



The Chemical Record

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Columbus Section of the American Chemical Society, Inc.
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MEETING NOTICE

Columbus Section of the American Chemical Society, Inc.

<http://columbus.sites.acs.org>

Meeting #851

Pills, Potions, and Poisons: Engaging Youth with Relevant Science

NICOLE CARTWRIGHT KWIEK

Clinical Assistant Professor
Assistant Director of Educational Outreach
College of Pharmacy
The Ohio State University

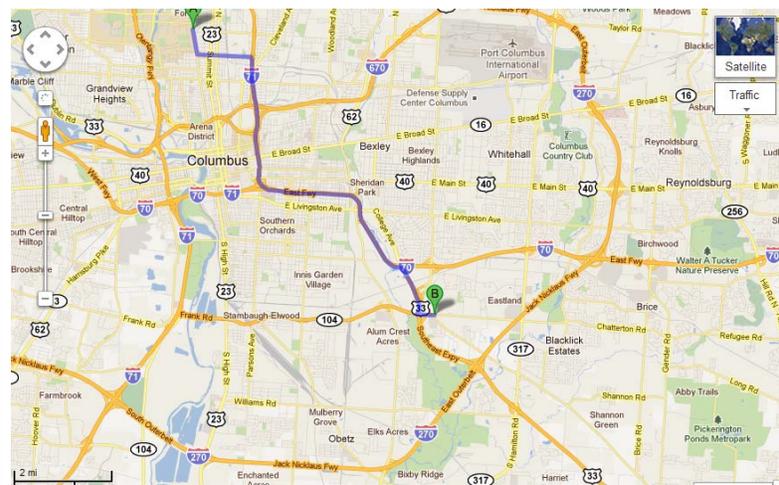
Monday, November 14, 2011

Berwick Manor Party House
3250 Refugee Rd, Columbus, OH 43232
Phone: 614.235.7100
www.berwickmanor.com

PROGRAM DETAILS

5:00-6:00PM	Executive Committee Meeting , private room at Berwick Manor Party House
6:00-6:45 PM	Social Hour , Appetizers: Italian meatballs & fried mushrooms
6:45-7:30 PM Dinner	Tossed salad with choice of dressings Please select either: <ul style="list-style-type: none"> • Chicken Marsala or • Broiled Haddock • Vegetarian available upon request Sides - mashed potatoes with gravy and peas with carrots; Dessert - carrot cake; Beverage - coffee and hot or cold tea as well as water
7:30-8:30 PM Program	Speaker: Dr. Nicole Kwiek - <i>Pills, Potions, and Poisons: Engaging Youth with Relevant Science</i>
Cost	\$20 per person members and non-members, \$18 for retired and unemployed members, \$10 per student. Payment will be collected at the door; cash and checks accepted. <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.
*Voicemail/e-mail Reservations Template	<ul style="list-style-type: none"> • First and last name: Please spell last name. • Membership category: member, high school teacher, non-member, retired, emeritus, unemployed, student, other. • Employer • Entrée choice: chicken, haddock, or vegetarian • 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, November 9th at noon
Program Contact	David Speth , dspeth@ewi.org
Directions & Parking	<p>Berwick Manor Party House 3250 Refugee Rd, Columbus, OH 43232 Phone: 614.235.7100 http://www.berwickmanor.com/</p> <p>Berwick Manor Party House is located near the intersection of Frank Road (Refuge Road) (route 104) and Southeast Expressway (route 33).</p> <p>Heading east on Interstate 70, take the 105A exit. Heading west on Interstate 70, take the 105B exit. Head south on route 33 to Refuge Road. Turn east (left) onto Refugee Road. Destination will be on your left.</p> <p>See map below for location.</p>

Map



ABOUT THE TOPIC: *Pills, Potions, and Poisons: Engaging Youth with Relevant Science*

Despite a demand for science-literate graduates in a global economy, fewer university students are successfully completing science degrees. There is considerable evidence that students who develop science career aspirations early are more likely than their peers to succeed in earning a baccalaureate degree in science. As such, numerous "think-tanks" have recommended precollege science education initiatives that stimulate science interest and reduce barriers for all students. In this presentation, Dr. Nicole Kwiek will overview the work occurring at the Ohio State University College of Pharmacy (and beyond) to improve science education at the precollege level. She will overview the Duke University's Pharmacology Education Partnership, a national NIH-funded curricular program that embeds basic high school biology and chemistry concepts within the context of pharmacology (the science of drug action, with a particular focus on drugs of abuse). Additionally, she will discuss the Pills, Potions, and Poisons science enrichment program and the data that has emerged from this initiative. A hands-on science education activity will be showcased and modeled with participants.

