

## Dr. Jonathan Deeds To Speak About “Fishy Business” at February Meeting

Dr. Jonathan Deeds, of the FDA Center for Food Safety and Applied Nutrition (CFSAN), will speak at the CSW Dinner Meeting on February 9, 2012. His talk is entitled, “Fishy Business: Addressing Seafood Safety and Seafood Labeling Issues at the FDA Using Modern Molecular Techniques”.

Dr. Deeds is currently a Research Biologist in the Division of Analytical Chemistry, Office of Regulatory Science, CFSAN at the FDA. He received his B.S. in Biology from the University of Dayton, Ohio in 1995, his M.Sc. in Environmental Toxicology from the University of Louisiana at Lafayette in 1997, and his Ph.D. in Marine, Environmental, and Estuarine Science from the University of Maryland in 2003. His dissertation work, entitled, “Toxins and Toxicity from the Cosmopolitan, Bloom-Forming Dinoflagellate *Karlodinium micrum*”, first described a new family of marine biotoxins, the karlotoxins, which were responsible for several highly publicized fish kills in Maryland in the late 1990’s. In 2003, he was hired by the FDA Office of Seafood to work on various aspects of seafood safety, particularly in relation to FDA-regulated marine biotoxins. This work led to another of Dr. Deeds’ projects involving the molecular species identification of seafood to trace the origin of foods involved in outbreaks of human illness in the U.S. The methods employed for this work have now led to an FDA-wide project to replace current chemical based species identification methods with modern state of the art molecular techniques to address several current issues involving seafood labeling, including species substitution and economic fraud. Dr. Deeds has been recognized several times for his scientific achievements by the FDA including the CFSAN Outstanding Intercenter Scientific Collaboration Award in 2006, the FDA Outstanding Junior Investigator Award in 2009, and the Foods Program Outstanding Scientific Collaboration Award in 2011.



*Speaker Abstract Located on Page 3*

## High School Chemistry Teachers: ACS-Hach Grant Applications Due

The ACS-Hach High School Chemistry Grant is awarded to U.S. high school chemistry teachers seeking funds to support ideas that transform classroom learning, foster student development, and reveal the wonders of chemistry. Teachers can request up to \$1,500 for their ideas. Applications are accepted annually February 1 – April 1. Applicants for the 2012-2013 award cycle will be notified of their status by June 30, 2012.

Since 2008, more than 400 ACS-Hach High School Chemistry grants have been awarded to teachers with innovative and exciting ideas. They have offered grants for:

- Laboratory Equipment & Supplies
- Instructional Materials
- Professional Development
- Field Studies
- Science Outreach Events

Recent awards were given for the following: Real-world con-

sumer and environmental studies projects; 21st century laboratories; “cool chemistry” demonstration shows; 3-D modeling; electronic, real-time student portfolios; interactive technologies for immediate results and assessment; podcasts for learning on-the-go; and professional development courses.

For more information, please visit <http://portal.acs.org/portal/Navigate?nodeid=2245>.

# The Capital Chemist™



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

Volume 62, Number 2 February 2012

## Editor, Business Manager

Jessica L. Rasmussen (Pullen)

Voice: 202-659-2650

Email: [csw@acs.org](mailto:csw@acs.org)

## Publisher

Chemical Society of Washington

## Business Staff

Zory 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](http://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](mailto: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](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.

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: 1108th Dinner Meeting

Thursday, February 9, 2012

University of Maryland

Chemistry Building Atrium

6:00 p.m. Social Hour

7:00 p.m. Dinner

8:00 p.m. College Achievement Awards

8:30 p.m. Speaker Presentation

**COST** \$20.00 Members & guests, \$10.00 Students

**Menu includes:** Chicken or steak Florentine, served with a garden salad, herb roasted potatoes, assorted cookies, and soda.

Please make reservations by **Monday, February 6, 2012, 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 from College Park Metro Station. The bus stops 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).



