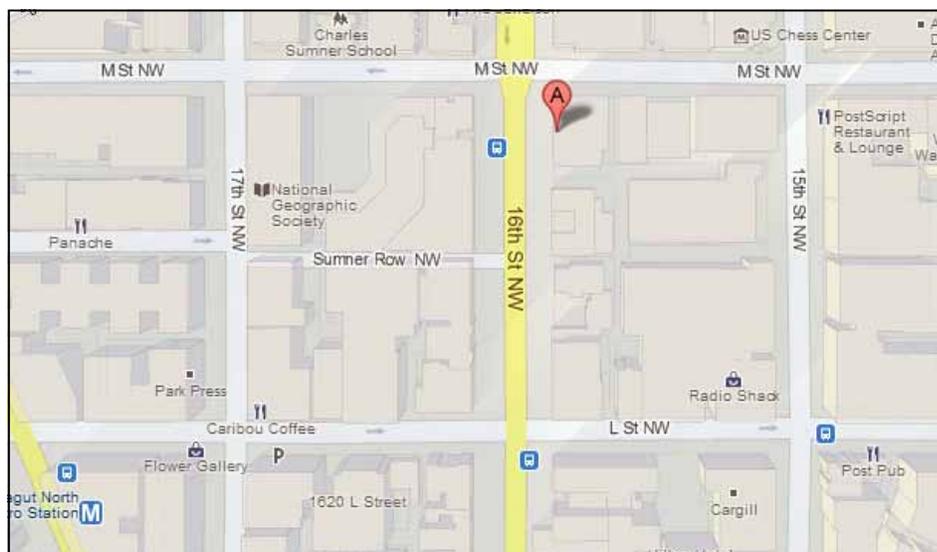
7:30 p.m.: Social hour, mixer

Cost and Reservations: This is a free event, and the public is invited to attend. Make reservations by **Monday, September 16, 2013, 12:00 noon**, to the CSW office: csw@acs.org or 202-659-2650. Please designate the names in your party.

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 west-bound.

Parking: Parking is available in nearby commercial parking garages (Please be aware that garage closing times vary). Parking is also available on the street after 6:30 pm, but be aware that most parking meters are in effect until 10:00 pm and may be limited to 2 hours.

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



National Chemistry Week, Continued From Page 1

Capital Chemist. So mark your calendar now and plan on joining us at an event, or plan one yourself.

As part of the NCW 2013 celebration, CSW will be sponsoring a local NCW Illustrated Poem contest for students in grades K-12. Write and illustrate a poem using the National Chemistry Week theme, "**Energy – Now and Forever!**" Participants are encouraged to illustrate concepts related to the importance of renewable energy. Your poem can be in any style as long as it is **no more than 40 words**. All entries must be received by the local NCW coordinator no later than Monday, October 21, 2013. 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 and will receive a local section award as well. Additional information on the contest, as well as NCW, is available on the ACS website (www.acs.org/ncw).

You can contribute to the NCW campaign by performing Chemistry 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 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.

More information about local activities will be posted on the CSW web site (www.csw-acis.org) as they become 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 240-402-1889 (day) or 301-384-7311 (evening).

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September 5: Mapping the Future of Green Chemistry Education

<http://acswebinars.org/future-green-chemistry-education>

September 19: Bend Minds With Your Bare Hands—Neil's Perspective on Negotiation

<http://acswebinars.org/chemical-entrepreneurship-2013>

September 26: Disappearance of the Y Chromosome

<http://acswebinars.org/end-of-men>

October 3: Tragic Chemical Accidents—Tales, Investigations, and Lessons Learned

<http://acswebinars.org/chemical-accidents>



Calendar of Events

Charles L. Gordon Award Nominations Due

September 16, 2013

CSW Community Service Award Nominations Due

September 16, 2013

YCC NGA Lab Tour & Lecture

September 18, 2013

CSW Evening Meeting

September 18, 2013

ACS Hach Building

YCC Happy Hour

September 26, 2013

Science Club

YCC Webinar

October 8, 2013

Marymount University

October CSW Meeting

October 10, 2013

Koshland Science Museum

Hillebrand Prize Nominations Due

October 15, 2013

ACS Leadership Course

October 19, 2013

National Chemistry Week

October 20-26, 2013

Retired Chemists Luncheon

October 24, 2013

CSW is on Facebook!

