

## Hillebrand Prize Recipient Mike Doyle to Speak at April Meeting

On April 10, 2014, Dr. Michael P. Doyle, Professor at the University of Maryland, College Park, will receive the 2013 Hillebrand Prize and be the featured speaker for the evening. Logistical details for the meeting can be found on page 2.

The selection of the recipient of the Hillebrand prize, the highest award given by CSW, is difficult due to the fact that all nominees have an extensive record of publications and other research accomplishments in wide ranging areas of the chemical sciences. This year's recipient, Dr. Michael P. Doyle of the University of Maryland, College Park, has an exceptionally strong record of research accomplishments including over 300 papers in high-impact journals (averaging 43 citations per article), 22 book chapters, 10 monographs, and 9 patents. He is a recognized leader in the chemical sciences as the above accomplishments strongly suggest, and has demonstrated his leadership role on numerous editorial boards, funding agencies, and professional organizations.

Michael P. (Mike) Doyle is distinguished for his contributions to asymmetric catalysis and metal carbene transformations, for providing basic understanding to nitrosyl chemistry (that includes the biochemical reactions of nitrites and nitrogen oxides), and for his research in physical organic chemistry and synthetic method development. He began his research at Hope College in Michigan with nitrosyl chemistry, discovering the applications of nitrogen chemistry—from nitrosonium salts to nitrites—and providing the mechanistic details for modern understanding of the biological effects of nitrogen oxides and nitrosyls. He is perhaps best known for his research in dirhodium-catalyzed reactions of diazo compounds and for his invention of the “Doyle catalysts”—dirhodium(II) tetracarboxamidates with chiral lactam ligands that are commercially available (Doyle dirhodium catalyst,  $\text{Rh}_2(5\text{S-MEPY})_4$  | Sigma-Aldrich: <http://www.sigmaaldrich.com/catalog/product/aldrich/424420>). These catalysts have proven to provide the highest levels of stereocontrol in intramolecular cyclopropanation and carbon-hydrogen insertion reactions with diazoacetates of any catalyst ever developed for these chemical transformations. His research into metal carbene transformations of diazoacetates extended from addition reactions and insertion processes to ylide transformations and established the influence of ligands on reaction selectivities. In addition to having a catalyst named after him, chemical transformations also carry his name, the best known of which is the “Doyle-Kirmse Reaction” ([www.wikipedia.org/wiki/Doyle-Kirmse\\_reaction](http://www.wikipedia.org/wiki/Doyle-Kirmse_reaction)). The vast majority of this research was performed with undergrad-



## Chemists Celebrate Earth Day Theme: “The Wonders of Water”

...cont. on page 10

*Contributed by Kim Morehouse, CCED Coordinator*

Earth Day was first officially recognized on April 22, 1970 as a way to demonstrate support for a healthy environment, raise awareness about environmental issues, and remind people that we all need to contribute to a sustainable planet. For years, chemists have been promoting a better world through recyclable plastics, cleaner-burning fuels, phosphate-free detergents, environmental monitoring, and green chemistry initiatives. The American Chemical Society officially joined the Earth Day celebration on April 22, 2003.

The Chemical Society of Washington (CSW) will once again participate in Chemists Celebrate Earth Day (CCED) activities. Chemistry is all around us and is vital to our planet's sustainability. Whether it's used in recyclable and biodegradable materials or through the reduction of waste, chemistry is involved in ensuring that we can be eco-friendly and kind to our environment. This year's theme, “The Wonders of Water,” explores the unique properties of water that

are crucial for life and a cleaner environment.

Water plays an important role in our lives. In addition to drinking water, we use it in many of our daily activities. Did you know that water covers almost three-quarters of the Earth's surface? Or that the body of a child is almost 77% water while that of an adult is composed of 50-60 % water? Have you ever wondered why water takes the shape of a drop or how some insects are able to walk on top of water? How does water stick to the leaves of plants to help keep them hydrated? This year's edition of “Celebrating Chemistry” explores these as well as many other properties of water, and is available via the ACS website at [www.acs.org/earthday](http://www.acs.org/earthday).

