

# The CHEMIST

A publication of the Chemical Society of Washington—Section of the American Chemical Society November 2013 Vol. 63 - No. 8

### November Dinner Meeting at Catholic University, Featured Speaker Dr. Ted Becker

On November 14, CSW will host its monthly evening meeting at Catholic University. Our featured speaker will be

Dr. Ted Becker, who will give a talk on "Nobel Prizes in NMR and MRI: Contenders and Laureates." Dinner meeting information can be found on page 2.

Dr. Edwin D. (Ted) Becker is a Scientist Emeritus at the National Institutes of Health, where he has had a long career, beginning in 1955, as a research scientist, a laboratory chief, and an associate director of NIH. He received a B.S. in chemistry from the University of Rochester and a Ph.D. in chemistry from the University of California, Berkeley. His research has been primarily in investigations of molecular structure by infrared and Raman spectroscopy and by nuclear magnetic resonance (NMR), as well as development of NMR methodology.

He is a Fellow of the American Chemical Society, the American Association of the Advancement of Science, the International Society of Magnetic Resonance, the Washington Academy of Sciences, and the National Academy of Sciences, India. He has received a number of prizes and awards from NIH, the ACS, the Coblentz Society, and the Georgetown University Bicentennial Medal. He has served in a number of leadership roles in scientific societies, including chair of the ACS International Activities Committee (1993-95), Secretary General of IUPAC (1996-2003), and president of CSW (2006).



Dr. Becker has published several textbooks on NMR and has recently edited and written extensively on the history of NMR, particularly in the Encyclopedia of Magnetic Resonance.

### Abstract: "Nobel Prizes in NMR and MRI: Contenders and Laureates"

This is a rather non-technical description of the historical development of nuclear magnetic resonance (NMR) from its origins in physics in the late 1930s to current methods for chemical analysis and for medical imaging – the latter usually referred to as MRI.

NMR is ubiquitous. For example, almost every chemist and student of chemistry utilizes NMR to elucidate the structure of organic molecules from simple to complex. NMR provides three-dimensional structures of proteins and other macromolecules that rival x-ray crystallography, with the bonus of information on the macromolecular dynamics. Solid-state NMR is important in materials research. Millions of people have now experienced the value of MRI in various types of medical diagnosis.

The presentation is built around the five Nobel Prizes awarded over 60 years in NMR/MRI. This is an account of the scientists who carried out the prize-winning research, how they did it, and why they undertook this work. I also include several brief stories about others who might reasonably have been considered contenders for the honor, as well as an account of a very public controversy in 2003 over the Nobel selection in MRI.

### **Have You Voted? Voting Closes on November 15**

It's election season here at CSW! By now, you should have received either an electronic or paper ballot delivered by VoteNow for our local section's election. We're very lucky to have a great slate of candidates for the positions of President -elect, Secretary, Councilor, and Manager. Please take a few minutes to review their statements and help decide the future of our organization. If you have any questions about the candidates, the voting process, or the different roles within the CSW, please let us know by sending an e-mail to csw@acs.org. As a reminder, voting closes November 15.

### In this issue...

Dinner Meeting Info	page 2
YCC News	page 3
50-Year Members	page 4
Calendar of Events	page 4
CSW Travel Awards	page 5
Project SEED News	page 6

### The Capital **Chemist<sup>TM</sup>**



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### THE CHEMICAL SOCIETY OF WASHINGTON PRESENTS: 1122nd Evening Meeting

