

The CHEMIST

A publication of the Chemical Society of Washington-Section of the American Chemical Society Vol. 62 - No. 9

December 2012

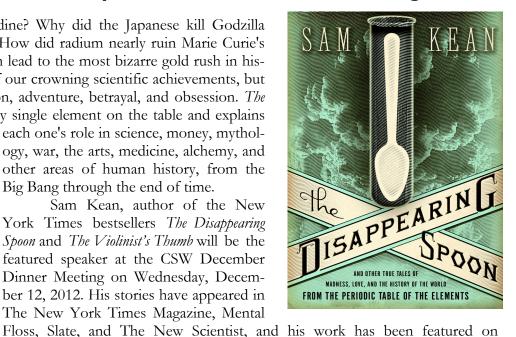
Bestselling Author Sam Kean to Speak at December Dinner Meeting

Why did Gandhi hate iodine? Why did the Japanese kill Godzilla with missiles made of cadmium? How did radium nearly ruin Marie Curie's reputation? And why did tellurium lead to the most bizarre gold rush in history? The Periodic Table is one of our crowning scientific achievements, but it's also a treasure trove of passion, adventure, betrayal, and obsession. The Disappearing Spoon delves into every single element on the table and explains



each one's role in science, money, mythology, war, the arts, medicine, alchemy, and other areas of human history, from the Big Bang through the end of time.

Sam Kean, author of the New York Times bestsellers The Disappearing Spoon and The Violinist's Thumb will be the featured speaker at the CSW December Dinner Meeting on Wednesday, December 12, 2012. His stories have appeared in The New York Times Magazine, Mental



"Radiolab," "All Things Considered," and "Fresh Air." Copies of Sam Kean's books, The Disappearing Spoon: and Other Tales of Madness, Love, and the History of the World from the Periodic Table of the Elements and The Violinist's Thumb: and Other Tales of Love, War, and Genius, as Written by Our Genetic Code will be available for review and purchase after the lecture. Additional meeting details can be found on page 2.

Xu Duan, Holton-Arms School, Receives CSW Schubert Award for High School Teaching

The recipient of the 2012 Leo Schubert Memorial Award for outstanding teaching of high school chemistry is Xu Duan, Chemistry Teacher at the Holton-Arms School in Bethesda, Maryland. He joined the faculty at Holton-Arms in 2011 after nine years at Queen Anne School in Upper Marlboro, Maryland.

Mr. Duan was born in Beijing but spent most of his childhood in Inner Mongolia in the frontier region near the border with the Soviet Union. After graduating in 1986 from the Hebei State University in Beijing with a bachelor's degree in Biochemistry and Microbiology, he spent six years engaged in teaching and research at the Beijing Biodiversity Conservation and Research Center in China. Then, in 1992, he enrolled in the graduate program at the University of Maryland in College Park, where he subsequently received his Master's Degree in Biology in 2000.

At both the Holton-Arms School and Queen Anne

Richard G. Weiss, Receives CSW Charles L. **Gordon Award**

The recipient of the 2012 Charles L. Gordon Award is Professor Richard G. Weiss of Georgetown University. The award is given in recognition of exemplary service by a CSW member to the profession of chemistry, chemists, and the Chemical Society of Washington. It is named after Charles Gordon for his years of service as managing editor of the Capital Chemist.

As a professor of chemistry at Georgetown University and as a senior editor for the journal Langmuir, Dr. Weiss is well known in the chemical community. He has also established an international presence as a Fulbright Research Fellow and as an International Union of Pure and Applied Chemistry Fellow. He currently serves as a member of the Advisory Editorial Board of the Journal of the Brazilian Chemical Society. His research program at Georgetown is focused on the synthesis, properties, and chemical reactions of materials, particularly of gels and liquid crystals.

The Capital Chemist™



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

Volume 62, Number 9 December 2012

Editor, Business Manager

Jessica L. Rasmussen Voice: 202-659-2650 Email: csw@acs.org

Publisher

Chemical Society of Washington

Business Staff

Zory R. Glaser, Chair CSW Publications Committee 202-659-2650

Advertising Manager

MBO Services

PO Box 1150, Marshfield, MA 02050-1150 781-837-0424 voice

www.mboservices.net

CSW Correspondence

Kristy A. Martin, Administrator CSW, 1155 16th Street, NW, O-218 Washington, DC 20036 202-659-2650 voice email: csw@acs.org

http://csw.sites.acs.org

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

GENERAL: The Capital Chemist (ISSN 0411-0080) is published monthly from January to December (except June, July, and August) by the Chemical Society of Washington, 1155 16th Street, NW, Washington, DC 20036. 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.

CSW assumes no responsibility for the statements and opinions advanced by the editor or contributors to its publication or the products and services advertised herein

Copyright ©2012, Chemical Society of Washington.

2012 Officers

President

Robert Wiacek, Pixelligent Technologies **President-Elect**

Douglas J. Raber, GreenPoint Science

Secretary

Alan J. Anderson, Bowie State University Treasurer

Kathryn Hughes, National Academies

THE CHEMICAL SOCIETY OF WASHINGTON PRESENTS: 1114th Dinner Meeting

Wednesday, December 12, 2012 Fire Station 1 Restaurant 8131 Georgia Ave. Silver Spring, MD 20910

Agenda

6:00 p.m. Social Hour and Check-in

7:00 p.m. Dinner

Mixed green salad, grilled salmon, chicken marsala, mashed potatoes, and vegetables. Served buffet style.

