

THE ACTION & REACTION

Newsletter of the Mid-Michigan Section of the American Institute of Chemical Engineers

Volume 27 Issue 1 🐼 March 2024

UNDERGRADUATE CHEMICAL ENGINEERING EDUCATION SCHOLARSHIP



Who

High school seniors residing in the Great Lakes Bay region who plan to major in chemical engineering

What

Renewable scholarship awarding \$2000 over the course of four years for the study of chemical engineering

Where

A college or university of your choice with an undergraduate chemical engineering program accredited by the Engineering Accreditation Commission of ABET

Eligible programs are listed on: [ABET Website](https://www.abet.org/)

[Apply Now](https://www.aiche.org/community/sites/local-sections/mid-michigan/undergraduate-chemical-engineering-education-scholarship)

Deadline

March 29, 2024

High School Seniors

Sponsored by:



For More Information :

Ted Calverley 989-948-7078
tcalverley@charter.net

Apply online at <https://www.aiche.org/community/sites/local-sections/mid-michigan/undergraduate-chemical-engineering-education-scholarship>

Mid-Michigan Section of AIChE Scholarship Opportunity

Undergraduate Chemical Engineering Education Scholarship



- Who:** High school seniors residing in the Great Lakes Bay region who plan to major in chemical engineering
- What:** Renewable scholarship awarding \$2000 over the course of four years for the study of chemical engineering
- Where:** A college or university of your choice with an undergraduate chemical engineering program accredited by the Engineering Accreditation Commission of ABET
- Eligible programs are listed on: <http://main.abet.org/aps/Accreditedprogram-search.aspx>
- Sponsor:** American Institute of Chemical Engineers Mid-Michigan Section
- Deadline:** Applications due by **March 29, 2024**
- Contact:** Apply online in 2024 at <https://www.aiche.org/community/sites/local-sections/mid-michigan/undergraduate-chemical-engineering-education-scholarship>

Questions? Contact Ted Calverley at 989-948-7078 or tcalverley@charter.net



Words from the Chair

BY JYO LYN HOR, CHAIR

Mar 2024

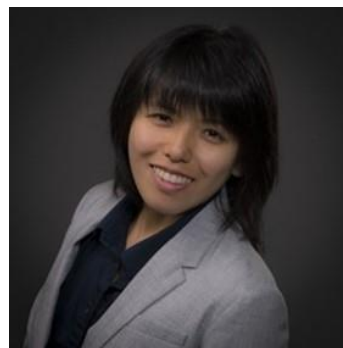
The year flies by when there is a lot going on. Earlier in January we had the honor of hearing from retired Dow fellow Mark Jones, who chronicled how the scientific process failed to dissuade the spread of misinformation, but instead caused viral headlines on exaggerated microplastic consumption by the average person. In February, Professor Michelle Franci from Bryn Mawr College in Pennsylvania gave a virtual seminar on the chemistry of tea, including the controversy her book sparked among tea aficionados in recommending addition of salt to tea to reduce bitterness. While these topics are varied in themes, they emphasized the importance scientific communication and education to the broader public. In addition of the monthly seminars, our STEM outreach committee has also been doing scientific module demonstration at local schools, and our EDI committee has been showcasing career pathways to students through A Day in

The Life of an Industrial Scientist with the Mid-Michigan ACS.

Upcoming next, we have planned several seminars, and we are planning our spring banquet on the evening of May 16 (Thursday) at the Midland Country Club. More details regarding the banquet will be available in the upcoming announcement. We invite you to join us at the banquet to celebrate the accomplishments of scholarship, award winners, the people behind the scenes at MMAICChE who organized various events throughout the year, as well as to welcome our incoming committee for the 2024 – 2025 term as we wrap up the year.

That said, keep an eye out on the call for award nominations and scholarship applications through our communications! If you are interested in being part of the MMAICChE committee, come join us or reach out to any of us from the committee and we would be delighted to share our experiences and roles. As we wrap up the

year, I am humbled to still have so much to learn; it has been a great privilege for the opportunity to work with this outstanding MMAICChE committee, and I look forward to another great year of activities and local



involvement at MMAICChE.

Sincerely,

Jyo Lyn Hor

Meet Vincent



Vincent is a recent graduate hailing from Cincinnati, Ohio. He received his BS in Chemical Engineering from the University of Cincinnati in 2023 where he also received minors in Chemistry and Environmental Engineering. Prior to joining Dow, Vincent completed five co-ops at various companies and locations. His first three co-ops were with Marathon petroleum in the areas of Production planning, Environmental Engineering, and Improvement/Operations. He then completed a co-op with Dupont in Improvement engineering before completing his last co-op with Dow in Deer Park as a Production intern in Methacrylate's. Vincent was also an undergraduate researcher for his university building a process to try and chemically recycle waste plastics to virgin grade material.

