

The KalChemist News

Vol. 12, Issue 1

January 2022

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2022 KACS Executive Officers

Chair

Mr. Benjamin S. Maxey benjamin.s.maxey@pfizer.com

Past-Chair Dr. Edward W. Thomas edwardwthomas@gmail.com

Chair-Elect Dr. Nicole Burke nburke@kalsec.com

Secretary Mr. Jacob Kirkendall jkirkendall@kalsec.com

Treasurer Dr. P. Douglas Williams treasurer@kalamazooacs.org

Councilor Dr. Lydia E. M. Hines lemhwgh@gmail.com

Alternate Councilor Dr. Tomasz Respondek tomasz.respondek@zoetis.com

Comment from the 2022 KACS Chair

Happy New Year!

We start 2022 with the shadow of Covid-19 continuing to stymie our ability to live 'normally,' but in spite of its darkness there are many bright lights for our local section! We welcome new Executive Committee members Nicole Burke (Chair Elect), Jacob Kirkendall (Secretary), and Tomasz Respondek (Alternate Councilor). We are excited to start the year with an Industrial Careers Panel at Kalamazoo College on January 18, hosted by Blakely Tresca, and a presentation by Daniela Arias-Rotondo on February 16. See the Calendar for more details. And we will be fleshing out the implementation plan for our updated Strategic Plan (see December 2021 Newsletter for more details).

I would like to thank the outgoing members of the Executive committee, Hershel Jude (2021 past-chair) and James Redwine (secretary), for their excellent support and leadership of the section through the past year, and look forward to the continuing support of Ed Thomas as past-chair, Doug Williams as treasurer, and Lydia Hines as councilor.

While this year will continue to present new challenges, I look forward to leading our section back toward a more normal future with the help and support of the new Executive Committee.

Together in science, Ben Maxey, KACS Section Chair 2022



Parting Comments from 2021 Chair Ed Thomas

Dear Members,

I want to thank you for your engagement during 2021. Even though we never met in person as a section, many of you attended our virtual events. These ranged from seminars, awards, and activities during Chemistry Week. We were optimistic we could offer the Bell's Poster session in November as a live event, but even with the best of intentions we were thwarted by the virus. I also want to give a special thanks to your Executive Committee who kept things running during these tough times.

<u>Lydia Hines</u> – KACS Councilor: Having served in this capacity since 1984, Lydia brought ACS vision to KACS. If there was a question about ACS, Lydia could answer it or find out the answer. She organized and implemented the virtual 2021 awards celebration for high school and college students across our section and keeps KACS High School teachers informed of ACS resources available to them for their professional development. She delivered, in person, 50- and 60-year ACS award certificates to KACS members. Lydia edited and published our monthly KACS newsletter that captured events, and outlined future activities.

<u>Hershel Jude</u> – Past Chair 2021: Hershel took on an active role in a new project and continued a long and important tradition. This year he launched our new website (partially funded by an ACS grant) that unites so much of our business and information in one place. We have yet to explore the full potential of this tool and Hershel is leading the way. He also took over the responsibility for leading KACS chemistry week from Lydia. This virtual event brought many members together; they demonstrated science activities that could entertain and educate students and parents in our section.

<u>Ben Maxey</u> – Chair Elect 2021: Ben was the KACS chair in 2003 and accepted this leadership position again. He was instrumental in keeping the members apprised of the happenings at Pfizer with the production of the COVID-19 vaccine. This was implemented at the viewing of "Mission Possible" on June 10 when he detailed the most recent activities at the Pfizer (Portage) manufacturing site and then again at the speed-networking event for students on September 28. He remained a steady hand through all our 2021 discussions.

<u>James Redwine</u> – Secretary: James did a fantastic job writing the minutes from the KACS Executive monthly meetings. These minutes serve as a record but also helped us follow up on discussion and document decisions we made. James also conducted our annual elections and certified them with the National ACS. James also found his replacement, Jake Kirkendall, to follow in his footsteps as his term expired.

<u>Doug Williams</u> – Treasurer: Doug performed his treasurer responsibilities in a timely and reliable manner. Every month he provided us with the treasurer's report, kept track of our income from ACS and advocated supporting many of our outreach programs. Doug modernized our accounting system, implemented bonding insurance for his position and made all the KACS financial transactions transparent to the Executive Committee. He also focused on our education outreach programs. He arranged for funding AACT (American Association of Chemistry Teachers) memberships for our Section's high school teachers and organized a chat room where they could share best practices. He also donated much time to Project SEED, which serves students during summer.

<u>Grace McKnight, Andrew Walsh, Sydney Collins, and John Getson</u> – K College and WMU Student Representatives: we learned so much from you and applaud your outreach efforts during the pandemic. We wish you the best in your careers and please use us as a resource in the future.

Thanks again, and Happy New Year, Ed Thomas Chair 2021/Past Chair 2022





News about KACS in C&EN

In the last 2021 issue of <u>C&E News</u> (December 13/20) there was an article regarding National Chemistry Week (NCW) events and programs by local sections in the US and around the world (alphabetically listed); our Kalamazoo Section event was mentioned on p. 50 (lower left).

In the November 2021 issue of <u>The KalChemist News</u> we included an article regarding activities undertaken by the WMU ChemClub during the past academic session; below we include a similar informational piece from the Kalamazoo College Chemistry student group.

Kalamazoo College Chem Student Group Activities 2021

By Grace McKnight

As Kalamazoo College returns to in-person instruction, the Kalamazoo College American Chemical Society Club continues to provide opportunities for K students to engage with the local and larger community of chemists globally. In January and in September, we participated in the KACS Speed Networking events which connected K students and other interested undergraduates with professional chemists in the Kalamazoo community. One of our Executive board members, Suja Thakali, joined the virtual event all the way from study abroad in Rome, Italy, to briefly speak on a meaningful connection she had made at a previous KACS networking event.



Also in September, we promoted ACS to the K community at K Fest and introduced our club to freshmen and sophomores, who were joining us on campus for the first time. Today, the Kalamazoo College American Chemical Society Club retains over 40 members passionate about chemistry and looking for professional development opportunities. As the term continued, interest in non-virtual gathering decreased, so we made the difficult decision to postpone two highly anticipated events to Winter quarter. We continued to promote virtual activities such as "ChemClash: Rival Reactions" trivia, opportunities to learn about graduate school, and internship/fellowship openings.

Our return to campus in January will hopefully come with more fun events and opportunities, both virtual and in-person. We plan to host our third annual Chemistry Escape Room Challenge: "Outbreak of the Mutated Zombie *Drosophila*!". To escape, a team of four chemistry and biology students must solve a series of STEM-based puzzles in 45 minutes or less. Prizes will be awarded to the three fastest teams, which of course includes bragging rights! Also on the agenda for this winter is the Dow Open, which invites chemistry students to join us for DIY putt-putt golf hosted by all STEM clubs in the Dow Science Center. This event is guaranteed to be lively and it's a fun chance to collaborate with other groups on campus.

We also plan to join the WMU Chem Club at their student center for a Game Night Mixer. Kalamazoo College students are typically pretty excited to get out of the "K bubble" and pizza will be provided, so we expect a good mix of chemists to join us! Heading further off campus, we plan to attend the MSU Battle of the Chem Clubs, where undergraduate chemistry clubs from across the state compete in a variety of chemistry-based games and challenges for the glory of being crowned best chemistry club in Michigan. When we last attended in 2020, our club finished third overall, but finished first in the "speed titration" event, which we spend significant time preparing for. We hope to enter the final three again this year for another chance at the coveted title.

KACS Student Award Information

The Kalamazoo section offers **monetary awards** to undergraduate and graduate students <u>for travel to</u> <u>ACS meetings</u> to deliver oral or poster presentations. Please visit <u>this page</u> for details on how to apply.

Please send the following by email to the KACS secretary (jkirkendall@kalsec.com)

- A completed <u>application</u>
- A letter of support from your research advisor

Requests for **up to \$500** will be considered for travel expenses for a student to present his/her work at an American Chemical Society meeting. The next ACS meeting (Spring) will be in hybrid format in San Diego, CA, March 20-24. The **deadline for receipt of applications** is <u>four weeks prior to the meeting for</u> <u>which funding is requested</u>. A student may receive this award only once per degree being pursued.

Editor's Note

<u>All ACS members</u> receive frequent mailings from ACS, some of which do contain important and relevant information, such as the item shown below. That is one reason I strongly encourage local ACS members to recommend that undergraduate students, who indicate interest in chemistry as a career, become members of the Society during those years at ~\$25/yr – a very worthwhile investment in their professional aspirations.

As an example, the following item appeared in the <u>ACS Matters</u> e-mail publication sent biweekly from ACS to members; I subsequently sent it to the Chem departments at K and WMU for distribution to their chem majors:

Learn whether you should work in Industry or academia (ACS WEBINAR)

Should you work in industry or academia? Join <u>ACS</u> <u>Virtual Office Hours on Thursday, January 6</u>, at 12:00 PM ET, for an overview of the key differences from ACS Career Consultant Lori Spangler. <u>This</u> <u>FREE virtual career guidance session is open to ACS</u> <u>Members AND non-members.</u> Attendees will also get personalized career advice during small group networking sessions led by ACS Career Consultants.

(appeared in December 14 ACS Matters)



Calendar

- January 17, Monday, EC meeting 7 p.m. ZOOM (contact <u>Ben Maxey</u> for information)
- January 18, Tuesday, Industry Q&A Panel 6 p.m. to 7:30 p.m. (ET)

The panel will be an informal discussion on the path to a career as an industrial chemist; after introductions, most of the time will be left for student questions. We will use Teams as our virtual meeting platform. **Attendees can register at** <u>this link</u>.

- February 16, Wednesday, 6:30 p.m. Seminar by Dr. Daniela Arias-Rotondo, K College Assistant Professor of Chemistry, ZOOM (contact <u>Ben</u> <u>Maxey</u>) Presentation title: *Photoredox Catalysis: an inorganic chemist's view of organic synthesis*
- February 21, Monday, EC meeting 7 p.m. by ZOOM (contact <u>Ben Maxey</u> for information)
- March 21, Monday, EC Meeting 7 p.m. by ZOOM (contact <u>Ben Maxey</u> for information)



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Message from Nicole Burke, 2022 Chair-Elect

I am excited and honored to serve as the 2022 Chair-Elect and 2023 Chair of the Kalamazoo Section of the American Chemical Society. Although the year was supposed to be kicked off by attending the ACS Leadership Institute in Atlanta, the challenges caused by Covid-19/Omicron led to the in-person component of the Leadership Institute being rescheduled to early Summer 2022. However, a virtual kick-off event on January 21 provided an excellent introduction to ACS and the



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leadership roles within the organization. While the last minute change in travel plans was disappointing, I hope to embrace a similar attitude of flexibility and resilience as the local section works together to increase membership participation and plan events.

I look forward to helping the Kalamazoo ACS section achieve the local section's vision of enriching all people's lives in our community through chemistry. Through organizing innovative local events and activities, we have the opportunity to build a strong and inclusive community.

Industry Career Panel held

By Blakely Tresca

As advertised, in January of this year the Kalamazoo College student chapter of the ACS organized a 1½-hour long Industry Career panel with three local newly-hired industrial chemists. Our panelists were Mr. Amani Kibasa from Kalsec, and Drs. Anupreet Kharbanda and Andrew Huntsman from Zoetis. The event was moderated by Dr. Blakely Tresca, assistant professor of chemistry at Kalamazoo College. Attendees were excited to hear about the diverse educational and professional backgrounds of the panelists, all three of whom also responded very ably and clearly to participants' questions relating to the importance of skills, beyond lab expertise, which are needed to succeed in a collaborative work environment. The value of availing oneself of internship opportunities, and the need for evaluating one's personal ambitions and job aspiration decisions were also presented. The event was held virtually on Teams and we are looking forward to organizing an in-person event next year.

KACS offers sincere thanks to our organizers and panel participants.



Have You Liked Our Facebook Page?

Keep up with Kalamazoo ACS events and newsletters on the Section's Facebook page, <u>www.facebook.com/acskalamazoo</u>! Many thanks to Elke Schoffers for maintaining this page!

A Full Year, Despite COVID!

SUMMARY OF OUR 2021 KACS ACTIVITIES

By Ed Thomas, Past Chair 2022

The KACS goals for 2021 were to increase member participation, to continue providing interesting scientific activities for members and our community, and to continue serving as a platform for our chemists to reach out to teachers and students.

Addressing our first two goals:

Seminars:

February 8, Dr. P. Poddutoori, University of Minnesota-Duluth

March 15, Dr. Kayunta Johnson-Winters, University of Texas at Arlington

March 22, Dr. James Salvador, General Motors R&D Center in Warren, MI

Member Meetings:

February 22, H. N. Cheng, Ph.D., President of the American Chemical Society, "Sustainability and Green Chemistry"

June 10, viewed "Mission Possible: The Race for a Vaccine"



To address our third goal:

January 26 - for college students, our Fourth Annual Speed Networking Event

September 28 - the Fifth Annual Speed Networking Evening Event.

"Germs, Disease Prevention, Immune Response and Treatment" prepared and presented by Edward W. Thomas, Ph.D., KACS Chair, to Kalamazoo fourth and seventh graders - March; Wayne State University NOBCChE - April 26 and Detroit school children - May 10.

Western Michigan chemistry students gave demonstrations to 2nd-5th graders in the spring and fall, then at the Portage Celery Flats to support "Green-a-thon" during CCEW - April 25. Approved grant of \$500 for student lab coats.

May 10, students, teachers and long-term ACS members joined us via ZOOM for annual KACS Awards Gathering where we recognized outstanding high school chemistry students, one outstanding graduating senior each from WMU and K College, and 8 long-term ACS members!

Dr. Blakely Tresca, Kalamazoo College faculty, selected as nominee for the Committee on Community Activities Volunteer Of The Year.

Dr. Megan G. Kowalske, WMU, nominated for Stanley C. Israel Regional Award.



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KACS Executive Committee paid for high school teachers' membership in AACT (American Association of Chemistry Teachers).

At the 2021 Great Lakes Regional Meeting, John C. Getson, WMU undergraduate, was recognized for outstanding poster/flash presentation in medicinal chemistry!

Supported Project SEED - student D. Starkey-Williams participated. Doug Williams also nominated Dwight Williams for outstanding mentor.

October 16, the 35th Annual Chemistry Day in Kalamazoo, our section premiered an original Chemistry Day Video. View the video <u>here</u>.

Governance:

In March, posted the ACS Chemical Professional Code of Conduct.

Separately, approved and implemented KACS Volunteer / Meeting Conduct Policy, modeled after the ACS national meeting policy.

Our newsletter, compiled and edited by Lydia Hines, consisted of 11 monthly issues detailing KACS events, national ACS interests and our running calendar.