Thursday, November 14, 2013

6:00pm-9:00pm Great Room C

Pryzbyla Center Catholic University

Washington, DC

Agenda

6:00 p.m.: Check in, Social Hour

7:00 p.m.: Dinner

8:00 p.m.: Speaker Presentation

Cost: \$30.00 Members & Guests, \$15.00 Students

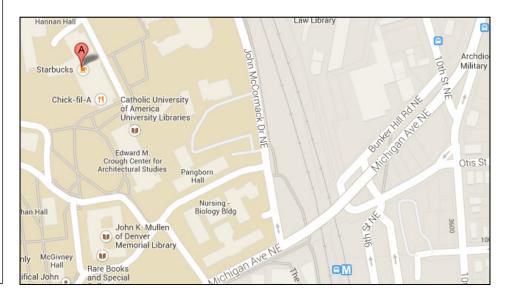
Menu includes: Mesclun greens with cherry tomatoes and balsamic vinaigrette, chicken française with white wine lemon sauce, grilled flank steak with red wine sauce, potatoes gratin, grilled asparagus and carrots, assorted rolls with butter, assorted dessert bars, soda, and water.

Reservations: Make reservations by Monday, November 11, 2013, 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 Catholic University website page for directions to campus is <a href="http://www.cua.edu/about-cua/directions.cfm">http://www.cua.edu/about-cua/directions.cfm</a>.

Parking: Enter campus from Michigan Ave. and proceed toward McMahon Parking, which will be available at 5 pm.

**METRO:** Red Line to Brookland-CUA. Exit the Metro Station on the CUA side, which is marked. Cross Michigan Ave. onto campus.



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

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

### Fall Happy Hour and Chemistry Scavenger Hunt

The CSW-YCC organized a fall happy hour and a chemistry scavenger hunt event at Science Club, a bar in downtown DC, on September 26, 2013. Participants enjoyed networking and the chemistry scavenger hunt. Prizes were awarded to the top scorers in the scavenger hunt. The CSW-YCC would like to thank all the participants and especially Ms. Linda Wang, a Senior Editor at Chemical and Engineering News, who was filming the event for a story on the "Value of Networking for Job Searching," which made the networking event more fun.



# O 2013 Ajsy Molto

### **Putting Your Best Foot Forward: Managing Resumes**

On October 8, 2013, the CSW-YCC tuned into the ACS Webinar® "Putting Your Best Foot Forward: Managing Your Paper and Online Resumes" at Marymount University. Dr. David Harwell, Assistant Director of ACS Career Management and Development, explained tips for making a resume stand out from the crowd. During the question and answer section, Chris Kim (Account Manager at Aerotek, Inc.) and Meredith Dow (Founder of Driven Staffing Inc.) answered questions from attendees. About 38 attendees enjoyed the career-related webinar.

### National Chemistry Week: Halloween and Mole Day Celebration

As part of National Chemistry Week, CSW celebrated Mole day and Halloween on October 23, 2013 at ACS Headquarters in downtown DC. Mr. Michael Bertocchi and Ms. Susette Ingram, both graduate students at



Georgetown University, presented a trivia game based on NCW and Mole Day, and Dr. Ajay Mallia demonstrated Halloween-themed chemistry experiments.



All photos courtesy of Ajay Mallia.

### **Upcoming Events**

### November 5, 2013, 12:30pm-1:30pm Library of Congress - Chemistry Lab Visit and Tour

Join CSW on Tuesday afternoon on November 5, 2013 at the Library of Congress for a Chemistry lab visit and tour. 101 Independence Ave. SE, Washington D.C. 20540 Make reservations by November 1 at noon. For more information, contact Ajay Mallia, vajaymallia@gmail.com.

### November 6, 2013, 1:00pm Chemistry of Money

Presenter: Dr. Steve Carlo, Office of Materials Technology, Bureau of Engraving and Printing

Marymount University

2807 N. Glebe Rd, Arlington VA 22207

Make reservations by November 4 at noon. For more information contact Dr. Deana Jaber, <u>djaber@marymount.edu</u>.

### November 9, 2013, 8:30am-12:30pm Acing the Interview: Career-related Workshop

Presenter: Dr. David Harwell, Assistant Director, ACS Career Management and Development ACS Headquarters, 1155 16th St NW, Washington DC 20036 Make reservations by November 6 at noon. For more information, contact Dr. Ajay Mallia, vajaymallia@gmail.com.

