

The Chemical Record

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Columbus Section of the American Chemical Society, Inc.

David Speth, Section Chair – drspeth@sbcglobal.net

George Greene, Editor – george.greene@abbott.com

Section Website: columbus.sites.acs.org

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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.

MEETING NOTICE



Scientific Expert Analysis™



ACS
Chemistry for Life®



Columbus Section of the American Chemical Society, Inc.
Meeting #868

columbus.sites.acs.org

Fracking: Safety and Environmental Concerns

Thursday December 12, 2013

5:30PM

Joint Meeting with the
Central Ohio Section of the American Institute of Chemical Engineers

Scientific Expert Analysis Ltd
7349 Worthington Galena Road
(On the corner of Sancus Boulevard and Worthington Galena Road)
Worthington, OH

PROGRAM DETAILS

5:30 – 6:00 PM	Social Time
6:00 – 7:00 PM	Lecture: <i>Fracking Safety and Environmental Concerns</i> , by Charles Guinther and Jason Henthorn, S.E.A. Limited
7:15 – 8:30 PM	Dinner: Buca di Beppo, 60 East Wilson Bridge Road Since the meal will be served family style, you do not need to make a dinner selection. The dinner menu will be: <ul style="list-style-type: none">• Mixed Green or Caesar Salad• Spaghetti with meat sauce• Fettuccine Alfredo• Chicken Limona• Cannoli• Coffee, Tea and Soft Drinks



	<p>Directions from SEA to Buca di Beppo Turn right out of the SEA parking lot onto Worthington Galena Road. At the stop light turn left to stay on Worthington Galena Road. Pass under I 270 and take the first right onto East Wilson Bridge. Buca di Beppo is about a mile down the road on the right before US 23.</p>
Cost	<p>\$25 per person members and non-members, \$10 for retired and unemployed members, \$5 per student. Payment will be collected at the door; cash and checks accepted. There is no cost to attend the program only. Please help control costs by honoring your RSVP.</p>
RSVP	<p>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 at columbus.sites.acs.org.</p>
*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, student. • Employer/School. • Please indicate if you will join us for the <u>Dinner & Program</u> OR <u>Program Only</u> • Your phone number, in case we need to contact you.
Reservation Deadline	<p>Friday, December 6th at noon</p>
Program Contact	<p>David Speth 614-538-0635, drspeth@sbcglobal.net</p>
Directions & Parking	<p>From the North: Take US 23 south to East Wilson Bridge Road. Turn left on East Wilson Bridge to Worthington Galena Road. Turn left on Worthington Galena Road. Proceed under I 270. SEA Ltd is at the corner of Sancus Boulevard and Worthington Galena Road at the first stop light north of I270.</p> <p>From the South: Take US 315 north to I 270 East. Stay on the right and take the US 23 south exit. Stay to the left on US 23 until you reach East Wilson Bridge Road. Turn left on East Wilson Bridge. Proceed to Worthington Galena Road. Turn left onto Worthington Galena Road. Proceed under I 270. SEA Ltd is at the corner of Sancus Boulevard and Worthington Galena Road at the first stop light north of I 270. Or Take I 71 north to I 270 West. Stay to the right and exit at US 23 south. Take US 23 south to East Wilson Bridge Road. Turn left on East Wilson Bridge to Worthington Galena Road. Turn left on Worthington Galena Road. Proceed under I 270. SEA Ltd is at the corner of Sancus Boulevard and Worthington Galena Road at the first stop light north of I270.</p> <p>From the East: Take I 70 west to I 270 North. Stay on I 270 until you reach the US 23 South exit. Take US 23 south to East Wilson Bridge Road. Turn left on East Wilson Bridge to Worthington Galena Road. Turn left on Worthington Galena Road. Proceed under I 270. SEA Ltd is at the corner of Sancus Boulevard and Worthington Galena Road at the first stop light north of I270.</p> <p>From the West: Take I 70 East to I 270 North. Stay on I 270 until you reach the US 23 South exit just past US 315. Stay to the left on US 23 until you reach East Wilson Bridge Road. Turn left on East Wilson Bridge. Proceed to Worthington Galena Road. Turn left onto Worthington Galena Road. Proceed under I 270. SEA Ltd is at the corner of Sancus Boulevard and Worthington Galena Road at the first stop light north of I270.</p>

ABOUT THE SPEAKERS:

CHARLES GUINThER AND JASON HENTHORN

Charles Guinther obtained his Bachelor of Science degree in Forensic Science and Chemistry at Eastern Kentucky University. He has been an environmental and safety consultant for more than 30 years providing expert testimony in cases on environmental contamination, chemical exposure, chemical storage, chemical flammability, spontaneous heating, mold investigation and indoor air quality. He is a Board Certified Safety Consultant and has OSHA Hazwopper training.