Our new website was implemented by Hershel Jude with the aid of an ACS grant.

With a grant from ACS, KACS developed our strategic plan, in November.

Vision: Enriching all people's lives in our community through chemistry

Mission: Connecting and educating local members, scientists, and students through innovative chemistry programs and outreach for the benefit of our community – Allegan, Kalamazoo and Van Buren counties.

Goals: 1) Work with educators to develop programs that benefit students; 2) Increase participation and involvement within our community; 3) Connect academia and industry through KACS to build a strong and inclusive community by organizing innovative local events.





Pros and Cons of <u>a Career in Industry</u> Intellectual Freedom Compensation Work-life Balance Research Results Career Advancement Impact Job Security – H. N. Cheng

'Industry Matters' a Helpful Publication

ACS' <u>Industry Matters</u>, a weekly e-mail publication distributed to each ACS <u>member</u>, contains "industry insights, career advice, and more to help you succeed in a dynamic and challenging working world," as well as information on professional development, funding and awards, and entrepreneurial resources. As a follow-up to our KACS' recently-held Industry Panel (see article on page 1) you may want to read the following **very informative** <u>article</u> by H. N. Cheng, ACS past-president, which appeared in the January 27 issue of that publication. **Distribution of the article to chemistry students** and other interested acquaintances is **encouraged** as well.

(For internship availability students are advised to visit **Handshake**, and possibly other similar sites, offered at the various area post-HS educational institutions.)

KACS Calendar

February

- February 16, Wednesday, 6:30 p.m. ZOOM lecture by Dr. Daniela Arias-Rotondo, K College Assistant Professor of Chemistry. Presentation title: *Photoredox Catalysis: an inorganic chemist's view of organic synthesis* (click here for more information and to register)
- February 21, Monday, EC meeting, 7 p.m. (ZOOM, contact Ben Maxey)

<u>March</u>

- March 7, Monday, *deadline for abstract submission* for <u>Central Regional Meeting</u>, June 7-10, Ypsilanti, MI (click <u>here</u> for meeting information)
- March 14, *deadline for abstract submission* for the <u>Fall ACS Meeting</u> (hybrid format) in Chicago, IL, August 21-25, 2022 with the theme "Sustainability in a Changing World" (click <u>here</u> for more information)
- March 20-24, <u>Spring ACS Meeting</u> (hybrid format) in San Diego, CA with the theme "Bonding through Chemistry" (click <u>here</u> for registration information)
- March 21, Monday, EC Meeting, 7 p.m. (ZOOM, contact <u>Ben Maxey</u>)



<u>April</u>

- April 7, Thursday, 7 p.m., Dr. Angela Wilson, 2022 ACS President by ZOOM (click <u>here</u> for more information and to register)
- April 17-23, Chemists Celebrate Earth Week (CCEW) with the theme "The Buzz about Bugs Insect Chemistry" (contact Lydia Hines for hands-on activity materials and information, or if you want to volunteer)
- April 18, Monday, EC Meeting, 7 p.m. (contact Ben Maxey)





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Don't Miss These March Events!

- March 14, Monday: <u>Registration</u> opens for Central Regional Meeting (June 7-10, Ypsilanti, MI)
- March 20-24: Spring ACS Meeting, hybrid format, San Diego. <u>Registration</u> is still open.
- March 21, Monday: EC Meeting, 7 p.m. (contact <u>Ben Maxey</u>)

Arias-Rotondo Gives Overview of Research

By Ed Thomas



Dr. Daniela M. Arias-Rotondo, assistant professor of chemistry at Kalamazoo College, presented an overview of her research in photoredox catalysis on February 16, 2022. Dr. Arias-Rotondo is from Argentina and received her B.S. in chemistry from the University of Buenos Aires. She then received a Ph.D. at Michigan State under Prof James K. McCusker, followed by a postdoc at Princeton with Dr. David W. C. MacMillan (2021 Nobel Laureate). She explained how ruthenium was originally

used for these reactions, but iridium proved to be a superior catalyst. Dr. Arias-Rotondo then explained how these catalysts could provide photosensitized energy transfer-mediated catalysis through electronically excited nickel (II) to form oxygen-aryl bonds from carboxylic acids and aryl halides (for the original paper see: D.M. Arias-Rotondo, et al., <u>Science</u> 2017, 355, 380-385). All on the ZOOM meeting appreciated hearing the enthusiasm with which Dani (as she likes to be called) shared her research work with us and gave her a hearty round of applause.

KalChemist News: An ACS Member Benefit

Did you know that *The KalChemist News* is a benefit of being a member of ACS/KACS?

Any ACS member whose address of record at ACS is in a zip code within Kalamazoo, Allegan and VanBuren Counties is assigned to the Kalamazoo Local Section of the ACS (or KACS); changes in mailing addresses, e-mail addresses or telephone numbers should be reported to <u>service@acs.org</u> (or called in to 1-800-333-9511).



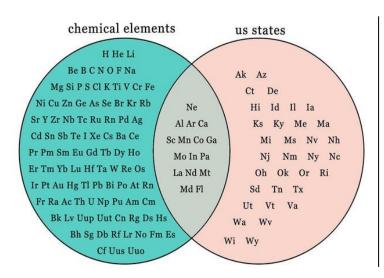
Personal Career Consulting with ACS Career Consultants

<u>ACS Virtual Office Hours</u> are held the first Thursday of every month at 12pm ET, and feature a presentation from an ACS Career Consultant for the first 45 minutes, followed by small networking breakout sessions led by Career Consultants for the remaining 45 minutes. Register for the 2022 themes today!

Connect 1:1 with ACS Career Consultants for Personalized Career Advice

Continue the discussion and sign up for a Personal Career Consulting appointment! This **ACS Member-only program** allows you to arrange a one-on-one appointment with a certified ACS Career Consultant.

Our diverse team of Consultants provide personalized career advice to ACS Members through resume reviews, mock interviews, LinkedIn profile reviews, and general career counseling sessions. Browse our <u>Career Consultant roster</u> and request your appointment today!



Job Posting: Visiting Assistant Professor of Chemistry

The Department of Chemistry and Biochemistry at Kalamazoo College invites applications for a oneyear appointment as a Visiting Assistant Professor to teach general and organic chemistry. The position will begin September 2022 and a Ph.D. in Chemistry, or the equivalent is required (or evidence of imminent completion). For more information click <u>here</u>. Questions may be addressed to Dwight Williams at <u>dwight.williams@kzoo.edu</u>.





Do You Want to Help a Chemistry Teacher? Let's Talk!

Action has started on one of our major objectives (Education outreach) identified at last Fall's Strategic Planning session. Below is a letter to our members regarding the progress made on this objective and requesting some assistance as we move forward.

Do You Want to Help a Chemistry Teacher? Let's Talk! Doug Williams and Carl Stachew

Are you interested in motivating young science students to enrich our world through chemistry? We think that one of the best ways is to support their teachers, so KACS set this as a primary goal in our <u>2021 strategic</u> <u>plan</u>. To develop this goal more effectively, we have been meeting with some of our local science education administrators for advice and support.

The Michigan Department of Education's K-12 science standards (MSS) were updated in 2015 and emphasize a transition to query and project-based learning that gives more relevance to scientific principles, uses a wider variety of sources (not just a textbook) and requires more writing and presentation of results. Even though it has been over five years since adoption of the new standards, our regional teachers are still challenged to find quality instruction materials that are aligned with them. A concise version of <u>MSS for Principals</u> suggests potential helping opportunities that seem particularly suitable for KACS member engagement. These include:

- Finding and/or supplementing high quality instructional materials that are suited to specific curricular goals.
- Avoiding/troubleshooting technical problems encountered in using new instructional materials.
- Identifying high quality professional learning materials or development opportunities that are suited to a teacher's personal needs and interests.
- Answering instructor or student questions about the relevance of classroom activities.
- Providing advice on careers in chemistry and possibly offering workplace tours, job shadowing, student internships, where applicable.

We believe that KACS members have a lot to offer to our area teachers. If you would like to learn more and/ or be part of our planning process, <u>please contact either of us by email or phone (see below)</u>.

Doug Williams, <u>treasurer@kalamazooacs.org</u>, (269) 760-2360 Carl Stachew, <u>carl.f.stachew@pfizer.com</u>, (269) 720-0984

KACS Calendar

- March 14, Monday: <u>Registration</u> opens for Central
 Regional Meeting (June 7-10, Ypsilanti, MI)
- March 20-24: Spring ACS Meeting, hybrid format,
 San Diego. <u>Registration</u> is still open.
- March 21, Monday: EC Meeting, 7 p.m. (contact <u>Ben Maxey</u>)
- April 7, Thursday: ACS President Angela Wilson, 7 p.m., via ZOOM (register <u>here</u>)
- April 18, Monday: EC Meeting, 7 p.m.
- April 17-23: CCEW "The Buzz About Bugs" Insect Chemistry
- May 16, Monday: EC Meeting, 7 p.m.



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FIND US ON FACEBOOK! @ACSKalamazoo Don't Miss These April Events!

- **April 7, Thursday: 7 p.m. Angela Wilson, ACS President** (via ZOOM; register <u>here</u>)
- April 18, Monday: 7 p.m. EC Meeting (contact <u>Ben Maxey</u>)
- April 17-23: CCEW "The Buzz About Bugs" Insect Chemistry
- April 21, Thursday: Lake Michigan College seminar (see below for information)

Toledo's Mark Mason to present Spring Science Seminar at LMC

Mark R. Mason, Professor in the Department of Chemistry and Biochemistry at the University of Toledo, will present the Spring Science Seminar, **"Green Chemistry Principles for the Design and Use of Safer Chemicals,"** from **3-4:15 p.m.** on **Thursday**, **April 21**, in Room C-316 of the Main Building of Lake Michigan College's Benton Harbor campus.



After serving as a postdoctoral associate with

Dr. Andrew Barron at Harvard University from 1991-1993, Mason began his faculty career in 1993 as Assistant Professor of Chemistry at the University of Louisville. In 1998, he moved his research group to Toledo where he currently serves as Professor of Chemistry. In 2011, he became the Founding Director of the UT School of Green Chemistry and Engineering (SGCE), serving in that role until 2020.

His current research focuses on the development of catalysts comprised of the Earth-abundant elements aluminum and iron for applications in organic synthesis and polymer production. Past research has included polymerization catalysis, ligand development, and fundamental chemistry of aluminum and gallium compounds.

Mason received his bachelor's degree in chemistry in 1985 from Bowling Green State University, and his Ph.D. in inorganic chemistry in 1991 from Iowa State University.

This seminar is free and open to the public.

For more information, email <u>jbeck@lakemichigancollege.edu</u> or call (269) 695-2986.

Invitation to our 2022 Awards Gathering



In May of each year for the past 49 years the KACS has held an Awards gathering at which each chemistry teacher from our section's high schools (Allegan, Kalamazoo and Van Buren Counties) and faculty at our two 4-year colleges have been invited to nominate an outstanding chemistry student, or graduating senior. These individuals as well as long-time ACS members and others are recognized.

This year, as last, instead of an in-person gathering we will meet virtually using the ZOOM platform. KACS members are invited to "attend" this gathering where we can hear from our student awardees of their aspirations and offer them encouragement on their journeys forward regarding the continuation of their plans for further studies and/or careers.

ZOOM Awards will be held Monday May 2, 7 p.m. (50/60 year members, HS students, WMU and K outstanding chemistry graduating seniors, etc.) Register in advance for this ZOOM meeting <u>here</u>.

Tips for Successful Virtual Meetings

By Angie Abraham From the Councilor News and Committee Alerts 3/2022

Virtual meetings are the new normal. And with people starting to ask whether remote work arrangements might continue well into the future, it's important to take steps to enhance the video experience of meetings. ACS Web and Research Representative Courtney Swecker offers these tips to make your next video-assisted call a success:

- Get the lighting right. Make sure you're positioned for ample and balanced lighting.
- Choose the right background. Avoid a cluttered environment to help keep the meeting distraction-free. Check ahead to see if the videoconferencing platform has alternate backgrounds to select from.



- **Do a sound check.** Test your microphone and speakers before joining a virtual meeting. When you're the presenter, a dry run is essential.
- Convey the right body language. Remember to sit up straight, just as you would in an in-person meeting.
- Get close, but not too close. Place your computer at the distance, where your shoulders or torso are visible.
- Play to the camera. Put the camera at eye level and look directly into your computer's camera.
- **Maintain interaction.** Keep the attention of your meeting attendees with interactive features like polling, multiple choice questions and breakout rooms.
- **Evaluate and enhance.** If approved in advance for recording, record your session and review later to identify areas of improvement.
- Say your acknowledgements at the finish. If hosting the meeting, take a moment to thank everyone for their time and attendance. Wrap up by acknowledging those who helped with the meeting or presented.

Councilor Report from Council Meeting (Virtual): Spring 2022 ACS Meeting, San Diego

By Lydia E.M. Hines KACS Councilor

- By electronic ballot, the Council selected Mary Carroll and Rigoberto Hernandez as candidates for 2023 President-Elect. These two candidates, along with any candidates selected via petitions, will stand for election in the Fall National Election.
- The Committee on Nominations and Elections announced the selection of the following candidates for Directors-at-Large for 2023-2025 terms:



Milagros (Milly) Delgado, Malika Jeffries-El, Will E. Lynch and Ellene Tratras Contis. The election of two Directors-at-Large from among these four candidates and any selected via petition will be conducted in the fall. <u>Ballots will be distributed to all Councilors</u> around October 1, 2022.

- The **Council** approved the continuation of the Committee on Chemists with Disabilities (CWD) and the *Petition to Amend the Duties of the Committee on Chemists with Disabilities.*
- The **Council** approved the *Petition to Amend the Use of Dues*.

The total resource pool available for distribution to Local Sections and Divisions will be funded via a quasiendowment established from the Society's unrestricted investment balances.

• The **Council** approved a *Division name change*.

Effective January 1, 2023, the Division of Carbohydrate Chemistry (CARB) will change its name to the <u>Division</u> of Carbohydrate Chemistry & Chemical Glycobiology (CARB).

- The Council approved a Petition to Charter an International Chemical Sciences Chapter in Switzerland.
- The **Council** approved the *extension of market testing of the international dues discount program* based on World Bank country income levels.
- The **Council** approved the 2023 Schedule of Membership.

The 2023 Schedule of Membership did not change any dues, benefits, eligibility, or privileges from the 2022 Schedule.

Highlights from Committee Reports

Nominations and Elections

The Committee on Nominations and Elections solicits Councilors' input regarding qualified individuals for President-Elect and/or Directors for future consideration. Suggestions may be sent to <u>nomelect@acs.org</u>.

Committee on Committees

All Councilors, including new Councilors, were reminded to complete their online committee preference form for 2023 committee assignments. The preference form will be open to all ACS members and no one will be required to request permission to gain access to the form. The new form will allow users to review each committee by its main topic and focus, along with the skills and expertise needed to serve.