ABOUT THE SPEAKER

Dr. Nicole Kwiek is the Assistant Director for Educational Outreach at the Ohio State University College of Pharmacy. Nicole is also a Clinical Assistant Professor in the Divisions of Pharmacology and Medicinal Chemistry, teaching undergraduate and pharmacy students in basic pharmaceutical sciences. She received her B.S. in Biochemistry from Ohio University and Ph.D. in Pharmacology from Duke University. She also worked as a postdoctoral fellow at the Duke Center for Science Education. She is the lead administrator and teacher in the College of Pharmacy's Pills, Potions, and Poisons science enrichment program for high school students. In addition to her teaching, Dr. Kwiek helps to lead the Generation Rx Initiative, a learning community of OSU faculty, staff, and students studying the problem of prescription drug abuse.



REFLECTIONS FROM FIFTY- AND SIXTY-YEAR ACS MEMBERS

Editor's Note: We invited this year's fifty- and sixty-year honorees to share reflections on their lives, careers and association with ACS. Their responses, which are among the most interesting articles that we have published during my nine years as Editor, follow. If any other experienced members would like to share your stories with us, we will be honored to run them in future issues of *The Chemical Record*.

DR. LUCILE E. DECKER, SIXTY-YEAR MEMBER

After spending several years in teaching and research in Chicago and Pittsburgh, my family and I moved to Columbus, OH. I joined Chemical Abstracts in the Biochemistry Department in 1975.

In Columbus, I became much more active in the American Chemical Society and I have enjoyed it. I was Chairman of the Section one year and served other times as Councilor or Alternate Councilor.

I was also active in the Columbus Technical Council. In April, 1981, I was named Technical Person of the Year by the Columbus Technical Council.

In 1992, I quit working full-time, but continued part-time for two years. I have enjoyed being retired and in good health so that is important.

DR. GIDEON FRAENKEL, SIXTY-YEAR MEMBER

When ACS informed me I had been a member for 50 years I couldn't believe it, let alone 60 years. ACS and its journals has been a major component of my scientific life ever since my Senior Thesis with E. J. Corey was published in 1953 and until today with several articles in the pipeline. Before the advent of electronic publishing I would drop off my galley at CAS on the way home. This reminds me that when we travel around giving lectures and we end up with acknowledgements – who did the work and who paid for it - we never give credit to what came before, the literature, without which there would be no research.

It is troubling to me that despite all the electronic advances in scientific publication the literature is becoming increasingly inaccessible. Yes, if you know what you want you can read a journal from anywhere in the world. On the other hand much of a search involves browsing for the question, turning pages in books and journals. Many books have been sent away to storage so it takes at least a day to retrieve one. Many a book only becomes known to me when I see it on a shelf. We owe so many advances in sciences to the serendipitous result of a literature search. That is becoming increasingly difficult.

It is also troubling to me that the electronic data bases we rely on are inherently very fragile, easily hacked into, damaged and even changed. Remember the Soviet Encyclopedia whose content changed with government whim. What with unstable economic and political conditions we cannot rely on the publishers to maintain the technology of electronic data storage. Lastly there is no privacy on the Internet. A government, a company, even a nosy neighbor can be watching what you read. On the other hand books on shelves have survived 500 years of violent European history. Nobody knows you were in the library reading a book. No technical update necessary. No PC. At most just maybe a pair of glasses.

Beware the siren song of the electronic library.

MRS. PRISCILLA RATLIFF, FIFTY-YEAR MEMBER

Thanks to my major professor I was awarded my membership in ACS by the East Tennessee Section as I was completing my senior year in chemistry at Maryville College. As I recall I was introduced to Nobel Prize winning chemist Glenn Seaborg the evening I attended my first meeting. Needless to say I was impressed. Following graduate school I was recruited by Chemical Abstracts Service which I knew was part of the ACS. Thus I came to Columbus and began my working career and my association with the Columbus Section. At times I was active in the local section and sometimes inactive but I always kept in touch by our ubiquitous *Chemical Record*. I highly value the lifelong friendships I have made in the local section, and it has been my privilege to serve the local section in various ways over the years.