"Like" us today to keep up with CSW news and events!



2013 CSW Award Nominations Due

Contributed by Mike Doyle, Awards Committee Chair

Charles L. Gordon Memorial Award

Named after Charles Gordon for his years of service as managing editor of the *Capital Chemist*, the Charles L. Gordon Memorial Award is given in recognition of exemplary service by a CSW member to the profession of chemistry, to the science of chemistry, and/or to the Chemical Society of Washington. Nominations are invited for this award, consisting of a plaque that will be presented at the December CSW dinner meeting. A written nomination should include a description of the accomplishments on which the nomination is based. Additional documentation that includes seconding letters and the nominee's CV are welcome.

Completed nominations for the Charles L. Gordon Award are due on or before September 16, 2013. The nomination should be submitted electronically to csw@acs.org. Please contact the Chair of the Awards Committee, Michael P. Doyle, mdoyle3@umd.edu, if you have any questions.

Community Service Award

Nominations are invited for the Chemical Society of Washington Community Service Award that is given to a member of CSW in recognition of outstanding public service. The annual award, in the form of a certificate, will be presented at the December CSW dinner meeting. A written nomination consists of a letter that describes the contributions of the nominee and why the candidate is deserving of the honor. Additional documentation that includes seconding letters and the nominee's CV are welcome. In order to be eligible for the award, the nominee must be a member of the Chemical Society of Washington (ACS Local Section).

Completed nominations for the CSW Community Service Award are due on or before September 16, 2013. The nomination should be submitted electronically to csw@acs.org. Please contact the Chair of the Awards Committee, Michael P. Doyle, mdoyle3@umd.edu, if you have any questions.

Hillebrand Prize

Nominations are invited for the Hillebrand Prize that is awarded annually for original contributions to the science of chemistry by a member or members of the Chemical Society of Washington. The Hillebrand Prize is the most prestigious honor given by CSW and is recognized nationally as a mark of significant accomplishment in chemistry. Many previous Hillebrand Prize winners have won numerous other national and international awards, including three that have received the Nobel Prize. 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. Recent awardees can be found at <http://csw.sites.acs.org/hillebrand.htm>.

The nomination letter is limited to 1000 words. Two seconding letters are required, each limited to a maximum of 500 words, and the nomination package must also contain the nominee's curriculum vitae, including a list of publications and other accomplishments, and a proposed citation of not more than 25 words. The nomination package should be submitted by e-mail, preferably as a 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 writers of seconding letters. All materials must be received by October 15, 2013. The awardee will be announced before the end of the year, and the Prize will be presented at a CSW dinner meeting in March 2014. 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.

Fenselau featured in ASMS Focus Article

CSW member Catherine Fenselau was the subject of a Special Focus section in the August 2013 edition of the *Journal of The American Society for Mass Spectrometry*. Fenselau was the recipient of the 2012 Distinguished Contribution Award. The Special Focus section included an opening article detailing Dr. Fenselau's history and contributions to her field, as well as a Critical Insight article written by her.

From the article: "The *Journal of the American Society for Mass Spectrometry* is privileged to present this Special Focus to honor Catherine Fenselau and to acknowledge her seminal accomplishments in the rapid detection, characterization, and differentiation of intact microorganisms by mass spectrometry. We look forward to the exciting future of this field!"

Chemists Celebrate Earth Day

CSW members celebrated Chemists Celebrate Earth Day (CCED) 2013 at Rockville Science day, held at Montgomery college in Rockville, MD.



Photo courtesy of Ajay Mallia.

CSW Younger Chemists Committee (YCC) News and Events

Contributed by Dr. Ajay Mallia, YCC-coordinator

Finding Your Pathway

In order to explore the diverse opportunities available in today's market, YCC organized a workshop on career development and job prospects in the industrial and academic settings on May 4, 2013 at ACS Headquarters. Ms. Malahat Layazali and Mr. Roger E. Brown, from ACS-Careers explained how to start searching for jobs and different job opportunities. Thirty-seven attendees actively participated in this workshop and discussion. The CSW-YCC committee would like to recognize and thank the speakers, Ms. Layazali and Mr. Brown, and the ACS-Careers team for helping us make this event a big success.