The committee preference form will open mid-April at <u>CMTE.acs.org</u>. Users will also be able to submit a skills assessment which will be used when considering which committees may best suit their talent.

KRESA—KACS Partnership Meeting

By Doug Williams and Carl Stachew

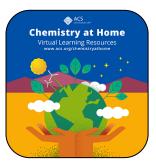
In our <u>March newsletter</u>, we asked if you would like to help our local section high school chemistry teachers and we heard from a few of you. It's not too late to get involved but it is time to mark your calendar for **3-4 p.m. on Thursday, May 19** for a kickoff meeting with the Kalamazoo Regional Educational Services Agency (KRESA) on ZOOM. This will give us an opportunity to listen to the challenges our local teachers face and learn how we can help more effectively. Instructions for registration will be sent in our May newsletter. Please let one of us know if you have any questions about this exciting new project for KACS.



inspiring educational excellence

Doug Williams, <u>treasurer@kalamazooacs.org</u>, (269) 760-2360 Carl Stachew, <u>carl.f.stachew@pfizer.com</u>, (269) 720-0984

Chemistry at Home: Connecting Chemistry with Everyday Life



If you're in search of fun and enriching science learning activities to do at home, over Spring Break or any time, check out **Chemistry At Home** from ACS. This free, online compilation of hands-on virtual learning resources for students in grades K-12+, or for anyone interested in learning a little more about the practical applications of chemistry in everyday life, is available at <u>www.acs.org/chemistryathome</u>. Organized by topic, these resources are designed to aid parents, teachers, and the science-curious in knowledge enrichment during these times when distance learning is still extremely valuable and occasionally advisable.

Materials from the <u>Reactions video series</u>, <u>C&EN</u>, magazines from the ACS Education Division, and the ACS portfolio of hands-on activities for students in grades K–12 and beyond are organized and bundled together into convenient groupings. The resources focus on five topics: <u>The Earth</u>, <u>Water</u>, <u>Food</u>, <u>Health & Your Body</u>, and <u>The Periodic Table</u>, putting a spotlight on the connection between chemistry and everyday life. Visit the <u>ACS Education website</u> to learn more and get started.

KACS Calendar

<u>April</u>

- April 7, Thursday: 7 p.m. Angela Wilson, ACS President (via ZOOM; register here)
- April 18, Monday: 7 p.m. EC Meeting (contact Ben Maxey)
- April 17-23: CCEW "The Buzz About Bugs" Insect Chemistry
- April 21, Thursday: Lake Michigan College seminar (see page 1 for information)

<u>May</u>

- May 1, Sunday: Portage Green-a-thon event WMU ChemClub representing KACS
- May 2, Monday: KACS Awards Gathering 7 p.m. (50/60 year members, HS students, WMU and K outstanding graduating seniors, etc.) Register in advance for this ZOOM meeting <u>here</u>.
- May 16, Monday: 7 p.m. EC Meeting (contact <u>Ben Maxey</u>)

<u>June</u>

- June 7-10: Central Regional Meeting, Ypsilanti, MI. Information <u>here</u>.
- June 20, Monday: 7 p.m., EC Meeting (contact <u>Ben Maxey</u>)



The KalChemist News

May 2022

www.kalamazooacs.org

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2022 KACS Executive Officers

Chair Mr. Benjamin S. Maxey chair@kalamazooacs.org

Past-Chair Dr. Edward W. Thomas edwardwthomas@gmail.com

Chair-Elect Dr. Nicole Burke nburke@kalsec.com

Secretary Mr. Jacob Kirkendall secretary@kalamazooacs.org

Treasurer Dr. P. Douglas Williams treasurer@kalamazooacs.org

Councilor Dr. Lydia E. M. Hines lemhwgh@gmail.com

Alternate Councilor Dr. Tomasz Respondek tomasz.respondek@zoetis.com



FIND US ON FACEBOOK! @ACSKalamazoo

Greenathon in Portage Chemists Celebrate Earth Week (CCEW)

By Abigail Boyer

The weather in Kalamazoo/Portage between 11 a.m. and 3 p.m. on May 1, Sunday, was chilly (~50 °F) but **it** did not rain as forecasted; we had a great turn-out at this outdoors activity; about 25-30 youngsters came by. Our two volunteer WMU ChemClub members (Aleya



Brandon and Abigail Boyer) handed out dinosaurs that "grew" when placed in water, and let the kids create Slime! Earth Day stickers and removable tattoos were happily received as were copies of "The Buzz about Bugs" magazine (Adults and children loved this publication). The supplies we used and handed out came directly from KACS! Thank you. Safety goggles were worn and were a big hit with several of the children. Very cute!

K College, WMU Chem Clubs Hold Gathering

By Barney Walsh (K)

On April 6, the K College and WMU Chem Clubs hosted an in-person game night. There were nine total students present, four from Kalamazoo College and five from WMU. As we haven't collaborated with the WMU club frequently, we used this opportunity to meet the members, play some games, and talk about chemistry. We shared pizza and tacos while we socialized, and it was great learning about

everyone's various interests across the disciplines. It was nice to get off the K campus and visit the WMU chemistry building, and we hope there will be another opportunity for collaboration again in the near future.





ACS President's Career Anything But Linear Angela Wilson Addresses KACS Via Zoom Meeting

By Ed Thomas

Dr. Angela Wilson is the 2022 President of the American Chemical Society, a John A. Hannah Distinguished Professor of Chemistry, Associate Dean for Strategic Initiatives, and Director of the Center for Quantum Computing Science, and Engineering at Michigan State University. She earned her bachelor's degree in chemistry at Eastern Washington University and her Ph.D. in chemical physics from the University of Minnesota. She was a postdoctoral fellow at Pacific Northwestern National Laboratory. From 2016-2018 she led the Division of Chemistry at the National Science Foundation. She has been a member of the ACS since 1989.

The above is Dr. Wilson's bio from the American Chemical Society's She discussed her website. It all sounds very linear and straightforward. However, those professional background of our members who attended Angela's Zoom presentation to the KACS on April 7 found her career has been anything but linear. She as a love of discussed her professional background as a love of chemistry and chemistry research. When research opportunities weren't available in Oklahoma, and research. she applied for, and received, an NSF grant (POWRE) for women in research. At the University of North Texas where she taught, she created the Center for Advanced Scientific Computing and Modeling; this, then, provided new jobs and opportunities at the University in a department she led. Her ACS connections as Councilor for the Dallas/Fort Worth section proved instrumental in helping advance her career, and helped to pave the way to the opportunity for her position as the NSF Division Director of Chemistry. In 2018, she joined the chemistry faculty at MSU. She enthusiastically supported the benefits of membership in the ACS, starting at the undergraduate level (https://www.acs.org/content/acs/en/membership.html) and promoted the National Fall ACS Meeting to be held in Chicago (hybrid format) in August 2022. Following a lively Q&A session with the attendees, we all shared our appreciation by a round of virtual applause.

49th KACS Awards Gathering-Second Zoom Version

By Lydia E. M. Hines

Still maintaining caution due to COVID we held our 2022 Awards Gathering/Celebration via ZOOM on Monday, May 2, at 7 p.m.

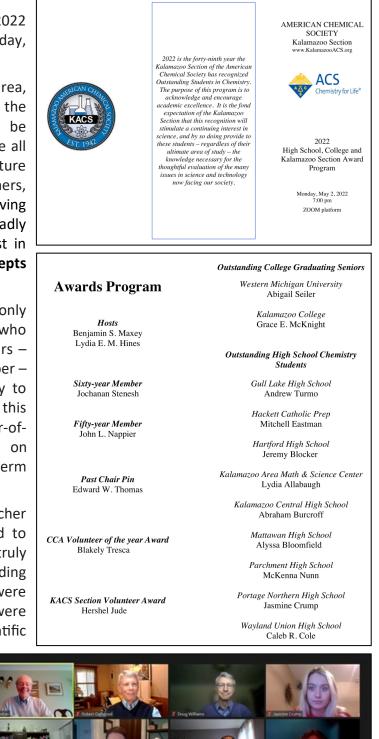
All 36 HS Chemistry Teachers in our 3-county KACS area, and our 2 4-year institutions were invited to submit the name of one Outstanding Chemistry student to be recognized with an award and a certificate, and give all attendees an opportunity to hear of their future educational plans. As I wrote to the teachers, "Outstanding" does not necessarily refer only to having "the best" grade in chemistry, but can be more broadly defined as a student who shows particular interest in **learning the subject, effectively applying the concepts learned,** as well as a **desire to mentor others**.

However, this annual gathering does not recognize only students! We also congratulate those among us who have been members of the ACS for 50 or more years – this year we had one 50-year and one 60-year member – as well as those who have given time and energy to serve our section (KACS) in various capacities: at this ceremony we awarded a past-chair pin, a Volunteer-ofthe-Year Award (from the ACS Committee on Community Activities) and a KACS Award for long-term service.

The eleven students nominated along with their teacher nominators and/or parents/guardians were invited to the event, as was our section membership – we truly enjoy recognizing and encouraging our budding scientists. Eighteen folks attended and we were delighted to hear from the four students who were there that they look ahead to continuing in a scientific

field – a sophomore who will continue to apply himself at his high school, one at Michigan Tech, one at WMU, and one at the Univ. of Illinois at Urbana-Champaign.

We congratulate each one of these students and wish them well as they move on in their career aspirations.



Elena Meadows

Michelle Mason

Michelle Masor

Passing of 48-Year Member Mike Barcelona

Our deepest sympathy to the family of Mike Barcelona, a 48-year ACS member who passed away on Wednesday, April 20, 2022. His obituary is <u>here</u>. To send a message of condolence to the family, the mailing address is 4016 Grand Prairie Rd., Kalamazoo, MI 49006.



A 'KACS History Offer'



You may recall that in May of 2019 our Section celebrated receipt of the National Historical Chemical Landmark (NHCL), for the amazing steroid chemistry research done at The Upjohn Company in 1950-90, with a dinner and a dedicatory ceremony at the Radisson and at the Kalamazoo Valley Museum.

We have been advised that there are 46 candle holders (with NHCL logo) with battery tea lights and 75 tea light candles (no candle holders) available and are to be discarded; if you are interested in having any of these as a memento, or for use in demos, please let me (Lydia) know by sending me an <u>e-mail</u> or giving me a call at 269-375-7349 **by the end of July**. Leftovers will be discarded after that!



ACS Endorses Climate Change Legislation and Carbon Pricing Write Your Representatives!

In April, ACS announced that it has endorsed a package of bills in Congress to fight climate change and encourage sustainable energy through mandated goals, incentives and an added price on fuels that produce carbon dioxide. More details and instructions for contacting Congressional representatives can be found on the <u>ACS member advocacy website</u>. Carbon pricing has gained significant and unexpected support in recent months. For example, see <u>https://www.api.org/climate#carbon-price</u> for an endorsement by the American Petroleum Institute.

Because our SW Michigan House Representative Fred Upton is the ranking member of the House Subcommittee on Energy, the KACS Executive Committee has informed Congressman Upton of our support for this important ACS position. We invite you to do the same.

Food for Thought Culinary Science Cooking Competition Sponsored by Kalsec

By Anna Cheely, Kalsec

On April 21, Kalsec sponsored a cooking competition held by the Kalamazoo Valley Community College's Culinary Arts Program at KVCC's Marilyn J. Schlack Culinary and Allied Health building on the college's downtown Bronson Healthy Living Campus. This competition, Food for Thought, consisted of Culinary students from Kalamazoo Valley Community College teaming up with food scientists and research chefs from Kalsec to create an appetizer using food science principles.

This competition included a hands-on tour at Kalsec with presentations and activities from



Photos courtesy of Kalamazoo Valley Community College

scientists in brewing, sensory, flavor chemistry, and Culinology. Lunch was also provided using Kalsec extracts to show how culinary collides with food science to create a safe, tasty, and nutritious meal. This learning aided in the students' concepts and presentations during the final event.

Attendees were also able to sample beers brewed by the Sustainable Brewing program at KVCC. Kalsec is a partner in this program as they helped establish the program as the first in sustainable brewing in the U.S. and is aptly named the Kalsec Center for Sustainable Brewing Education. Brewing science and innovation in a sustainable manner is important to both institutions and furthers the impact of the partnership.



During the event, 5 finalists presented their concepts to all attendees and explained the concepts relating to food science. A panel of judges from Kalsec rated the food concepts along with food science explanations. All five finalists received Kitchen Aid mixers, while the top 3 received scholarship money.

A special thanks to Linda Depta, Paige Eagan, Cory Barrett, and Stephanie Hughes from KVCC and Scott Nykaza, Ken Burns, and Nora Yang from Kalsec.

For more information please visit the latest <u>press release</u> from KVCC.

Job Opening in the WMU Department of Chemistry

Western Michigan University Department of Chemistry seeks candidates for Tenure-Track Faculty Specialist I/II

The successful candidate must complete a MS in Chemistry or a closely-related field by August 2022 with preference given to candidates who specialize in chemical education and/or have completed a PhD in Chemistry or a closely-related field. Application review began on April 25, 2022, and applications will be accepted until the position is filled. See <u>www.kalamazooacs.org/jobs-internships/</u> for full job description.

Skills Beyond the Bench: Journeys in Leadership

The <u>Central Regional Meeting</u> (CERM) is scheduled for June 7-10 on the campus of Central Michigan University in Ypsilanti, MI.

They will be hosting a session titled "Skills Beyond the Bench: Journeys in Leadership" to which our members have been especially invited.



Regardless of your career path in the chemical sciences, opportunities for leadership will likely come your way. You might be asked to chair a committee, manage a new project, or seek regional or national office. Why should you say yes or no, can you say yes and still find a work-life balance, and what are the benefits of saying yes? Our panel of speakers from area industry and academia will discuss where their journey in leadership has taken them.

Networking Coffee Break • Individual Stories in Leadership • Panel Discussion Friday June 10th • 1:00-3:30 • EMU Student Event Center

In celebration of the 95th anniversary of the Women Chemists Committee and the 50th anniversary of NOBCChE, the Midland, Detroit, and Huron Valley ACS local sections and the Midwest Region of NOBCChE bring you the 5th annual Skills Beyond the Bench. This year our event will be held at CERM on the campus of Eastern Michigan University. Registration for attendance at 2022 SBTB is free but does require a completed registration at <u>CERM</u>. Final details on speakers and room to follow.









High School Teacher Travel Grants to BCCE 2022

By Doug Williams and Jacob Kirkendall

The <u>27th ACS Biennial Conference on Chemical Education (BCCE)</u> will take place from July 31 – August 4 at Purdue University. The BCCE is designed for those who teach chemistry at all levels – from grade school to grad school – and provides chemistry educators with opportunities to meet with colleagues in formal and informal settings and to learn about new materials, methods, and content for successful teaching of chemistry.

