



HURON VALLEY ACS SECTION NEWSLETTER



Paul R. Jones, Editor

OCTOBER, 2010

CURRENT OFFICERS:

Chair: Harriet Lindsay (2010)
Chair-elect: Ruth Ann Armitage (2010)
Treasurer: Wade Tornquist (2010)
Secretary: Bert Ramsay (2010)
Outreach: Larry Kolopajlo
Councilors: Ellene (Nina) Tratras Contis (2009-2011)
Harriet Lindsay (2010-2013)
Alternate Councilor: Paul Jones (2010-2013)

NOMINATIONS FOR 2011: We encourage you to submit nominations for the following offices to be filled in the coming year: Chair-elect (one-year term); Secretary (two-year term), Treasurer (two-year term), Alternate Councilor (three-year term). Please consider nominating yourself! Submit any names for consideration to the chair of Nominating Committee, Bert Ramsay [bramsay1@emich.edu]. *Deadline is October 31.*

WEBSITE. This is the current, revised address and the site is open to the public: <http://huronvalley.sites.acs.org/>. You are encouraged to check this often for recent news of the section. There will be a link to this *Newsletter* as well. Thanks to Jose Vites for continually updating the site. ACS Huron Valley is also on Twitter (@HV_ACS), Facebook, and LinkedIn. Get connected to your local section through your favorite networking site.

240th ACS National Meeting, Boston, MA, August 16-20, 2010. Councilor Ellene (Nina) Tratras Contis attended the meeting, The candidates for the fall 2010 ACS national election were announced as follows:

President-Elect 2011

Luis A. Echegoyen, Professor, University of Texas at El Paso, El Paso, TX

Bassam Z. Shakhashiri, Professor, University of Wisconsin, Madison, WI

Directors-at-Large - 2011-2013

Janan M. Hayes, Robert L. Lichter, Kathleen M. Schulz, and Kent J. Voorhees,

Director, District II - 2011-2013

George M. Bodner, Joseph R. Peterson

Director, District IV - 2011-2013

Larry K. Krannich, and Will E. Lynch

COMMITTEES (2011-2013). These were elected by electronic ballot.

Committee on Committees: Janet L. Bryant, H. N. Cheng, Amber S. Hinkle, V. Michael Mautino, and Yorke E. Rhodes.

Council Policy Committee: John E. Adams, Alan M. Ehrlich, Mary Virginia Orna, and Dorothy J. Phillips.

Committee on Nominations and Elections: Jeannette E. Brown, Martha L. Casey, D. Richard Cobb, Lissa Dulany, and Angela K. Wilson.

Meeting Registration Report

As of August 24, 2010, the ACS fall national meeting had attracted 14,059 registrants: Regular attendees 8,211; Students 3,230; Guests 393; Exhibit Only 733; and Exhibitors 1,492.

Membership Activity

The 2010 membership numbers are on track to meet year-end goals. The Student Member community has continued to grow since creation of this new member category in June 2009. The number of Student Members was 12,815 as of July 31, 2010.

Scheduling of Council Meetings

A proposal to move Council meetings from Wednesdays to Tuesdays was presented, along with survey results from Councilors and other stakeholders. After a robust discussion, Councilors concluded their discussion with a straw poll that showed 128 in favor of the proposed move of Council to Tuesdays, 225 opposed, and 56 undecided. The Council Policy Committee and the Board of Directors will decide by spring 2011 whether the Council should move from Wednesday to Tuesday.

Councilor Nina Contis attended the **International Activities Committee**, where she chairs the **Subcommittee 2 – Europe**. Specific goals discussed and already identified as part of the ACS Strategic Plan were: ACS international collaborations furthering chemistry's role in addressing global challenges; sustaining momentum of International Year of Chemistry beyond 2011; continuation of global projects like climate change and water projects to collect global data; helping extend the Society's engagements in international education and training.



RECENT NEWS OF THE SECTION.

2010 National Chemistry Olympiad

Ninety two students took the Local Section Chemistry Olympiad Exam given on March 19, 2010 at Eastern Michigan University. Six high schools were represented as follows:

High School	Number of Students	Teacher
Clinton	26	Ron Schaffner
Huron	18	Andrew Collins
Lincoln	7	Kyla Gurganus
Pioneer	16	Karen Fox
Saline	24	Bridgette Sparks
Ypsilanti (through EMU)	1	Early Alliance Program

Based on local section exam results and official rules, the following eleven students earned the right to participate in the Chemistry Olympiad National Exam held on Thursday, April 19 at Eastern Michigan University:

Alicia Layer	Clinton
Hannah Porter	Clinton
Derek Wu	Huron
Christiana No	Huron
Kathleen Huntzicker	Huron
Peter Zieske	Lincoln
Corey Harper	Lincoln
Hope Wilson	Pioneer
Viknesh Krisnan	Pioneer
Channe Griffith	Saline
Karl Winsor	Saline

Each of the above students received \$100 for their fine performance on the local section exam, and their schools received \$50.

