

Newsletter for the Kalamazoo Local Section of the American Chemical Society

May 1, 2016

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Chair's Comments

By Brian Eklov, PhD

May is shaping up to be a busy month for the KACS. We have:

May 3rd: 2016 Tourtellotte Lecture,
Dr. Geri Richmond at K College

May 5th: Alton Brown Live at Miller
(Sold-Out!)

May 9th: Annual Awards Gathering at
WMU

May 14th: Science Café Field Trip to
Journeyman Distilling, with the St.
Joseph Valley Local Section

May 20th: 4 PM CGSA Spring Picnic at
Oshtemo Township Park

More information on each of the available
events is included below. Please come
and join us for some science and fun!

Visit our website www.kalamazooacs.org

THANKS FOR THE INTEREST!
Alton Brown Live: Eat Your Science tickets are
SOLD OUT!

Alton Brown Live: Eat Your Science
Miller Auditorium
Thursday May 5, 2016
7:30 pm
AltonBrownTour.com



KACS has reserved a block of tickets for members who are interested in attending the Alton Brown Live show on Thursday, May 5th at 7:30 PM. The well-known television personality and author has a knack for explaining kitchen science in an engaging and entertaining manner.

KACS seats are SOLD OUT!
Look for a report in our next newsletter!

ARE YOU ATTENDING The Annual KACS Awards Program?

**Western Michigan University's Chemistry Building
Monday May 9, 2016
6:00 pm Refreshments
6:45 pm Presentation of Awards**



The annual Awards Program of the KACS will be held Monday, May 9th, 2016 in the lobby of the Chemistry Building at Western Michigan University (WMU). We will gather at 6pm for light refreshments and conversation among members, students, teachers, and parents. The presentation of awards will begin at 6:45pm.

Among the over 50 awards to be given that evening will be:

- Outstanding College Chemistry Student from WMU
- Outstanding College Chemistry Student from Kalamazoo College
- Outstanding High School Chemistry Teacher
- Outstanding High School Chemistry Students
- Competitive Exam Scholarship Awards

In order that we may provide adequate refreshments, do be kind enough to send a quick note to either James Kiddle, KACS Competitive Exam Committee Chair or Mike Walsh, KACS Education Chair indicating the number of attendees in your party. Parking, in the Miller Auditorium Ramp, will be no cost to attendees

RSVP for Awards Program
James Kiddle james.kiddle@wmich.edu
Mike Walsh mwalsh@kzoo.edu

FAMILY FUN CGSA Spring Picnic!

**Friday May 20th
4:00 pm**

**Oshtemo Township Park
7275 West Main Street
Kalamazoo MI 49009**



KACS is again sponsoring the annual WMU Chemistry Graduate Student Association (CGSA) spring picnic. The purpose of this event is to introduce chemistry graduate and undergraduate students to the KACS community outside of the university. In previous years, this event has been a successful opportunity to gather professors, students, and local ACS members. This is a family-friendly event with many activities and yummy food!

Bring the Entire Family to this fun event!

DON'T MISS OUT!

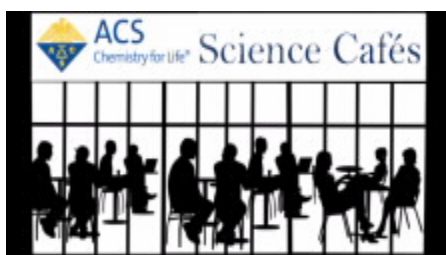
Science Café Field Trip to Journeyman Distillery

Journeyman Distillery
Historic Featherbone Factory
109 Generations Drive
Three Oaks, MI 49128
Saturday May 14th
3:00 pm

www.JourneymanDistillery.com



It's time for a field trip! We will be meeting up with the St. Joseph Valley Section at Journeyman Distillery in Three Oaks, MI for tours of the distillery and tasting of their distillates at 3 pm on May 14th. We are expecting our twenty spaces to fill quickly, so please RSVP ASAP! **Tour tickets are \$10**, and also please indicate if you would be interested in a group transportation option (Additional cost may apply). You can find out more about Journeyman Distillery by visiting their website.



Science Cafés promote scientific literacy by encouraging informal discussions between nonscientists and scientists. So feel free to invite your over-21 non-chemist friends or family to this open event!

Claim your spot TODAY for the Distillery tour!
Contact Brian Eklov chair@kalamazooacs.org

Project SEED Opportunities



Project SEED opportunity: Project SEED was established by the American Chemical Society (ACS) in 1968 to provide economically disadvantaged high school students the opportunity to conduct hands-on research for 8 to 10 weeks in the summer. Selected students receive a fellowship award and will be eligible to apply for a SEED college scholarship.

In the summer of 2015, two students were awarded Project SEED opportunities. Jacob Wasyliw worked with Dr. Szymczyna at Western Michigan University (WMU) on a project titled "Bioinformatics of Tanapox Virus Proteome". Kathryn Way worked with Dr. Guda at WMU on a project titled "Optical Spectroscopy to Monitor Ligand-DNA Binding Interactions".

This year the Kalamazoo ACS (KACS) is looking to fill two Project SEED positions. One will be with Dr. Szymczyna and one will be with Dr. Guda. To qualify the student must have completed his or her sophomore year in good academic standing, have taken at least one course in chemistry, and be recommended by their chemistry teacher or other school official. Students are selected based on their qualifications and letters of recommendation. High school chemistry teachers should have received a letter detailing the project and nominating process. If you have not received the letter or need more information please contact Don Schreiber, Project SEED Coordinator or Mike Walsh, KACS Education Chair.