KACS is offering grants of up \$500 to help cover registration, travel and lodging expenses for <u>high school</u> teachers in our local section who are planning to attend the BCCE. See <u>https://kalamazooacs.org/grants/</u> for instructions and an application form. Grant applications are due by June 17.

Help a Chemistry Teacher (SW MiSTEM Chemistry Network Meeting)

By Doug Williams and Carl Stachew

As described in recent newsletters, we invite KACS members to partner with high school chemistry teachers to enhance classroom instruction and help students understand the relevance of and career opportunities in the study of chemistry. If you are interested, please go to <u>https://www.smore.com/mr4b5</u> and register for our virtual Southwest MiSTEM meeting on May 19 from 3 to 4 p.m. This partnership is organized with KACS by the Kalamazoo Regional Educational Services Agency (KRESA). Please let one of us know if you have any questions about this exciting new project for KACS.

Doug Williams, <u>treasurer@kalamazooacs.org</u>, (269) 760-2360 Carl Stachew, <u>carl.f.stachew@pfizer.com</u>, (269) 720-0984

KACS Calendar

May

 May 16, Monday, 7 p.m.: EC Meeting, contact <u>Ben Maxey</u>

<u>June</u>

- June 7-10: Central Regional Meeting, Ypsilanti, MI information and registration <u>here</u>
- June 20, Monday, 7 p.m.: EC Meeting, contact <u>Ben Maxey</u>

<u>July</u>

No Meetings

<u>August</u>

- (date, time and location TBD): Social gathering for members ? (outdoors)
- August 15, Monday, 7 p.m.: EC meeting, contact
 Ben Maxey
- August 21-24: Fall ACS Meeting (hybrid) Chicago, IL





June 2022

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2022 KACS Executive Officers

Chair Mr. Benjamin S. Maxey chair@kalamazooacs.org

Past-Chair Dr. Edward W. Thomas edwardwthomas@gmail.com

Chair-Elect Dr. Nicole Burke nburke@kalsec.com

Secretary Mr. Jacob Kirkendall secretary@kalamazooacs.org

Treasurer Dr. P. Douglas Williams treasurer@kalamazooacs.org

Councilor Dr. Lydia E. M. Hines lemhwgh@gmail.com

Alternate Councilor Dr. Tomasz Respondek tomasz.respondek@zoetis.com



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Congratulating members is always a pleasure! Hershel Jude Wins Service Award

By Ed Thomas, Ph.D.

The KACS Section Meritorious Service Award recognizes individuals in our section who have selflessly continuously and contributed their time and energy. Our 2022 awardee is Dr. Hershel Jude. Since the inception of this onetime award in 1989, only 42 section members have won this prestigious award.

museum chemistry experiments and chair Edward Thomas. presented a poster at Bell's KACS Poster Session. With



Hershel volunteered at the Hershel Jude (right) receives the 2022 demonstrating KACS Volunteer Award from past-

Photo by Doug Williams

his interest piqued in KACS, he then joined the governance of the section, being elected Chair-Elect in 2018. He planned and hosted our last in-person event for the section at Latitude 42 during early March 2020 [pre-COVID]. This was followed by his leadership as chair during 2020 to conduct monthly executive committee meetings. He also directed us in continuing our awards and seminars by ZOOM. As Past-Chair, he led the program to update our website to a more modern, user friendly and functional platform. He also accepted from Lydia Hines the responsibility to lead the National Chemistry Week activities. He recruited chemists and provided chemical resources when needed for Chemistry day, which permitted Annette Hoppenworth to produce a movie that captured a virtual science world of chemistry demonstrations. This was made available to all in our section-which includes Allegan, Kalamazoo and Van Buren Counties. All of this volunteer work occurred while Hershel conducted research at Kalsec in the hops department as a lead research scientist.

Hershel received his award on May 5 from Ed Thomas, 2021 KACS chair, at the Kalsec research site.

Hewitt Named New President of Bridge Organics Co.

By Ed Hessler, Ph.D.

I retired as president from Bridge Organics Co. in Vicksburg, MI on February 11, 2022 and am very pleased that Brad Hewitt was named President of the company as of that date.



Contract Research & Development

Brad had worked at Upjohn (Pfizer) for 20 years with a BS degree in Chemistry. Because he demonstrated very high chemistry knowledge and productivity, he was promoted to a senior scientist at Upjohn in 1993. Brad came to Bridge Organics in early 2006 and has worked for Bridge ever since. In addition to his responsibilities as a senior scientist, he was responsible for the planning and execution of a major expansion of the building in 2008-9. From that expansion in our pilot lab, Bridge now has two glass-lined reactors (400L and 800L) capable of -30 degrees C; two hastelloy reactors (400L and 100L) capable of -70 degrees C; and two 120L glass-lined reactors capable of -70 degrees C. These reactors and associated cooling/heating circulators were all found by Brad through his diligent searches of online equipment auctions.

Brad has also greatly expanded his knowledge of the environmental and safety aspects of working with laboratory areas and the large pilot area, and has developed standard process safety reviews for the large equipment.

Brad, who initially interviewed with The Upjohn Company in an effort to return to Michigan, shared the following biographical information:

I received a BS Chemistry degree from University of Michigan in 1984, with Prof. Masato Koreeda, Ph.D. as my senior research advisor. After two years of graduate school at University of California-Berkeley (advisor Prof. Clayton Heathcock, Ph.D.), I decided to interview with The Upjohn Company in order to return to Michigan and pursue a career in industry.

I joined Chemical Process R&D at The Upjohn Company in 1986 as a chemistry associate. In the years that followed, I had the opportunity to work with Drs. Bruce Pearlman, Joel Huber, and Kevin Henegar, and in 1993 I was promoted into the company's Ph.D. career path and assigned a lab to lead. In 1997, my lab became part of Early Process R&D, where we supported Drug Discovery R&D. When Pfizer discontinued the Pharmaceutical Sciences division in Kalamazoo in 2006 I was pleased to be given an immediate opportunity to join Bridge Organics as a senior scientist and remain in Kalamazoo. In addition to working on developing and scaling chemistry for our customers' needs, I have served as the Chemical Hygiene Officer since 2007, the Facility Engineer (2009-2015), and VP of Engineering (2015-2021).

Three ingredients for success:

- The strength of a horse
- The skin of an elephant
- The work ethic of a bee
 - Sir James Fraser Stoddart (Northwestern U), 2016 Nobel Laureate in Chemistry



Words to the Wise ...

"Science doesn't care if you are cool, rich, or have lots of followers. Science is hard and demanding but amazing and powerful. If this sounds interesting? Maybe you are a future scientist."

 Adele Luta, Exploration Extravehicular Activities (EVA) Integration Project Manager at Oceaneering, with MS and BS degrees in physics

ACS Leadership Institute: A Note from the Chair-Elect

By Nicole Burke, Ph.D.

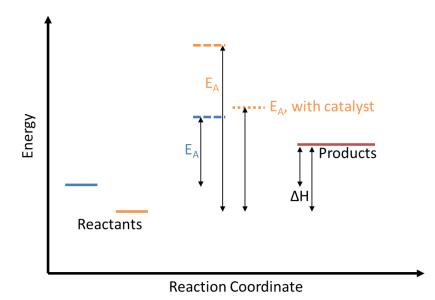
I attended the ACS Leadership Institute in Atlanta May 20-22. It was an engaging and exciting opportunity to meet with fellow local section leaders (in person even!) and learn more about ACS and how to better serve our local Kalamazoo section. The weekend was split into networking events, the local section leaders track session, and an elective leadership course. The local section leaders track session addressed topics such as communication, social media, the new ACS membership model, and the NeXus grant program. The primary focus of the track session was collaborative brainstorming sessions for planning successful activities. The main take-away was the excitement and eagerness to return to in-person and hybrid events to foster connections with ACS local sections' most important assets – our members and communities.

For my leadership course, I selected the Diversity Workshop, a new offering for the 2022 Institute. It was a four-hour session on Diversity, Equity, Inclusion, and Respect (DEIR) that somehow felt not nearly long enough. The session was so successful in large part due to the clearly established ground rules, which I share here as a resource that we can all utilize in our lives.

As for the content of the session, ACS has developed a model for DEIR that uses a language we can all relate to – chemistry, particularly that of a reaction



coordinate. In this model, professional success and progress can be envisioned as an endothermic reaction. Within this context, each individual has a unique sense of self that exists at the intersection of many identities. Within society and/or our professional life, these identities may introduce barriers to success and progress. Intersecting identities (e.g. age, race, gender, religion, etc.) may be additive or synergistic to lower an individual's ground state energy. Traditional D&I initiatives focus on equalizing the ground state energies via demographics analysis and targets, i.e. % of managers that identify as female. This model focuses on achieving equality through equalizing enthalpy, ΔH . However, true equity requires acknowledgement of



varying barriers to success, i.e. different activation energies. This more comprehensive model focuses on achieving equity through equalizing enthalpy, ΔH , and activation energy, E_A . In this model, we can look at finding professional 'catalysts' to reduce the activation energy. In doing so, it is critical to remember that a catalyst fundamentally works by changing the pathway or mechanism to the end-point, here defined as success.

I look forward to implementing the lessons learned at the 2022 Leadership Institute both in my daily professional life both in service of my workplace and KACS.

MiSTEM Chemistry Network Meeting

By Doug Williams, Carl Stachew, Blakely Tresca

On May 19, nine KACS members and Pfizer employees met with six high school chemistry teachers from southwest Michigan to discuss new STEM teaching standards and ways that we can help teachers in their classrooms. The meeting was organized by KRESA Science Consultant, Mary Burke. Mary

works closely with KRESA's MiSTEM Regional Director, Diane Owen-Rogers, to manage the <u>Southwest Region</u> of the <u>MiSTEM Network</u>, which is administered under the Michigan Department of Labor and Economic Opportunity.

Among the issues raised, teachers indicated that they are seeking assistance with:

- Project and Phenomenon Based Learning
- Connecting Science & Engineering Practices (SEP) to Careers
- Relating HS Chemistry Labs to Workplace Lab Practices
- Engaging students in the wake of pandemic fatigue and remote learning

We are planning to continue these discussions and follow up with more specific partnership ideas in the coming months. Watch The KalChemist News for future updates and invitations to join in this important piece of our strategic plan. If you have comments or questions, please feel free to contact Doug Williams (treasurer@kalamazooacs.org).

Longtime Member Passes Away



Robert (Bob) Kelly, 1974 chairman of the KACS and a 62-year member of the ACS, passed away on May 22, 2022, in Florida. A Memorial Service will be held in Kalamazoo at First Baptist Church on Sunday, June 26 at 1:30 p.m.

ACS CEO Announces Retirement

On May 31, the American Chemical Society (ACS) announced that Thomas Connelly, Jr., Ph.D., will retire from his position as ACS chief executive officer at the end of the year after more than seven years of serving in this role.



Volunteers Needed for Summer Picnic/Annual Meeting

Are you feeling as isolated over the COVID-19 Pandemic as I am? Do you miss getting together with your fellow chemists to discuss science without a screen between you? Do you enjoy planning picnics or social gatherings? Would be willing to help plan one? If your answer to any of the preceding questions is "yes," I (Hershel Jude) would love to talk with you about an idea that came out of the KACS strategic planning session last fall; KACS is planning a meeting <u>tentatively</u> <u>scheduled for September 2022</u>—which hopefully will become an annual event—that will include a combination of food, drinks, and science. However, we cannot organize this



wonderful event without your help! If you are willing to participate please email <u>Hershel Jude</u>.



Southwest Region

Chemistry Day at the Museum Returns—Please Volunteer!

Chemistry Day at the Kalamazoo Valley Museum is being planned for **Saturday, October 15, 2022, noon to 4 p.m**. This event will be held **in person** for the first time since October 2019! Get ready to educate, entertain, and entice the next generation to the wonders of chemistry and watch the smiles on the faces of children and adults alike! **The topic** of this year's National Chemistry Week is **Fabulous Fibers: The Chemistry of Fabric**. Do you have a great experiment you can share with an audience of 5th to 9th graders? Are you



interested in demonstrating one of several experiments that are performed every year at this event (we have a list!)? Do you have no idea what this event is about but are willing to contribute a few hours of your time on a Saturday in October to brighten the day of young aspiring scientists in our community? **We need your help to make this event a success**. If you are willing to participate please email <u>Hershel Jude</u>.

Fall Speed-Networking Event Being Planned!

Blake Tresca, who has led the organization of recent Speed-Networking events for the KACS is in the process of recruiting volunteer mentors for the Fall event on Tuesday, September 27, from 6-7:30 p.m. on ZOOM.

If you have not participated in prior events and would like to know more about this very helpful outreach to mentor students aspiring to a professional career in chemistry, please contact Blake Tresca at <u>Blakely.Tresca@kzoo.edu</u>. If you have served as a mentor in the past I am sure that Blake would be delighted to have you contact him with your offer to join this important outreach once again.

KACS Calendar

<u>June</u>

- June 7-11: <u>Central Regional Meeting</u>, Ypsilanti, MI
- June 20, Monday: 7 p.m., EC Meeting, contact <u>Ben Maxey</u>

<u>July</u>

- No KACS meetings
- July 31—August 4: The ACS Division of Chemical Education's Biennial Conference on Chemical Education (BCCE 2022) will be held at Purdue University, West Lafayette, IN. Visit the conference website for complete conference details, or email <u>bcce2022@gmail.com</u> with questions.

<u>August</u>

- August 15, Monday: 7 p.m., EC Meeting, contact <u>Ben Maxey</u>
- August 21-25: <u>ACS Meeting</u> (hybrid), Chicago, IL

<u>September</u>

- September 19, Monday: 7 p.m., EC Meeting, contact <u>Ben Maxey</u>
- September outdoor member-&-family social gathering/picnic; date, time, location TBD, depending on expressed interest (see call for volunteers by Hershel Jude on page 3)
- September 27, Tuesday: 6-7:30 pm, Fall Speednetworking event; on ZOOM; register at this <u>link</u>.





The KalChemist News

August 2022

www.kalamazooacs.org

Vol. 12, Issue 7

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K Chem Major Earns Scholarship Page 5

> 2022 KACS Executive Officers

Chair Mr. Benjamin S. Maxey <u>chair@kalamazooacs.org</u>

Past-Chair Dr. Edward W. Thomas edwardwthomas@gmail.com

Chair-Elect Dr. Nicole Burke nburke@kalsec.com

Secretary Mr. Jacob Kirkendall secretary@kalamazooacs.org

Treasurer Dr. P. Douglas Williams treasurer@kalamazooacs.org

Councilor Dr. Lydia E. M. Hines lemhwgh@gmail.com

Alternate Councilor Dr. Tomasz Respondek tomasz.respondek@zoetis.com



FIND US ON FACEBOOK! @ACSKalamazoo

Don't Miss These August Events!

