ISOTOPICS

The Cleveland Section of the American Chemical Society

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On Deck:

November 19, 2014

Dr. Thomas Janini of The Ohio State University presents on Beehive Chemistry

Location TBD

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Isotopics

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October Meeting Notice

Tour of NASA Glenn Research Center
Followed by dinner at the 100th Bomb Group, Cleveland
Wednesday, October 22, 2014

4:45 pm	Check-in for NASA badges
5:00 pm – 6:00 pm	Tour of two NASA areas
6:30 pm – 8:00 pm	Dinner at the 100th Bomb Group Restaurant

An Evening of Aeronautics and Space

Tour of NASA Glenn Research Center

To check-in, please meet in the parking lot on the North side of Brookpark Rd., across from the NASA-Glenn entrance. Be sure to bring a photo ID and if not a U.S. citizen, also bring your passport and visa papers or Green Card. Buses will take us on the tour and then back to the parking lot, from which you can drive your car over to the 100th Bomb Group down the street.

DINNER RESERVATIONS REQUIRED:

The maximum number of participants for the NASA tour has now been reached, but dinner slots are still available. Positioned directly across from the Cleveland Hopkins International Airport, 100th Bomb Group Restaurant offers a dramatic panoramic view of the departing and arriving air traffic. Please RSVP to Theresa Nawalaniec (t.nawalaniec@csuohio.edu) by **Tuesday, October 7**, with one of three dinner choices:-

- Marinated Chicken Vinaigrette (topped with a Balsamic Drizzle and Tomato-Herb Salsa)

- Fresh Atlantic Salmon Filet (Citrus-glazed with Fruit Salsa)

- Roasted Vegetable Wellington (Roasted Vegetables with Mozzarella inside a Pastry Shell upon Basil Cream Sauce)

Checks made out to “Cleveland ACS” are greatly appreciated; cash otherwise. $20 for members and guests, $10 for retirees or unemployed, $5 for students. A cash bar will also be provided.

Directions to NASA Glenn Research Center

NASA Glenn Research Center is located near Cleveland Hopkins International Airport.

Exiting from I-480 West: Exit at Grayton Rd. and turn right (south) onto Grayton Rd. Turn right (west) Brookpark Rd.

Exiting from I-480 East: Exit at Brookpark Rd. and turn right (west) onto Brookpark Rd.

Travel west on Brookpark Rd. approximately 3/4 mile to the traffic signal at NASA Parkway. Turn left at the signal and proceed toward the Main Gate. We will meet in the parking lot on the left.

21000 Brookpark Road, Cleveland, OH 44135. Phone: (216) 433-4000.

Directions to the 100th Bomb Group

The 100th Bomb Group is located near Cleveland Hopkins International Airport, and NASA Glenn Research Center.

20920 Brookpark Rd, Cleveland, OH 44135. Phone: (216) 267-1010.

Call for Nomination: The Morley Medal

The Cleveland Section annually sponsors a regional award, which consists of the Morley Medal and an honorarium of $2,000. The next presentation of the Morley Medal will take place at the meeting of the Cleveland Section ACS in May 2015. The award is presented at a banquet, at which time the recipient will deliver the Edward W. Morley Lecture for that year. Travel expenses for the medalist and spouse will be provided.

The purpose of the award is to recognize significant contributions to chemistry through achievements in research, teaching, engineering, research administration and public service, outstanding service to humanity, or to industrial progress.

The area of eligibility includes those parts of the United States and Canada within about 250 miles of Cleveland. The contributions for which the award is given should have been made by the awardee when a resident of this area, or if a major contribution was made elsewhere, the nominee should have continued to make contributions while a resident of this area. Nominations may be made by any member of the American Chemical Society, The Chemical Society or the Chemical Institute of Canada.

Nominations for the Morley Medal should include a letter of nomination and curriculum vitae including the candidate's education, professional experience & activities, awards & honors, offices held and specifics on significant contributions. The letter of nomination should highlight these significant contributions. A representative list of references to the candidate's more important contributions, an evaluation of the significance of these achievements, and a listing of the nominee's most significant publications and patents are also appropriate. Added consideration will be given to individuals under the age of 48 with demonstrated accomplishments and for continuing significant future accomplishments. Strong seconding letters are suggested. The specific reference for every publication or patent is neither required nor encouraged. Electronic submissions are preferred.

Deadline for receipt of nominations is December 12, 2014. Send nomination and supporting material to:
Dr. Mark J. Waner
Cleveland Section Morley Medal Committee
Department of Chemistry
John Carroll University
University Heights, OH 44118
(216) 397-4791
E-mail: mwaner@jcu.edu

A natural way to monitor, and possibly control populations of, stink bugs

Journal of Natural Products

Anyone who has squashed a stink bug knows why they got their name. Although just a nuisance to homeowners, the insects feed on and damage fruits and vegetables, causing significant economic losses for farmers. Now scientists report in ACS' Journal of Natural Products that they've

discovered certain stink bug pheromone components and made them artificially in the lab for the first time, and these substances can be used to monitor and manage their populations.

Ashot Khrimian and colleagues explain that the brown marmorated stink bug, also known as Halyomorpha halys, is an invasive pest from Asia that now is found in most of the U.S., as well as parts of Canada and Europe. These flat, "shield-shaped" insects flap around noisily in homes, especially in the fall, as they seek places to hibernate during the winter. But the real problem lies in their summer activities, when they eat fruits, vegetables and other important crops. It's these summer activities that have prompted efforts to reduce their populations. These stinkers emit pheromones, or chemicals, that tell others of their species to come closer. Scientists could potentially use the substances to lure brown marmorated stink bugs to a specific spot so that they can count them and determine better ways to manage their expanding numbers, as they do for other insects.

Khrimian's team discovered and reported the chemical architectures of two pheromone components. They did this by studying closely related compounds. When used out in field tests, the two components attracted adult and juvenile brown marmorated stink bugs. Because these compounds didn't have to be pure, the researchers could use relatively inexpensive mixtures to trap this stink bug.

The authors acknowledge funding from the U.S. Department of Agriculture.

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.