Working in higher education and in industry

CSW-YCC organized two extensive workshops on working in higher education (on June 12 attended by 27 participants) and working in industry (on July 13 attended by 57 participants) by Dr. David Harwell, Assistant Director of Career Management and Development. Dr. Harwell instructed the participants how to prepare and apply for an academic institution job, pros and cons of a career in academia, and job opportunities within the four main types of academic institutions. He also clearly explained the best way to find industrial jobs and explained how to write a resume for industry and manage the recruitment process. The CSW-YCC committee would like to recognize and thank Dr. Harwell, the ACS-Careers team, and CSW Administra-

tive Officer Dr. Kristy Martin for helping us make this event a big success.

Anacostia Environmental Youth Summit

The CSW-YCC and CSW-Sustainability committees participated in an outreach event at the Anacostia Environmental Youth Summit (AEYS) organized by District Department of Environment on May 31, 2013 at Anacostia Park in Washington, DC. Volunteers from CSW provided hands-on activities to high school students. Our aim was to educate the students about air and water pollution and explain about greenhouse gases and oil spills using demonstrations.



How well do you know the world of chemistry? - A networking event

The CSW-YCC committee and the ACS Office of International Activities successfully organized a networking event on August 22, 2013 at ACS Headquarters. About 35 participants enjoyed the

event. Ms. Julia Throop (senior associate, ACS-OIA) discussed the international activities of ACS. Dr. Ajay Mallia, (Chair, CSW-SEED and membership committees and YCC coordinator) presented an interactive discussion on chemistry language and origin of many chemistry words using a short quiz. Correct answers were awarded with prizes. For further information about ACS-OIA visit www.acs.org/ic (intlacts@acs.org). The CSW-YCC committee would like to thank the ACS-OIA team and CSW Administrative Officer Dr. Kristy Martin for helping us in making this event a big success.

Upcoming Events

September 18, 2013, 12:30-2:00 pm

National Gallery of Art lab tour and a lecture on conservation science

(Make reservation by September 13, noon at csw@acs.org, for more information contact Dr. Ajay Mallia at vajaymallia@gmail.com)

September 26, 2013, 6:00-8:00 pm

Fall Happy Hour & Chemistry Scavenger Hunt
Science Club

1136 19th St NW, Washington, DC 20036
(Make reservation by September 23, noon at csw@acs.org)

October 8, 2013, 7:00-8:00 pm

Putting Your Best Foot Forward: Managing Your Paper and Online Resumes-Webinar
Marymount University

2807 N. Glebe Rd, Arlington VA 22207
(Make reservation by Friday October 4, noon, at csw@acs.org)

Photos courtesy of Ajay Mallia.

**Retired Chemists Group Luncheon
Pier 7 Restaurant, Washington DC
October 24, 2013**

Agenda

- 11:15am: Social (no host bar)
- 12:00pm: Lunch
- 1:00pm: Business meeting
 - a. Election of officers for 2014
 - b. Installation of officers
- 1:20pm: Speaker: Dr. Robert Maybury, IOCD (retired)

Dr. Robert Maybury

Executive Director Emeritus, International Organization for Chemical Sciences in Development (IOCD).

“Linking the exploration and conservation of biodiversity—a tribute to the late Thomas Eisner, father of chemical ecology”

With a Ph.D. in chemistry from Boston University and 2 years of postdoctoral research in protein chemistry at Harvard University, Robert Maybury taught chemistry and carried on research at the University of Redlands, California for 10 years. Then, in 1963, he joined the science sector of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in Paris, France, with 12 years in Paris and 8 years in Nairobi, Kenya, as Deputy Director of the UNESCO Regional Office for Science and Technology for Africa. On retiring in 1983, Dr. Maybury was invited by Dr. Charles Weiss, Science and Technology Adviser to the World Bank, to join him in implementing a training course on choice and management of technology for developing countries. Finally, in 1987, Dr. Maybury was privileged to accept Dr. Glenn Seaborg’s invitation to serve voluntarily as the Executive Director of IOCD, which he has done for 23 years until granted emeritus status.