For all events, please RSVP to csw@acs.org.

# CSW 50-Year and 60-Year Members Recognized at CSW Meeting

CSW recognized the following 50-year members at its evening meeting in October at the Koshland Science Museum. Additionally, Walter Benson received a 60-year member award. Dr. Benson is a former President of CSW and in recent years was the Project SEED chair. CSW would like to thank Dr. Benson and the 50-year members for their years of service to the ACS.

B. Stephen Carpenter Robert F. Cozzens Charles N. Davidson Harold A. Deadman, Jr. Elvira Doman William C. Eckelman Stanley Evan Edinger Alan M. Ehrlich Richard Volkert Flor Robert W. Gaugler John W. George Stephen R. Heller Paul F. Hudrlik Norman S. Kondo Aetius R. Lawrence Robert L. Lipnick

Michael G. Mage Saba Mahboob Charles R. Midkiff, Jr. Dwarika Nath Misra Stephen S. Olin David M. Richman James Silverton Leslie B. Sims Leslie E. Smith Thomas E. Smith Wayne M. Stalick John Terapane Margaret A. Wechter

Jonas Weiss

John F. Witherspoon

Sidney Bernard Zamochnick

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**November 7:** Getting the Most out of Your Mentoring Relationships

Speaker: Dr. Donna Dean

http://acswebinars.org/mentoring-relationships

November 14: No Mentor? Mentor Yourself!

Speaker: Dr. Saundra Yancey McGuire http://acswebinars.org/mentor-yourself

**November 21:** Giving Thanks for the Water Bath—Sous Vide Cooking

for the Holidays

Speaker: Dr. Douglas Baldwin

http://acswebinars.org/sous-vide-holidays



### **Calendar of Events**

## Library of Congress Lecture and Tour

November 5, 2013

### "Chemistry of Money" Lecture

November 6, 2013 Marymount University

# "Acing the Interview" Workshop

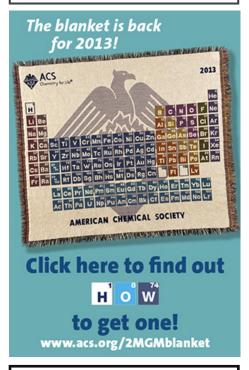
November 9, 2013 ACS Headquarters

### **Monthly Evening Meeting**

November 14, 2013 Catholic University

### **CSW** Election Voting Closes

November 15, 2013, 11:59pm







### 2013 CSW Student Travel Award Application Process

The Chemical Society of Washington is pleased to announce a travel award to defray travel and/or registration costs to a National ACS meeting. Eligible expenses include meeting registration and travel expenses, such as airfare and lodging. Applicants should submit the following to CSW (email: CSW@acs.org) by January 17, 2014:

- 1. A cover letter stating how and why attending this ACS meeting will promote his/her career;
- 2. The applicant's CV;
- 3. A letter of recommendation from the student's mentor explaining why the student deserves the award and how this will help his/her professional development;
- 4. An accepted abstract with proof of acceptance.

Within three weeks of returning from the ACS meeting, the awardees should submit receipts to the Treasurer for any or all of the eligible expenses described above, after which the Treasurer of the Chemical Society of Washington will issue a check to each of the awardees. After returning from the conference, awardees will be asked to present their posters at one of the upcoming CSW dinner meetings.

The award is not intended for post-doctoral fellows. There will be a maximum of 4 awards available for each National meeting. Each award will be for \$500 and award of this stipend will be based on the review of the above materials. The award is open to students who are graduate students in the jurisdiction of the Chemical Society of Washington.

### 2013 CSW Student Travel Award Winners

The CSW awarded four awards of \$500 each for the spring National ACS meeting in New Orleans. The award winners were:

- Gail Clements (The George Washington University)
- Kelli Sikorski (University of Maryland)
- Romina Heymann (University of Mary-
- Zhenlei Xiao (University of Maryland).

