

American Chemical Society – Kalamazoo Local Section Newsletter

February 23, 2015

Vol. 5 - Issue 1



Chair Comments

Brian Eklov



Brian Eklov, Ph.D. (KACS
Chair)

2015 KACS Executive Officers

Chairperson

Dr. Brian Eklov, Kalexsyn
bmeklov@kalexsyn.com

Past-Chairperson

Dr. John H. Engelmann, Miller Canfield
jengelma@hotmail.com

Chairperson-Elect

Vacant

Secretary

Angela Willson, WMU, Mallinson Institute
angelamwillson@gmail.com

Treasurer

Dr. John Miller, WMU – Chemistry
john.b.miller@wmich.edu

Councilor

Dr. Lydia E. M. Hines, WMU – Chemistry
lemhwgh@gmail.com

Alternate Councilor

Dr. Doug Williams, Kalsec, Inc.
dwilliams@kalsec.com

I want to begin my time as chair of the Kalamazoo Section by thanking everyone who volunteered at and attended our events over the last year. As a testament to the hard work that goes into the events that we host, we were rewarded with two ChemLuminary awards this year, one for our innovative Chemistry and Culture series, and the second for our Recycle-a-Poster event that is fast becoming a yearly tradition (Please see the September 2014 Newsletter for more detail). We couldn't have achieved these honors without your efforts and dedication.

This year is looking to be just as busy for the Kalamazoo Section. Our first large event will be the Joint Great Lakes / Central Regional ACS Meeting that we are co-hosting with the West Michigan Section this May 27-30 at DeVos Place in Grand Rapids. Dr. Scott Denmark (University of Illinois at Urbana-Champaign) will kick off the meeting as the opening plenary speaker, and Dr. Joan Brennecke (University of Notre Dame) and Dr. Dustin Mergott (Eli Lilly) will continue the high-level technical proceedings on Wednesday and Thursday afternoon.

(Continued on Page 2)

KACS website: <http://kalamazooacs.org/>

Do you have questions, comments, or would like to contribute to this newsletter?
Send an email to: ACSKzoo@gmail.com

Miscellaneous

(Continued from Page 1)

Abstract submission and registration are both open. See <http://jglcrm2015.com> for more information. I am looking forward to seeing you in Grand Rapids.

Our annual awards gathering is coming up this spring, followed by a meeting we are planning with the Detroit and Huron Valley Sections in Ann Arbor this September. Chemistry Day at the Kalamazoo Valley Museum, a favorite event for both our section and me, will be in October, and planning for this year's Recycle-a-Poster event is already underway for November.

I would enjoy hearing from you about what events you've enjoyed in the past, and what events you'd like to see in the future, and I look forward to working with you this year.



JGLCRM – Grand Rapids

By Lydia Hines

Be Part of the Joint Great Lakes-Central Regional Meeting in Grand Rapids! It is now less than 4 months away...

Mark your calendar for this ACS Meeting to be held at the Amway Grand Hotel/DeVos Place in downtown Grand Rapids **from Wednesday through Saturday, May 27-30, 2015. Registration is now open**, so please plan to register and participate along with about 1000-1400 other chemists to bring a professionally rich program to our area.



Grand Rapids, MI | jglcrm2015.com

As we get closer to the meeting date we seek your assistance in the following ways:

- In encouraging vendors with whom you have interactions to agree to exhibit at the Meeting and to sponsor one or more of our symposia or a social event (go to www.jglcrm2015.com, and click "Expo").
- We could use at least 2 volunteers in the Layout of our Program Book after abstracts have been submitted - abstract submission opened on January 5, 2015.
- We will need help with the on-site physical registration process as well; as subsequent Section newsletters are sent your way keep your eyes open for more opportunities to lend a hand.

Lydia E. M. Hines (lemhwgh@gmail.com), who is co-General chair of the Meeting, looks forward to hearing of your offers to assist.

In addition to our plenary and keynote speakers (see above), Dr. Tom Lane (Past-President, ACS) will be giving the address at the Awards banquet on Friday evening and Dr. Diane Grob Schmidt, current ACS President, will be the featured speaker at the Women Chemists Committee luncheon. The Younger Chemists Committee is sponsoring a morning fun run and other activities as well as a luncheon. There will be professional enrichment workshops, a full-day safety workshop, and an undergraduate program. ACS Board representatives will also be on hand to interact with the members - an Ice Cream Social has been planned for that purpose on Friday afternoon from 2-3 p.m. Saturday morning we will be hosting several workshops for teachers, so encourage teacher acquaintances to register.

Continue to visit the meeting website to see how many of our colleagues are already involved in the planning, and for updates on the program and other news.

