

The Chemical Record

Volume 57 — Number 4 — September, 2015

Columbus Section of the American Chemical Society, Inc.

David Speth, Section Chair — drspeth@sbcglobal.net

George Greene, Editor — ggreenjeans@yahoo.com

Section Website: columbus.sites.acs.org

IN THIS ISSUE...

ABOUT THE COLUMBUS SECTION.....	1
MEETING NOTICE	2
PROGRAM DETAILS	2
ABOUT THE TALK: <i>THE DEVELOPMENT OF THE IUPAC INCHI CHEMICAL STRUCTURE STANDARD</i>	4
ABOUT THE SPEAKER: <i>DR. STEPHEN HELLER</i>	4
CHAIRMAN'S NOTE	4
NOTE FROM THE CHEMICAL RECORD EDITOR	5
KIDS AND CHEMISTRY EVENT: <i>IT'S A WHIRLWIND AT FOUNTAINSIDE!</i>	5
COLUMBUS SECTION ACS CALENDAR OF EVENTS	6
ABOUT <i>THE CHEMICAL RECORD</i>	6
CHANGE OF ADDRESS.....	6
ADVERTISING RATES.....	7

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

Columbus Section of the American Chemical Society, Inc.

columbus.sites.acs.org

Meeting #878

Patterson-Crane Award Presentation and Lecture

The Development of the IUPAC InChI Chemical Structure Standard

Dr. Stephen R. Heller
Guest Researcher at NIST

Tuesday September 8, 2015

Clintonville Woman's Club
3951 North High Street
Columbus, OH 43214
614-268-5525

PROGRAM DETAILS

5:00 – 6:00 PM	Executive Committee Meeting – All members are welcome to attend.
6:00 – 6:45 PM	Social Hour – Appetizers and soft drinks
6:45 – 7:45 PM Dinner	Choice of <ul style="list-style-type: none">• Chicken Kiev• Glazed Pork• Portabella Lasagna All served with rice pilaf and fresh bean medley Dessert Tray



7:45 – 9:15 PM Program	Presentation of the Patterson-Crane Award to Dr. Stephen Heller <i>The Development of the IUPAC InChI Chemical Structure Standard</i>
Cost	The charge for dinner is \$20 per person for members and non-members, \$5 for retired and unemployed members, and \$5 for students. Payment will be collected at the door; cash and checks accepted. There is no cost to attend the program only. <i>Remember that this is a dinner order and must be paid. Please help control costs by honoring your order.</i>
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, columbus.sites.acs.org .
*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 • Your choice of entrée: Chicken Kiev, Glazed Pork, or Portabella Lasagna • 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	Wednesday, September 2, at 12:00 Noon
Program Contact	David Speth , 614-538-0635, drspeth@sbcglobal.net
Directions & Parking	<p>The Clintonville Woman's Club is set back from North High Street. Please be careful about finding the correct driveway.</p> <p>From the North Take Ohio 315 south to Exit 7 Henderson Road. Turn left onto Olentangy River Road and then left again onto Henderson Road. Take Henderson Road east to North High Street. Turn right and proceed 0.6 miles south. The Clintonville Woman's Club is on the right. If you reach the Whetstone Recreation Center you have gone too far.</p> <p>From the East Take I 670 west to Ohio 315 North. Take Ohio 315 north to the Olentangy River Road exit. Stay left at the fork to exit 6C. Follow the signs to North Broadway. Merge onto West North Broadway and proceed east to North High Street. Turn left onto North High Street and drive 0.8 miles north. The Clintonville Woman's Club is on the left just past the Whetstone Recreation Center and the Park of Roses.</p> <p>From the West Take I 70 East to I 670 East. From I 670 take exit 2B to Ohio Route 315 North. Take the Olentangy River Road exit. Stay left at the fork to exit 6C. Follow the signs to North Broadway. Merge onto West North Broadway and proceed east to North High Street. Turn left onto North High Street and drive 0.8 miles north. The Clintonville Woman's Club is on the left just past the Whetstone Recreation Center and the Park of Roses.</p> <p>From the South Take Ohio 315 north to the Olentangy River Road exit. Stay left at the fork to exit 6C. Follow the signs to North Broadway. Merge onto West North Broadway and proceed east to North High Street. Turn left onto North High Street and drive 0.8 miles north. The Clintonville Woman's Club is on the left just past the Whetstone Recreation Center and the Park of Roses.</p> <p>Parking is free but limited.</p>