## Speaker Abstract: , "Fishy Business: Addressing Seafood Safety and Seafood Labeling Issues at the FDA Using Modern Molecular Techniques"

No one likes to feel cheated. Yet paying premium prices for products labeled as "wild-caught," "local," or "sustainable" products (like grouper, cod, or walleye), while receiving imported, over-fished, aquacultured, or flat-out other species than were listed on the label makes people feel just that. In addition, intentional mislabeling of seafood products can hide risks inherent to certain types of culturing and processing, e.g. the use of unapproved aquaculture drugs, natural toxins, microbial contamination, allergens, etc., which circumvents FDA's Hazard Analysis Critical Control Points (HACCP) regulation. The entire process of HACCP starts with knowing what the product actually is. And consumers are not the on-

ly ones being cheated. Some types of intentional mislabeling, designed to hide the regional origin of a product, are done to circumvent tariffs or to hide the fact that a product was not locally caught. This practice not only cheats the consumer but can affect local industries as well by artificially driving down the prices of their products, often forcing them to also participate in these deceptive practices to remain competitive in the marketplace. Perhaps most importantly, by continually paying premium prices for inferior products, over time, some consumers will simply stop purchasing seafood and will lose out on the numerous nutritional benefits of this food group. Recent advances in the standardization of appropriate

DNA markers for species identification coupled with the new affordability of sequencing equipment has allowed the FDA to establish an updated program in seafood authenticity using modern molecular tools, allowing the FDA to address these important issues and better perform their charge of assuring the public that the food they eat is safe and accurately labeled.

**It's easy to become a CSW volunteer!**

**Email [csw@acs.org](mailto:csw@acs.org) about upcoming opportunities today!**

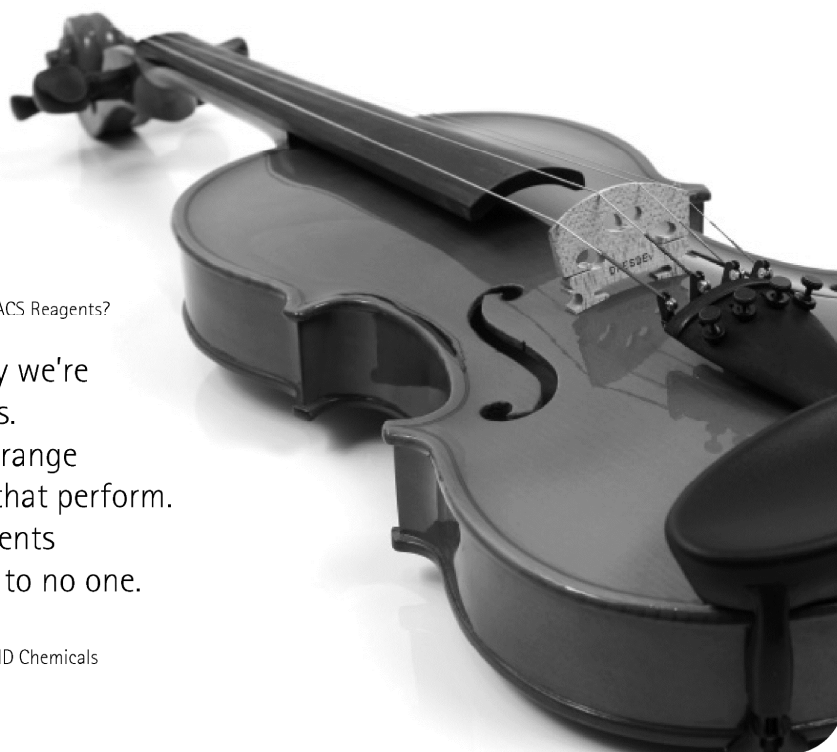


[www.emdchemicals.com/analytics](http://www.emdchemicals.com/analytics)

Does EMD know anything about ACS Reagents?

You might say we're  
in tune with your needs.  
EMD offers a diverse range  
of ACS products that perform.  
The quality of our solvents  
plays second fiddle to no one.

That's what's in it for you. EMD Chemicals





## BUSINESS DIRECTORY

### SERVICES

### CAREER OPPORTUNITIES



**NEW ERA ENTERPRISES, INC.**  
NMR-IR/FTIR-UV-VIS-FL  
sampling supplies & accessories

Three major catalogs / pricing to view  
and download from

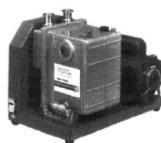
[www.newera-spectro.com](http://www.newera-spectro.com)

One source for Spectroscopic  
Sampling Supplies

CAGE Code: 44ME9

DUNS: 556785657

1-800-821-4667 [cs@newera-spectro.com](mailto:cs@newera-spectro.com)



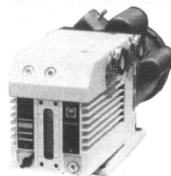
**Eastern Scientific**

[www.easternsci.com](http://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.