### Calling all Volunteers!

*Looking for Volunteer Opportunities? Please see page 9 for upcoming volunteer opportunities, and keep an eye on our Calendar of Events on page 8.*

# The Capital Chemist™



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

Volume 64, Number 4 April 2014

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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](mailto:service@acs.org); or edit member profile online at [www.acs.org](http://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. Subscription price for an electronic subscription is included in all membership fees; mailed paper subscriptions are \$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: 1126th Evening Meeting

April 10, 2014

University of Maryland  
Chemistry Building Atrium  
College Park, MD

Cost \$25.00 Members & guests, \$12.50  
Students

## Agenda

6:00 p.m.: Check in, Social Hour  
6:45 p.m.: Dinner  
7:30 p.m.: Schubert and Hillebrand  
Award Presentations  
7:45 p.m.: Featured Speaker, Dr.  
Michael P. Doyle

**Buffet-style menu includes:** mixed green salad; grilled herb-marinated chicken breast with merlot sauce; Yukon mashed potatoes; seasonal grilled vegetables; penne with squash, zucchini, sun-dried tomatoes, and marinara; Chef's selection of miniature desserts; freshly-brewed iced tea; Starbucks coffee; and hot tea

**Reservations:** Make reservations by **Monday, April 7, 2014, 12:00 noon**, to the CSW office: [csw@acs.org](mailto: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:** From Baltimore Avenue (US Hwy 1), enter the UMD campus using Campus Drive. At the traffic circle, bear right onto Regents Drive. Parking is available in the parking garage across from the Chemistry building (circled below). Parking is unrestricted after 4:00 p.m. Campus Drive is also accessible from University Boulevard or Adephi Road, on the west of campus.

**Metro:** Green line to College Park. The University runs a free shuttle bus (No. 104) from the College Park Metro Station. The bus stops at Campus Drive and Regents Dr. (near the Circle and closest to the Chemistry Building) and at the Student Union. If you need a map, one is available from the University of Maryland website, at [www.umd.edu](http://www.umd.edu).



## 2013 Schubert Award Recipients

*Contributed by Mike Doyle, Awards Committee Chair*

### Jerry Turner, Richard Montgomery High School

In his nomination materials chemistry teacher **Jerry Turner** of Richard Montgomery High School in Rockville, Maryland is described as “always being there for the students and his fellow teachers; he...comes to work before the sun comes up, stays late and even comes in on the weekends.” Involved in virtually everything and everyone linked to the chemical sciences, he leads the school's School Energy and Recycling Team (SERT), and with colleague Kevin Martz, Turner has developed a new course to prepare students for the intense laboratory work in their last two years of high school by learning about accuracy and precision, propagated errors, creating graphs, and, among other learning modules, developing original labs with independent and dependent variables of their choosing. His students characterize him as being the alpha and omega of their high school experience with comments such as, “Mr. Turner never failed to enter class with a bright smile, despite the 7:25 am starting time” and “I looked forward to eighth period every day. No, it was not in anticipation for the end of school, but for my last class: IB Chemistry.”

A graduate of the University of Pittsburgh, Johnstown, he holds a M.Ed. from the main campus in Pittsburgh in Education of the Deaf and Hard of Hearing and an M.S. in School Administration and Supervision from Johns Hopkins University. He was the Deaf and Hard of Hearing Teacher for Montgomery County Public Schools before moving to Sherwood High School in 1997 to teach chemistry, then in 2009 to his current position at Richard Montgomery High School in Rockville. In one of the letters in support of his nomination, a student wrote, “There are those teachers that are great because they have fantastic personalities and easily become students' favorites. There are also those teachers that are great because they are wonderful educators who make learning fun. Mr. Turner is a rare combination of both ..... he combines his terrific personality with his expertise to make chemistry engaging and comprehensible for all of his students.”



### Kimberly Z. Duncan, Flint High School

The “flipped classroom” is a new pedagogical model in which the typical lecture and homework elements of a course are reversed. Students view short video lectures before the class session, while in-class time is devoted to exercises, projects, or discussions, and **Kimberly Z. Duncan** of Flint High School in Oakton, Virginia is an expert. As a resource for other teachers around the state and country, she has participated in a global Flipped Classroom Open House by hosting teachers from around the region and presented her experience at the Virginia Association of Independent School's (VAIS) Technology Conference. In the letter nominating her for the Schubert Award, Kim Duncan is characterized as doing “a remarkable job building the chemistry program at Flint Hill and pushing herself as an innovative educator. More importantly, she has prepared and inspired countless students.”