ABOUT THE TALK:
THE DEVELOPMENT OF THE IUPAC INCHI CHEMICAL STRUCTURE STANDARD

The development, implementation, and adoption of a structure representation standard for chemistry has been, and continues to be, an interesting project. The IUPAC International Chemical Identifier (InChI) chemical structure standard algorithm for defined chemical structures is playing a critical and central role in creating links and connections among sources of chemical information. Just in the past few years, for example, any journal article, database, or chemical catalog, can freely add an InChI to that chemical which will be same InChI for that chemical found anywhere. This enables linking and connections to vast amounts of information and data associated with a chemical available in electronic form. Such InChI linking supports basic and applied research and development in the chemical, biological, and medical sciences.

This presentation will describe the past, present, and future of how the unique InChI string is the key to linking information and how the InChI Trust is working to assure the continued support and delivery of the InChI algorithm.

ABOUT THE SPEAKER:
DR. STEPHEN HELLER

Dr. Stephen Heller received his BS degree from the State University of New York Stony Brook campus and his PhD in chemistry from Gerogetown University. He is a guest researcher at the National Institute of Standards and Technology working on the IUPAC International Chemical Identifier (InChI) project as Project Director for the not-for-profit InChI Trust. The objective of the IUPAC InChI Chemical Identifier Project is to establish a unique label (the IUPAC International Chemical Identifier) as a non-proprietary identifier for chemical substances that could be used in printed and electronic data sources. This will enable easier linking of diverse data compilations. Since release of the first version in April 2005, it has been incorporated into more public and private databases than any other structural representation.

Dr. Heller has also served on the Advisory Board of the NIH PubChem database, contributing database editor for Chemindustry.com, and on the editorial board of the International Journal of Chemistry. He continues to serve as the software review editor for the Journal of Chemical Information and Modeling. He was also a founder of the NIH/EPA/NIST Mass Spec Database and the NIH/EPA Chemical Information System. Among his awards are the EPA gold medal for the Chemical Information System, the American Chemical Society Chemical Information Division Skolnik Award and the CSA Mike Lynch Award.



CHAIRMAN'S NOTE
BY DAVID SPETH

Greetings from the Columbus Section Chair. I hope everyone has had a good summer in spite of all the rain we have had. Hopefully all of you have found interesting science to do indoors to keep your minds off the weather and that the local flooding has not had an impact on you.

As we enter the fall season of our program, we have a critical need to find new people to staff our Executive Committee. For the past 10 years we have had an excellent group of leaders shepherd the Columbus Section along. With their help we have a robust treasury and we have established connections with the OSU undergraduates and COSI that allow us to develop programs to bring new people into the chemical discipline. We have also had a series of excellent dinner meetings with provocative and timely topics.

Our leadership team is now depleted. The members we have counted on for the past decade are retiring from their professional positions and moving on to other activities. To continue our program for our members and our outreach efforts to the broader community, we need a new team to step in and take charge. The existing team is committed to helping new members of the Executive Committee master their responsibilities so volunteers will not be left to figure everything out alone. If you like what has been done recently, please consider volunteering to help continue our efforts. If you think we need to change what we are doing, please also volunteer and help us steer the Columbus Section in a new direction. We need volunteers for all levels of involvement from Chair, Chair elect, treasurer elect, secretary, and national councilor to committee members and newsletter editor.

Along this line we have been challenged to host a Regional ACS meeting in 2019 or 2020. This would be a large undertaking with potential attendance over 1000 and a budget over \$100,000. Our existing leadership team is not willing to accept this challenge unless we know there is a group committed to fostering the local section through this multi-year effort. If you want us to host the Regional Meeting we need you to volunteer to help the Local Section by stepping into a leadership position over the next 2-3 years.

Thank you for helping the Columbus Section maintain its vibrant program. I look forward to seeing you at one of our Fall meetings.