Four additional awards of \$500 each were presented for the fall National ACS meeting in Indianapolis. The award winners were:

- Lauren Graham (University of Maryland)
- Soumya Rastogi (University of Maryland)
- Zi Teng (University of Maryland)
- Jie Zhou (University of Maryland)

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### **Project SEED News**

Contributed by Ajay Mallia, Project SEED Chair

### Project SEED Fellows Recognized at Koshland Science Museum Poster Presentation

At the October CSW meeting, CSW recognized the 2013 Project SEED fellows and awarded them certificates of accomplishment. For the last 45 years, Project SEED has provided the opportunity to do hands-on scientific research with a mentor at a research institution to more than 9,000 economically disadvantaged high school students. This year, for the first time in the history of CSW, the Project SEED committee supported 17 talented high school students from DC, VA, and MD schools at research institutions such as the FDA, NIST, Library of Congress, University of Maryland, Georgetown University, and the George Washington University during the summer of 2013. The Project SEED committee organized a poster presentation at the CSW monthly meeting which was held on October 10, 2013 at the Marian Koshland Science Museum. High school students presented and defended their research findings at the meeting. Dr. Ajay Mallia (CSW Project SEED chair) gave a brief introduction of Project SEED and congratulated all the students on their successful completion of the program. Ms. Cecilia Hernandez (Assistant Director of ACS Education) explained the benefits of the Project SEED program. The poster presentation event was well attended by the students' parents and high school chemistry teachers, as well as the mentors and their spouses, and graduate student mentors. Dr. Zeeshan Ahmed from NIST, who mentored two SEED students this summer, shared his experiences with the audience. Dr. Douglas Raber, CSW president, awarded certificates of accomplishment to the SEED fellows and wished them a great future. A "best poster" contest was also held and CSW would like to congratulate to Mr. Seong Jang (SEED-2 student) and Ms. Angela Chan (SEED-1 student), who won the first and second prizes, respectively, for their posters.

### Project SEED Needs Your Support!

Project SEED cannot operate without the help from individuals and companies that support the Scientists-intraining. Are you interested in support-

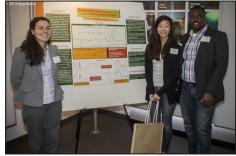


ing Project SEED? Last year we unfortunately turned away many applicants because of lack of funding. CSW has established the Noel Turner Memorial Fund to help support Project SEED. Your donation will be used for student stipends (\$2500 for the SEED -1 and \$3000 for the SEED-2 program). Your contribution is fully tax deductible. For more information, Ajay Mallia, Project SEED Chair, can be reached by email at vajay-mallia@gmail.com, or you may contact CSW at csw@acs.org, or by phone at 202-659-2650.

### Deadlines for Project SEED 2014: Mentors and Students

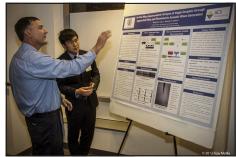
The deadline for Project SEED mentors to send their research proposals is January 30, 2014. If you are interested in mentoring a Project SEED student, please contact the CSW Project SEED chair, Dr. Ajay Mallia at vajaymallia@gmail.com. High school teachers and counselors can submit applications for potential Project SEED candidates for 2014 to the Project SEED chair. In order to be eligible to participate in Project SEED, students need to have completed a year of chemistry class by June 2013, and be able to prove economic disadvantage. For information on Project SEED and student eligibility, please contact the CSW Project SEED committee or visit the Project SEED website at www.acs.org/projectseed. Alternatively, you may also contact the ACS Project SEED office at projectseed@acs.org or 202-833-7732.











From top: Ms. Harliv Kaur explaining her research; Professor Marie-Christine Daniel, UMBC, Ms. Angela Chan and Mr. William Ghann; Participants enjoying the event; Dr. Zeeshan Ahmed explaining his mentoring experience; Mr. Seong Jang answering a question from Mr. Mark Agnew, Rockville HS.

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

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



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