Receiving her B.S. degree in chemical engineering from the Georgia Institute of Technology, Kim Duncan worked at NALCO in Naperville, Illinois, and at the Naval Ship Systems Engineering Station in Philadelphia. Substitute teaching while raising her family inspired her to enter teaching full time. After obtaining her M.Ed. at Marymount University she joined Flint High School where she is Upper School Science Teacher and has been Freshman Class Dean and Senior Project Team Leader. But it is one of her former students who sums up Kim Duncan's impact most appropriately: “Where do I even begin to write a letter about the very woman who inspired me to follow in her footsteps to become a chemistry teacher?... Do I start with the fact that her classes were both the hardest but most rewarding classes I have ever taken in my life, ever? Or what about mentioning all of the late night and early morning email exchanges, the chats before and after school, or the walks we took when I was home on a break from college, none of which were required but all of which were irreplaceable? Kim Duncan is not only the greatest teacher I have ever had, but she is also the person whom, aside from my family and a select group of others, has shaped my life in more ways than even I can fathom.”

*Nominations for the 2014 Schubert Award are being accepted through June 2, 2014. More information can be found on page 10.*





## Ajay Mallia Honored as the CSW Local Section Volunteer of the Year

Dr. Ajay Mallia has served CSW in many different roles and has volunteered his time to reach out to the community. In 2013, under his leadership, CSW participated in the Anacostia Environmental Youth Summit, which was attended by approximately 400 DC high school students. To generate interest from members, Dr. Mallia organized a Mole Day and Halloween celebration as part of National Chemistry Week (NCW) where he demonstrated “Halloween-themed” chemistry experiments. In addition to his outreach activities, Dr. Mallia organized networking events, career workshops, and chemistry lab tours at local museums as the chair of the Younger Chemists Committee. He also served as CSW’s Project SEED chair and was an active volunteer at other CSW Chemists Celebrate Earth Day (CCED) and NCW activities.

## CSW Younger Chemists Committee (YCC) News and Events

*Contributed by Dr. Ajay Mallia and Dr. Deana Jaber, YCC-coordinators*

The Younger Chemists Committee (YCC) organizes events and workshops to help early-career chemists in the chemical sciences and related fields. In 2013, CSW’s YCC organized 15 different and diverse events including career workshops, outreach activities, museum visits, chemistry demonstrations, and networking happy hours. All CSW members are welcome to participate in these activities/events/workshops. If you are interested in volunteering for any future events, please contact YCC coordinators Dr. Ajay Mallia ([vajaymallia@gmail.com](mailto:vajaymallia@gmail.com)) or Dr. Deana Jaber ([djaber@marymount.edu](mailto:djaber@marymount.edu)).

### “You Be The Chemist” Fairfax Challenge

CSW’s YCC committee organized the “You Be The Chemist” (YBTC) Fairfax Challenge, in collaboration with the Chemical Education Foundation (CEF) and Marymount University. The Fairfax Challenge was held at Marymount University on February 22, 2014. YBTC, one of the Chemical Education Foundation's biggest programs, is an academic question-and-answer competition for students in grades 5-8. The student participants attended with their school educators and parents. Dr. Deana Jaber, who served as the primary organizer for the competition, welcomed the participants and the audience. Dr. Joseph Houck served as the moderator and Dr. Ajay Mallia, Dr. Suman Samai, and Dr. Divya Karat served as judges. Dr. Eric Bubar, Marymount University’s physics professor, entertained the students with science demonstrations and activities.

Three middle schools (Edlin School, Rachel Carson Middle School, and Spring Hill Elementary School) took part in the Fairfax challenge and a total of nine students participated in the competition. Johnny Erskine of the Edlin School took first prize, and Rahul Rajan and Kavya Kopparapu, both from Rachel Carson Middle School, won second and third prizes, respectively. CSW’s YCC committee wishes to extend thanks to all volunteers, and of course to our student participants, including their educators and parents.

### Future Activities

#### Chemists Celebrate Earth Day (CCED) Events

CSW’s YCC committee will participate in Maryland Day celebrations at the University of Maryland, College Park on April 26, 2014 (10:00 am – 4:00 pm). CSW YCC volunteers will provide hands-on activities and demonstrations for high school children who attend the event. If you would like to volunteer for this event, please contact Dr. Ajay Mallia via email at [vajaymallia@gmail.com](mailto:vajaymallia@gmail.com). This event will be a collaborative event with the UMD Students Affiliates chapter (UMD SAACS).

Photos courtesy of Ajay Mallia. From top to bottom: Dr. Deana Jaber welcoming the audience, moderator Dr. Joseph Houck presenting the YBTC questions (competitors are sitting on front row), Dr. Eric Bubar’s demonstration, and the judges evaluating the results.



## News from the National ACS Meeting in Dallas

*Contributed by Mike Doyle, Councilor*

The 247<sup>th</sup> ACS National Meeting was held in Dallas, Texas on March 16-20, 2014. The actions of the Council and highlights of committee oral reports are reported here.