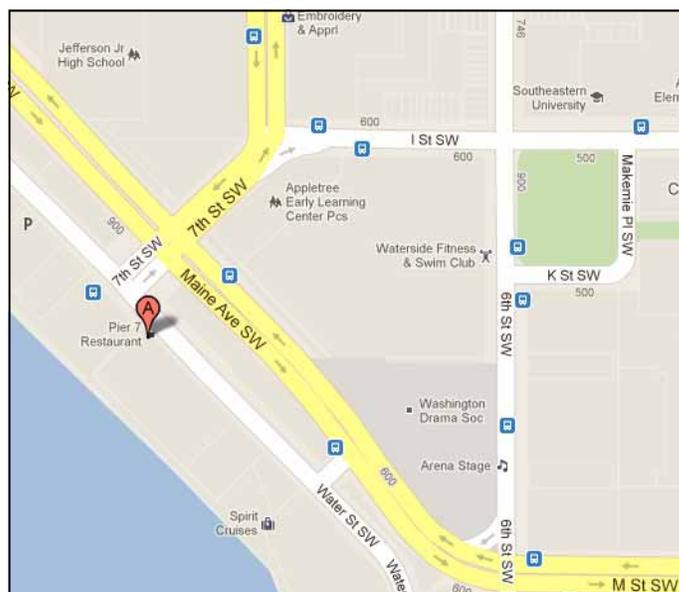
Bob Maybury’s talk pays tribute to the late Dr. Thomas Eisner, a highly esteemed chemical ecologist of Cornell University who, throughout the 1950s and 60s, was sounding the alarm through his writings and lectures about the ever-increasing rate of destruction to the environment that was causing loss to the biodiversity of whole habitats. Convinced that concerted action was needed to arrest this assault on biodiversity resources, he proposed a scheme that linked chemical prospecting of biodiversity (which he called “bioprospecting”) with conservation of that same biodiversity. Bob will describe the journey he and IOCD travelled with Tom Eisner, first to get support for this scheme and, after Tom’s passing, the long and tortuous road IOCD is still pursuing in extending the scheme to developing countries. Even though biotechnology has rapidly come to the fore as a powerful source of pharmaceuticals and agrochemicals, the fight against disease and the improvement of agriculture still requires the continuation of bioprospecting with nature’s yet unexplored diversity along with the conservation of this biodiversity. Hence, IOCD accepts the responsibility of extending Eisner’s scheme for linking exploration and conservation to more of the developing countries.

Luncheon Information:

Menu choice: (1) medallions of NY sirloin, (2) broiled filet of sole and scallops, (3) breast of chicken tarragon, (4) seafood Newburg with rice pilaf, or (5) a vegetable plate. Served with your entrée will be a choice of potato and vegetables du jour, tossed salad, ice cream log with strawberry sauce, rolls, and beverages.

Reservations: Please send your menu selection(s) along with a check for \$28.00 per meal, made out to RCG or Retired Chemists Group, to Dr. Jerome McDonald, 19636 Olney Mill Road, Brookeville, MD 20833. Please send your menu choice(s) and check for receipt by October 17.

Pier 7 Restaurant is located in the Channel Inn Hotel on Washington’s waterfront at 650 Water Street, SW. There is free 3-hour parking in the garage under the hotel. Please remember to have your parking ticket stamped at the luncheon.



ACS Leadership Course for CSW Members: "Fostering Innovation"

We have all heard the old adage of doing something in the same way over and over will not produce different results. The very basis of chemistry and your profession challenges you to advance your thinking, identify new solutions, and design new approaches continuously. Yet, it is not easy changing the way you or those you work with look at an issue and create new ideas. Imagine if you could:

- Tap into a systematic method for creating new approaches.
- Eliminate personal and organization barriers that inhibit your ability to think more innovatively.
- Have a proven process to generate ideas.

We all have the capacity to innovate. Yet, sometimes we are blocked because we don't have a process that will help us think outside the box, or we are unwilling to challenge traditional approaches, or communication barriers inhibit us. Whatever the reason, the objective is to gain the tools to help you and those you lead stretch your ability to develop new ideas.

On Saturday October 19th, the Chemical Society of Washington will be hosting a 4-hour leadership course from the ACS Leadership Development System, titled "Fostering Innovation".

In this four-hour course you will learn that innovation doesn't happen by chance but can be managed. The understanding and tools you gain will help you learn how to tap into your own innovation style as well as learn how to stimulate innovative thinking.