- August 15, Monday: 7 p.m., EC Meeting, contact <u>Ben Maxey</u>
- August 21-25: Fall <u>ACS Meeting</u> in Chicago, IL, hybrid
- August 23, Tuesday: 8 p.m.—midnight, ChemLuminary Award celebration at Fall ACS meeting in Chicago (see article on page 2)
- August 26, Friday: 11:30 a.m.—2 p.m., SEED student poster presentation, Calder Fieldhouse, K-College (see article on page 4)

Congratulations Blakely Tresca, CCA Volunteer of the Year

By Hershel Jude

Every year the ACS Committee on Community Activities (CCA) invites each local section to identify one member as its "Volunteer of the Year" (VOTY). The individual selected should have been involved actively in planning outreach experiences that aim to improve the public's perception of chemistry.



Our KACS VOTY nominee for 2021 was **Blakely Tresca**, a Kalamazoo College faculty

member. During the year Blake championed the Kalamazoo College chemistry club, motivating his students to be active in ACS. He presented demonstrations at the virtual 2021 chemistry day at the museum and provided supplies needed for some of the other activities as well. Blake co-organized a virtual speed-networking event to introduce Kalamazoo College and Western Michigan University students to the ACS career offerings, and to the large variety of careers available to chemistry students after they complete their undergraduate degrees, while simultaneously hearing of personal attributes which contribute to success. He also spearheaded the formation of an industrial panel (ZOOM format) from among our membership, at which college students could ask questions about the various industrial jobs represented and hear personal experiences from our panelists. In addition, Blakely participated in our KACS virtual strategic planning weekend in the Fall of 2021.

When you see Blake, **please congratulate him on this well-deserved recognition**.

KACS Nominated for ChemLuminary Award

We received word in early July that KACS was selected as a **finalist** for a ChemLuminary Award in the Medium Small section category (we have ~250 members) for our 2021 activities as reported in our Annual Report. The celebration will be held during the Chicago ACS meeting at the Hyatt Regency Hotel, Grand Ballroom A-F. The Poster session and reception will start at 8 p.m. on Tuesday evening, August 23, and will be followed by the presentation of the awards from 9 to 10 p.m. (doors to the Award celebration itself will open at 8:45 p.m.); there will be music and dancing open to those who want to stay after 10 p.m. If you are planning to be at the Chicago ACS meeting in person



you may want to plan to attend this gala to see if our KACS is named a winner. Contact <u>Ed Thomas</u>, the Section's Past-Chair, so he can be on the lookout for you at the party!

Join Us for Speed Networking

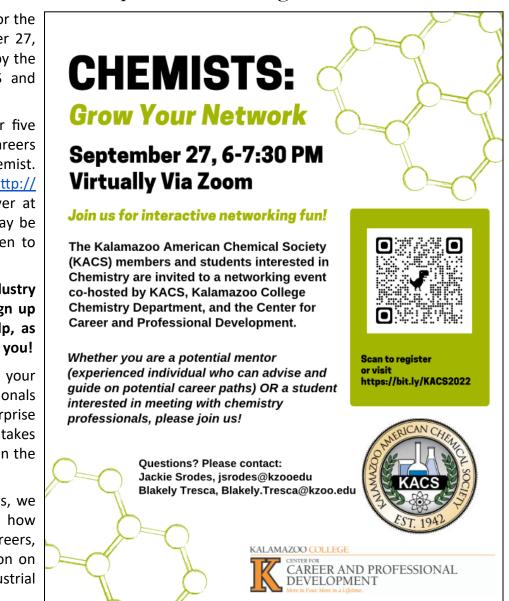
Speed Networking is returning for the 6th year on Tuesday, September 27, 2022, an activity co-sponsored by the Kalamazoo section of the ACS and Kalamazoo College.

Join us at 6 p.m. on ZOOM for five rounds of short discussions on careers and navigating life as a chemist. Registration is open now at <u>http:// bit.ly/KACS2022</u> (registration flyer at right). Sign-up early as space may be limited, and priority will be given to early registrants.

Professional chemists from industry and academia are invited to sign up as mentors. We need your help, as this event can't happen without you!

Undergraduate students, this is your chance to meet with professionals from across the chemical enterprise and ask questions about what it takes to get, and experience success, in the positions you want.

In addition to break-out sessions, we will hear from past attendees how mentorship has shaped their careers, and a short keynote presentation on successful strategies in industrial chemistry.



Chemistry Day at the Museum—Any Interest?

Chemistry Day at the Kalamazoo Section's Valley Museum, our primary outreach event for National Chemistry Week (NCW), is planned for Saturday, being October 15, 2022, noon to 4 p.m. This year it will be held in person for the first time since October 2019, and often attracts more than 500 people from our community each year!

But we need your help! This event needs 10-20 volunteers to present demonstrations and talk with young people about the wonders of chemistry. Don't worry if you don't know what demonstration to do—we have a list of from which you may choose!



If you are willing to participate in this event, please email Hershel Jude.



Summer Picnic/Annual Meeting—Any Interest?

As mentioned in the June issue of The KalChemist News, we are planning a picnic and annual meeting on Saturday, September 10 or 17. Please **email** <u>Hershel Jude</u> if you would like to attend (include if you are available on one of these dates or both, and how many people from your family or group will be joining us).

It's a chance to catch up with old friends that you may not have seen since before the pandemic started, to meet folks who are new to the KACS, and to enjoy some family fun (yes, your families are invited to come with you)!

Also, we need your help! Please email <u>Hershel Jude</u> if you are willing to help organize, run the grill, grocery shop (KACS will pay), set up before the event, clean up after the event, etc. Many hands make light work!

KACS Project SEED Update

By Doug Williams KACS Project SEED Coordinator

Project SEED returned to in-person research this year after the last two years were limited to virtual programming and projects. This summer, the Kalamazoo Section sponsored three Project SEED fellows who are introduced below.

Our fellows will be presenting posters of their work at the Kalamazoo College Summer Research Symposium from **11:30 a.m.—2 p.m. on Friday, August 26 in the Calder Fieldhouse** next to the K-College football stadium. Enter the fieldhouse from the parking lot on W. Michigan Avenue. If you are available, please drop in to visit them and hear about each project.

If you would like to contribute to our Project SEED fellowship fund, please visit our website for more information (<u>https://kalamazooacs.org/project-seed/</u>).

Alejandro Alvarez



Alejandro Alvarez is working in Kalsec's Discovery and Open Innovation R&D team as part of the ACS Project SEED summer internship program. Originally from the Dominican Republic, Alejandro just finished his Junior year at Kalamazoo Central High School (KCHS). He is interested in pursuing a career in the engineering field, either Chemical Engineering, Food Engineering, Nuclear Power, or Aeronautics. Of his many hobbies, Alejandro particularly enjoys drawing, gardening (with a special interest in growing mint), and being on the KCHS Model United Nations club. At Kalsec, he has been working on modernizing a GC-MS library of essential oil analyses and creating a searchable database.

Eddie Anderson

My name is Eddie Anderson, and I am pleased to be a part of ACS Project SEED. I am currently 15 years old and going into my junior year at Kalamazoo Central High School. At Kalamazoo Central is where I met my chemistry teacher Mr. Carver who referred me to the ACS Project SEED Summer Internship. Personally, I have always been interested in science and engineering, it was not until my sophomore year that I realized I really enjoy chemistry. Outside of science, my hobbies are making music, track and field, and graphic design. Through Project SEED, I am able to experience hundreds of scientific techniques and meet many professional scientists. My project is stationed at Kalsec food manufacturing under the mentorship of Joe Chemler. The goal of my project is to categorize the rheological properties



of spice and herb oleoresins to improve the First Pass Quality of finished goods. My efforts will have a significant impact on the speed at which Kalsec's finished goods are bulked for customers by eliminating some of the common causes of QC failures. I have really appreciated the help from my mentor as well as the R&D team here at Kalsec. They have an open willingness to teach and help me understand an extraordinarily complex scientific world. The most important thing I learned at Kalsec is, always ask other scientists about their work because it can provide valuable information about what you can do in the future. I will always recommend that future Project Seed students never be afraid to ask questions. Remember that when you go into these internships you are here to learn. Don't be scared to look stupid when asking questions because all questions grow your scientific knowledge. Try to experience science through other lenses than your own, to understand why it is that scientists do what they do. ACS Project SEED is a fantastic way to see what you like and don't like in the scientific world, and even what you could change.

Sadaya Hamby

Hello! My name is Sadaya Hamby, and I will be a junior this year attending Kalamazoo Central High School. My Chemistry teacher's name is Mr. Jovaughn Carver, who introduced me to and encouraged me to apply for project SEED. I graduate in the year 2024, maybe even 2023. In my free time, I like to draw, read, write and socialize. This summer, I am working with Dr. Dwight Williams at Kalamazoo College. The goal of my project is to create an anti-microbial, using a combination of synthesis and hybrids. I have appreciated the hands-on learning experience and the atmosphere. Not only am I learning a substantial amount, I am able to do or show the things I am learning almost immediately. Some advice I would give to future participants is to relax. I know sometimes you might get a little overwhelmed at first at maybe even the thought of working with people who have more knowledge and experience than you, but that's part of what you're here for. You are here to learn and especially in a way that you can't get sitting in a classroom. So learn and relax, you will have fun, and you will be amazed at what you can do. My current plans after high school are to go to K-College for my undergraduate degree, and then go to medical school or achieve my doctorate in another STEM field. Project SEED has greatly influenced my decisions. Getting to know some of the professors and students at K-College has been really helpful. This program also helped me see that not only do I maybe want to be a surgeon, but I might want to stay in the lab, or be a chemical engineer as well. I am hugely grateful for this opportunity and the exposure it has granted me.

K-College Student Wins ACS Women Chemists Committee (WCC) Priscilla Carney Jones Scholarship

By Blakely Tresca

The Priscilla Carney Jones Scholarship for 2022 was awarded to **Crystal Mendoza**, a Chemistry major at Kalamazoo College. The scholarship is given each year by the WCC to a female undergraduate student in chemistry and includes a minimum of \$1,500 towards their education.

Crystal is currently abroad in Germany for a summer research experience at the Karlsruhe Institute for Technology working with Prof. Claudia Bizzarri. She will be presenting her research on inorganic catalysts for CO₂ reduction at the K College Senior Symposium next year and plans to present her prior research for the 2022 SACNAS (Society for the Advancement of Chicanos/Hispanics and Native Americans in Science) meeting in October 2022.

You can read more about Crystal's story in this article, <u>https://www.kzoo.edu/news/mentors-help-chemistry-major/</u>

This is the second year in a row that a Kalamazoo College student has won this award; Ola Bartolik was the recipient in 2021.



'I'm Not Sure Where I Would Be If I Was Not Immersed in ACS and Its Activities'

By Roger Nahas

KALSEC (Executive Vice President of Global Research & Development and Chief Innovation Officer)

"My journey with ACS goes back to being a graduate student at the University of Missouri, eager to explore the world, connect with my fellow chemists and develop my scientific and professional skills. ACS provided a lot of tools that shaped up my experience to a much better version of myself. Of particular importance was the ACS National Meeting in Spring 2007 in Chicago, IL. Specifically, the job fair which highlighted an opening from a spice extraction company from a place called Kalamazoo, in the state of Michigan that I had never visited but only heard of its major city, Detroit. A resume submission led to a phone interview followed by a trip to Michigan in early May. Nothing but beautiful weather (they don't tell you about November – April), nice food, good beer and more importantly: impressive science and some of the best and most passionate chemists I have ever met. The rest is history and 15 years later I still



love my job, and my wife who is a Michigander by birth, and three kids born and raised in Kalamazoo. Thank you ACS! I'm not sure where I would be if I was not immersed in ACS and its activities, but I might not have been where I am today."

Less is More When it Comes to a Job Interview

Carlonda Reilly says be concise and precise with your answers to interviewers' questions

From Industry Matters Newsletter March 10, 2022

Dr. Carlonda Reilly has been the vice president and chief technology officer at Kennametal for the last threeand-one-half years. As a member of the executive leadership team, she is responsible for leading a global organization of close to 800 in research, development, and advanced engineering, delivering innovative advanced materials, tooling, and wear-resistant solutions to various industries.



As a science professional, you undoubtedly will interview for more than one position throughout your career. Two words to keep in mind as you prepare for your interview: **Concise and precise.**

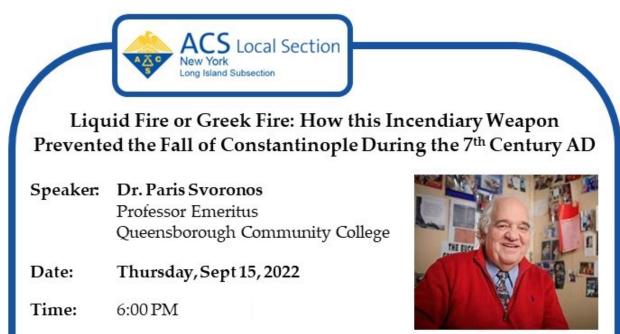
Be concise: I have had many hour-long interviews where I was only able to ask one or two questions. The candidate rambled for long lengths of time and sometimes never got around to answering. Listen intently to the question and be sure to address it! Organize your thoughts and experiences and include a few details to support your answer. Give time for follow-up discussion and for addressing your questions to the interviewer.

Be precise: A good way for an interviewer to determine whether you might be a good fit for a position is to hear you talk about what you have done in previous roles. When asked a question about how you handled a situation, do not give hypothetical answers, like what you "would do."

Address questions by giving specific examples of what you actually "have done," the results of your actions and how you learned from the experiences. If you talk about a team success, describe the impact that your individual contribution made and relate that to the question at hand. Provide examples that illustrate attributes, like your strengths, teamwork, leadership and how you've worked through specific challenges.

A Unique History Program

Below is a unique history program which came to the attention of KACS Councilor Lydia Hines. It is accessible on ZOOM (link <u>here</u>) and she invites you to join the audience on September 15.



Abstract

The emerging Arab califate during the 7th century AD aimed at extending its conquest of Europe via two routes. The first one was defeating the Byzantine Empire by overcoming Constantinople around 672 AD. The second one involved taking over Northern Africa, crossing Gibraltar, overcoming Spain and moving towards the Italian peninsula. Their first route failed due to the devastating effect the liquid (Greek) fire had on the superior fleet of the Arabs. The exact composition of this incendiary weapon is still not exactly known although many suggestions have been postulated. These many proposals and the reactions involved will be discussed.

