



ISOTOPICS

The Cleveland Section of the American Chemical Society

Volume 90 Issue 4

April 2014

On Deck:

May 21, 2014

TBD

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http://www.csuohio.edu/sciences/dept/cleveland_acs/

April Meeting Notice

Wednesday, April 9, 2014

Education Night and Awards Ceremony
GrafTech International, Parma

4:30 pm	Executive Committee Meeting
5:30 pm	Social/Networking
6:00 pm	Dinner
7:00 pm	Presentation

Cleveland Science History: Telling the Story with Science

Kayla Gray, Case Western Reserve University

Throughout history, Cleveland has been the cornerstone for several scientific advancements. With a total of 7 National Historic Chemical Landmarks, it puts Cleveland above any other local section. This amazing science can be demonstrated in a way to inspire the future generations of scientists and engineers while reminding others of the history that surrounds them.

DINNER RESERVATIONS REQUIRED:

Please RSVP by contacting Helen Mayer by email at Helen.Mayer@graftech.com (preferred) or by phone at (216) 676-2373, by noon on **Friday, April 4th** with your name, total number of guests in your party, and phone number. Checks made out to "Cleveland ACS" are greatly appreciated; cash otherwise. \$20 for members and guests, \$10 for retirees or unemployed, \$5 for students.

SPECIAL RESERVATION INFORMATION REQUIRED:

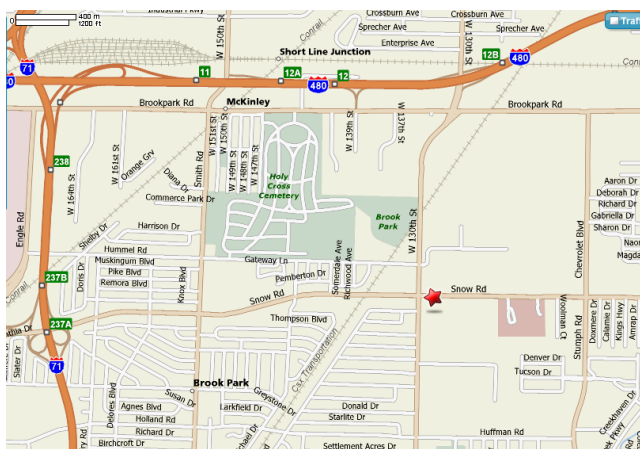
At least one day before arrival, Helen will need the following information about each dinner attendee: Name, country of citizenship, US residency status (citizen, permanent resident, visa holder), and email address. One email address per family is OK. In addition, when they arrive, we require a photo ID for each adult. Photo IDs are not required for anyone under 18. Just a note, being a permanent resident or visa holder does not automatically bar someone from entering our building. We just have to do an extra check on visa holders to satisfy a government requirement.

Directions to GrafTech International

GrafTech International Holdings Inc.
12900 Snow Road
Parma, OH 44130

From the East or West: Take I-480 to the W 130th exit. Go south on W 130th. Turn left on Snow Road. GrafTech will be on your left. The entrance to the parking lot is after the main building. Enter the building using the side employee entrance.

From the North or South: Take I-71 to the Snow Road exit. Turn east on Snow Road, toward Parma. GrafTech will be three miles on your left. The entrance to the parking lot is after the main building. Enter the building using the side employee entrance.



Speaker Bio

Kayla Gray is a senior Chemical Biology and Theater major at Case Western Reserve University from Hamilton, Ohio. Her passions lie in medicinal chemistry and neurological sciences. She has participated in research since 2008 and has studied sickle cell anemia, glioblastomas, and regenerative medicine. Kayla plans on attending medical school while continuing research and outreach.

NEOSEF Winners

ACS Special Award Winners at the 2014 Northeastern Ohio Science and Engineering Fair

The 2014 NEOSEF was held at Cleveland State University on March 11–13, 2014. Over 500 students in grades 7-12 participated in the fair. During the judging session on March 11, volunteer judges for the Cleveland section of the ACS reviewed approximately 100 projects entered into the Chemistry Category and selected the award winners:

First Place (\$150): *Kirstin Boni*, West Geauga High. “Proteolytic enzymes: A comparison of supplemental and natural sources”

Second Place (\$100): *Chris Kim*, Hudson High. “Design of Electrode Using Exoskeleton Biopolymer”

Third Place (\$75): *Yennmay Chia*, Beaumont High. “Maximum Power Point Tracking, Load Resistance, and Solar Irradiation Profiles Effects on Solar Panels”

Honorable Mention (\$50): *Natalie Barendt*, St. Angela Merici. “Hydrophilic vs. Hydrophobic”

Honorable Mention (\$50): *Emma Gill*, Columbia Middle School. “Which nut provides the most energy?”