Instructional Objectives

After completing this program, the participant will be able to describe:

- The structural, personal, and communication barriers to innovation;
- That everyone is capable of generating ideas and we are innovative in different ways;
- Four different approaches to developing ideas and how to encourage people to innovate no matter what their preferred innovation approach;
- The 4 main questions that serve as the basis for innovation; and
- How to help people open up to new possibilities, challenge traditional approaches, and encourage diverse perspectives.

Who Should Attend This Workshop?

This workshop is designed for leaders in our local section who need to rely on innovative thinking, ideas, and approaches to move a group in a new direction or a project forward. Those leaders who are responsible for making significant changes to current processes, or are asked to create new ideas and approaches for addressing key issues, or who need to make a significant impact, will benefit greatly from this course.

For more information, contact Rob Wiacek at rwiacek@gmail.com.

Course: Fostering Innovation

Date/Time:

October 19, 10:00 am - 2:00 pm

Location: American Chemical Society, 1155 Sixteenth St., NW, Washington, DC 20036 (Marvel Hall)

Apply by October 5 to participate for free! Available to a limited number of participants selected by CSW. The course is open for the regular fee to anyone else (\$150 for ACS members, \$300 for non-members).

To apply for free participation:

Send an email to rwiacek@gmail.com by 11:59 pm on **October 5**, including your contact information, a paragraph explaining why you want to attend the course, and a short description (up to 1 page bio or 2 page CV or resume) including your technical/scientific experience and experience/participation in ACS or CSW activities or other volunteer organizations.

The blanket is back for 2013!

Click here to find out to get one!

www.acs.org/2MGMblanket

Paul Terry Receives RCG Certificate of Appreciation

The Retired Chemists Group celebrated its 25th anniversary and presented Paul Terry with a certificate of appreciation at their last luncheon, held August 8, 2013 at the Marietta House Museum in Glenn Dale, MD. The photo shows Joe Antonucci presenting the certificate of appreciation to Paul Terry, who was the co-founder and first President of the Retired Chemists Group



(RCG). He remains very active in RCG. His award reads:

The Retired Chemists Group of the Chemical Society of Washington on the Occasion of its Twenty-fifth Anniversary Celebration Expresses to Paul Terry the deep appreciation of its members for his foresight, energy, and dedication in the creation and fostering of the Retired Chemists Group, thus contributing to the professional and personal well-being of this important segment of the Society's membership, as its members leave their formal and familiar career paths and follow the less well-defined opportunities presented by retirement.

Photo courtesy of Jahn Malin.

K-12 STEM Volunteers Needed

The American Association for the Advancement of Science needs scientists, engineers and physicians to assist K-12 STEM teachers in the District of Columbia and adjacent counties during the 2013-14 school year. The details of the collaboration are worked out between the teacher and the volunteer, and may involve giving demonstrations, assisting in lab experiments, lecturing on special topics, assisting with homework, etc. The hours are flexible, and volunteers attend a one-day orientation session before being assigned to schools. To see how volunteers are assisting their teachers, view the Voice of America classroom interview, <http://youtu.be/2RiVrYKbck>, or the video clips at www.seniorscientist.org. If you care about K-12 STEM education and have time to share your knowledge with students and teachers, please email bcalinge@aaas.org, or call 202-326-6629.

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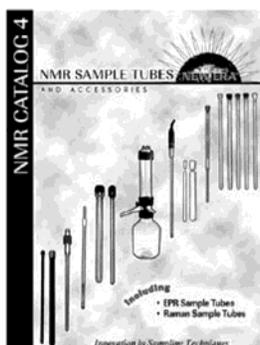
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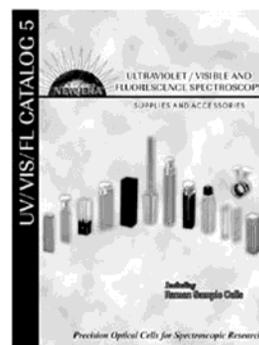
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National Historic Chemical Landmarks in Your Community

Contributed by Keith Lindblom, ACS National Historic Chemical Landmarks Program Manager

The American Chemical Society established the National Historic Chemical Landmarks program to enhance public appreciation for the contributions of the chemical sciences to modern life in the United States and to encourage a sense of pride in their practitioners. To date, the program has recognized nearly 70 subjects in the United States and around the world, including three within the Chemical Society of Washington:

Bakelite: Discovered in 1907 by Leo Hendrik Baekeland, Bakelite was the world's first completely synthetic plastic. Baekeland reacted phenol and formaldehyde under pressure at high temperature in a sealed autoclave known as a Bakelizer to form the thermosetting resin Bakelite. Versatile and readily molded, Bakelite opened the door to an era of synthetic materials. The National Museum of American History, which houses the Bakelizer, received the Society's first NHCL recognition in 1993.