Biography

Dr. Paris Svoronos, a native of Greece, earned his doctorate at Georgetown University (1979) and worked at Queensborough Community College-CUNY for 40 years (1981-2021). He has been a firm believer of the community college concept in the US where, as he says, "nobody cares where you come from; instead everybody wants to see what you achieve". He is the first ever chemist to be chosen as the Outstanding Community College Professor of the Year Award by the CASE/Carnegie Endowment Foundation (2003), and the first ever community college faculty to be selected as the 2020 James Flack Norris Award by the ACS-Northeastern section since its 1951 inception. Dr. Svoronos received the ACS Stanley C. Israel Regional Award for Advancing Diversity in the Chemical Sciences (2018). His services to the ACS-NY section have been recognized by his election as its chair (2015) as well as the bestowing of its Volunteer Service Award (2016) and the Professor of the Year among Two-year Colleges honor (2019). He is a National ACS fellow, the chair of History of Chemistry (ACS-Long Island section) and co-chair of the Microwave topical group (ACS-NY section).

Presented by ACS Long Island Subsection & the Chemistry Department of Nassau Community College

A <u>Chemist</u> Founded the Smithsonian Institution, the Largest Museum Complex in the World!

Fun Fact contributed by Ed Thomas

Born in Paris of English parents, James Smithson attended Pembroke College, Oxford, in 1782. He excelled in chemistry and minerology. After an illustrious industrial career and with failing health, he left his estate to his nephew. A peculiar last clause was added to his will stipulating that if the nephew died without heirs, the estate would go to the United States "to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge." Smithson died in



1829, at approximately 64 years old. Six years later his nephew died of unknown causes and left no heirs. The United States government was notified of this extraordinary bequest, and the estate, valued at more than \$500,000, was awarded to the United States on May 9, 1838. Finally, after <u>Congress debated for eight years</u> what to do with the money, on August 10, 1846, President James K. Polk signed legislation establishing the Smithsonian Institution. (source: the Smithsonian Institution website)

KACS Calendar

<u>August</u>

- August 15, Monday: 7 p.m., EC Meeting, contact <u>Ben Maxey</u>
- August 21-25: Fall <u>ACS Meeting</u> in Chicago, IL, hybrid
- August 23, Tuesday: 8 p.m.—midnight, ChemLuminary Award celebration at the Fall ACS meeting in Chicago (see article on page 2)
- August 26, Friday: 11:30 a.m.—2 p.m., SEED student poster presentation, Calder Fieldhouse, K-College (see article on page 4)

<u>September</u>

- September 10 or 17, Saturday: picnic (see article on page 3; please respond)
- September 19, Monday: 7 p.m., EC Meeting, contact <u>Ben Maxey</u>

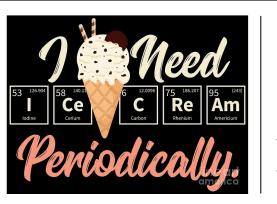
 September 27, Tuesday: 6-7:30 p.m., Fall Speednetworking event; on ZOOM; register at this <u>link</u>.

<u>October</u>

- Date TBD: Bell's poster presentation with special speaker
- October 15, Saturday: noon to 4 p.m., Chemistry Day at the Kalamazoo Valley Museum; Kickoff to NCW 2022 (October 16-22) with the theme "Fabulous Fibers: The Chemistry of Fabrics" (see article on page 3 or contact Hershel Jude for additional details on Chemistry Day) – Volunteers are needed for this program – please participate!
- October 17, Monday: 7 p.m., EC Meeting, contact <u>Ben Maxey</u>

Memory Lane

Some of our members who used to work at The Upjohn Company may want to take a "trip down memory lane" by looking at the picture in the lower left corner on page 28 of the July 4, 2022 issue of *C&EN*, part of a very complimentary article entitled "<u>From a shark</u> to a possible Parkinson's drug."



Need a Chuckle? Sale ticket ... Base: \$26.86 Tip: π Total: \$30.00



The KalChemist News

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ACS National Meeting Report Page 6

2022 KACS Executive Officers

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Past-Chair Dr. Edward W. Thomas edwardwthomas@gmail.com

Chair-Elect Dr. Nicole Burke nburke@kalsec.com

Secretary Mr. Jacob Kirkendall secretary@kalamazooacs.org

Treasurer Dr. P. Douglas Williams treasurer@kalamazooacs.org

Councilor Dr. Lydia E. M. Hines lemhwgh@gmail.com

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FIND US ON FACEBOOK! @ACSKalamazoo Don't Miss These September Events!

- September 19, Monday: 7 p.m., EC Meeting, contact Ben Maxey
- September 27, Tuesday: 6-7:30 p.m., Fall Speed-networking event; on ZOOM; register at this <u>link</u>.

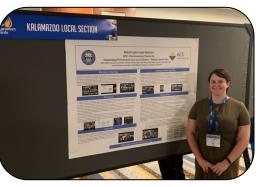
KACS Summer Picnic—Canceled

The KACS proposed summer picnic has been canceled due to the low number of responses expressing interest, combined with the sites (with shelters) being considered not being available. We will try again next year. If anyone is willing to take the lead on planning a summer picnic please message the KACS <u>chair</u> or <u>chair elect</u>.

ChemLuminary Ceremony

By Ed Thomas

As reported in the August issue of <u>The KalChemist</u> <u>News</u>, our Section was nominated for a ChemLuminary award recognizing Outstanding Performance by a Local Section – Medium Small Size

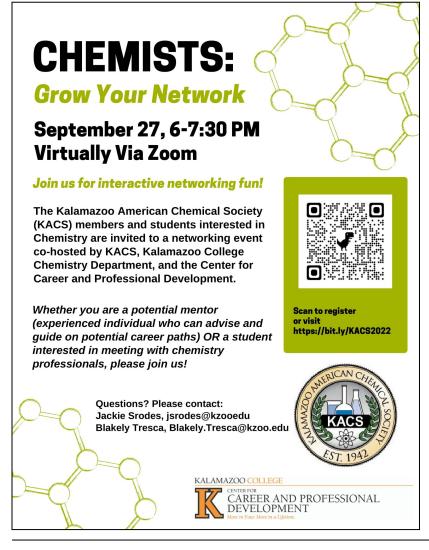


Category, based on our section's activities during 2021. The awards were presented at a gala event at the Fall ACS national meeting in Chicago on August 23. The other finalists for this section-size category (200-399 members) were Brazoport, TX, and South Jersey. The hard work, innovative activities and participation by our members and executive committee led to our nomination. Our outreach, seminars, meetings and governance activities comprised a poster that was displayed with others before the awards ceremony. In a large Chicago Hyatt Regency Ballroom, ACS members gathered



to hear the winners of over 45 special ACS awards. When our award category was called we learned that Brazoport had been selected. We compliment this local section and take pride in KACS being nominated as a finalist for this prestigious award.

Speed Networking Returns! Volunteers Needed!



By Blakely Tresca

Speed Networking is returning for the 6th year on Tuesday, September 27, 2022, an activity co-sponsored by the Kalamazoo section of the ACS and Kalamazoo College. Join us at 6 p.m. on ZOOM for five rounds of short discussions on careers and navigating life as a chemist. Registration is open now at http://bit.ly/KACS2022 (registration flyer at left). Professional chemists from industry and academia are invited to sign up as mentors. We need your help, as this event can't without you! happen Undergraduate students, this is your chance to meet with professionals from across the chemical enterprise and ask questions about what it takes to get, and experience success, in the positions you want. In addition to break-out sessions, we will hear from past attendees how mentorship has shaped their careers, and a short keynote presentation on successful strategies in industrial chemistry. Join the KACS LinkedIn group for additional networking opportunities and to stay up to date with events, https://www.linkedin.com/ groups/12584628/.

Chemistry Day at the Museum Returns—Volunteers Needed!

Chemistry Day at the Kalamazoo Valley Museum, our primary KACS outreach event for National Chemistry Week (NCW), is being planned for **Saturday, October 15, 2022, noon to 4 p.m**. We **need** a list of **volunteers ASAP**!!! This year's theme is <u>"Fabulous Fibers: The Chemistry of Fabrics</u>," but any chemistry-related demonstration you would like to present will be acceptable. The Museum has reserved the entire third floor gallery, the lobby, and the theater for demonstrations. They have hired a photographer



for the day and are working on a first-ever Chemistry Day T-shirt that will be provided to all volunteers! Parking in the ramp on Eleanor Street near the museum will be validated. Please email <u>Hershel Jude</u> with your T-shirt size, demo you are willing to perform (or a request to be assigned as a helper for a Demo) and/or fill out **the Vendor Form available on page 3. We would like to have two people at each activity we offer.**

KalamazooVALLEY[™]

October 15 12 p.m.-4 p.m. CHEMISTRY DAY 2022 IN PERSON

Contact Person		
Organization/Business		
Email	Website	
Phone		
T-Shirt Size	No T-Shirt	
Name of Experiment		
Description of Activity:		

I Need:

Number of Tables

Number of Chairs

Electrical Outlet

Near Water

Other Needs (please specify):

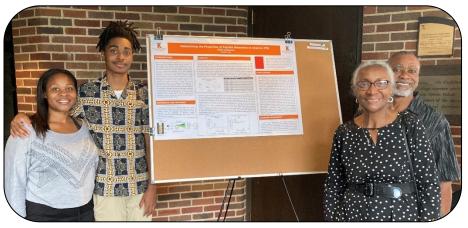
Please submit completed vendor form by **September 26** to Annette Hoppenworth, <u>ahoppenworth@gmail.com</u>.

Project SEED Presentations

By Doug Williams

Our 2022 Project SEED fellows joined K-College undergraduates from the chemistry and biology departments in presenting posters of their summer research at Kalamazoo College on August 26. We thank Prof. Dwight Williams (Chemistry, Kalamazoo College) for organizing the event. The SEED students return to their high schools this fall with renewed interest in science and greater awareness of how chemistry can lead to rewarding and meaningful careers.

All three of our students are eligible for one more Project SEED summer fellowship. We will also invite new applicants in 2023. Each project requires local research mentors and financial support. ACS provides partial financial support but our local section covers \$1,250 for a first-year fellow or \$1,500 for a second-year fellow. If you would like to help us support local projects directly as a mentor or by making a donation, please visit our <u>Project SEED webpage</u> or contact me directly at <u>treasurer@kalamazooacs.org</u>. We are very grateful to this year's mentors and sponsors (Kalamazoo College & Kalsec) as well as those who have donated to our KACS Project SEED fund. We cannot do this without you.



Eddie Anderson (Kalamazoo Central HS, junior)

Project: Determining the Properties of Paprika Oleoresin to Improve First Pass Quality

Mentor: Dr. Joe Chemler (Kalsec, Inc.)

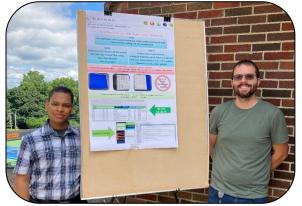
Pictured with: mother Alexis Plair and grandparents Alexander and Patricia Plair

Sadaya Hamby (Kalamazoo Central HS, junior)

Mentor: Prof. Dwight Williams (Chemistry, Kalamazoo College)

Project: Towards the Synthesis of Aqabamycin G-Tricepyridinum Hybrids

Pictured with: Prof. Dwight Williams





Alejandro Alvarez (Kalamazoo Central HS & KAMSC, senior)

Project: Digital Transformation at Work – Kalsec Essential Oils Database

Co-mentors: David Bolliet (Kalsec, Inc.) and Michael Horton (Kalsec, Inc.)

Pictured with: Michael Horton



MiSTEM Chemistry Network Update—Seeking Chemists

By Doug Williams, Carl Stachew, Blakely Tresca

In June, we <u>described</u> our new high school teacher outreach efforts through the SW MiSTEM network. As we begin the 2022/23 school year, we will continue these conversations with high school teachers in bimonthly online meetings (3-4 p.m. on September 20, November 1, January 17, March 7, and May 2). Our work this year will focus on assisting teachers with needs that they identified in our last meeting. We will initially focus on (1) activities to support MiSTEM chemistry concepts, (2) career stories/lab visits, (3) phenomenon- or project-based learning methods and (4) supporting teacher-scientist partnerships. Three teacher-scientist partnerships have begun to form over the summer. We would like to expand this number. If you have interest in helping with this outreach program, please contact Doug Williams (<u>treasurer@kalamazooacs.org</u>). We will see that you are included in the meeting invitations.

Wayne State University Professor to Deliver Seminar

James Bour, chemistry professor at Wayne State University will deliver a seminar in person at Kalamazoo College on Thursday, October 13 at 6 p.m. This seminar is jointly sponsored by KACS and the Chemistry Department of Kalamazoo College. Future emails will provide more detailed information. Please contact <u>edwardwthomas@gmail.com</u> or <u>Blakely.Tresca@kzoo.edu</u> to make a reservation.



Seeking Nominations for Chair-Elect, Treasurer



The Kalamazoo Section of the American Chemical Society is issuing a **call for nominations for Chair-elect for 2023** (followed by duties as president in 2024 and pastpresident in 2025), and for **Treasurer**, a 2-year appointment **2023-2024**. **Please self-nominate or nominate someone with their approval**.

Send names to the secretary, Jacob Kirkendall (<u>secretary@kalamazooacs.org</u>) by **October 7**.

For a description of responsibilities, please visit <u>https://kalamazooacs.org/operations-manual/</u>.

ACS Fall 2022 Hybrid Meeting-Councilor's Report

August 21-25, 2022 • Chicago, Illinois

Summary of Governance Issues and Actions (edits and additions by KACS councilor Lydia E. M. Hines) A more complete report can be found at the KACS <u>website</u>.

> Voting

 By electronic ballot, the Council elected Raychelle Burks, Anne M. Gaffney, Will E. Lynch, and Frankie K. Wood-Black for a three-year term (2023-2025) on the Council Policy Committee (CPC). <u>Lydia E.M.</u> <u>Hines</u> was elected to serve through 2023.

> Highlights from Committee Reports

- The Chair of the Committee on Committees (ConC) reminded councilors of the new online committee preference form that is open over the summer to solicit names of individuals interested in serving on ACS Society Committees.
- On the recommendation of the Committee on Local Section Activities (LSAC), Council approved the Petition for a change in Section Name from the Northeast Tennessee Section to the Tennessee-Virginia Highlands Local Section. New Local Section member-size categories were identified:

Small: 50-199	Medium Small: 200-449	Medium: 450-599
Medium Large: 600-999	Large: 1000-1999	Very Large: >2000

• Council approved allowing Corporation Associates to set fees based on a sales revenue model.

> Meeting Attendance

• The fall 2022 meeting in Chicago was held in a hybrid manner from August 21-25. As of August 24, there were 11,619 registrations [9,355 in-person (~1,400 Int'l) and 2,264 virtual (~1,100 Int'l)].

> The Board looks forward to ensuring international members have a voice and a vote on the Board of Directors.