NOTE FROM THE CHEMICAL RECORD EDITOR
BY GEORGE GREENE

To: All Members and Friends of the Columbus Section
From: George Greene, Editor, *The Chemical Record*

For the past twelve years, I have had the privilege of serving as the editor of your Chemical Record. However, it is now time to pass the torch. My employer has outsourced my job and I have consequently been forced into retirement, so I no longer have access to many of the tools that are necessary for this role. This is not an onerous task; my main function is to compile articles that are submitted to me into a Word document, generate a pdf for posting on the Section's website, and print/mail approximately 20 hard copies. Other Section members are extremely helpful in writing articles and proofreading the copy prior to publication, and I will be happy to help you get started.

If you are interested in serving as editor, please contact me at ggreenjeans@yahoo.com, via snail-mail at PO Box 173, New Albany, OH 43054, or via text/cell at 614-397-7862.

KIDS AND CHEMISTRY EVENT: IT'S A WHIRLWIND AT FOUNTAINSIDE!
By Jeff Trent

It's a whirlwind at FountainSide! Kids were able to

- Begin the day with mini-cloud creations at COSI on Wheels.
- Get crafty with Indian Village Outdoor Education Center and Macaroni Kid while learning about clouds and tornadoes.
- Catch a cloud in your hand with ACS Kids & Chemistry, and fly out of the park with Krash the "krazy" parrot from the Columbus Clippers.
- Discover how vegetables can protect one another with Local Matters.
- Be a part of Lowe's Plant and Grow workshop.
- Visit OSU Sports Marketing to get active throughout the summer.
- Top off the day with a smoothie from the Molina Healthcare Smoothie Bicycle, or a treat from the Sunny 95/Meijer Treat Truck.

EVENT Description: FountainSide in Bicentennial Park (Several Bus Loads of Children participated with others present.)

COLUMBUS SECTION OF THE AMERICAN CHEMICAL SOCIETY, INC. — PO BOX 82181 — COLUMBUS, OH 43202 — columbus.sites.acs.org



Presentation - ACS Kids & Chemistry Started Early and Stayed Late: 11am - 3pm

10x10 tent with four 8ft Tables

- Wind Power - Fan, and Wind Turbine for electricity powering LED Light and Music.
- Solar Power- Shop Light and Solar Toys - Frog, Grasshopper, Airplane.
- Water Power- Water Wheel with Continuous Flow fountain pump in Blue Pool.
- Sprinkler Bucket for Dry Ice Smoke and water fall.
- Bubble Flower - Dancing Flower bubble machine.
- Fish Styx - colorful flexible polymer fish for display in Blue Pool.
- Bubble Solution for Catch a Cloud presentation.
- Dry Ice for Catch a Cloud bubbles with white vapor.
- Dry Ice for pH demonstration - Universal Indicator - Windex Basic, Dry Ice Carbonates Water to make Acidic.
- Glow in the Dark Dinosaurs - UV Flash Light to stimulate glow. Mirror to show teeth are phosphors that glow.
- Hex Bugs and Track - Demonstrate random motion (Brownian Motion) like a drop of food coloring in still water disperses.
- Wooden Dinosaur display.
- Robot Display.
- Balloons on tent.


6x6 Tent

- Giant Hoberman Sphere with Bean Bag inside for "Get into the Atom" display backed by oversize Periodic Table.
- Giant Bubble Station - Giant bubbles floating over the children.

Safety: White scalloped fence barrier around 10x10 tent, Water Wheel, and Giant Bubble Station.

Safety Goggles were available. Had Emergency Kit with Band-Aids etc just in case, but not needed for this event.

COLUMBUS SECTION ACS CALENDAR OF EVENTS

Year	Month	Date	Day	Location	Comments
2015	September	2	Wed		Noon: Deadline for reservations for September, 2015 Section meeting.
2015	September	8	Tues	Clintonville Woman's Club	Monthly Section Meeting; see details elsewhere in this issue of <i>The Chemical Record</i> .
2012	October	18-24	Sun-Sat	Here, There, Everywhere	 National Chemistry Week (NCW).

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 173, New Albany, Ohio 43054, , ggreenjeans@yahoo.com. Electronic mail contributions should be in MS Word 1997/2003 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.