7:50 p.m. Awards Presentation, Schubert and Gordon Award

8:10 p.m. Featured Speaker, Sam Kean

COST \$30.00 Members & guests, \$15 Students

Reservations: Make reservations by Monday, December 10, 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.

Parking: Free parking is available after 6pm on Silver Spring and Georgia Avenues directly adjacent to the Fire Station 1 restaurant. The Fenton Street parking garage (with meters) is located on the same block.

Metro: The closest metro station is the Silver Spring station (red line).



50-Year ACS Members Recognized at November Dinner Meeting



Pictured left to right: George Birnbaum; James Burton; Zory Glaser; Quentin Looney; Harold Peterson; Michael Pope; Don Schneider; Vane Smith, Jr.; William Tolles; Anne Turner

"I joined the ACS when I was a graduate student at Michigan State and attended my first national meeting in Chicago. Although I was a biochemistry major, my chemistry courses served me well as a faculty member teaching biochemistry at the University of Massachusetts at Amherst and at Dartmouth College and Dartmouth Medical School. After an academic career, I joined the grant review staff of the Center for Scientific Review (CSR) at the National Institutes of Health. I currently work part time as a Senior Advisor to the Director of CSR and look forward to attending more local meetings sponsored by CSW and more national ACS meetings."

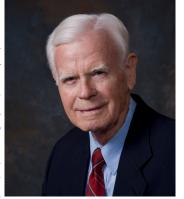
—Dr. Donald Schneider, 50-year ACS

"My 60 Years of Membership in the American Chemical Society" Contributed by Dr. Robert H Maybury

Little did I realize what membership in a professional society would mean when, in 1952, having just received my PhD in Chemistry from Boston University, I also signed up as a member of the American Chemical Society.

I then entered a decade of teaching and research at the University of Redlands in California while also taking an active part in the San Gorgonio Section of the American Chemical Society (ACS). Through this I met fellow chemists and served it as Chairman for a year. I also served as Member-at-Large of the Division of Chemical Education of the ACS.

In 1963, I joined the Science sector of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in Paris, France, where over the next 10 years I was responsible for programs to improve chemical education, particularly in developing countries. I soon



recognized the value of maintaining my membership in the ACS, for several American chemists came to Paris to spend their sabbaticals voluntarily working with me on specific tasks related to UNESCO's chemical education programs. Such stalwarts of the ACS's chemical education programs as Drs. Larry Strong, J. Arthur Campbell, and Hubert Alyea provided leadership to the UNESCO Pilot Project for Improving Chemical Education in Asia, a project I organized at a laboratory at Chulalonghorn University in Bangkok, Thailand.

I spent eight of my 20 years with UNESCO in the UNESCO Regional Office for Science and Technology in Africa, focused on science policy, but also continuing to cooperate with chemists throughout African countries. On retiring from UNESCO in 1983, I joined the Science Adviser of the World Bank in Washington, developing a training course on technology for the developing countries. But in both Africa and Washington, I sustained my contact with chemistry by reading that irreplaceable publication, C&E News, and attending whenever possible the meetings of the International Activities Committee at national ACS meetings.

While working abroad, on several occasions I had met Dr. Glenn T Seaborg (the Noble Laureate and an ACS President) to discuss his interest in creating an international association of chemists. Much to my surprise, in September 1987, Dr. Seaborg visited me at the World Bank and invited me to serve voluntarily as Executive Director of the International Organization for Chemical Sciences in Development (IOCD). He explained that the director of this nonprofit group of chemists he had helped create had just been tragically killed in a motor accident. I accepted his invitation and worked closely with Dr. Seaborg until he was succeeded as President by Dr. Jean-Marie Lehn, Noble Laureate in Chemistry in France.

My work with IOCD brought me once more into active contact with chemists throughout the world. Moreover, I soon realized that my membership in the ACS offered invaluable resources for my work. I acknowledge the support of Fabienne Myers, Editor of Chemistry International, who repeatedly ran articles about IOCD. I also acknowledge the support of Dr. John Malin, who, when he was the ACS officer for the International Activities Committee, repeatedly welcomed me to report on IOCD at the committee's meetings. I was granted Emeritus status with IOCD two years ago and invite readers to visit its website at: www.iocd.org.

Three ACS National Historic Chemical Landmarks in DC Area

The American Chemistry Society established the National Historic Chemical Landmarks program in 1992 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. The program does this by recognizing seminal achievements in the chemical sciences, recording their histories, and providing information and resources about landmark achievements.

The Chemical Society of Washington is home to three National Historic Chemical Landmarks: "Deciphering the Genetic Code" at NIH; the National Institute of Standards and Technology in Gaithersburg, MD; and "Bakelight: the World's First Synthetic Plastic" at the National Museum of American History.

