

The Chemical Record

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Columbus Section of the American Chemical Society, Inc.

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IN THIS ISSUE...

ABOUT THE COLUMBUS SECTION	1
ABOUT THE CHEMICAL RECORD	1
CHANGE OF ADDRESS	1
ADVERTISING RATES	1
MEETING NOTICE	2
PROGRAM DETAILS	3
ABOUT THE SPEAKERS	3
CALL FOR NOMINATIONS: 2014 ACS FELLOWS	4
\$1000 AWARD FOR OUTSTANDING OUTREACH	4
COLUMBUS SECTION ACS CALENDAR OF EVENTS	4

ABOUT THE COLUMBUS SECTION



The Columbus Section of the American Chemical Society comprises approximately 1,500 members who live and work in the following central Ohio counties: Delaware, Fairfield, Fayette, Franklin, Hocking, Knox, Licking, Madison, Marion, Morrow, Muskingum, Perry, Pickaway, Ross, and Union.

The Mission of the American Chemical Society (ACS) is to encourage in the broadest and most liberal manner the advancement of the chemical enterprise and its practitioners. Toward that end, the ACS advances scholarly knowledge, provides professional services and support, communicates with varied audiences, and is actively involved in the science, education, and public policy arenas.

The Columbus Section of the ACS adheres to this mission and the strategic thrusts of the national organization and leadership by providing programs and networking opportunities for Chemistry professionals in Central Ohio.

We invite ACS members and scientists in the community to lend their expertise and talents to our activities in science education, government and legislative policy issues, safety in our industrial plants and in our communities, and care of our land.

ABOUT THE CHEMICAL RECORD

The Chemical Record, official newsletter of the Columbus Section of the American Chemical Society, Inc., is published monthly, February-May and September-December (eight issues per year.) Opinions expressed by editors or contributors do not necessarily represent the official position of the Columbus Section or of the editorial staff. We welcome your contributions to your *Chemical Record*. Please submit them via postal or electronic mail to **George Greene**, PO Box 360941, Columbus, Ohio 43236-0941, george.greene@abbott.com. Electronic mail contributions should be in MS Word file attachments (preferred) or plain-text messages. *Thank you very much!*

CHANGE OF ADDRESS

Changes in postal or e-mail address should be reported to the Membership Chair, **David Speth**, 614-688-5162, drspeth@sbcglobal.net. David will forward the change-of-address information to ACS Headquarters.

ADVERTISING RATES

Advertising rates for *The Chemical Record* are as follows (per single insertion): Full Page, \$250; Half page, \$150; Quarter Page, \$120; Eighth Page: \$60; Business Card, \$50. Discounts: 5% for four insertions or 10% for eight insertions during a calendar year. There is no charge for "help wanted" ads.



MEETING NOTICE



ACS
Chemistry for Life®

Columbus Section of the American Chemical Society Meeting #870

How Do You Make Diamonds? Measuring Extreme Pressures

Wednesday, March 19, 2014

The Lakes Golf & Country Club
6740 Worthington Road
Westerville, Ohio 43082

Speakers:

Dr. Abds-Sami (Sami) Malik
Technology Manager, Sandvik Hyperion

Dr. Emil Stoyanov
Development Engineer, Sandvik Hyperion

Abstract: High pressure diamond synthesis requires pressures in the range of 5 gigapascals (GPa), but measuring such high pressures is more complicated than measuring your car tire pressure! Over the past few decades, many pressure gauges have been developed to address this problem. After a brief overview of industrial diamond synthesis and products, we will present a novel pressure gauge that was developed in a collaborative project between Sandvik Hyperion and Arizona State University. This continuous, *ex situ*, pressure gauge can measure in the 4 to 10 GPa range and at temperatures ranging from 1400 to 1600 C.