### **ACTIONS OF THE COUNCIL**

#### **Election Results**

The Committee on Nominations and Elections presented to the Council the following nominees for selection as candidates for President-Elect, 2015: Peter K. Dorhout, William A. Lester, Jr., Christopher K. Ober, and Henry F. Schaefer III. By electronic ballot, the Council selected Peter K. Dorhout and William A. Lester, Jr. as candidates for 2015 President-Elect. These two candidates, along with any candidates selected via petitions, will stand for election in the Fall National Election.

The Committee on Nominations and Elections announced the results of the election to select candidates from the list of nominees to serve as Directors from District III and District VI on the Board of Directors for the term 2015-2017. Nominees for District III included Dee Ann Castell, Pat N. Confalone, Anne S. DeMasi, and Kathryn E. Uhrich. Nominees for District VI included Allison A. Campbell, Paul W. Jagodzinski, Lee H. Latimer, and Eleanor D. Siebert. By mail ballot, the Councilors from these districts selected Pat N. Confalone and Anne S. DeMasi as District III candidates; and Paul W. Jagodzinski and Lee H. Latimer as District VI candidates. Ballots will be mailed on or before October 10, 2014 to all ACS members in District III and District VI for election of a Director from each District.

#### **Candidates for Directors-at-Large**

The Committee on Nominations and Elections announced the selection of the following candidates for Directors-at-Large for a 2015-2017 term: Dawn A. Brooks, William F. Carroll, Jr., Barbara A. Sawrey, and Ellen B. Stechel. The election of two Directors-at-Large from among those candidates and any selected via petition will be conducted in the fall. Ballots will be mailed to the Council on or before October 10, 2014.

#### **Committee Continuance**

As part of a regular performance review, the Council voted unanimously to continue the Committees on Chemical Safety, on Chemistry and Public Affairs, and on Minority Affairs. Continuation of these three committees requires Board concurrence.

#### **2015 Member Dues**

The Council voted to set the member dues for 2015 at the fully escalated rate of \$158. This rate is established pursuant to an inflation-adjustment formula in the ACS Constitution and Bylaws.

#### **Divisional Allotment Formula**

After voting to postpone its implementation by one year, the Council voted to approve a revised formula for allocating dues funds to divisions. This formula, which was presented by the Committee on Divisional Activities, will be effective with allocations in 2016 based on 2015 division performance.

#### **Changes in Local Section Territory**

On recommendation of the Committee on Local Section Activities, the Council voted to approve the petition from the North Jersey Section to include the area of the former Monmouth County Section in its territory, effective immediately.

#### **New International Chemical Sciences Chapter**

On recommendation of the Committee on International Activities and subject to the concurrence of the Board of Directors, the Council voted to approve petitions to charter the South Korea International Chemical Sciences Chapter and the Malaysia International Chemical Sciences Chapter.

### **COMMITTEE ORAL REPORTS (Highlights)**

#### **Society Committees**

##### **Budget and Finance (B&F)**

In 2013, ACS generated a net from Operations of \$15.1 million, which was \$2.0 million favorable to the budget. This represents the Society's tenth consecutive year of positive operating results. Total revenue was \$490.5 million, which was \$8.8 million (or 1.8%) lower than budget, and essentially flat when compared with 2012. The result was largely attributable to cost containment measures throughout the ACS. Unrestricted net assets rebounded in 2013, rising to \$207 million, and more than doubling from the 2012 level.

##### **Education (SOCED)**

SOCED approved a pilot program to form ACS International Student Chapters.

#### **Standing Committees**

##### **Membership Affairs (MAC)**

For 2014, MAC authorized an individual member test for India to allow for a \$52 full Member dues rate. At this meeting, MAC extended the test to include new and renewing members in India for three years.

##### **Economic and Professional Affairs (CEPA)**

Findings from the ACS 2013 New Graduate Survey have been compiled and reveal troubling news: overall unemployment among new graduates rose from 12.6% in 2012 to 14.9% in 2013. This is primarily due to the high unemployment among recent Bachelors. New graduates must be at the top of our priority list for employment assistance in 2014.

*...cont. on page 6*

## Meeting Recap: CSW Travel Award Winner Poster Session and College Chemistry Achievement Awards Given at March Dinner Meeting

Contributed by Kathryn Hughes, CSW President

CSW celebrated our local section student award winners at the March 11 dinner meeting held at ACS headquarters. The evening began with a poster session featuring the CSW Student Travel Award winners from 2013. These graduate students shared the posters they presented at the ACS national meetings in March and August of last year with the assistance of a \$500 award from CSW. It was a great chance to learn about the excellent research performed by these students. As a reminder, applications for these awards open twice a year. Keep reading your *Capital Chemist* for the next announcement and join us in San Francisco in August.