Jason Henthorn has a Bachelor of Science degree in industrial hygiene from The Ohio State University. He is responsible for managing projects involving environmental and occupational factors or stresses which may impair the health and well-being of citizens in the community. He has been responsible for sampling, evaluating and controlling a variety of industrial and environmental exposures including arsenic, silica, hydrogen fluoride, noise, heat, mercury and electromagnetic fields.

ABOUT THE TALK:

FRACKING: SAFETY AND ENVIRONMENTAL CONCERNS

Directional drilling and hydraulic fracturing have brought with them the opportunity to positively and significantly impact communities across the United States. Although the oil and gas industry is becoming more experienced, each geography presents new and unique challenges. As the industry has expanded and new workers are brought into the field, the frequency of accidents has also increased. These accidents range from those related to increased road traffic in areas under exploration or development to fires and explosions that result from improper handling of volatile gases and liquids recovered from the well. There is also the potential for exposure to toxic materials like hydrogen sulfide and aromatic compounds. The lecture will describe the hazards and help us as citizens to put them into perspective.

NOTE FROM THE CHAIR

BY DAVID SPETH, SECTION CHAIR

We had a great Chemistry Day at COSI. Our exhibit focused on the periodic table of the elements as a representation of the chemical sciences. As part of that display we were lucky to have **Rich Tenaglia** bring his collection of the elements to show to the guests at COSI. Rich's collection started with samples his father brought home from his work at Battelle. It now includes all of the elements except those that are radioactive. Between the samples and Rich's passion for the stories behind them, it was a great experience for all the more than 500 students and parents who attended the event.

The day's activities concluded with a lecture by **Sam Kean** author of *The Disappearing Spoon and Other True Tales of Madness, Love, and the History of the World from the Periodic Table of the Elements*. The audience of more than 150 heard a great presentation on some of the interesting stories behind Sam's passion for science and the stories of the people behind the elements. Based on the questions from the children in the audience, I think we may have convinced a few of them to pursue a career in science. After the lecture Sam was patient enough to sign copies of his book for more than 40 attendees.

Our final event of the day was a reception for ACS members and guests with Sam. It was a great way to end a great day. Thanks to the COSI staff did a great job helping me organize all the events and thanks to **Jeff Trent** for leading the Chemistry Day display activities.

Our next meeting is a joint effort with the Central Ohio Section of the American Institute of Chemical Engineers. The event will be December 12 at SEA Limited. Dinner at Buca di Beppo will follow the program.

Since this is my last note as Chair of the Columbus Section, let me take the time to thank everyone on the executive committee and all the committee chairs who helped me with the section activities this year. Keeping the section active takes the contributions of a number of people. Without everyone's help we could not deliver an interesting program to our members or promote chemistry in the community. Thanks again for all those who contributed to our efforts.

Finally let me make a final plea for volunteers. As I noted above, keeping the section active requires contributions from a group of people. No one contribution is huge, but each is an integral part of our organization. To keep things going we are always in need of people to help with our activities as either committee chairs or members of the executive committee. This year we are particularly in need of someone to step up to be chair-elect or treasurer-elect. These roles are advisory for 2014 so they do not require a large time investment, but they are essential to the maintenance of an active section in 2015 and beyond. Please consider volunteering to help us continue our activities.

CALL FOR ANNUAL REPORTS
By DAVID SPETH, SECTION CHAIR

HELP!!!

As 2013 comes to an end it's time to prepare the 2013 Annual Report for ACS National. This report is very important since our stipend from National depends on timely filing of this document. I would like this report to be as complete as possible so I am asking all of the committee chairs to submit a summary of their activities. I think we have a very active section in Columbus but we don't always capture all of our efforts. Let's try to be as complete as possible this year.

If you are an individual member who participated in an organized outreach activity either organized by the Section or by any other institution, we would also like to capture it so that we can show ACS National the full scope of our activities. The report need not be detailed. A simple listing of the activity location, date, content and number of attendees (estimated) is sufficient. If everyone does a little, no one needs to do a lot.

Thanks for your help with the report and for everything you did for the section this year.