Local Section National Exam

Karl Winsor, under the direction of Bridgette Sparks, and Derek Wu from Huron, under the direction of Andrew Collins, won **Honors** certificates for their performances on the 2010 U.S. National Chemistry Olympiad (USNCO) national examination. The American

Chemical Society provides certificates to the top 150 students that ranked High Honors (top 50) and Honors. The 2010 National Exam is available on the Internet at www.acs.org/Olympiad.

Outstanding High School Teacher Award

At the regional meeting in Dayton in June, Bridgette Sparks, Saline High School, recipient of the Huron Valley teaching award, went on to win the CERMACS regional competition, which includes Ohio, Michigan, Kentucky, West Virginia, Pennsylvania, and Indiana. Congratulations!

UM Outstanding Graduate Student Award

Joseph Braymer, University of Michigan graduate student, was recognized as Outstanding Graduate Student for 2009-2010 at a ceremony in Ann Arbor in June. This award is sponsored by the Huron Valley Section.

Project SEED

This past summer, the Huron Valley Local Section sponsored two high school students to participate in the ACS Project SEED program. Myrtes Moore, a senior at Lincoln High School (Kyla Gurganus, high school chemistry teacher) and Crystal Smith, a senior at Pioneer High School (Karen Fox, high school chemistry teacher) each joined research groups at EMU for 8 weeks this summer. Ms. Moore worked with Prof. Hedeel Evans' group on a project designed to elucidate the catalytic mechanism of dihydroorotase. Ms. Smith worked with Profs. Maria Milletti and Harriet Lindsay on a computational and experimental project in which she screened a number of Lewis acids to determine which most effectively initiated a tandem reaction in the synthesis of unnatural amino acids.

In addition to their research, the Project SEED students along with EMU's 10 chemistry undergraduate research students participated in a number of activities, including tours of NSF International in Ann Arbor, the art conservation labs at the Detroit Institute of Arts, and Pfizer's process facility in Portage. Students also heard talks on careers in chemistry and science from Joe Colombo, a chemist at Cayman Chemical, and on careers in science policy by Erica Lanni, a chemistry graduate student at University of Michigan. For more information about Project SEED, visit the ACS Project SEED website. For more information about Huron Valley's Project SEED program, contact the program coordinator, Prof. Harriet Lindsay (hlindsay@emich.edu).

Science Outside the Lab: Erica Lanni

I applied to this program, was accepted, convinced my adviser to let me go, and fundraised like crazy so I could pay the program fee. ACS Huron Valley was very generous to provide half the registration fee for the two-week session held last summer in Washington, DC. During that time the group and I met with many scientists who now work in various areas of policy. They included individuals at agencies, congressional staff, and the employees of membership organizations like the ACS. To complement their views we also spoke with professors who study science policy (including U-M's own Shobita Parthasarathy) and visited science exhibits at the Smithsonian. Finally we got to try our hand at a little policy by participating in a mock review panel at NSF and writing press briefs for a fictional Office of Science Technology Policy.

I am now writing about science policy as a community contributor for AnnArbor.com and I enjoyed presenting my experience to students at EMU this summer. I have also enrolled in two classes at the Ford School of Public Policy. Most excitingly, I have been invited to start a Government Action Committee (GAC) for our local section. These committees can take many forms and I am looking for input from other members, but generally seek to keep members informed about policy issues related to chemistry and host policy events. If you are interested in taking part, please feel free to contact me with ideas or find me at the upcoming ChemExpo!

Erica is a graduate student studying organic-materials chemistry at the University of Michigan. She would love to answer any questions readers may have, so please feel free to contact her at elannil@gmail.com. You can also find her on the ACS Huron Valley Facebook Page.



Survey of Huron Valley Members:

90 members responded to the survey recently sent out; two-thirds of the respondents are from academia and 30% from industry. 52% are minimally active in ACS (e.g., attend meetings occasionally). 37% would be more active in local section activities if they were better informed, although 36% knew about local section activities. Most respondents (68%) are interested in participating in speakers and presentations, followed by outreach and education activities (47%), social activities (43%), and government/legislative action activities (21%). Most members prefer to get information through emails, although the *Newsletter* is also a good way to reach them. There was not much love expressed for blogs or social networks, which were rated "would not/do not use" by more than 60% of respondents!