Do you need Project SEED information?
Don Schreiber donald.schreiber@wmich.edu
Mike Walsh mwalsh@kzoo.edu

REPORT

April 8th Thomas B. Higgins, PhD seminar and visit

By Jeffrey Bartz, PhD



Dr. Tom Higgins, a 1992 graduate of Kalamazoo College, addressed the KACS on "How Undergraduate Research can Change Student' Lives" on Friday, April 8. Dr. Higgins worked to develop an undergraduate research program in the community colleges in Chicago. Longitudinal studies show that students who participated in research persisted in science to a higher degree than similar students who did not do research and had a higher rate of transferring to four-year institutions. Dr. Higgins is a professor at Harold Washington College and is currently a Program Director at the National Science Foundation. During his visit to Kalamazoo, Tom also had an opportunity to meet with and talk to faculty and students from WMU, KVCC, and Kalamazoo College.

REPORT

April 23rd Chemists Celebrate Earth Day Events

by Lydia M. Hines, PhD



Celery Flats in Portage

Spring arrived on and off in April and the forecast was for a sunny day on the 23rd; but the temperature was still in the 60s so our first experience at the **Portage Green-a-thon** was a pretty “cool” one. The event was very well organized by the Portage Youth Advisory committee and their liaison from the City Clerk’s office. It was our first attempt at cooperation with them and we were very pleased to have made that contact. Lydia Hines, along with the expert help of Carl Stachew (well known to many in KACS, and others in the education circles, for his passion for science outreach to young people), and the enthusiasm of 4 Kalamazoo College Students, Ian Bunker, John Bailey, Sarah Glass and Joyce Nguyen saw 6 hours pass with “never a dull moment” as youngsters and their parents stopped by our table to make UV-sensitive-bead bracelets and to learn about carbon dioxide, its varied sources and uses, and to “make chalk”, as well as to get copies of Celebrating Chemistry to take home to continue “doing science experiments”. A great experience overall, which I hope some of the readers of this newsletter will want to enjoy as we celebrate Earth Day in April of 2017!

Kalamazoo Nature Center

This was our 6th year of participation with the Kalamazoo Nature Center during their Earth Day Celebration; Taylor Grace, Emily Hanner, Greg Johnson and Casey Wright from the WMU Chem Club were present at the opening of the event in the morning and were busy making chromatography flowers with youngsters and their parents who came by the KACS table. The steady flow of visitors continued through the afternoon when visitors could also avail themselves of our Celebrating Chemistry publication for their continued science enjoyment at home. K College students Myles Truss, Sangtawun Miller and Andrew Kaylor along with KACS chair Brian Eklov “held down the fort” during the afternoon hours.

Many thanks are due to all who volunteered at this annual event!

REPORT

April 12th The Science Behind Crafting Beer

By Andre Venter, PhD



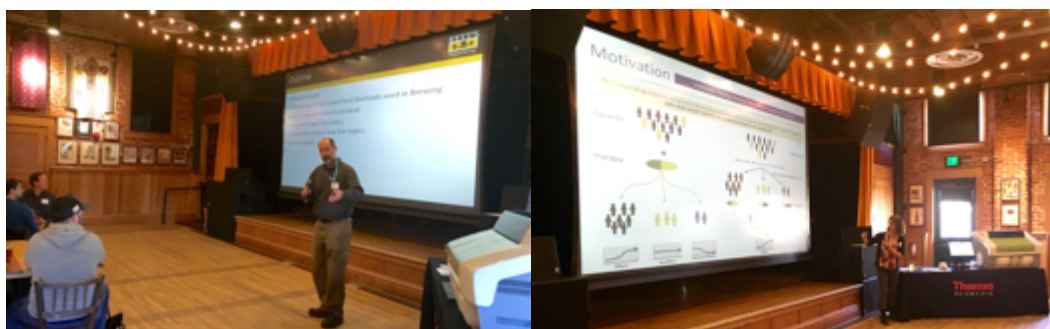
On April 12 KACS' topical group "The Kalamazoo Area Mass Spectrometry Discussion Group" and Thermo Fisher Scientific hosted a seminar on mass spectrometry and the science behind crafting beer. This event at Bells Brewery Eccentric Café brought 91 attendees together. The crowd represented a wholesome mix of those working in mass spectrometry or in the brewing industry and included professionals, students and other interested members of the public. Two presentations were presented providing a mixed taste of beer quality control and beer flavor innovation.

The first presentation was delivered by Dr. Barbara Dunn from the Department of Genetics at Stanford University and was entitled the "Systematic Integration of "Omics" Data to Improve Innovation in Beer Crafting". Dr. Dunn described how systems biology is used to study, for example, the differences between popular yeast strains used in the production of California Ale and Hefeweizen beer styles.

Dr. Luke Chadwick, Senior Scientist at Bells Brewery, presented on how the challenge to make a delicious beer consistently can be addressed by picking it apart at the molecular level. Dr. Chadwick presented an overview of the instrumentation used in a brewing laboratory and on the role of data in the quest for ever-increasing beer quality. He dazzled us with numerous rabbit holes of yet to be explored challenges faced by those who take a scientific approach to crafting quality beer.

Thermo Fisher Scientific demonstrated the use of the Gallery™ Plus Beermaster. This photometric analyzer provides automated efficiency in quality control measurements to help reduce costs and improve productivity in breweries. For more information on ThermoScientific Mass Spectrometry Products, please contact giovanni.pallante@thermofisher.com

If you would like to be notified of future events by the Kalamazoo Area Mass Spectrometry Discussion Group, please send an email to andre.venter@wmich.edu.



Do you have questions, comments, or would like to contribute to this newsletter?
Send an email to Christine Pruis, Communication Chair at ACSkzoo@gmail.com