Last year's award winners are:

- Gail Clements, The George Washington University
- Kelli Sikorski, University of Maryland
- Romina Heymann, University of Maryland
- Zhenlei Xiao, University of Maryland
- Lauren Graham, University of Maryland
- Soumya Rastogi, University of Maryland
- Zi Teng, University of Maryland
- Jie Zhou, University of Maryland

Following the poster session and a break for dinner and discussion, the College Chemistry Achievement Award winners were honored. This award is given to outstanding seniors majoring in chemistry and biochemistry from each of the area colleges and universities. We hope to see their applications for travel awards to ACS meetings in the coming years!

This year's Achievement Award winners are:

- Asadullah Akhund, St. Mary's College of Maryland

- Chanell Boyd, Howard University
- Miah Davis, Howard University
- Moira Esson, American University
- Kevin Harvey, Catholic University of America
- Alice Kunin, University of Maryland
- Jacob M. Modest, Georgetown University
- Cameron Mohammadi, Georgetown University
- Carly Montanero, American University
- Yukiko Yarnall, George Mason University
- Woldegebriel G. Yeibyo, University of the District of Columbia



Clockwise, from top left: Yukiko Yarnall, Alice Kunin, Carly Montanero, and Asadullah Akhund, all receiving their College Chemistry Achievement Awards from Kathryn Hughes, CSW President.

## National Meeting News, Continued from Page 5

### Meetings and Expositions (M&E)

As of this morning (March 19, 2014), the ACS spring national meeting had attracted 13,680 registrants, including 6,853 regular attendees and 5,140 students. The meeting had 10,050 papers presented. The new ACS Mobile Application had over 6,000 downloads by meeting attendees. M&E voted to eliminate the author index in the hard program meeting program book beginning with the spring 2015 meeting. The searchable author index is now available via the mobile application and other electronic means.

### Divisional Activities (DAC)

Operating as a DAC subcommittee, the

Multidisciplinary Planning Group is proposing the following 2017 national meeting themes to the divisions for their consideration:

Spring, San Francisco: *Advanced Materials, Technologies, Systems and Processes*  
Fall, Washington, DC: *Chemistry's Impact on the Global Economy*

### Local Section Activities (LSAC)

LSAC will initiate the process to dissolve the Ocean County Section as a result of the group's failure to meet the criteria to remain an active section.

### Other Committees

#### Chemical Safety (CCS)

CCS has published its first-ever Safety

Alert concerning the Rainbow Demonstration, in *Chemical and Engineering News*, March 17, 2014. Copies were distributed to Councilors.

### Special Discussion Item

A special discussion item was put on the Council agenda for this meeting. ACS President Tom Barton presented and moderated a discussion on "What can ACS do to increase the quality of science education in grades K-12?" Following the presentation, 39 Councilors engaged in a robust discussion on the factors impacting the quality of K-12 science education in the U.S.





## Project SEED News

*Contributed by Ajay Mallia, Project SEED Chair*

### Project SEED Student Applications Due May 2

Student Applications for the 2014 Project SEED program are due on May 2 at noon. High School science teachers are needed as sponsors to identify excellent chemistry students to participate in Project SEED and assist in the application process.



### Student Eligibility

**Academic Requirements:** Students entering their junior or senior year in high school and who have completed at least one high school chemistry course are eligible to apply. AP Chemistry is highly recommended.

**Family Income Requirements:** Students must be recognized as economically disadvantaged to be considered for Project SEED. Preference will be given to students whose family income does not exceed 200% of the Federal Poverty guidelines based on family size.

### Application materials

Contact Project SEED chair Dr. Ajay Mallia ([vajaymallia@gmail.com](mailto:vajaymallia@gmail.com)) for application forms. Along with the application form, the following are also required:

- Scanned copy of 1040 tax form (tax year 2013)
- One letter of recommendation from a chemistry teacher should be emailed to Dr. Ajay Mallia. The recommendation letter should clearly state the relationship with the student and specify how well and how long the teacher has known the student (for example, include which classes you taught that the student attended.). The letter should clearly describe why the student is exceptional/outstanding and why you think that the student will successfully complete the program.

The Project SEED committee should receive completed application packages by noon on May 2, 2014. Please send materials by email, if possible.