Vincent works on the PR&D Copolymers team reporting to Stephanie Palosaari. Since joining Dow, Vincent has worked on projects ranging from production quality improvements for Silicone elastomer blends to new product implementation in the areas of Silicone Polyethers and Alkoxysilanes.

As the incoming YTP Chair Vincent strives to work on reinvigorating programs in collaboration with colleges and Universities near Midland, improve MMAICHE's connectivity within Dow to new non-R&D Chemical Engineers and increasing involvement of other local Non-Dow employees

A Day in the Life of an Industrial Scientist

Mid-Michigan AIChE Equity, Diversity, and Inclusion Committee and Midland ACS Diversity and Inclusion Committee co-hosted Day in the Life of an Industrial Scientist on Jan. 27, 2024 at Midland Center for the Arts, funded by #TeamUp Grant from the LPGA Dow Championship. The purpose of the day is to highlight the diversity of STEM careers in industry. The day featured a problem-solving challenge where students and volunteer industrial mentors worked in groups to solve a problem, a poster session from the mentors to highlight their work, and plenty of time for networking. We had approximately 30 students in attendance from across the Great Lakes Bay Region including high school and college students. Two even attended from as far away as Wayne State! The day was a great success with overwhelmingly positive feedback from the students and mentors. A big thank you to all our volunteer mentors and our problem-solving challenge facilitators: Brian Clark, Anna Zink, and Deboleena Chakraborty who made the day a success!






Day in the life of an industrial scientist 2nd edition

Problem solving challenge, poster session, and networking!

Who: Students pursuing a STEM major	When: Saturday January 27 th , 2024 9 AM – 3 PM	Where: Midland Center for the Arts <small>1801 W St Andrews Rd, Midland, MI 48640</small>
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Free Event!
Breakfast, lunch and snacks provided
Local transportation subsidized or provided
Registration required (use QR code)





2024 BEST Symposium

An engaging symposium primarily intended for Black, Latinx and Native American U.S. doctoral and post-doctoral scientists to learn more about **exciting science and careers at Dow**.

Dates:

July 29 - August 1, 2024

Application Deadline:

April 30, 2024

Location:

Midland, Michigan

Questions?

BEST@dow.com

To learn more about the 2024 Best Symposium please scan below.



BEST participants can expect to learn more about Dow's:

- Technology, capabilities and expertise
- Commitment to inclusion & diversity
- Wide array of industrial R&D careers
- Leadership & company culture
- Research Assignments Program

2024 Seminar Series

SEMINAR SERIES

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Scientific Facts in the Meme Age



Mark Jones, PhD
Creative Director at MJPhD, Retired Dow (🕶️)

Abstract

Most have heard we consume 5 grams of plastic per week. That is the weight of a credit card's worth of plastic hiding in our food as microplastics. Many will recall the picture of a credit card between two chopsticks. I saw that image and immediately had my doubts. Creating the thought that each bite contained a credit card's worth of plastic – 5 grams – clearly was intentionally misleading. A little digging showed how misleading it is. Actual consumption is about a million times lower, only micrograms per week. The story of how 5 grams per week became accepted, how it is driving litigation, UN treaties and public sentiment is an interesting one. It is a story that raises doubts about whether science is working, or at least whether it is working fast enough. I'll examine the modeling errors, how the erroneous result spread, how few paused for a reality check, and how subsequent measurements in peer-reviewed papers failed to change the perception. I'll also predict you'll never pick up a water bottle again without looking for microplastic particles.