National Institute of Standards and Technology: Through programs in materials characterization and standards, measurement, calibration, and synthesis—and in areas as diverse as cryogenics, weather prediction, solid state devices, and synthetic rubber—NIST has demonstrated that the intelligent application of research in physical sciences to a wide range of societal challenges contributes to a higher quality of life for everyone. NIST was designated as a National Historic Chemical Landmark in Gaithersburg, Maryland, in 2001.

Deciphering the Genetic Code: Marshall Nirenberg and Heinrich Matthaei discovered the key to breaking the genetic code when they conducted an experiment using a synthetic RNA chain of multiple units of uracil to instruct a chain of amino acids to add phenylalanine. Nirenberg would go on to decipher the code by demonstrating the correspondence of various trinucleotides to individual amino acids. Their discoveries were recognized in 2009 at the National Institutes of Health in Bethesda, Maryland.

All Landmarks must clearly represent seminal achievements in the history of chemistry, must evidence significant impact and benefit to the public and the chemistry profession, and must be at least 25 years old. Prospective subjects are nominated by ACS local sections, divisions or committees; reviewed by the ACS National Historical Chemical Landmarks Subcommittee; and approved by the ACS Board Committee on Public Affairs and Public Relations. Recent achievements recognized through this program have included: The [development of fluorescent pigments](#); the [legacy of Rachel Carson's *Silent Spring*](#), and the [Mellon Institute of Industrial Research](#). For more information about the nomination and selection process and a complete list of designated achievements, visit www.acs.org/landmarks.

Doyle Named Outreach Volunteer of the Year

Contributed by Rob Wiacek

In an effort to recognize the immeasurable outreach efforts made by local section volunteers, the Committee of Community Activities (CCA) has established a new recognition program entitled **Local Section Outreach Volunteers of the Year**. This program intends to recognize individuals who have demonstrated extraordinary outreach volunteer service within their local section.

In recognition of his exemplary outreach efforts, it is with great pleasure that we announce that **Professor Michael P. Doyle** of the University of Maryland, College Park will be named the **2012 Local Section Outreach Volunteer of the Year** for the Chemical Society of Washington. Chairing the scientific committee for the 44th International Chemistry Olympiad, Professor Doyle assembled a committee to construct both written and laboratory exams and experiments, ensured that the exams were vetted and tested, and recruited volunteers to assist with the exams.

With this award, we recognize and honor Professor Doyle for providing an invaluable experience for these bright high school chemistry students from around the world.

Project SEED Needs Your Support!

Project SEED cannot operate without the help from individuals and companies that support the Scientists-in-training. Are you interested in supporting Project SEED? Last year we unfortunately turned away many applicants because of lack of funding. CSW has established the Noel Turner Memorial Fund to help support Project SEED. Your donation will be used for student stipends (\$2500 for the SEED-1 and \$3000 for the SEED-2 program). Your contribution is fully tax deductible. For more information, Ajay Mallia, Project SEED Coordinator, can be reached by email at vajaymallia@gmail.com, or you may contact CSW at csw@acs.org, or by phone at 202-659-2650.