### Selection Process

The Project SEED committee will start reviewing applications on May 2, 2014, and the results will be announced by the second week of May, 2014. Students will be shortlisted based on their eligibility, teacher's recommendation letter, and a short essay. Final selection will be determined after the students complete a telephone interview with CSW's Project SEED committee.

### 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 students). Your contribution is fully tax deductible. For more information, Ajay Mallia, Project SEED Chair, can be reached by email at [vajaymallia@gmail.com](mailto:vajaymallia@gmail.com), or you may contact CSW at [csw@acs.org](mailto:csw@acs.org), or by phone at 202-659-2650.

## Save the Date! ACS National Meeting

**August 10-14, 2014**  
**San Francisco, CA**  
**"Chemistry and Global Stewardship"**

**Abstract Submission open now**

**Registration and Housing opens May 2014**

**Technical Program available June 2014**



**ACS**  
Chemistry for Life™

**The Retired Chemists Group**  
offers a social program of lunches and outings available to all.

[csw.sites.acs.org/rcg.htm](http://csw.sites.acs.org/rcg.htm)



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## Chemists Celebrate Earth Day Activity: Illustrated Poem Contest Entries Due April 11

*Contributed by Kim Morehouse, CSW CCED Coordinator*

As part of the Chemists Celebrate Earth Day activities, the American Chemical Society is sponsoring an illustrated poem contest for students in Kindergarten through 12th grades. Students are asked to write and illustrate a poem using the Chemists Celebrate Earth Day 2014 theme, "The Wonders of Water." Detailed rules and guidelines are available on the Chemists Celebrate Earth Day website, [www.acs.org/earthday](http://www.acs.org/earthday). All entries must be complete, and provide all the information requested on the entry form, which is available via the ACS or CSW websites. Teachers at schools in the Chemical Society of Washington area are encouraged to hold a contest at their school and then submit those winning entries to:

Chemists Celebrate Earth Day Coordinator  
Chemical Society of Washington  
1155 16<sup>th</sup> Street, NW, Stop O-218  
Washington, DC 20036

Electronic submissions should be sent to: [Kim.Morehouse@FDA.HHS.GOV](mailto:Kim.Morehouse@FDA.HHS.GOV)

All entries must be received by Friday, April 11, 2014 so winners at the local section level can be submitted to the ACS by Friday April 25, 2014.

### **Retired Chemists Group Luncheon April 8, 2014 Alfio's La Tratoria Restaurant 4515 Willard Ave., Chevy Chase, MD**

#### **Agenda**

Social (no- host bar):  
11:30am-12:15pm  
Lunch: 12:15 pm-1:15pm  
Speaker: 1:15pm-2:15pm

**Speaker: Mary Bet Dobson**

**Assistant Director of Development, American Chemical Society**

**Subject: "Adventures with Project SEED"**

Mary Bet Dobson is Assistant Director for Development at the American Chemical Society. She is responsible for all aspects of individual giving, including annual and major gifts, as well as planned giving. She revitalized the planned giving program at ACS and implemented their first Legacy Society, the ACS Legacy Leaders. Mary Bet's career spans over twenty years in the non-profit sector, to include managing development programs at colleges and universities, and six years in the private sector, selling securities and software.

Join us for a talk and brief video to learn how you can help to develop scientifically literate citizens for today and tomorrow through Project SEED and other ACS educational programs, as well as your legacy.

**Luncheon Information:** Menu choices: (1) Chicken Dorati, (2) Veal Piccata, (3) Veal Parmagiano, (4) Filet of Flounder, or (5) Eggplant Parmagiano. Your entrée selection will be served with a house salad, bread, beverage, and ice cream.

**Cost:** \$23.00

**Reservations:** Please send your menu selection(s) along with a check made out to "Retired Chemists Group" for \$23.00 per meal to Dr. John Malin, 705 N Edison St., Arlington, VA 22203-1432. Dr. Malin can be reached at 703-524-5553. Please send all checks in time to be received by Tuesday, April 1, 2014.

Alfio's La Tratoria has free valet parking, and the Friendship Heights Metro Station is within walking distance.