As an organization I think that the ACS has changed in some ways but has stayed the same in others. And that has made it so successful over the years. The meetings, publications, and Chemical Abstracts have always been and continue to be world class. And the contributions of these three activities to scientific knowledge are immeasurable. I am very proud to be a small part of such accomplishment. The biggest change I observe is in the greater participation of women in chemistry and in the ACS in particular. Although I was not always welcomed as a woman chemist in organizations, the opposite was true in ACS. And this is also something that ACS can point to with pride.

I don't think anyone sets out to be a 50-year member of the ACS – it just happens. However, I now look forward to my 60 year anniversary.

DR. CHARLES STOCKMAN, SIXTY-YEAR MEMBER

I got my doctorate in chemical engineering in June of 1950. Back then, doctoral candidates in chemistry and chemical engineering were required to have a reading knowledge of French and German. I presume that is not the case today. I've forgotten the reason for the French, but the reason for the German was that Beilstein was the major abstract journal. Today, Chemical Abstracts has driven it to obscurity.

Passing the German exam was no difficulty. All chemical engineers had to take one year of chemical German, and I had had one year of high school German -- which I had used conversing with German prisoners of war in World War II.

The French was another matter. However, the Purdue graduate schools offered a free five days a week French course in the summer. While I was taking the course, the exam was being given for students who had taken the previous course. I took it for practice and accidentally passed. That ended my French education.

I worked in the lab for only eight years. Then I was promoted into management. However, it was R&D management and it was fun.

One thing stands out from my laboratory days because the Russians repeated the work and cited our publication in theirs, thus admitting that we did it first, something that the Russians were very reluctant to do back then. And this project got my picture in Life Magazine. Working in the Chemical Engineering Research Department at B.F. Goodrich's large corporate research center in Brecksville, Ohio, I headed the team that was the first in the world to vulcanize tires with nuclear energy. We used spent fuel elements from the Materials Testing Reactor at the National Reactor Testing Station at Arco, Idaho. That site is now called the Idaho National Laboratory.

NATIONAL CHEMISTRY WEEK 2011

By Professor John Blaha

The National Chemistry Week event was held at the Columbus Metropolitan Library, Main Branch on Saturday, October 22, 2011 from 10:30 AM to 3:30 PM.

This year's events were coordinated by **John Blaha** - Columbus State Community College, **Jeff Trent** - Boehringer Ingelheim, and **George Greene** - Abbott. Special thanks is given to **GFS Chemicals** for sponsoring and underwriting this year's event and the **Columbus Metropolitan Library staff** for their assistance.

About 400 children and an additional 200 adults visited the display areas. COSI provided hands-on demonstrations through the COSI-on-Wheels program. The following demonstrations were operated.

- Slime - always a family favorite
- A Closer Look - Use of a microscope to examine various crystalline substances
- Light The Night - Chemiluminescence demonstration
- Chemical or Physical Change - A matching picture game to identify chemical or physical changes
- Way Cool - endothermic and exothermic reaction demonstrations

Jeff Trent also provided his usual array of toys and exhibits which included catching clouds, dry-ice demonstrations, testing iodine with starch and measuring the effect of Vitamin C on the reaction.

The following is a list of additional volunteers for this year's sessions

Kyle Jepson - COSI

Amy Parker - COSI

Brandon Maynard – COSI

Qi Wenbin - OSU

Yun Gong - CAS

Astrid Moussa – CAS

Maria Rosenthal - American Chemical Society

Steve Rosenthal -CAS

Cheryl Vaughn - Columbus State Community College

Our volunteers provided additional assistance to COSI staff so that they could sharpen their demonstration skills to large groups. COSI has been invited to be part of the update to the PBS NOVA series on *Search for The Elements, Mystery of Matter*. As such, the COSI demonstrators will be filmed doing hands-on demonstrations and assisting others in doing these demonstrations. NCW provided a venue to interact in larger audience activities than COSI normally encounters.

Editor's Note: We will run photographs from the NCW activities in the December issue of *The Chemical Record*.

A PROGRAM TO ENCOURAGE STEM EDUCATION: THE WOODROW WILSON OHIO TEACHING FELLOWSHIP PROGRAM

By Karen Irving

A prestigious Ohio fellowship program seeks to recruit and prepare accomplished professionals and students as teachers in the STEM fields of science, technology, engineering, and mathematics.

Applications are now available online (www.wvteachingfellowship.org) for the Woodrow Wilson Ohio Teaching Fellowship program, which was created to prepare more STEM teachers and place them in some of Ohio's most-challenged public schools. Fellowships are open to high-achievers who have a bachelor's degree in mathematics or science, including those who already work in a STEM field and want to try their hand at teaching. Fellows receive a \$30,000 stipend and complete an intensive, one-year school-based master's degree in education. They then agree to work in a high-need Ohio school district for three years.