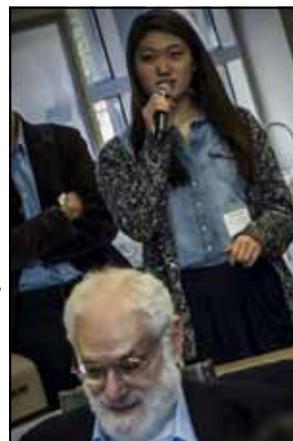


Project SEED: Cultivating Excellence in High School Students Through Summer Chemistry Research

Contributed by Ajay Mallia, Project SEED Coordinator

For the past 44 years, the ACS Project SEED program has helped thousands of economically-disadvantaged high school students who lack exposure to scientific careers by giving them an opportunity to conduct research at academic, industrial, or governmental institutions. Under the Project SEED program, high school students participate in a scientific research project in chemistry under the direct supervision of a mentor scientist for a period of 8 weeks from June to August. SEED fellows learn new research skills, gain self-confidence, and expand their education and career outlooks to place their foot firmly in the tough and expanding job market. CSW first became involved in Project SEED in 1991 by supporting 4 students. For the first time in CSW history, this year 17 disadvantaged DC, VA, and MD high school students were supported for summer internships at flagship institutes such as Georgetown University, George Washington University, and University of Maryland (College Park and Baltimore County), as well as national institutes such as FDA, NIST, and the Library of Congress. SEED students participated in a broad spectrum of research projects, including:

- Three-dimensional structural study of polysaccharides by NMR
- Characterization of a novel carrier protein for meningococcal meningitis vaccines
- Photonic thermometry using fiber bragg grating
- Porous molecular materials with embedded host molecules
- Environmental and biological nitric oxide reactivity at copper
- Synthesis and characterization and use of new Pd compounds
- Developing new instrumentation and methods for sample analysis
- UV/vis spectrophotometric analysis of the reactions of organic dyes
- Study of adaptive three-dimensional shape transformation of soft hydrogel materials, gels and ionic liquids and their applications
- Fundamental properties of water under cryogenic conditions
- Degradation of library paper-based materials
- Crystal growth of organic compounds
- Metal nanoparticles synthesis and characterizations
- Developing tools for designing safer industrial chemicals



CSW's Project SEED program organized an orientation session on May 25, 2013 at ACS Headquarters to clearly state the objectives and achievements of Project SEED, as well as to specify the responsibilities and expectations to the new SEED fellows. A range of speakers, including professors, national lab staff, school teachers, and SEED alumni, presented their own perspective on Project SEED. Topics discussed included lab safety, tips for success, and past successes where research projects have led to published papers. One speaker was Project SEED alumni and Thomas Jefferson High School graduate Ms. Hyae-in Seo. Ms. Seo won first prize in the Chemistry section for presenting her Project SEED research at the Virginia Junior Academy of Sciences (VJAS) at Norfolk State University. She is also a co-author of a publication in the ACS journal *Langmuir* that includes her Project SEED research and will be continuing her undergraduate studies at Columbia University. Ms. Seo told the new SEED fellows about her success story and the work involved.

The CSW Project SEED committee would like to recognize and thank the high school chemistry and science teachers who made Project SEED possible: Hadan Kauffman, Ashley Jones, and Omar Acio of Thomas Jefferson High School for Science and Technology; Jacqueline R. Alton of Thomas Wooten High School; Yuanjun Liu of Centennial High School; Mei Wang of Walter Johnson High School; Mark Agnew of Rockville High School; Marta Walter of High Point High School; Prasad Girard of Poolesville High School; and Ellen Royse of Capitol City Public Charter School.



Photos, from top: SEED fellow Ms. Ellen Kim and Professor Richard Weiss, Georgetown University (SEED mentor) at the orientation program; Question and answer portion of the orientation program; 2013 Project SEED fellows with Project SEED committee members Dr. Ajay Mallia and Dr. Walter Benson at the orientation program.

Project SEED 2013: A Summer in Photos



The names and institutions of the mentors who volunteered to guide these young scientists are described below. The CSW-SEED committee owes a huge debt of gratitude to the tireless work of all these mentors for the success of Project SEED.