PROGRAM DETAILS

5:30 – 6:30 PM	Executive Committee meeting (All Section members are welcome to attend)
6:30 – 7:00 PM	Social Hour
7:00 – 7:40 PM	Dinner Entrée Choices: 1. Chicken Marsala , with lemon scented risotto, green beans and house salad 2. Herb Dijon Roasted Salmon , with Roasted red skin potatoes, asparagus and mixed green salad 3. Vegetable Cannelloni (vegetarian)
7:45 – 8:45 PM	Presentation “How do you make diamonds?”
Cost	\$25 per person members and non-members, \$5 for retired and unemployed members, \$5 per student. New members are free! Payment will be collected at the door; cash and checks accepted. There is no cost to attend the program only. Remember that this is a dinner order and must be paid. Please help control costs by honoring your order.
RSVP	Please use the voice mail reservations service by calling 614-447-3600 extension 7047. Follow the template for reservations*. Alternatively, please send e-mail with the same information to The Columbus Section at the following e-mail address: acscols@wowway.com or use the Meeting Reservation Form on the Section’s website.
*Voicemail/e-mail Reservations Template	<ul style="list-style-type: none"> • First and last name: Please spell last name. • Membership category: member, non-member, retired, emeritus, unemployed, and student. • Employer • Please indicate your entrée choice. • Your phone number, in case we need to contact you.
Reservation Deadline	Wednesday, March 12, 2014 by noon
Program Contact	Wenbin Qi, 614-260-4179, Qiwenbin@gmail.com
Directions & Parking	The Lakes Golf & Country Club is located at 6740 Worthington Road, in Westerville, Ohio and is easily accessible via I-71. From I-71 North , take exit #121, Polaris Parkway/Gemini Place. Go East on Polaris Parkway past Germain Amphitheater and turn left on Worthington Road. Follow Worthington Road about 1.4 miles to the Club. The Clubhouse sits back off the road on the left. From I-71 South , take exit #121, Gemini Place (to Polaris Parkway), turn left on Gemini Place, then right onto Orion Place, follow Orion to Polaris Parkway. Turn left on Polaris Parkway and then turn left on Worthington Road. Follow Worthington Road about 1.4 miles to the Club. The Clubhouse sits back off the road on the left.

ABOUT THE SPEAKERS



Abds-Sami (Sami) Malik earned his Ph.D. at Cornell University where he studied solid state chemistry and physics under the direction of Prof. DiSalvo and Prof. Hoffmann. He has been working on high pressure materials technology for the past 11 years and is now the Technology Manager for mining products at Sandvik Hyperion.



Dr. Emil Stoyanov is a Development Engineer on the Mining team at the Sandvik Hyperion company. He received his PhD in geosciences from the Friedrich-Schiller-Universität in Jena, Germany. Emil is involved in developing new products for the mining industry as well as in research and development of novel technologies and materials that can be produced under extreme conditions and have potential industrial applications.

CALL FOR NOMINATIONS: 2014 ACS FELLOWS From the ACS Website

Nominations are now open for the 2014 class of ACS Fellows; the deadline for nominations is April 1, 2014. The ACS Fellows Program recognizes ACS members for excellence and leadership in both of two areas: (1) science, the profession, education, and/or management, and (2) volunteer service in the ACS community. Nominations are being solicited from ACS National Committees, Local Sections, and Divisions, as well as from individual members. Visit www.acs.org/fellows for program guidelines and nomination information.

\$1000 AWARD FOR OUTSTANDING OUTREACH FROM THE ACS WEBSITE

Do you know someone who is an outreach super-star? A fellow chemist who brings chemistry to life for public audiences, whether they be students, scouts, community groups, or others? Or maybe someone who gets the word out through radio, newspaper columns, videos or television appearances? Nominations are open for the Helen M. Free Award for Public Outreach, which recognizes an ACS member who improves public recognition and appreciation for the role of chemistry in our lives. \$1000 prize. Apply online by May 15, 2014.

COLUMBUS SECTION ACS CALENDAR OF EVENTS

Year	Month	Date	Day	Location	Comments
2014	March	12	Wed		Deadline for reservations for March Section meeting
2014	March	19	Wed	The Lakes Golf and Country Club, Westerville	March Section meeting-- <i>How Do You Make Diamonds? Measuring Extreme Pressures..</i> See details elsewhere in this issue of <i>The Chemical Record</i> .
2014	March	16 – 20	Sun – Thu	Dallas	247 th ACS National Meeting and Exposition
2014	April	22	Tue	Here, There, Everywhere	Chemists Celebrate Earth Day. Stay tuned to <i>The Chemical Record</i> and the Section website for details.
2014	August	10 – 14	Sun – Thu	San Francisco	248 th ACS National Meeting and Exposition
2014	October	1 – 4	Wed – Sat	Pittsburgh	45 th ACS Central Regional Meeting
2014	October	19 – 25	Sun – Sat	Here, There, Everywhere	National Chemistry Week 2014 Theme: <i>The Sweet Side of Chemistry – Candy</i> , Showcasing the chemistry involved in candy and confections Stay tuned to <i>The Chemical Record</i> and the Section website for details.