COMING EVENTS

Tour Speaker/Science Cafe

Thursday, October 14, 3:30 PM, EMU Student Center

Seminar: "The Chemistry of Coffee" Dr. Tracy Hamilton, University of Alabama, Birmingham.

The seminar will present a brief history of coffee, the physical process from cherry to brewed coffee and espressos. The final product of the harvest is the green "bean", which has a characteristic odor (green coffee beans will be passed around during the presentation). The roasting of the beans is dominated by the Maillard reaction and Strecker degradation. Some of the compounds that have been identified as important flavor and aroma compounds are - damascenone (cooked apple), 2-furfurylthiol (the dominant "coffee" smell of freshly brewed coffee), 2-isobutyl-3-methoxypyrazine (earthy), guaiacol (spicy), 2,3-butanedione (artificial butter), and 4-hydroxy-2,5-dimethyl-3(2H)-furanone (caramel).

The stage at which roasting is stopped has traditionally been done by color (after roasting test batches). The whole roasting process takes place 8-12 minutes, followed by rapid cooling to slow further reactions. Coffee roasted by the speaker (in his office!) will be sampled.

All coffee drinkers know that leaving coffee on a burner rapidly ruins the brew. This chemistry will be discussed, as will staling, the degradation of roasted coffee by exposure to air. Finally, the health issues surrounding coffee will be discussed. The compounds cafestol and kahweol can raise cholesterol slightly, but are absorbed by paper filters.

CHEM EXPO

Saturday, October 16, Eagle Crest Conference Center, 9AM-2 PM

More information is available at the new HV-ACS website: <http://huronvalley.sites.acs.org>. Follow the link under ChemExpo. Participation is FREE, but you need to register online to get lunch and a T-shirt. Students will be presenting posters, and professional chemists will talk to students about their jobs. **Keynote speaker at 11 A.M. is Tom Lane**, immediate past president of ACS. Panel discussion will take place 12:30-1:30, followed by the Awards Ceremony at 1:30. Contact Ruth Ann Armitage (rarmitage@emich.edu) for additional information.

Science Cafe

Wednesday, December 8, 6:30 PM

Corner Brewery, Ypsilanti

"Chemistry of Beer" presented by Arthur Howard and Cory Emal (EMU professors)

Snacks will be provided [BYOBM, bring your own beer money ☺]

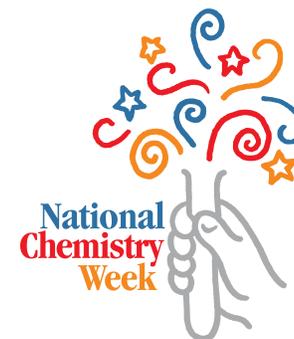
National Chemistry Week 2010

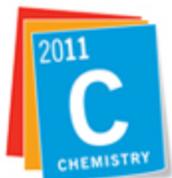
October 17-23, 2010

"Behind the Scenes with Chemistry!"

National Chemistry Week (NCW) is a community-based annual event that unites ACS local sections, businesses, schools, and individuals in communicating the importance of chemistry to our quality of life. Larry Kolopajlo is HVACS Coordinator, and high school teachers can ask him for Chemistry magazines in English and Spanish and other supplies including "nanomole" dolls. Teachers are encouraged to do demonstrations with their students.

The theme, "Behind the Scenes with Chemistry" alludes to the fact that chemistry is everywhere, whether prominent as a science fair project or tucked behind the scenes of a movie set or book. Explore the special effects in movies to appreciate that it is not magic, but rather common chemical concepts which explain the mystery behind the "magic" that is shown.



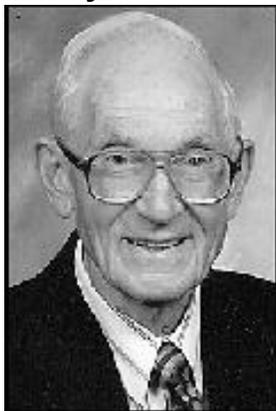


International Year of **CHEMISTRY** 2011

International Year of Chemistry 2011

A Planning Committee for IYC has been formed: Paul Rasmussen, Arthur Ashe, and Nina Contis.

Obituary:



Dr. Clark G. Spike, Professor Emeritus of Chemistry, EMU, died on May 7, 2010. A graduate of EMU, he earned the Ph.D. in inorganic chemistry at the University of Michigan and devoted 27 years of his life teaching chemistry at EMU, where he also held administrative positions. Memorial donations may be made to the EMU Foundation, to support the Clark and Avis Spike Endowment Fund.

Directions to EMU Student Center for October 14 Science Café:

The EMU Student Center is located at 900 Oakwood St. in Ypsilanti. Parking is available in the Visitor Lot; bring your parking stub to the meeting to have it validated.