The Ohio State University is one of seven universities chosen to participate in the Fellowship program. Others include John Carroll University in Cleveland and Ohio University as well as the Universities of Akron, Cincinnati, Dayton, Toledo. Each institution will train 15 Fellows.

Fellows graduating from Ohio State's Fellowship program will take their expertise to high-need school districts in the hopes of inspiring urban and low-income students to take a science- or math-based career path. For more information on Ohio State's program, visit go.osu.edu/wilson.

Those chosen for Ohio State's first class of Fellows will begin their master's programs in summer 2012.

The Fellowship is made possible with federal Race to the Top funds as well as Choose Ohio First scholarship funds, the state's premier model for recruiting and retaining talented Ohio residents in STEM and STEM-education fields. It is also supported by six Ohio foundations and the participating universities, which have pledged funds that match the support from the Woodrow Wilson National Fellowship Foundation of Princeton, New Jersey.

Founded in 1945, the Woodrow Wilson National Fellowship Foundation (www.woodrow.org) identifies and develops leaders and institutions to address the critical challenges in education. It supports its Fellows as the next generation of leaders shaping American institutions and also supports innovation in their institutions.

For information about participating in the Fellowship program, email wwwteachingfellowship@woodrow.org or telephone 609-452-7007, ext 141. Text TEACHING to 30644 to receive mobile updates.

REQUEST FOR 2012 EVENTS
By Natalie Chilicki, 2011 Chair-elect



First, I want to thank **Karen Irving** for all of her hard work and dedication to the section this year in planning the local section meetings for 2011. I know I have enjoyed attending these events! It is an honor for me to be able to be a part of leading such a large and active local section of the American Chemical Society as we move into 2012.

As many of you who have participated in the past know, we have had everything from wine or beer tasting, interactive presentations or panels, to tours of local facilities. What I want to know from our local section is what events you would like to see in the future!

I am encouraging any of you to reach out to me if you or someone you know, would be interested in presenting at a local section meeting or know of someone you would like me to approach. There are two ways you can get in touch:

- Take a short online, anonymous survey of what kind of events you would like to see offered by the local section. As well as any suggestions you have to improving our events overall. <http://www.surveymonkey.com/s/VJG6MFL>
- Email me directly at natalie.chilicki@yahoo.com with any ideas you have or to provide contact information of someone who would be an interesting speaker.

I look forward to serving as the 2012 chair for our local section!

UPCOMING FREE ACS WEBINARS
From the ACS Website

Go to acswebinars.org for complete information.

11/3 - Boost and Lose Your Memory With Chemistry.

Speaker: Todd Sacker

Moderator: Darren Griffin

11/10 - Advancing Your Career as a Woman in the Pharmaceutical/Chemical Industry

Speaker: Anabella Villalobos (Pfizer)

Moderator: Teri Quinn Gray, Research Manager, DuPont Crop Protection.

teri-quinn.gray@dupont.com

Co-produced: ACS Diversity Office

11/17 - The Chemical Keys to Thanksgiving Dinner.

Speaker: Harold McGee

Moderator: Bill Courtney

12/1 - How to Secure and Nurture a Vibrant Chemistry Career in the 21st century

Speaker: Brian Fahie

Moderator: Bill Carroll

12/8 - Welcoming the 2012: The Chemistry of Fireworks

Speaker: Washington College, Chestertown, Md., author of The Chemistry of Pyrotechnics, Basic Principles and Theory, Chris Mocella

12/15 - Chemicals & The Economy - Year End Review and Outlook

Speaker: Paul Hodges

Moderator: Bill Carroll

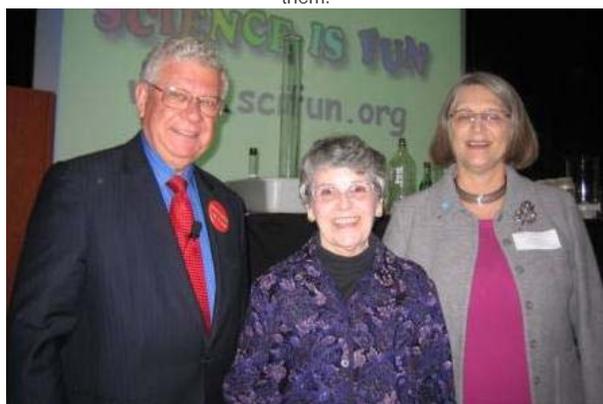
PHOTOGRAPHS FROM THE OCTOBER, 2011 SECTION MEETING
By Steve and Maria Rosenthal



Chemistry demonstrations by the man who literally "wrote the book(s)" on them.