Light refreshments and drinks will be served

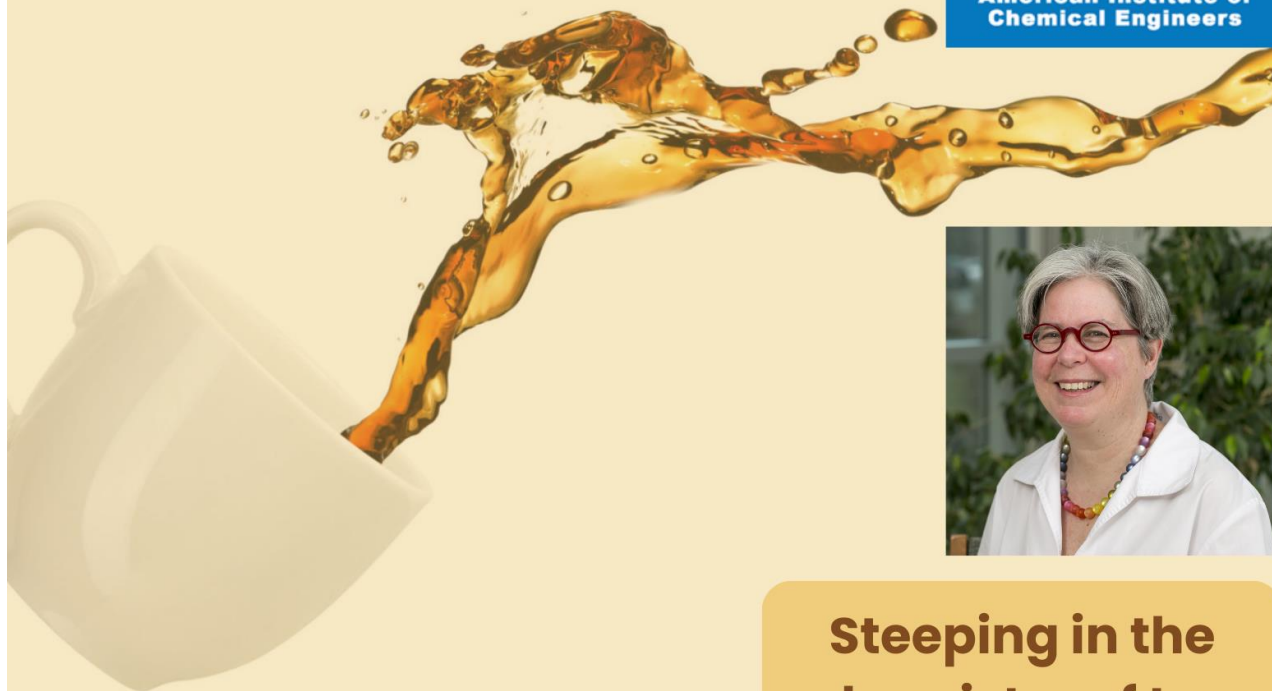
Event Details

12 – 1 PM,
January 23, 2024

In person and online
(Teams link will be sent separately)
MI Elements and Grains
3124 Jefferson Ave,
Midland, MI 48640

SEMINAR SERIES

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Steeping in the chemistry of tea

Michelle M. Franci, PhD
Professor of Chemistry at Bryn Mawr College

Abstract

Tea is the world's most popular beverage with billions of cups drunk each day worldwide. Tea contains hundreds of different chemical compounds which contribute to its color, taste and scent – and its stimulating effects. Take a dive with the author of *Steeped: The Chemistry of Tea* into a cup of tea to discover the rich molecular brew that can be extracted from the leaves of the *Camellia sinensis* plant.

Beginning with the leaves, we will explore the chemistry behind the production and infusion of different styles of tea, from green teas to pu'erh. What can we learn from the chemistry of tea about how to brew a better cup? Should you agitate the tea bag? Why do you get a weird film on your tea when you make it in the microwave and how can you get rid of it? What influence does the shape of the tea bag have on the final cup? And at the risk of causing another diplomatic incident, we will look at why or why not you might want to add salt to a cup of tea

Event Details

12 – 1 PM,
February 22, 2024

Only Virtual
(Teams link will be sent separately)

Donating to Support a Future Engineer through Mid-Michigan AIChE is Easy!



The Mid-Michigan Section of AIChE is involved in STEM educational outreach. We provide classroom demonstrations and support aspiring engineers through scholarships for summer camps and chemical engineering degrees. Your donation will be used to help Mid-Michigan AIChE sustain the scholarship fund that sends high school students to the Michigan Technological University Summer Youth Program or to an accredited university or college for a degree in chemical engineering.

You can choose to donate using a PayPal account or with a Debit or Credit card.

The PayPal link is:

https://www.paypal.com/donate/?cmd=_donations&business=eestangland%40character.net&item_name=Scholarships+donations+to+Mid-Michigan+AIChE¤cy_code=USD

OR scan the QR Code on your smartphone – it takes seconds!

Donations are tax-deductible and our secretary can provide you with a receipt.
We sincerely thank you for financially supporting aspiring chemical engineers.



MMAIChE 2023-2024 Executive Committee



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The Mid-Michigan Section of AIChE gratefully acknowledges the support provided by the following sponsors.



2024 Banquet announcement – Stay tuned for more details!

Mid-Michigan AIChE to Hold Spring Banquet

Featuring Guest Speaker Scott Collick, *DuPont Sustainability Vice President*

Mark your calendar! The Mid-Michigan Section of the American Institute of Chemical Engineers (AIChE) cordially invites you to attend the annual Spring Banquet on Thursday, May 16th, 2024, at the Midland Country Club in Midland. Our special guest speaker for the evening will be Scott Collick. More details to follow!

When: Thursday, May 16th, 2024

Where: Midland Country Club

Agenda: 5:30 – 6:00 PM: Social time with cash bar

6:00 – 7:55 PM: Dinner and awards program

8:00 – 8:45 PM: Keynote Speech by **Scott Collick**



Follow us on Facebook for events, updates and more

<https://www.facebook.com/Mid.Michigan.AIChE>

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www.aiche.org/community/sites/local-sections/mid-michigan

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