Awards Nominations

By The JGLCRM 2015 Regional Awards Committee

Dear ACS Members --

The Awards Program for the upcoming Joint Great Lakes/Central ACS Regional Meeting has been updated!

The nomination deadline for all awards has been **extended to March 1, 2015!** We also have the privilege to present a NEW award from the ACS -- the Partners for Progress and Prosperity (P3) Award! The P3 Award category has been created by the ACS to recognize successful partnerships between industry, government, academia, small businesses, and other organizations, including ACS local sections.

To be eligible for a P3 Award, the partnerships being nominated must have achieved an impactful outcome in one or more of the following ways:

- Improving public perception and appreciation of chemistry
- Promoting career advancement opportunities and/or encouraging entrepreneurship in the chemistry enterprise
- Advancing advocacy efforts with government or other thought leaders
- Supporting STEM education and research

At the Regional Meeting level the P3 Award will consist of a Partners for Progress and Prosperity medallion and framed certificate of recognition for each partner representing an entity or organization, as well as a \$1,000 grant split equally between all partners to advance the activities for which the award was presented.

See <http://www.acs.org/content/acs/en/funding-and-awards/awards/regional.html> for more information about the NEW P3 Award, as well as the other Regional Awards! (the E. Ann Nalley Volunteer Service Award, the Excellence in High School Teaching Award, and the Stanley C. Israel Award for Advancing Diversity)

Go to jglcrm2015.com to see information about the upcoming meeting and to nominate an individual or organization for one of the four regional awards by March 1, 2015!

We hope to see you at the **Regional Meeting, May 27-30, 2015 in Grand Rapids, MI.**

From our Past-Chair

Artificial Sweeteners

By John Engelmann

Americans love sweets. Not only do we consume large quantities of sugar, mostly derived from sugar cane and sugar beets, we consume large amounts of artificial sweeteners. The oldest artificial sweetener is saccharin which was discovered in 1878 by Constantin Fahlberg at Johns Hopkins University. At first its use in food was banned. Later, its use in foods was allowed although it suffered repeated bans in response to rat studies which seemed to suggest that it might be a carcinogen. These rat studies were controversial because they provided doses far in excess of actual human use of the product.



John Engelmann, Ph.D.
(KACS Past-Chair)

Sugar shortages in WWI and WWII helped promote the use of saccharin. In 1958, sodium cyclamate was introduced to the market. It was marketed as a mixture of 10 parts cyclamate and 1 part saccharin. Cyclamate also proved controversial because the ever popular rat studies indicated a possible link to cancer. Eventually other artificial sweeteners such as Aspartame, Neotame, Acesulfame potassium, and Advantame were developed. No artificial sweetener is perfect and it seems likely that the development of new non-caloric sweeteners will continue for the foreseeable future.

One of the newer sugar substitutes is sucralose. It was approved for US use in 1998 and recently has become quite popular. It is a chlorinated sucrose (1,6-Dichloro-1,6-dideoxy- β -D-fructofuranosyl-4-chloro-4-deoxy- α -D-galactopyranoside). Sucralose is heat stable and may be used in baking. Since the bulking agents mixed with the sucralose do not have the same bulking characteristics as sucrose, the texture of the baked goods produced with sucralose may be different from those produced with sugar. However, food manufacturers value sucralose because it is the most heat stable artificial sweetener.

The latest sweetener, Advantame, was approved this spring. It is 20,000 times as sweet as sucrose. It is chemically similar to aspartame and is stable at higher temperatures.

Considering Americans' love for sweets, and their desire to avoid calories, continuing development of artificial sweeteners seems inevitable.

More Information on JGLRCM



The ACS invites you to join us at the
[2015 Joint Great Lakes Central Regional Meeting](#)
May 27 - 30, 2015
Grand Rapids, Michigan

The [2015 Joint Great Lakes Central Regional Meeting](#) will be held May 27th-30th at the DeVos Place in Grand Rapids, Michigan. Visit the [JGLCRM website](#) for up-to-date program information.

Now Open
[Online Registration](#) and [Abstract Submissions](#)

Need a hotel room? A special rate of \$134 is being offered at the [Amway Grand Plaza Hotel](#), located next to the DeVos Place, until **April 19th**. Reservations can be made [online](#) or by calling the hotel at [800-253-3590](#).

[Register Online](#)
Advance registration ends April 19th

[Submit an Abstract](#)
Abstract submissions close March 23rd

[Hotel Reservations](#)
Discounted rate ends April 19th

American Chemical Society | 1155 Sixteenth Street, NW | Washington, DC 20036
Copyright © 2015 [American Chemical Society](#) All rights reserved.