> CEO Search

• CEO Thomas Connelly announced his retirement in May. The firm Korn Ferry International is assisting with the search which is now underway with the goal of identifying candidates, interviewing them and selecting our next CEO with a targeted start date of January 1, 2023.

> Other Society Business

• Registration fees for 2023 meetings will be the same as for 2022: \$399 in-person and \$199 virtual.

KACS Calendar

<u>September</u>

- September 19, Monday: 7 p.m., EC Meeting, contact <u>Ben Maxey</u>
- September 27, Tuesday: 6-7:30 p.m., Fall Speednetworking event; on ZOOM; register at this <u>link</u>.

<u>October</u>

- October 13, Thursday: 6 p.m., seminar by Wayne State Prof James Bour (see article on page 5)
- October 15, Saturday: noon to 4 p.m., Chemistry Day at the Kalamazoo Valley Museum; Kickoff to NCW 2022 (October 16-22) with the theme

"Fabulous Fibers: The Chemistry of Fabrics" (see article on page 2 or contact <u>Hershel Jude</u>) – Volunteers are needed for this program – **please participate**!

October 17, Monday: 7 p.m., EC Meeting, contact
 <u>Ben Maxey</u>

<u>November</u>

- November 21, Monday: 7 p.m., EC Meeting, contact <u>Ben Maxey</u>
- Date TBD: Bell's poster presentation with special speaker



The KalChemist News

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2022 KACS Executive Officers

Chair Mr. Benjamin S. Maxey chair@kalamazooacs.org

Past-Chair Dr. Edward W. Thomas edwardwthomas@gmail.com

Chair-Elect Dr. Nicole Burke nburke@kalsec.com

Secretary Mr. Jacob Kirkendall secretary@kalamazooacs.org

Treasurer Dr. P. Douglas Williams treasurer@kalamazooacs.org

Councilor Dr. Lydia E. M. Hines lemhwgh@gmail.com

Alternate Councilor Dr. Tomasz Respondek tomasz.respondek@zoetis.com



FIND US ON FACEBOOK! @ACSKalamazoo

Don't Miss These October Events!

- October 13, Thursday, Dr. James Bour seminar, 6 p.m. Dewing Hall, Kalamazoo College Rm. 103. More information below.
- **October 15,** Saturday, noon to 4 p.m., Chemistry Day at the Kalamazoo Valley Museum. See poster and article on page 2.
- October 17, Monday, 7 p.m., EC meeting, contact Ben Maxey.
- **October 17,** Monday, Deadline to submit an abstract for the Spring 2023 National ACS meeting in Indianapolis.

Wayne State Prof to Deliver Seminar at K

Dr. James Bour, chemistry professor at Wayne State University, will deliver a seminar **in person** at Kalamazoo College on **Thursday**, **October 13, at 6 p.m. in Dewing Hall, room 103**. This seminar is jointly sponsored by KACS and the Kalamazoo College Department of Chemistry and Biochemistry. Questions may be directed to <u>edwardwthomas@gmail.com</u> or <u>Blakely.Tresca@kzoo.edu</u>.

<u>Title</u>: Understanding Relationships Between Defectivity and Microporosity in Organic Polymers

<u>Abstract</u>: This presentation describes efforts to understand structural features critical for high surface areas in porous organic polymers. Using a network disassembly approach, we show that porosity is highly sensitive to dangling end defects. The implications of these insights on the design of improved synthetic approaches for high surface areal materials will be discussed.

<u>Dr. Bour's Biographical Information</u>: After graduating from Hackett High School in Kalamazoo, Dr. Bour earned a B.S. from Hope College in 2013 and Ph.D. in chemistry from the University of Michigan in 2018. As a graduate student he worked on the organometallic chemistry of high-valent nickel under Professor Melanie Sanford. He



then moved to MIT as an Arnold O. Beckman Postdoctoral Fellow to study catalytic applications of metal-organic frameworks in the lab of Professor Mircea Dinca. He began his independent career in 2020 at Wayne State University where his team studies the synthesis and applications of porous organic materials.

All are welcome! Starting at 5:10 p.m. there will be a reception in the Dewing Lobby featuring light sandwiches and soft drinks; to ensure there is enough food, if you plan to attend the reception please contact <u>edwardwthomas@gmail.com</u>.

Chemistry Day at the Museum

The Kalamazoo Valley Museum and the Kalamazoo Section of the American Chemical Society invite you to attend the event **"Fabulous Fibers:** The Chemistry of Fabrics!", which is the 2022 theme of our National Chemistry Week outreach. Visitors of all ages will enjoy chemistry experiments related to fibers, as well as other favorites. After a two-year hiatus, the 36th annual event will take place in person on Saturday, October 15, from noon to 4 p.m. at the museum; it is FREE to attendees.

Discover how chemistry can tell us more about fibers using fire in Great Balls of Fire! Use the sun to create a chemical print on fabric. Learn about ice dyeing and use synthetic tie dves to dve а bandana. Absorbent polymers are used in diapers to help absorb moisture and also make for some fun artificial snow. See how chemicals



Saturday, October 15 | 12-4 p.m. | FREE

The Kalamazoo Valley Museum and the Kalamazoo Section of the American Chemical Society present "Fabulous Fibers" at this year's Chemistry Day. Join us for fiber-related experiments as well as our yearly favorites!

Experiments Include

Solar Fabric | Great Balls of Fire | Tie-Dyeing & Ice-Dyeing | Buttons from Bad Milk Insta Snow | Making Nylon | Dancing Milk | Slime | PVT Water Color | pH-Acids & Bases Shiny Penny | Chemiluminescence | Elephant Toothpaste Chromatography Butterflies | Magic Sand

Future Chemist Apprentice Program

KAC

High school-age students are welcome to stop by the information table to sign up as an apprentice to a local chemist at next year's Chemistry Day. Learn more about the local American Chemical Society and pick up your free Chemistry Day t-shirt, while supplies last.



combine to create a string of nylon. Observe how milk, soured by vinegar, can be used to create buttons and how that same milk can show us how stains can be removed.

Many of past favorites are back! Make your own slime, explore acids and bases, clean pennies with ketchup, learn about PVT effects using colored water, try paper chromatography and "magic" sand. Chemiluminescence and elephant toothpaste demonstrations can be seen at 12:30, 1:30, 2:30, and 3:30 p.m. in the theater. Get your <u>free tickets at the front desk</u>. This spectacular science show is filled with glow-in-the-dark lights and "dancing" milk!

We look forward to seeing you at the Kalamazoo Valley Museum (230 N. Rose Street) on **Saturday, October** 15, from 12-4 p.m.!

Recent Speed Networking Night-Another Successful Event

On September 27, 2022, Kalamazoo College and Kalamazoo ACS jointly hosted the 6th Speed Networking event, our third virtual one over ZOOM. We had an exceptional turn-out thirty-five with over mentors and students.

Mentors from Chicago and Holland joined us, along with students from Western Michigan University and Kalamazoo College. Virtual networking in ZOOM has helped to expand this opportunity beyond the Kalamazoo area for both mentors and students.

The evening kicked off with a presentation by Dan Walker from Zoetis, who shared impactful tips for the job search and landing your dream job in the interview. Students and mentors were paired up in five breakout rooms for 10minute discussions.





Our speakers also included current K College juniors and seniors, Roman Ramos, Abby Barnum, and Margaret Lekan, who shared their experience at the recent ACS National Meeting in Chicago and the benefits of becoming ACS members. Jackie Srodes, from the Center for Career and Professional development at Kalamazoo College, discussed the services available to job seekers and companies recruiting for new hires.

After the event, a list of contacts was circulated for mentors and students to continue their conversations. We are hopeful that the connections made will benefit students and mentors alike for many years to come. Overall, the event was a resounding success, and we look forward to continuing to expand this format more in the future.

Anyone interested in becoming involved with Speed Networking in the future, please contact <u>blakely.tresca@kzoo.edu</u>. [Just FYI, those interested in further mentoring opportunities, planning has begun for **a career panel** sometime in the **spring of 2023!**]

MiSTEM Chemistry Network Update

The first Southwest MiSTEM teacher-scientist meeting of the 2022-23 school year was on September 20 with six high school chemistry teachers and eight scientists from KACS, Pfizer and Michigan State. The discussions included updates from recently formed teacher-scientist partnerships, current teacher challenges,



classroom equipment needs and enthusiasm for some new developments. Additional meetings are scheduled for 3-4 p.m. on November 1, January 17, March 7, and May 2. Please let any of us know if you would like to get involved in some way (visit classrooms, develop or review lessons/labs, provide supplies). KACS is providing some financial support for the teacher-scientist partnerships.

Doug Williams (<u>treasurer@kalamazooacs.org</u>) Carl Stachew (<u>carl.f.stachew@pfizer.com</u>) Blakely Tresca (<u>blakely.tresca@kzoo.edu</u>)

A 'Password' Idea

A "Password" idea: think of a favorite word which may be written using element symbols from the Periodic Table and use those elements' atomic numbers to make up your unique password (e.g., RESCUER, 75162968); add other symbols as required.

KACS Calendar

<u>October</u>

- October 13, Thursday: Dr. James Bour seminar, 6 p.m., Dewing Hall, Kalamazoo College Rm. 103; a reception featuring light sandwiches and soft drinks will commence at 5:10 p.m. in the Dewing Lobby. Please contact <u>edwardwthomas@gmail.com</u> to make a reception reservation.
- October 15, Saturday, noon to 4 p.m., Chemistry Day at the Kalamazoo Valley Museum; see poster and article on page 2.
- October 17, Monday: 7 p.m., EC Meeting, contact Ben Maxey
- October 17, Monday, Deadline to submit an abstract for the Spring 2023 National ACS meeting in Indianapolis, IN, March 26-30; the theme is "Crossroads of Chemistry," and it will be in hybrid format (visit <u>acs.org/meetings</u> for further details).

November

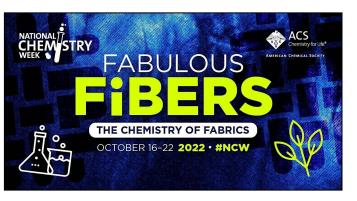
- November 21, Monday: 7 p.m., EC Meeting, contact Ben Maxey
- November 29, Tuesday: <u>return of the popular "Sustainable Science Recycle a Poster" event</u> at Bell's Eccentric Café (stay tuned for more in the November issue of the newsletter)

<u>December</u>

4

• December 19, Monday: 7 p.m., EC Meeting, contact Ben Maxey







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FIND US ON FACEBOOK! @ACSKalamazoo Don't Miss These November Events!

- November 21, Monday: EC meeting, 7 p.m., contact Ben Maxey
- November 29, Tuesday: Recycle a Poster at Bell's Eccentric Café, 5-9 p.m.

'Recycle a Poster' Returns at Bell's

By Dr. Tomasz Respondek, organizer

On Nov. 29, 2022, the Kalamazoo section of the American Chemical Society (KACS) will host its **10th annual poster session titled "Sustainable Science - Recycle a Poster"** at Bell's Eccentric Café in downtown Kalamazoo.

The KACS is pleased to bring back the popular event after a break in 2020 and 2021 due to the COVID pandemic. This is a public event made possible through a generous grant from Zoetis. Our keynote speaker will be Mark E. Jones, Ph.D. Mark retired in March 2021 as Executive External Strategy and Communications Fellow for Dow Chemical, having spent a decade on the CTO's staff. As an active contributor to the American Chemical Society he has served as chair of the Midland Local Section, writes for Industry Matters, hosts webinars and currently serves on the Committee on Public Relations and Communications and the National Historic Chemical Landmarks subcommittee.

All scientists interested in presenting a poster, please send your abstracts to <u>symposium@kalamazooacs.org</u> along with the poster title, the author list with the presenter underlined and an asterisk (*) for the lead PI, and the institution information by Sunday, November 27. <u>Undergraduate and graduate students are encouraged to participate</u>. Newly-prepared or "recycled" posters are welcome. Student presenters who submit their abstract (100-200 words) by Sunday, Nov. 27, can win a \$50 cash prize (3 will be awarded)!

Current ACS members, poster presenters and Zoetis employees are eligible for two complimentary drink tickets (alcoholic beverages for 21 years and older).

For more information please feel free to email <u>symposium@kalamazooacs.org</u>.

Posters with more information can be found on pages 2 and 3.







\$50 prize

The KALAMAZOO Section of the American Chemical

Society presents

Sustainable Science – Recycle a Poster

Call for Abstracts

Sci-Mix Poster Session on Nov 29, 2022 (5-9pm)

Bell's Eccentric Café (Back Room)

355 E Kalamazoo Ave, Kalamazoo, MI 49007 **Complimentary hors d'oeuvres** Free and open to the public

- 5-7 pm **Poster Setup, Registration, Reception**
- 6:45 pm KACS Announcements
- 7:00 pm Keynote: "Avoid Foam" and Other Consequences of Living in a World with PFAS, by Mark E. Jones, Creative Director at MJPhD, LLC

8 pm **Prize Announcement**

Poster Session, Network with Scientists and Speaker 8-9 pm

Undergraduate and graduate students are encouraged to participate. Newly prepared or "recycled" posters are welcome. Student presenters who submit their abstract (100-200 words) by Sunday, Nov. 27 can win a \$50 cash prize! To reserve an easel, presenters should email the following information to symposium@kalamazooacs.org by Sunday, Nov. 27 2022.

- the poster title
- author list with the presenter underlined and an asterisk (*) for the lead PI
- institution information
- an abstract to enter the prize drawing

More info on the KACS at https:// www.kalamazooacs.org/



Funding provided through a generous grant by **ZOCTIS**









The KALAMAZOO Section of the American Chemical

Society presents

Sustainable Science – Recycle a Poster "Avoid Foam" and Other Consequences of Living in a World with PFAS

by Mark E. Jones, Creative Director at MJPhD, LLC



Sci-Mix Poster Session on Nov 29, 2022 (5-9pm) Bell's Eccentric Café (Back Room)

355 E Kalamazoo Ave, Kalamazoo, MI 49007 Complimentary hors d'oeuvres Free and open to the public

Mark Jones is Creative Director at MJPhD, LLC, an independent consulting firm. He is an ACS Fellow and frequent ACS contributor. He writes a popular column for ACS Industry Matters (https://www.acs.org/content/acs/en/industry/industry-matters/mark-e-jones.html) and is a frequent contributor to ACS Webinars. His articles appear in R&D Magazine, Chemistry World, Chemicals Knowledge and others. He gives frequent talks and lectures on a variety of topics from sustainability, to chemical industry history, to presentation skills and more. Mark has over 30 years of industrial experience and touched many technology areas during his career. Mark retired from The Dow Chemical Company in 2021 having spent his last decade on the staff of the CTO as External Strategy and Communications Fellow.