For more information on these landmarks and the ACS National Historic Chemical Landmarks program, please visit http://csw.sites.acs.org/acsncl.htm.



CSW is on Facebook!

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



Do you have story ideas for the *Capital Chemist*? Email them to

csw@acs.org!

Gordon Award, cont. from page 1

Professor Weiss has provided valuable service to our local section by administering the College Achievement Awards since 2008, helping CSW to recognize the best and brightest undergraduate students in our region. In addition, he has served since 2009 as a mentor for Project SEED, which provides opportunities for economically disadvantaged high school students to gain research experience in a chemistry laboratory.

The Chemical Society of Washington is pleased to recognize Dr. Weiss's outstanding contributions to CSW and the chemistry community by naming him as the 2012 recipient of the Charles L. Gordon Award.

SPECTROSCOPIC

SAMPLING SUPPLIES and ACCESSORIES

IR - FTIR



Windows and Reflectance Plates

Liquid-Solid-Gas Accessories

> Reflectance Accessories

Reconditioning HATR

NMR - EPR



Sample Tubes 5 to 30mm

Micro Tubes and Capillaries

Innovative New Products

EPR and Raman Sample Tubes

UV - VIS - FL



Quartz and Glass Cells

Fluorescence Cells

Raman Cells

Special Application Cells

View and Download all literature with pricing at www.newera-spectro.com

CAGE Code: 44ME9 DUNS: 556785657

NEW ERA ENTERPRISES, INC.

1-800-821-4667

TEL WELDE

Fax: 1-856-697-8727

cs@newera-spectro.com

CSW Travel Awards Assist Local Students with ACS National Meeting Costs

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 can be meeting registration or travel expenses, such as registration, airfare and lodging. Applicants should submit the following by Midnight 1/4/2013 to CSW (email: CSW@acs.org):

- 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 the 2013 National meeting in New Orleans. 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.

Calendar of Events

December Dinner Meeting

December 12, 2012 Firestation 1 Restaurant, Silver Spring, MD

January Dinner Meeting

January 10, 2013 Marvel Hall, ACS Hach Building

February Dinner Meeting

February 13, 2013 Georgetown University

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 supporting Project SEED? This 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. Contact the Project SEED coordinators or CSW (csw@acs.org, phone, 202-659-2650) for more information.

Schubert, cont. from page 1

School, Mr. Duan has taught a variety of courses, including AP Chemistry and Honors Chemistry. Beyond the classroom, he has regularly served as a mentor for extracurricular chemistry competitions, including the annual Chemathon and Chemistry Olympiad, where his students have been highly successful. He is widely recognized by his students and their parents for his strong leadership and support. In 2008, the Washington Post named him a recipient of The Agnes Meyer Outstanding Teacher Award.

Mr. Duan's dedication extends to all his students and is not limited to the top performers who have achieved great success. A parent of one of his recent students writes that he "is passionate about his job. He pulls out all the stops to make sure that everyone is successful in his class."

The Chemical Society of Washington is pleased to recognize Mr. Duan's outstanding contributions to teaching high school chemistry by naming him as the 2012 recipient of the Leo Schubert Memorial Award.



ACS Webinars™ CLICK * WATCH * LEARN * DISCUSS

Learn more and register at www.acswebinars.org

December 6: Rational Design of Safer Chemicals

December 13: Chemistry and the Economy Year-end Review



The Retired Chemists Group

offers a social program of luncheons and outings available to all. csw.sites.acs.org/rcg.htm

It's easy to become a CSW volunteer!

Email csw@acs.org about upcoming opportunities today!



BUSINESS DIRECTORY

SERVICES

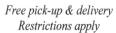


Eastern Scientific www.easternsci.com

781-826-3456

Vacuum Pump Problems?

Eastern Scientific specializes in the repair and precision rebuilding of all makes of mechanical vacuum pumps.





NMR Service 500 MHz

*Mass

*Elemental Analysis

NuMega Resonance Labs

numegalabs.com P-858-793-6057



Micron Analytical Services

COMPLETE MATERIALS CHARACTERIZATION MORPHOLOGY CHEMISTRY STRUCTURE

SEM/EDXA • EPA/WDXA • XRD XRF • ESCA • AUGER • FTIR • DSC/TGA

Registered with FDA ● DEA

GMP/GLP Compliant

3815 Lancaster Pike Wilmington DE. 19805 E-Mail micronanalytical@ compuserve.com

Voice 302-998-1184, Fax 302-998-1836 Web Page: www.micronanalytical.com

CAREER OPPORTUNITIES

SEARCHING FOR THAT SPECIAL JOB?

There are many companies and organizations searching for chemical and biochemical personnel to fill important jobs in their organizations.

- 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

Do you currently receive a paper copy of the *Capital Chemist*? Would you like to?

If so, it's time to renew!

Subscriptions are \$10/year (Jan-Dec). Your subscription will start/continue in January 2013. Please note that the *Capital Chemist* is not published in June, July, and August.



Checks should be made payable to CSW, and sent to: CSW 1155 16th Street, NW, O-218 Washington, DC 20036

Advertisers in this Issue:

Eastern Scientific	p6
Micron	p6
New Era	p4
NuMega	p6