Honorable Mention (\$50): *Hannah Leszcz*, St Raphael. “Sweet Science: Crystal Growth”

Honorable Mention (\$50): *Elise Rogozinski*, St Raphael. “Adios Lactose: The Effect of pH on Lactase”

Honorable Mention (\$50): *Rohan Sinha*, Strongsville High. “Effects of Different Antacids on Stomach Acid”

In recognition of their achievements, the award winners and their families have been invited to attend the April ACS meeting, display their posters at the social hour, and receive their awards.

Call for Nominations: Executive Committee

At this time, the Cleveland Section of the ACS is accepting nominations (including self-nominations) for the following four open positions on the Executive Committee, for 2015:

- 1 – Chair-Elect
- 2 – Treasurer
- 3 – Director (Auditing & General Awards)
- 4 – Trustee

Position details may be found at: <http://www.csuohio.edu/sciences/dept/cleveland/acs/documents.htm> under the ACS Cleveland Section Job Manual tab, in either Word or pdf format. Please send you nominations or self-nomination, by email, to:

Donald.A.Jaworske@nasa.gov

Thanks,

Don Jaworske, Past-Chair

2014 Cleveland Section Meeting-in-Miniature

Challenged by a heavy late-winter snowstorm, the annual Meeting-in-Miniature of the Cleveland Section of the American Chemical Society was held at Baldwin Wallace University on Wednesday, March 12. The local chair of the meeting was Lisa Ponton. Eight students received awards for excellent presentations. The awards were supported by Amalgamated Tuna, Dwight Chasar, Energizer, Lubrizol, Lily Ng, and Sherwin-Williams.

Undergraduate Student Awards (\$250)

Katelyn M. Chessler – John Carroll University
James Dobscha – Baldwin Wallace University
Melissa Hoffbauer – Baldwin Wallace University
Seol Casey Kim – Cleveland State University

Graduate Student Awards (\$300)

Tiyash Bose – Cleveland State University
Forrest Etheridge – Case Western Reserve University
John Swanson – University of Akron
Pratina Vabbilisetty – Cleveland State University

Selected from ACS Discoveries!

Study on coumarin in cinnamon and cinnamon-based products

Journal of Agricultural and Food Chemistry

Many kinds of cinnamon, cinnamon-flavored foods, beverages and food supplements in the United States use a form of the spice that contains high levels of a natural substance that may cause liver damage in some sensitive people, scientists are reporting. Their study, published in ACS' *Journal of Agricultural and Food Chemistry*, found similar results as those published in the European Union.

Ikhlas Khan and colleagues explain that cinnamon, which comes from the bark of certain trees, is one of the most important flavoring agents used in foods and beverages. "True," or Ceylon, cinnamon is expensive, so most breads, sticky buns and other products in the United States use dried cassia bark, or cassia cinnamon. Ceylon cinnamon contains very little coumarin, a naturally occurring substance that has been linked to liver damage in people sensitive to the substance. However, cassia cinnamon can contain larger amounts. Khan's team decided to check on the coumarin content of a wide variety of food products.

"As found in this study, coumarin was present, sometimes in substantial amounts, in cinnamon-based food supplements and cinnamon-flavored foods," they say.

The authors acknowledge funding from the U.S. Food and Drug Administration, the U.S. Department of Agriculture (Agricultural Research Service) and the Global Research Network for Medicinal Plants, King Saud University.

Nominations for the 2014 Yeager Award are now being accepted

The Ernest B. Yeager Award was established for the purpose of encouraging interest at the undergraduate level in spectroscopy and analytical chemistry. It is presented annually to an outstanding undergraduate student attending a college or university in Northern Ohio or

Northwestern Pennsylvania who has demonstrated an interest in some aspect of spectroscopy.

The award consists of a certificate, \$400 cash, and a one year complementary membership in the Society for Applied Spectroscopy. The award is sponsored jointly by the Society for Applied Spectroscopy (SAS) and the Analytical Topics group of the American Chemical Society (ACS).

The presentation of the Yeager Award will be made at the at the 58th Annual May Conference on Spectroscopy and Analytical Chemistry, to be held at the Dolan Science Center at John Carroll University on Wednesday, May 21, 2014. The award recipient will be required to present a 20 minute synopsis of his/her work and will be recognized at the evening banquet.

Letters of nomination, supporting materials and any questions should be addressed to:

Douglas E. Rohde
Lake County Crime Laboratory
235 Fairgrounds Road
Painesville, OH 44077
440-350-5950
drohde@lakecountyohio.gov

and must arrive no later than **March 31, 2014** at which time the nomination documents will be forwarded to the Yeager Award judging panel. Electronic submissions are encouraged.

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Isotopics is looking to highlight local chemistry professionals, companies, teachers, research groups, students, events, and more. If you have an idea for an *Isotopics* article, please contact the editor. *Isotopics* is also looking for local members to join our staff. Time commitments for staff members are minimal (a few hours a year!) and your contributions will be invaluable to our local section. If you are interested in joining *Isotopics*, please contact the editor.