Sincerely,

Dave Speth

WELCOME NEW MEMBERS!
By DAVID SPETH, SECTION CHAIR

Please join us in welcoming the following members who have joined the Section recently: The Columbus Section cordially invites new members to our monthly meetings. The Section will pay for new members' meals the first time they attend a meeting.

SHADI ABU-BAKER
JARED ARCHER
TONY BEIRL
DANIEL BUCKWALTER
STEVENS BURROUGHS
JERRY CASBOHM
SUBHRAKANTI CHAKRABORTY
BRIAN DILLMAN

ANDREW HAGA
MARTA HAMILTON
LE LI
TINGTING LIU
ANDREA MILLIKEN
SALIM OK
SARAH PREHABILO
TUCKER RUBINO

JOSEPH SCHEHR
BRIAN TURNER
RAQUEL UPSHUR
OREN WEBB
JOSHUA WIETING
KATHRYN WILLIAMS
LAI XU
JINGWEN ZHANG



ONLINE SHORT COURSES
FROM THE ACS WEBSITE

Online short courses are the best way to get the same high-quality instruction you expect without taking travel time away from work.

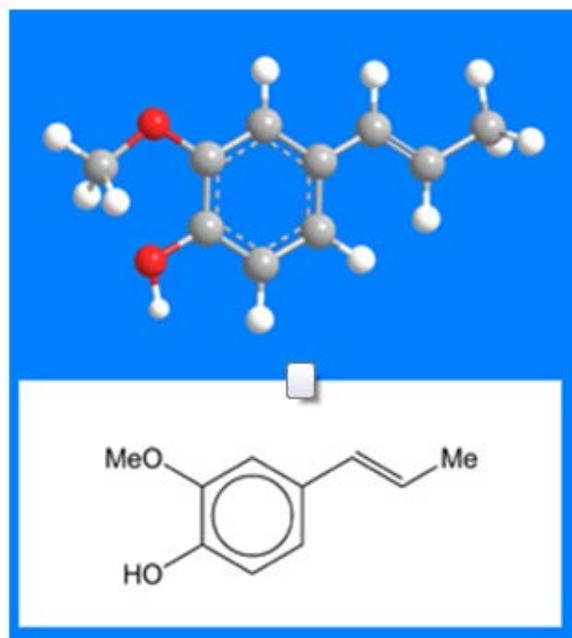
In an online short course, you can meet live and online with your instructor over a period of weeks. Classes are small so that we can customize the content to relate directly to the work that you are doing today. And with the time built in between sessions, you can apply what you've learned and bring up more questions throughout the longer course period.

Each course includes email access to the instructor, downloadable materials, and access to the session recordings so that you can keep up even if you can't attend the online session in person.

View our [Full Course Catalog](#).

Questions? Contact us at proed@acs.org.

MOLECULE OF THE MONTH
FROM THE ACS WEBSITE

**Isoeugenol**

Isoeugenol is an essential oil that was originally isolated from the Asian tree ylang-ylang (*Cananga odorata*). It exists in *trans* and *cis* isomeric forms; the more common *trans* isomer is shown here. Its first reported preparation was the isomerization of eugenol by two German research groups in 1891. The acetate ester of isoeugenol [can be used to prepare vanillin](#).

Isoeugenol is a flavor component of the nutmeg in the pumpkin pie you'll eat on Thanksgiving. Its isomer eugenol is a flavor component of clove. For an excellent and almost correct explanation of the difference between the two, go to nbclearn.com.



[More about this molecule](#) from CAS, the most authoritative and comprehensive source for chemical information.



COLUMBUS SECTION ACS CALENDAR OF EVENTS

Year	Month	Date	Day	Location	Comments
2013	December	6	Fri		Deadline for reservations for November Section meeting
2013	December	12		SEA	December Section meeting: Lecture at Scientific Expert Analysis. See details elsewhere in this issue of <i>The Chemical Record</i> .
2014	March	2 – 6	Sun – Thu	Chicago	Pittcon Conference and Expo 2014
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.

Join us for the 247th American Chemical Society National Meeting & Exposition

CHEMISTRY AND MATERIALS FOR ENERGY

DALLAS, TX • March 16 – 20, 2014

Registration Opens December 18, 2013

PACIFICHEM 2015
Honolulu, Hawaii, USA • December 15-20, 2015

Prelim Program now online • Call for 2nd round proposals opens 12/1/13



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.

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