- Professor Timothy Warren of Georgetown University mentored Ms. Vivian Mensah of High Point High School.
- Professor Andrei Vedernikov of University of Maryland, College Park mentored Ms. Sulin Wu of Centennial High School.
- Professor Zhihong Nie of University of Maryland, College Park mentored Mr. Sang Ho Jee of Old Mill High School.
- Professor Travis Holman of Georgetown University mentored Mr. Joshua Yoo of Old Mill High School.
- Professor Kaveh Jorabchi of Georgetown University mentored Mr. Seong Jun Jang of Thomas Jefferson High School.
- Dr. Daron I. Freedberg of FDA mentored Mr. Diego Torres of Poolesville High School.
- Professor Richard Weiss of Georgetown University mentored Ms. Ellen Kim of Thomas Jefferson High School.
- Professor Vladislav Sadchenko of George Washington University mentored Mr. Morris Mou of Centennial High School.
- Dr. Willie Vann of FDA mentored Ms. Ji Whae Choi of Thomas Jefferson High School.
- Dr. Zeeshan Ahmed of NIST mentored Ms. Alejandra Torres of Poolesville HS and Ms. Harliv Kaur of Wootton High School.
- Dr. Fenella G. France of Library of Congress mentored Ms. Linhchi Nguyen of Walter Johnson High School.
- Professor Akos Vertes of George Washington University mentored Ms. Ming Hong Nguyen of Capital City Public Charter School.
- Professor Marie-Christine Daniel-Onuta of University of Maryland, Baltimore County mentored Ms. Angela Chan of Centennial High School.
- Professor Jennifer Swift of Georgetown University mentored Ms. Aria Kim of Thomas Jefferson High School.
- Prof. Yu Ye Tong of Georgetown University mentored Mr. Richard Castro of High Point High School.
- Professor Adelina Voutchkova-Kostal of George Washington University mentored Ms. Michaela Berger of Rockville High School.

Clockwise, from top left: Professor Akos Vertes, George Washington University (SEED mentor), Ms. Ming Hong Nguyen (SEED fellow) and Ms. Sylwia Stopka (Graduate student mentor); SEED fellow Mr. Diego Torres with Dr. Daron I. Freedberg, FDA (SEED mentor); Carina Minardi (Graduate student) with Seong Jun Jang (SEED student) and Professor Kaveh Jorabchi, Georgetown University (SEED mentor); Professor Andrei Vedernikov, University of Maryland, College Park (SEED mentor), Sulin Wu (SEED fellow) and Elikplim Abada (Graduate student mentor); Mr. Joseph Ramirez (Graduate student mentor), Mr. Joshua Yoo (SEED fellow) and Professor Travis Holman, Georgetown University (SEED mentor); Professor Marie-Christine Daniel-Onuta, University of Maryland, Baltimore County (SEED Mentor), Ms. Angela Chan (SEED fellow) and Mr. William Ghann (Graduate student mentor); Mr. Yangwei Liu (Graduate student mentor), Mr. Richard Castro (SEED fellow) and Professor YuYe Tong, Georgetown University (SEED mentor); Dr. Greg Strouse, NIST (Group Leader, Sensor Science Division Thermodynamic Metrology Group, NIST), Dr. Zeeshan Ahmed, NIST (SEED Mentor), Ms. Alejandra Torres Diaz (SEED fellow) and Harliv Kaur (SEED fellow); Dr. Justine Vionnet, FDA, Ms. JW Choi (SEED fellow) and Dr. Willie Vann, FDA (SEED mentor); Professor Zhihong Nie, University of Maryland, College Park (SEED mentor), Mr. Sang Ho Jee (SEED fellow) and Mr. Yijing Liu (Graduate student mentor); SEED fellow Ms. Linhchi Nguyen with Dr. Eric Breitung, Library of Congress (SEED-co-mentor).

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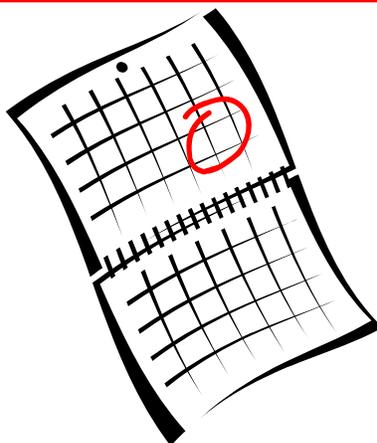
- Companies for laboratory and management positions
- Universities & Colleges for teaching positions and laboratory personnel
- Hospitals for technical and research personnel

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

- www.mboservices.net
- <http://membership.acs.org/W/WashDC/career.html>

SAVE THE DATE!

The Chemical Society of Washington will be hosting a special October meeting at the Koshland Science Museum, celebrating our newest 50 Year Members as well as our 2013 Project SEED students. More information will be in the October issue of the Capital Chemist.



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