



ISOTOPICS

The Cleveland Section of the American Chemical Society

Volume 91 Issue 3

March 2015

On Deck:

April 15, 2015

Education Night

Cleveland State University

Dr. Joe Vinson

March Meeting Notice

Wednesday, March 11, 2015

Notre Dame College, South Euclid, OH

2:30 pm	Registration Begins
3-5:15 pm	Technical Sessions
5:30 pm	Plenary Address
6:30 pm	Dinner followed by Awards Ceremony

Cleveland ACS Officers

Chair:

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

Chair-Elect:

David Orosz
Notre Dame College
(216) 373-5322
dorosz@ndc.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

Isotopics

Interim Editor:

Anna Cronin
(see contact info above)

Cleveland Section Web Site:

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

Venus in a bottle: Simulating Interactions Between the Crust and Atmosphere of Venus (and Venus-like Exoplanets)

*Ralph Harvey, Senior Fellow, NASA Glenn Research Center
Assoc. Professor, Case Western Reserve University*

Both historical and current investigations of Venus suggest that atmosphere/rock interactions may play a critical role in the evolution of that planet's atmosphere and crust, particularly in producing or maintaining that planet's thick CO₂-rich atmosphere in its current massive greenhouse state. Using GEER (the Glenn Extreme Environment Rig) we are exploring such interactions by creating "Venus in a Bottle"- mixing plausible Venus surface simulants with a high-fidelity recreation of that planet's thick, hot and corrosive atmosphere. These "naturalistic" simulations complement prior and ongoing highly constrained experiments and help us understand the messy and complex nature of Venus' rocks, atmosphere and history.

DINNER RESERVATIONS REQUIRED:

Please RSVP to John Moran by email at jmoran@ndc.edu by 5:00 p.m. on Wednesday, Mar 4 with one of three dinner choices: chicken, salmon, or Portobello mushroom ravioli.

We now can take credit card payments, checks made out to "Cleveland ACS," or cash. \$20 for members and guests, \$10 for retirees or unemployed, \$5 for students.

Directions to Notre Dame College

Registration and Technical Sessions will be in Regina Hall. Plenary Lecture and Dinner will be in the Main Administration Building.

Keynote Speaker's Bio

Ralph P. Harvey is currently a Senior Fellow at NASA Glenn Research Center, and an Associate Professor in the Department of Earth, Environmental and Planetary Sciences at Case Western Reserve University in Cleveland, Ohio. A graduate of Beloit College with a Ph.D. from the University of Pittsburgh, he has been the Principal Investigator and field team leader for the US Antarctic Search for Meteorites program since 1991. His scientific interests range from meteorites to the surfaces of Mars, Venus and the asteroids, to the history of the East Antarctic Icesheet, and both an asteroid and an Antarctic mountain now bear his name.

2015 Chemistry Olympiad

We are pleased to announce that the Cleveland Section of The American Chemical Society will be participating in the 2015 U.S. National Chemistry Olympiad (USNCO). The primary goals of this program are to stimulate interest and achievement in chemistry among high school students and to provide recognition of outstanding young chemistry students, teachers, and schools.

It is the responsibility of the Cleveland section to nominate students to take the USNCO National Examination. In order to identify these students, a preliminary, local Chemistry Olympiad will be conducted. The local exam will be administered at Cleveland State University on Saturday, March 14, 2015. We expect more than 100 students from local high schools to compete. Based on the results from the local competition, the top eleven students, with a maximum of two from the same school, will have the privilege of taking the National Chemistry Olympiad Examination and Practical. The National Exam is an-all day event that includes two exams and a lab practical. The

national exam will be administered on Friday, April 17, 2015 at Cleveland State University.

Following the National Exam and Practical, twenty students from the U.S. will be selected to attend a two-week training camp at the U.S. Air Force Academy to prepare for the international competition. Based on performance at the camp, four students will be selected to represent the United States in the 47th Chemistry Olympiad in Baku, Azerbaijan, July 20 – 28, 2015.

Megan Zhao from Brecksville-Broadview High School was one of the twenty students selected nationally to attend the two-week training camp at the U.S. Air Force Academy in last year's competition.

For more details contact Dr. Anne O'Connor, at a.oconnor@csuohio.edu.

Meet your Councilors – Part 2

Now we learn more about our serving councilors, David Ball and Dwight Chaser.

David Ball

I am the junior of the two Councilors for the Cleveland Section, serving in this capacity since 2001. I attend both National Meetings each year to represent the Cleveland Section at Council, and then like my fellow Councilor I report my experiences to the Executive Committee when I return to Cleveland. The Council session typically lasts for about 4 hours on the Wednesday morning of the National Meeting, and usually consists of reports from the national officers, committees of Council (I serve on two; more on that in a moment), and other invited people and issues. For example, in the most recent National Meeting of Council in San Francisco, Council voted to dissolve a local section in New Jersey due to long-term underperformance; the Society now has 184 local sections.