Free pick-up & delivery  
Restrictions apply



Pharmacology  
Research  
Institute

Chemist wanted with FDA agency experience.

This is a part-time consulting arrangement.

Work from your own home or office.

No travel required.

Please send CV to

Charles S. Wilcox, Ph.D., Executive Director

Tel: 714.827.3672; Fax: 714.827.3669

E-Mail: [cwilcox@priresearch.com](mailto:cwilcox@priresearch.com)

## NMR<sub>Service</sub> 500MHz

**\*Mass**

**\*Elemental Analysis**

## NuMega Resonance Labs

[numegalabs.com](http://numegalabs.com) P- 858-793-6057

### PROMOTE YOUR PRODUCTS AND SERVICES • ADVERTISE IN THE CAPITAL CHEMIST

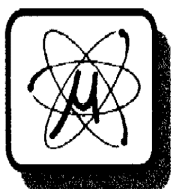
*The Capital Chemist* readership is  
greater Washington DC's largest source  
for chemical and biochemical buyers. *The  
Capital Chemist* reaches more than 4,300  
readers each month. It has been estimated  
that these buyers annually purchase more  
than \$215,000,000 of:

- EQUIPMENT
- SUPPLIES
- CONSULTING SERVICES

Placing an advertisement in *The Capital  
Chemist* is the lowest cost method of reaching  
this select audience.

For further information and other  
options for promoting your com-  
pany's products and services visit:

[www.mboservices.net](http://www.mboservices.net)



## 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](mailto:micronanalytical@compuserve.com)

Voice 302-998-1184, Fax 302-998-1836

Web Page: [www.micronanalytical.com](http://www.micronanalytical.com)

### Advertisers in this Issue:

Eastern Scientific.....	p4
EMD.....	p3
MBO Services.....	p4
Micron.....	p4
New Era.....	p4
NuMega.....	p4
PRI.....	p4

Do you have story ideas for the  
*Capital Chemist*?

Email them to  
[csw@acs.org](mailto:csw@acs.org)!



## February Anniversaries in Chemistry

February 1, 1905: Seventy-five years ago in 1937, Emilio Segré discovered technetium (Tc, 43) with C. Perrier. He also discovered astatine (At, 85) with D. R. Corson and K. R. MacKenzie and demonstrated the antiproton with others in 1955. He shared the Nobel Prize in Physics (1959) with Owen Chamberlain for their discovery of the antiproton.

February 20, 1937: Today is the 75th birthday of Robert Huber, researcher on the three-dimensional structure of proteins involved in photosynthesis. In 1988, he shared the Nobel Prize in Chemistry with Johann Deisenhofer and Hartmut Michel for the determination of the three-dimensional structure of a photosynthetic reaction center.

February 25, 1898: Seventy-five years ago, William Thomas Astbury used x-ray diffraction patterns to study the structures of nucleic acids and wool in both the stretched and unstretched forms. Today would be his 114th birthday.

February 27, 1901: Linus C. Pauling was born on this date. Fifty years ago, he was awarded The Nobel Peace Prize. He was a researcher on structure of molecules, valency, and resonance. He received the Nobel Prize in Chemistry in 1954 for his research into the nature of the chemical bond and its application to the elucidation of the structure of complex substances.

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

### CSW Calendar of Events

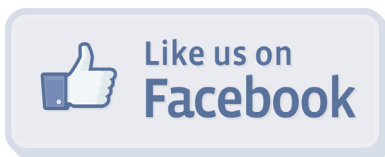
**February Dinner Meeting**  
University of Maryland  
Speaker: Dr. Jonathan Deeds  
February 9, 2012

**March Dinner Meeting**  
Pier 7 Restaurant  
March 22, 2012



### 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](mailto:csw@acs.org)!



### ACS Webinars™

CLICK \* WATCH \* LEARN \*  
DISCUSS

Learn more and register at  
[www.acswebinars.org](http://www.acswebinars.org)

**February 2:** Write Well and Prosper—Science Writing Tips

**February 9:** Is Love in the Air?  
Human Pheromones and Axillary Chemistry

**February 16:** Top Five Chemistry Tips for the Kitchen

**February 23:** EXTREME CHEMISTRY:  
Secret Science of Movie Stunts and Special Effects



**Happy Valentine's Day!**

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 2012. 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