



ISOTOPICS

The Cleveland Section of the American Chemical Society

Volume 90 Issue 8

November 2014

On Deck:

January 21, 2015

Past Chairs Night
Chemistry Librarians

Dr. Terri Lewandowski
Chemical Abstracts Publishing

Location TBD

November Meeting Notice

Wednesday, November 19, 2014

Center of Innovation and Growth, Baldwin Wallace
Berea, OH

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

Cleveland ACS Officers

Chair:

Michael J. Kenney
Case Western Reserve Univ.
(216) 368-3736
mjk56@case.edu

Chair-Elect:

Theresa Nawalaniec
Cleveland State University
(216) 687-3504
t.nawalaniec@csuohio.edu

Treasurer:

John Moran
Notre Dame College
(216) 373-6380
jmoran@ndc.edu

Secretary:

Anna Cronin
Great Lakes Science Center
(216) 696-4286
cronina@glsc.org

Beehive Chemistry: Apiculture from a Chemist's Perspective

Dr. Thomas E. Janini, Associate Professor, Division Chair: Arts, Science and Business Technology, Ohio State ATI

Dr. Janini will be discussing honey, propolis, pheromones, and his current research project involving the effect on honey bees of pesticide/fungicide combinations used in growing pumpkins and other cucurbits.

DINNER RESERVATIONS REQUIRED:

Please RSVP by contacting Theresa Nawalaniec by email at t.nawalaniec@csuohio.edu by 5:00 p.m. on Friday, November 7th with your name, total number of guests in your party, and a phone number.

Dinner will be a Buffet consisting of Chicken Piccata, Roast Pork Loin, Cheese Ravioli with Marinara, Roasted Red Skin Potatoes, Veggies of the Day, Dinner Rolls, Beverages, and Dessert Bar.

Checks made out to "Cleveland ACS" are greatly appreciated; cash otherwise. \$20 for members and guests, \$10 for retirees or unemployed, \$5 for students.

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Interim Editor:

Anna Cronin
(see contact info above)

Cleveland Section Web Site:

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

Directions to Center of Innovation and Growth at Baldwin Wallace University

340 Front St., Berea, OH 44017.

Phone (440) 826-2393

<http://www.bw.edu/quickfacts/directions/>

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

Call for Nomination: Irene C. Heller Award Presented to an Outstanding High School Chemistry Teacher

Annually, the Cleveland Section of the American Chemical Society sponsors an award to recognize an outstanding high school chemistry teacher in the Cleveland Section. The award consists of an honorarium of \$1,000 and a framed certificate; and is named for Irene Heller of North Olmsted High School in recognition of her contributions as an outstanding high school chemistry teacher and her service to the Cleveland Section.

The nomination package should include (1) a letter of nomination and (2) a detailed curriculum vita. The letter of nomination should highlight these significant contributions. The nominations should consist of information on the candidate's education, professional experience and activities, awards and honors, offices held and specifics on significant contributions.

All nominees must be sponsored by at least one member of the Cleveland Section. If you do not know a local section ACS member willing to serve as Champion for your candidate, contact Jeff Mathys who will provide one for you. The Cleveland Section is geographically defined by the counties of Cuyahoga, Geauga, Lorain, Medina, Huron, and Erie. Electronic nominations using

Word or PDF Files should be mailed to jamathys.family@gmail.com.

The award will be presented at the April, 2015 meeting of the Cleveland Section.

Dolphin 'breathalyzer' could help diagnose animal and ocean health

Analytical Chemistry

Alcohol consumption isn't the only thing a breath analysis can reveal. Scientists have been studying its possible use for diagnosing a wide range of conditions in humans — and now in the beloved bottlenose dolphin. In a report in the ACS journal *Analytical Chemistry*, one team describes a new instrument that can analyze the metabolites in breath from dolphins, which have been dying in alarming numbers along the Atlantic coast this year.

Cristina E. Davis and colleagues note that studying dolphins' health is about more than preserving their populations — the popular mammals also can serve as sentinels for overall ocean health. But invasive techniques such as skin biopsies and blood sampling, which are the most effective ways to test their health, are difficult to perform. An intriguing alternative comes from research on human-health monitoring with breath analyzers. Exhaled breath contains compounds called metabolites that can hint at a person's diet, activity level, environmental exposures or disease state. Davis' team wanted to develop a way to capture dolphin breath so they could gather this kind of information on marine mammals.

The researchers designed an insulated tube customized to trap the breath exhaled from the blowhole of the bottlenose dolphin. They tested it on dolphins both in the wild and under human care. The scientists established baseline breath profiles of healthy animals and identified changes in the breath of animals affected by disease or other factors. The researchers conclude that breath analysis could someday be used to diagnose and monitor problems in marine mammals — and by extension, in ocean health.

The authors acknowledge funding from the Office of Naval Research, The Hartwell Foundation, and National Center for Advancing Translational Sciences.

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.