I'm also one of a small number of Councilors who serves on two Council Committees. Of two, the busier one is the Committee on Local Section Activities, abbreviated LSAC. LSAC consists of about 25 Councilors from a variety of local sections. Our job is to interact with local sections,

review and comment on their annual reports, administer several small grant programs focusing on local section activities, and select some ChemLuminary Awards based on the annual reports. As I mentioned, it's a busy committee! I'm vice-chair of the Local Section Assistance and Development (LSAD) subcommittee, which works with struggling local sections (again, as judged by their annual reports) to try to bring them back on track. LSAC typically works on the Saturday and Sunday of the National Meeting week, so it's a lot of time invested at every National Meeting.

As part of my membership on LSAC, I've also been invited to assist at the annual ACS Leadership Institutes (LI) that the ACS hosts for new section and division officers, and other up-and-coming ACS leaders. So far, each LI I've attended has been in Dallas. Once I simply provided support for one of the workshops, called "Planning Successful Activities", attended by about 80 section chairs and chairs-elect. But in January 2015, I actually presented a pilot workshop, "Getting Back on Track", for which we invited representatives from struggling Sections to attend and talk about their problems in the hopes of brainstorming ideas to get them back to being successful Local Sections. The workshop was very well received by the attendees, and I hope that it becomes a regular fixture at future LIs. In case you're wondering – the Cleveland Section was NOT invited to this workshop; we've got a good, active Section!

The other Committee I sit on is the Nomenclature, Terminology, and Symbols, abbreviated NTS. This Committee considers issues relating to chemical nomenclature, terminology, and symbols that may affect the ACS. Curiously, as I found out at my very first Committee meeting, this Committee does not have any prerogative to suggest symbols for new elements! That's actually a duty given to the National Academy of Sciences. But the Committee still deals with very fundamental issues that affect chemistry and science as a whole. As an example, at the San Francisco National Meeting I helped plan a symposium on the upcoming revised definitions

of the kilogram and the mole. As you might suspect, there's a lot of discussion among scientists and engineers all over the world on how to best redefine these two fundamental units. You can't get much more basic than this in all of science! This Committee typically meets on Monday afternoons of National Meeting week, so my first three days at National Meetings are almost completely filled with Committee meetings.

In real life, I'm professor and current chair of the Department of Chemistry at Cleveland State University. My area is physical chemistry, these days mostly computational chemistry. My wife and two teen-age sons (and I can't believe that my sons are teenagers already!) live on the east side of the greater Cleveland area.

Dwight Chasar

I am the senior, both in age and longevity in position, of your two councilors, having served for nearly 30 years and I have not missed a National Meeting in all that time. I have served on a number of national committees by presidential appointment, starting with Patents and Related Matters (3 yr), followed by LSAC (7 yr), Constitution and Bylaws (6 yr), Divisional Activities (6 yr), two of those as Chair; and on two elected committees by council, Council Policy, and Nominations and Elections (N&E), the latter of which I was Vice-chair for two years. Most committees have subcommittees and I have worked on or chaired a number of those throughout my tenure. N&E is, for example, responsible for finding and vetting qualified nominees for District Directors, Directors-at-Large and President-Elect of the Society. Like David said above, while a lot of committee work is done at National Meetings, depending on the committee, a lot of work needs to be done throughout the year and most of the committees I've been on are working ones.

I am currently an associate member of the Committee on Science (COMSCI). An associate member participates in all the work but does not typically get to vote on final motions of the committee. COMSCI has three subcommittees:

Awards, Public Policy and Communications, and Science & Technology, the last of which I am a member. One of the duties of this subcommittee is to anticipate and explore emerging areas of chemistry, including programming, and provide those findings to the Divisions' Multidisciplinary Programming Planning Group (MPPG), which selects themes for technical programming years in advance of the National meeting. I am the COMSCI liaison to the MPPG. I was chair of the Divisional Activities Committee when we recommended and campaigned for thematic programming and the MPPG was formed. So there are some long term relationships where experience is helpful.

Being so senior, I opt to sit in on the newly formed Senior Chemist's Committee for its half day session just to be aware of their activities. Recently I became an associate editor of their newsletter and submit articles to it.

There are 184 local sections, over 30 technical divisions, about 40 committees, and task forces all the time. These have provided opportunities for lots of work with fellow councilors and other ACS members and staff, experience, and avenues to contribute ideas for improvement and change in the ACS. I trust that I have done my part.

I worked for 33 years as a synthetic and process organic chemist for the BFGoodrich Co. and its successive companies, Noveon, Lubrizol, and Emerald Performance Materials, unbelievably all at the same telephone extension and lab. None of my managers ever gave me any grief over my ACS activities. I retired in 2007 to concentrate more on my other passion, birding, travelling around the US and to many countries to see their birds.

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.