ACS President-Elect Dr. Bassam Shakhshiri, Fifty-Year Honoree Dr. Dan Borgnaes, Section Chair Dr. Karen Irving,



Dr. Shakhshiri, Fifty-Year Honoree Mrs. Priscilla Ratliff, Dr. Irving



Fifty-Year Honorees Dr. Dan Borgnaes, Mr. Carter Brown, and Mrs. Priscilla Ratliff



Dr. Shakhshiri, Sixty-Year Honoree Dr. Lucile Decker, Dr. Irving



Sixty-Year Honorees: Dr. Sheldon Shore, Dr. Charles Stockman, Dr. Gideon Fraenkel, and Dr. Lucile Decker

COLUMBUS SECTION ACS CALENDAR OF EVENTS

Year	Month	Date	Day	Location	Comments
2011	November	9	Wed		Noon: Deadline for reservations for November, 2011 Section meeting.
2011	November	14	Mon	Berwick Party House	Speaker: Nicole Cartwright Kwiek , OSU Department of Pharmacy
2011	December	7	Wed	GFS Chemicals and The River Club	Joint meeting with the Central Ohio Section of AIChE, tour of GFS Chemicals, dinner at The River Club
2012	Feb-Mar	28-1	Tue-Thu	Blackwell Inn, OSU	Women in Science and Engineering (WISE) Symposium to Be Conducted at Battelle: "W2W – Women to Women – Connecting Global Science and Technology Leaders" See www.battelle.org/conferences/wise for details.
2012	March	11-15	Sun-Thu	Orlando	Pittcon Conference and Expo
2012	March	25-29	Sun-Thu	San Diego	243 rd ACS National Meeting and Exposition
2012	August	19-23	Sun-Thu	Philadelphia	244 th ACS National Meeting and Exposition
2013	April	7-11	Sun-Thu	New Orleans	245 th ACS National Meeting and Exposition
2013	September	8-12	Sun-Thu	Indianapolis	246 th ACS National Meeting and Exposition
2014	March	16-20	Sun-Thu	Dallas	247 th ACS National Meeting and Exposition
2014	August	10-14	Sun-Thu	San Francisco	248 th ACS National Meeting and Exposition

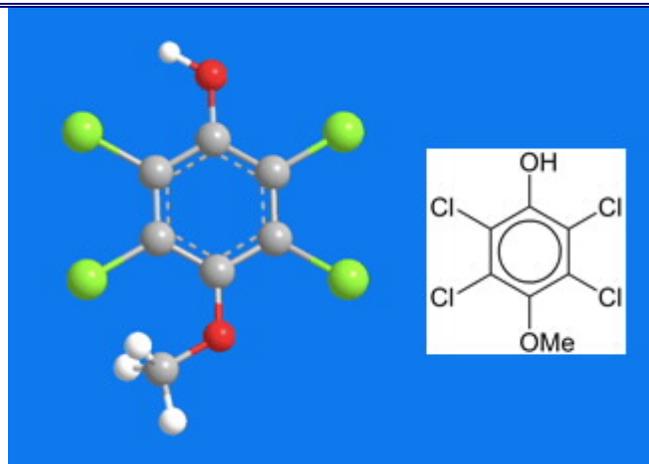
MOLECULE OF THE MONTH
From the ACS Website

Drosophilin A

Drosophilin A, or 2,3,5,6-tetrachloro-4-methoxyphenol, is a natural antibiotic first isolated by F. Kavanagh and co-workers from the mushroom *Agaricus subatratrus* in 1952. This year, W. Vetter and coauthors, while analyzing commercial meat from wild boars (*Sus scrofa*) for persistent organic pollutants, [identified drosophilin A in the meat](#). Mushrooms are typically parts of boars' diets, and the presumed lack of toxicity of drosophilin A may aid in the synthesis of useful nontoxic polyhalogenated compounds.



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



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.

SECTION E-MAIL ROUTING

Please send items for distribution to the Section e-mail list to **Maria Rosenthal** (mrosentha@cas.org). Maria will perform any necessary formatting then she will forward the message to **Robert Bird**, Electronic Communications Coordinator, for distribution. If you would like to be added to the e-mail distribution list, please contact Robert Bird (rbird@cas.org).

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