5-7 pm	Poster Setup, Registration, Reception
6:45 pm	KACS Announcements
7:00 pm	Keynote Speaker: Mark E. Jones, PhD
8 pm	Prize Announcement
8-9 pm	Poster Session, Network with Scientists and Speaker

Current ACS members, poster presenters and Zoetis employees are eligible for two complimentary drink tickets (alcoholic beverages for 21 years and older)

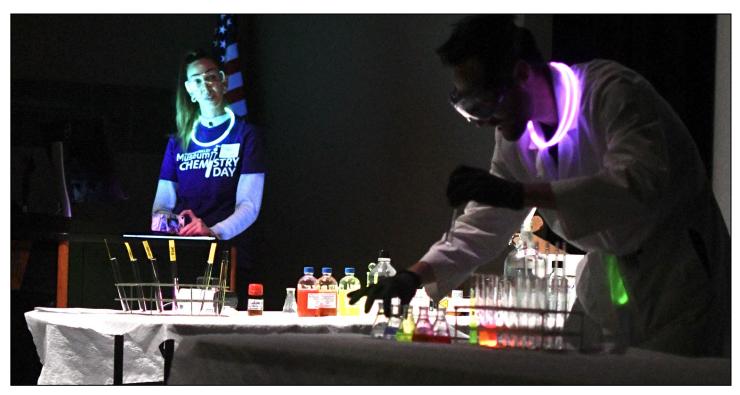
Come and celebrate the comeback of this popular event after a break due to COVID. For questions please email symposium@kalamazooacs.org

More info on the KACS at https:// www.kalamazooacs.org/



Funding provided through a generous grant by **ZO**





Chemistry Day 2022 Redux and Thank You

By Dr. Hershel Jude

What an exciting year to coordinate my first in-person Chemistry Day at the Kalamazoo Valley Museum with Annette Hoppenworth and Lexie Schroeder-Kobb; my thanks to both for making the planning process so fun!

After being virtual the last two years due to the pandemic, I did not know what to expect this year for the program. The response to our calls for volunteers exceeded all my expectations! Thank you so much to everyone that helped: there were 49 chemists who presented 16 demos to about 600 members of the Kalamazoo community! Volunteers came from Bridge Organics, Lake Michigan College, Kalamazoo Area Math and Science Center (KAMSC), Kalamazoo College, Kalamazoo Valley Community College, Kalsec, Perrigo, Pfizer, Portage Central High School and Western Michigan University. Additionally, more than a dozen scientists reached out to express their disappointment at not being able to participate due to other commitments - thank you all, and I look forward to working with you in 2023 and beyond.

The willingness of KACS members to give a few hours of their time on a Saturday to discuss chemistry with the Kalamazoo community and show the next generation of chemists why we are all so passionate about our field is what makes this section truly great!

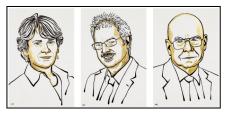
I hope you enjoyed your 2022 Chemistry Day at the Museum experience. My only regret is that I was sick and not able to greet each of you.

Please mark your calendar for **next year's Chemistry Day at the Museum**, which is scheduled for **October 14, 2023 from noon to 4 p.m**.



A 'Safety Lesson' All of Us Need to Heed

By now you are aware that the 2022 Nobel Prize in Chemistry went to Carolyn Bertozzi of Stanford University, Barry Sharpless of Scripps Research Institute, and Morten Meldal of the University of Copenhagen "for the development of click chemistry and bioorthogonal chemistry."



https://www.nobelprize.org/prizes/chemistry/2022/summary/

Even though some may have read the real-life "cautionary tale" about/by one of this year's winners, Barry Sharpless, it is a reminder worth sharing with all who work in a laboratory setting at any level:

https://news.mit.edu/1992/safety-0311

Wayne State Assistant Chem Prof Presents Seminar at K College

By Dr. Ed Thomas

Have you wondered how hydrogen powered vehicles can store that energy source safely? On October 13, Dr. James Bour, assistant professor of chemistry at Wayne State, presented a seminar and answered this question for nearly 40 students and professors from Kalamazoo College and Western Michigan University as well as KACS members in Dow Auditorium on K's campus. The seminar entitled "Understanding Relationships Between Defectivity and Microporosity in Organic Polymers," was jointly hosted by KACS and the Kalamazoo College Chemistry and Biology Department.

In an enthusiastic talk, James explained that by making porous organic materials he can control the surface area of the product. Increased surface area inside the polymer cavities (or pores) means more gas can be stored per gram of material at lower pressures than expected. The physical properties of these materials (pore size) are very substrate, time, and catalyst dependent during their synthesis. Additional information on this research using nickel catalysts with zinc dust to form the polymers can be found in Bour, <u>Chem.</u> <u>Commun.</u>, 2022, 48, 6841. After a thoroughly engaging and enlightening talk, Dr. Bour was peppered with questions from the students and the audience. Some of these questions could not be answered as they are subjects of his next grant proposals. For the first in-person KACS function in over 2 years, we can report the evening was a success.



KACS' 2022 Project SEED students, with comments from our coordinator, Dr. Doug Williams, were featured in an article, written by Linda Mah, on pages 10 and 11 of the November 2022 issue of Kalamazoo Public Schools' newsletter, <u>Excelsior</u>; check it out at <u>https://www.kalamazoopublicschools.com/Excelsior</u> (choose November 2022 edition)

Congratulations, Annette Hoppenworth!



Congratulations to **Annette Hoppenworth**, recently retired from the Kalamazoo Valley Museum (KVM), and key collaborator over 33 years for our section's annual Chemistry Day there each Fall; she was recently honored with the <u>2022 Distinguished Career Award from the Midwest Museum Association</u>.

Below are highlights of various aspects of her career at the Kalamazoo Valley Museum:

• <u>Preschool exhibits</u> and increasing literacy; conference presentations on how to use stories with preschoolers, along with collaborations with staff training and preschool exhibits.

- Using stories to connect to KVM visitors and help KVM visitors connect to exhibits.
- Using *Carmen Sandiego* to connect to planetarium show and take visitors "around the world" to other museums
- Participation with Peace Jam and Aesthetic Education Programs
- <u>Chemistry Day</u>, 36-year collaboration with the Kalamazoo Section of the American Chemical Society—<u>an</u> <u>example of community connections and support</u>
- <u>Storytelling Festival</u>—helped visitors use <u>the power of their stories</u> to connect people and to help them discover who they are.

KACS Calendar

- November 21, Monday: EC meeting, 7 p.m., contact <u>Ben Maxey</u>
- November 29, Tuesday: Recycle a Poster at Bell's Eccentric Café, 5-9 p.m.
- December 19, Monday: EC meeting, 7 p.m., contact <u>Ben Maxey</u>

A Little Light Humor

"A photon checks into a hotel. A bell hop asks him if he needs any help with his luggage. The photon says, 'No, thanks. I'm traveling light.""





Our Sincere Condolences

Our sincere condolences to the family of **Dr. Charles "Chuck" Coverdale**, a 64-year member of the KACS.

According to his <u>obituary</u>, "Chuck worked his entire career at the Upjohn Company beginning downtown doing heart research and later as a Production Manager in Fine Chemicals. He was proud of his record in going the extra mile to keep his chemical operators safe when they worked in cubicles and had difficult procedures to follow. The making of the raw material for Motrin was an important project he worked on."

A memorial service to celebrate Chuck's life will be held at Portage United Church of Christ on Sunday, November 6 at 3 p.m. A visitation with family will take place at 2 p.m. before the service.



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FIND US ON FACEBOOK! @ACSKalamazoo

KACS Has a LinkedIn Group

By Blakely Tresca

keep up with events and



share updates between the monthly newsletters. Join us here https://www.linkedin.com/groups/12584628/ This group highlights activities from the local section and updates from the executive committee, including The KalChemist News. It is also a place to connect with other members, look for volunteer opportunities, and share work opportunities. Expanding the social media presence and connecting members is one of the goals developed during the strategic planning workshop in late 2021. Our existing sites on Facebook and our website remain active portals to the local section; we are looking to engage members where they are most active and invite community posts from everyone.

Project SEED 2023—How You Can Help

By Doug Williams

In September, we celebrated another successful year for our Project SEED program. Now we are preparing for next year, 2023. To offer each of our 2022 Project SEED fellows a second fellowship and continue our goal of supporting at least two new fellows, we will need additional research mentors and funds.



AMERICAN CHEMICAL SOCIETY

I heartily thank those who have supported us over the years. Our local section costs for this expanded program will increase from \$3,750 to \$8,000 next year. (Year 2 fellows are paid a little more than year 1 fellows). Donations are applied 100% toward student stipends. To donate to our local section fund please see our Project SEED webpage.

If you or someone you know has interest in serving as a research mentor for a talented high school student, please contact me for details. I would love to introduce you to the joy of working with Project SEED.

A Successful Return of KACS' "Bell's Event"

By Tomasz Respondek

Tuesday, November 29, 2022 marked the return of the **"Sustainable Science -Recycle a Poster"** poster session **at Bell's Eccentric Café**, after a 3-year hiatus due to the COVID-19 outbreak. This was the 10th occurrence of this popular activity which was once again made possible thanks to a generous donation from



Zoetis. Over 40 people attended, 24 of them KACS members! We were joined by scientists from Pfizer, Kalsec, Bridge Organics, Dipharma (Kalexsyn) and WMU, as well as by members of the public at large.

The event followed its usual schedule with a keynote presentation from Mark Jones, PhD, followed by a poster session. Mark recently retired from the Dow Chemical Company as Executive External Strategy and Communications Fellow, after a career there that spanned over 31 years. Mark is an active collaborator with different ACS programs. He frequently writes for ACS <u>Industry Matters</u> and is presenter at a variety of industry-related events. He is currently the co-chair of the National Academies Chemical Sciences Roundtable.

Mark gave a remarkable talk on PFAS titled **"Avoid Foam' and Other Consequences of Living in a World with PFAS"** (<u>https://www.mjphd.net/PFAS_talk.html</u>). In his talk he reviewed the always-changing definitions of what PFAS are, the history and decisions made over the years leading to the contamination of different sites around the country with PFAS chemicals as well as research being done to try to remedy the situation. His talk was extremely well received and was followed by over 15 minutes of questions from the audience.

A varied selection of hors d'oeuvres and craft beers from Bell's brewery were available to those in attendance, again made possible from the Zoetis sponsorship. Six recycled posters highlighted research conducted at WMU and Kalsec. Each of 3 students from WMU who presented posters received a \$50 award:

- Probing the Shielding Tensor Components of Amino Acids Using Nuclear Magnetic Resonance Shiva Agarwal, Michael Famiano* from WMU's Department of Physics
- Ion Suppression Investigation in Direct Analysis of Hop Bittering Compounds <u>Vitalis Omulo</u>, Chhiring Sherpa, Andre R. Venter* from WMU's Chemistry Department
- Fabrication of Monolayer-Protected Gold Cluster Thin Films: Electrochemical and Optical Properties Shivi Saxena, Guda Ramakrishna* from WMU's Chemistry Department

The KACS executive committee would like to thank all of the volunteers that helped organize the event and all the participants for joining us. We are looking forward to the 11th edition of the event next fall.



With Sympathy

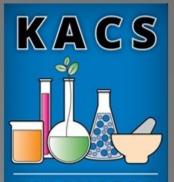
We want to extend condolences to the family of Marv Grostic, who died on November 6, 2022; Marv served as KACS chair in 1996. His obituary may be found here. Memory Aid From a HS Teacher:

> CATions are always PAWSitive!



Kalamazoo ACS Local Section Year-at-a-Glance 2022 (KACS coordinator)

- Student / Industry discussion panel (Blakely Tresca)
- Chem demo table at Portage Green-athon for Earth Day/CCEW (Lydia Hines)
- Speakers
 - Dr. Arias-Rotondo, K College
 - Dr. Bour, Wayne State University
 - Dr. Wilson, ACS President 2022 (Ed Thomas)
- Annual Awards Gathering (Lydia Hines)
- KRESA / AACT Science Coach collaboration (Doug Williams)
- Project SEED expansion (Doug Williams)
- Student / Chemist Speed Networking event (Blakely Tresca)
- National Chemistry Week / Chemistry Day at the Museum (Hershel Jude)
- Annual Recycled Poster Event (Tomasz Respondek)
- Monthly newsletter
 (Lydia Hines)



KALAMAZOO AMERICAN CHEMICAL S O CIETY

Chemistry at Home, Connecting Chemistry with Everyday Life

If you're in search of fun and enriching science learning activities to do at home over the upcoming holidays, have a look at <u>Chemistry at Home</u>. This free, online compilation of hands-on virtual learning resources for students in grades K-12+, or for anyone interested in learning a little more about the practical applications of chemistry in everyday life, is available at www.acs.org/chemistryathome. Organized by topic, these resources are designed to aid parents, teachers, and the sciencecurious in knowledge enrichment where distance learning is still extremely valuable and occasionally advisable.



Materials from the <u>Reactions video series</u>, <u>C&EN</u>, magazines from ACS Education, and the ACS portfolio of hands-on activities for students in grades K–12 and beyond are organized and bundled together into convenient groupings. The resources focus on five topics: <u>The Earth</u>, <u>Water</u>, <u>Food</u>, <u>Health & Your Body</u>, and <u>The Periodic Table</u>, putting a spotlight on the connection between chemistry and everyday life.

Kalamazoo Undergraduate Chemists Present at WMRUGS

By Blakely Tresca

The Van Andel Institute in Grand Rapids hosted the **W**estern **M**ichigan **R**egional **U**nder**g**raduate **S**ymposium (WMRUGS) on November 5, 2022, for the 16th year. Several chemists and biochemists from Kalamazoo College shared their research through posters and presentations. Maxwell Rhames (K College student presenter pictured here) represented Kzoo with an exceptional seminar on his summer research into Schiff

Base Ligands and Manganese Complexes in the Arias-Rotondo lab. The day began with a keynote by Amy Lane from the University of North Florida. Graduate and undergraduate students from across western Michigan presented their work on posters and oral presentations throughout the day. This annual conference serves as a wonderful opportunity for students to connect with graduate school and industry recruiters during multiple networking sessions.

Calendar

December

December 19, Monday, 7 p.m.: Executive Committee meeting via Zoom; contact <u>Ben Maxey</u>

2023

<u>January</u>

January 16, Monday, 7 p.m.: Executive Committee meeting via Zoom; contact <u>Ben Maxey</u>

Share Your News Now

We would love to hear from you and share your news with fellow scientists in the Kalamazoo area! Send your news and events to newsletter editor Lydia E. M. Hines at <u>lemhwgh@gmail.com</u> by the end of the month in order to get it in next month's newsletter!

February

February 20, Monday, 7 p.m.: Executive Committee meeting via Zoom; contact <u>Ben Maxey</u>

<u>March</u>

March 26-30: <u>Spring National ACS Meeting</u> in Indianapolis, IN (hybrid), theme: "Crossroads of Chemistry"