## Calendar of Events



April 6, 2014

Rockville Science Day

*More information on page 9*

April 8, 2014

Retired Chemists Group Lunch

*More information on page 8*

April 10, 2014

CSW Evening Meeting

*More information on pages 1-2*

April 23, 2014

Robert Goddard Montessori  
STEM Fair

*More information on page 9*

April 26-27, 2014

USA Science & Engineering  
Festival

*More information on page 9*

April 26, 2014

Chemathon

*More information on page 9*

April 26, 2014

Maryland Day (YCC Activity)

*More information on page 4*

May 2, 2014

Project SEED Applications Due

*More information on page 7*

May 16, 2014

Anacostia Environmental Youth  
Summit

June 2, 2014

Schubert Award Nominations  
Due

*More information on page 10*

August 10-14, 2014

ACS National Meeting  
San Francisco, CA



## Upcoming Volunteer Opportunities for CSW Members

### Volunteer at the USA Science & Engineering Festival

The USA Science & Engineering Festival will take place April 26-27, 2014 at the Walter E. Washington Convention Center. The mission of the S&E Festival is to re-invigorate the interest of our nation's youth in science, technology, engineering, and math (STEM) by producing and presenting the most compelling, exciting, educational, and entertaining science festival in the United States. The American Chemical Society will once again be a sponsor and exhibitor at this event. The Chemical Society of Washington will be partnering with ACS by providing volunteers to help man the booth and to assist with hands-on activities for the children. If you are interested in volunteering for the festival, please contact Kim Morehouse via email at [kim.morehouse@fda.hhs.gov](mailto:kim.morehouse@fda.hhs.gov). Additional information about the festival can be found on their website at [www.usasciencefestival.org](http://www.usasciencefestival.org).



### Encourage a Future Scientist: Judge a Science Fair!

The Chemical Society of Washington (CSW) encourages its members to serve as judges for high school science fairs held in the DC area. Events are held late February through March. Serving as a judge is a great way to benefit the community and encourage young scientists.

#### Featured Event:

Robert Goddard Montessori STEM Fair

April 23, 2014

9:30am-12:30pm



If interested in volunteering, please email Lisa Jellison at [lisa.jellison@pgcps.org](mailto:lisa.jellison@pgcps.org)

Please visit [csw.sites.acs.org/activities.htm](http://csw.sites.acs.org/activities.htm) for more information.

### Volunteers Needed For Chemathon 2014

The thirtieth Annual Chemathon will take place on Saturday, April 26, 2014. The Chemathon is an annual chemistry competition for high school chemistry students in Maryland, Northern Virginia, and the District of Columbia. The Chemathon competition is organized by a committee of area high school chemistry teachers and chemists, and is hosted by the Department of Chemistry and Biochemistry at the University of Maryland, College Park. The Chemathon is open to all area high schools who would like to participate. There is no entry or registration fee. Please see the Chemathon website for information on how to register your school (<http://www2.chem.umd.edu/chemathon/>).



The Chemical Society of Washington will once again be a sponsor of this event. Volunteers are needed to help judge the poster contest, as well as to assist with some of the activities that the students will be competing in. If you would like to volunteer for this event, please contact Kim Morehouse via email at [kim.morehouse@fda.hhs.gov](mailto:kim.morehouse@fda.hhs.gov).

### Volunteers Needed for Rockville Science Day

CSW, in conjunction with the Chemistry Department at Montgomery College, Rockville Campus will participate in Rockville Science Day on Sunday, April 6, 2014. Rockville Science Day is open to the general public and CSW encourages you to attend. Rockville Science Day is intended to provide a friendly environment for students and their parents to participate in some hands-on demonstrations and to learn more about how science and engineering are important to our society. There will be more than 70 exhibitors with hands on activities. Additional information about Rockville Science Day can be found on their website ([www.rockvillescience.org/rcsday.html](http://www.rockvillescience.org/rcsday.html)).

This event will be co-sponsored by the CSW Outreach Committee and the CSW Environmental/Sustainability Committee. Volunteers from CSW will be providing hands-on activities for children who attend the event as a part of CSW's participation in CCED. Volunteers will also hand out copies of the "Celebrating Chemistry" publication for CCED, and various CCED-themed products. If you would like to volunteer for this event, please contact the CSW CCED coordinator, Kim Morehouse ([Kim.Morehouse@fda.hhs.gov](mailto:Kim.Morehouse@fda.hhs.gov)).

Additional activities for CCED, as they are planned, will be posted on the CSW website (<http://csw.sites.acs.org>).

## Speaker Information, Continued From Page 1

uate students because from 1968 until 1997 he was a faculty member at undergraduate institutions. It was only in 2000 that he began to take graduate students.

Since coming to the University of Maryland in 2003 Doyle has developed chiral dirhodium carboxamidates as exceptional catalysts for highly enantioselective Lewis acid promoted reactions, developed highly enantioselective [3+3]-cycloaddition reactions as an alternative to hetero-Diels-Alder reactions for the construction of heterocyclic compounds, established new oxidation methods and oxidation catalysts, and discovered novel paddle wheeled dirhodium structures. His recent research on dirhodium caprolactamate catalyzed chemical oxidations with hydroperoxides has not only produced highly selective processes (allylic oxidation—the Umera-Doyle reaction), but he also clarified the mechanisms of these reactions from what had been a diverse array of interpretations.

Mike has been called the “guru of undergraduate research” (Rebecca Rawls, “An Undergraduate Champion”, *C&EN*, Vol. 80, number 39, September 30, 2002, pg. 30-31) in recognition of his role in developing student careers in the chemical sciences through research and being an outspoken champion of research as an educational enterprise. More than 150 undergraduate students are coauthors of at least one publication with him, and there are several with five or more publications. The list of his undergraduate coauthors constitutes a virtual who’s who in organic and inorganic academic chemistry today. Postdoctoral associates who number fifty have been instrumental in his research endeavors with undergraduate students, and many of these associates are now faculty in academic institutions. He was one of the founders of the Council on Undergraduate Research ([www.cur.org](http://www.cur.org)), its first president (1978), and the Editor of its newsletter; and he was also the first Chairman (1987) for the Executive Committee of the National Conferences on Undergraduate Research (NCUR) that merged with CUR in 2011. Doyle is the recipient of the 1995 James Flack Norris Award for Outstanding Achievements in the Teaching of Chemistry sponsored by the Northeastern Section of the American Chemical Society and the 2002 George C. Pimentel Award in Chemical Education from the American Chemical Society.

The involvements of Mike Doyle in the American Chemical Society and other professional organizations have been extensive. As Chair of the Department of Chemistry and Biochemistry at the University of Maryland, he led the department to national recognition for efforts in increasing diversity (“Blueprint for increasing Diversity”, *C&EN*, Volume 89, issue 51, pg. 41-42, 2011). Mike was General Chair for the 2011 Middle Atlantic Regional Meeting of the ACS during the same year that he was President of the Chemical Society of Washington. Additionally, he and his colleague Andrei Vedernikov chaired the Scientific Committee and organized the host site for the 2012 International Chemistry Olympiad.

### Abstract, “Dirhodium, Dinitrogen, and Determined Influences from Talented Associates”

The elements of a career in the chemical sciences are not only those whose combinations construct chemical compounds, but also colleagues and students who shape the progress of what is yet to come. This presentation will briefly trace the origin of current research through those who created the opportunity and focus on the development of asymmetric catalysis applied to the synthesis of many classes of organic compounds through metal carbene formation with dirhodium compounds. The FDA increased the flow of research by their publication in 1992 of “The Development of New Stereoisomeric Drugs”, and the NIH took up the challenge by focusing some of their resources on asymmetric synthesis with the beneficiaries being pharmaceutical companies and the general public who benefited from resulting advances.

## Request for Nominations: Leo Schubert Memorial Award

*Contributed by Mike Doyle, Awards Committee Chair*

The Leo Schubert Memorial Award recognizes an **outstanding teacher of high school chemistry** in the Washington, D.C. area. The award was established in 1979 to honor Dr. Leo Schubert, a chemistry professor at American University who devoted much of his career to developing programs for high school teachers and students. The award consists of a \$500 honorarium and a certificate, which will be presented at the December CSW dinner meeting.

Nominations for the award must be comprehensive and include supporting letters as well as details about the nominee’s accomplishments in areas such as innovation in teaching, writing curricula, outside teaching, papers published, involvement in science fairs and postgraduate study. A nomination form can be obtained via an e-mail request to [csw@acs.org](mailto:csw@acs.org).

Eligibility: the nominee must teach chemistry at a secondary school in the geographic region of the Chemical Society of Washington, Washington, D.C., which includes neighboring counties in Maryland and Virginia. Please contact the Chair of the Awards Committee, Michael P. Doyle, [mdoyle3@umd.edu](mailto:mdoyle3@umd.edu), if you have any questions. Completed nominations should be submitted by Monday, June 2, 2014.

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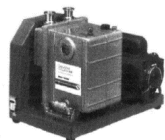
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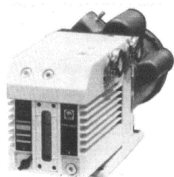
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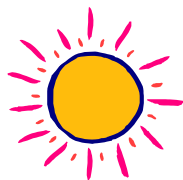
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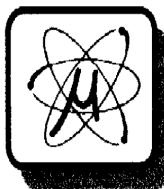
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