

## **Publishing Note**

Please note that because Spring Break is the week of Feb. 28, we will not send out our next issue of TeamMSE until the following week, Monday, March 7. If you have information you'd like to share with the community, please email **Kristen Freshley** at <a href="mailto:krisfres@umich.edu">krisfres@umich.edu</a> by Sunday, March 6. It's a bit early, but...

Have a great Spring Break!





Here's what you need to know in regard to the latest campus Covid news:

### Cases on campus remain low

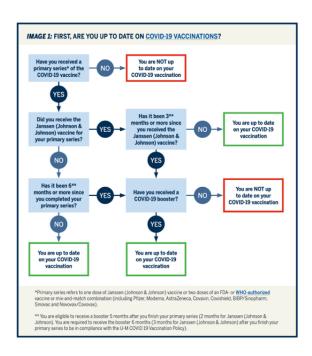
COVID-19 cases continue to decrease on campus and in the surrounding community, with daily reports showing a continued downward trend for students and employees. U-M's wastewater surveillance also shows a pattern of decreasing activity in Ann Arbor, Ypsilanti and in areas on and around campus.

### U-M mask requirement still in effect

Even though Washtenaw County is changing its requirement for K-12 schools, U-M's face covering requirement remains in effect. Campus leaders are continuing to evaluate ad monitor conditions.

## Vaccine update

Please get your COVID-19 booster as soon as possible based on your eligibility and <u>report</u> it to the university to be in compliance with the <u>vaccination</u> <u>requirement</u>.



U-M has created a <u>decision-tree</u> infographic to provide assistance in determining whether you are in compliance with the vaccine mandate.

Student Life has sent information on administrative holds directly to students who have not yet submitted booster information or whose submission has been rejected.

# **Upcoming MSE events**

## Note: Next two 890 seminars will be in-person



This Friday, February 18, Lane Martin, MSE chair at University of California, Berkeley, will present "New Understanding and Emergent Phenomena in Ferroic Complex Oxide Thin Films" at 10:30 a.m. in 1013 Dow or via Zoom:

umich.zoom.us/j/99711556862

Passcode: mse890

On Friday, February 25, Yale University Associate Professor Judy Cha will present "Nanscale phase transitions in 2D materials" at 10:30 a.m. in 1013 Dow or via Zoom:

umich.zoom.us/j/99711556862

Passcode: mse890



## CoE Maize & Blizzard Festival Feb. 15-16



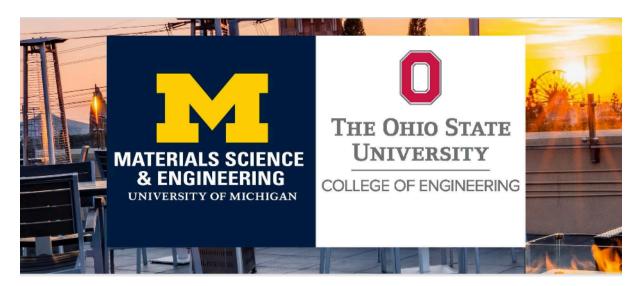
Come out for some winter fun on North Campus **tomorrow and Wednesday, Feb. 15-16**, for Maize & Blizzard Festival, featuring an iceless ice skating rink, mechanical snowboard, free food, hot cocoa, warming stations, glow-in-the-dark corn hole, swag, and more!

#### Schedule of events:

- Tuesday, 12-1:00 p.m. live ice sculpture carving
- -Wednesday, 12:00 p.m. musical performance from Groove
- -Wednesday, 4-5:00 p.m. performance and ice skating sessions from

Winter activities (ice skating, mechanical snowboard and lawn games) will be open both dates from 1-7:00 p.m. in Murfin Ave. parking lot, located behind Walgreen Drama Center. Free rental skates provided.

# Thursday is sign-up deadline for TMS reception!



If you're attending @TMS2022 later this month and want to attend our Alumni & Friends reception with OSU, please register <a href="here">here</a> by this **Thursday**, **February**17. The event will be held in Anaheim at The Fifth, a rooftop restaurant/bar, on Monday, Feb. 28, 7-10:00 p.m.

# **Special seminars with the Honorable Jeffrey S. Merrifield Feb. 17 & 18**

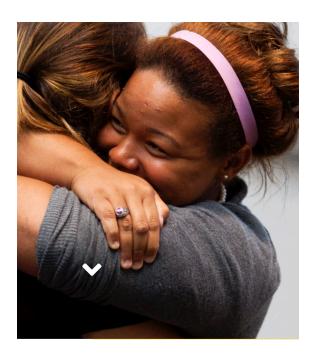


Jeffrey S. Merrifield, a former Commissioner of the Nuclear Regulatory Commission, will present "The Role of Advanced Nuclear in the Development of Green Hydrogen Economy" on Thursday, Feb. 17, 1-2:30 p.m., in the Johnson Rooms. On Friday, Feb. 18, at 12:00 p.m., he will present "The Transformative Advanced Nuclear Technologies That Are Driving Rare Bipartisanship in Washington, D.C.," also in the Johnson Rooms. Join by Zoom <a href="here">here</a> (passcode: 731691). Merrifield will discuss how advanced nuclear technologies will play a critical role in the movement toward the increased use of clean hydrogen. These seminars are hosted by Ron Larson from ChemE and Todd Allen, Chair of the NERS department.

## MMS Luncheon guest Feb. 18: CoE's C.A.R.E. Center

Friday, Feb. 18 12:30-1:30 p.m., 1013 Dow

Join us for this week's MMS luncheon with the C.A.R.E. Center! The Michigan Engineering C.A.R.E. Center is the central hub to assist engineering students by providing genuine and practical support, both



inside and outside of the classroom. Take away lunches will be provided.

## Graduation '22: Important dates & deadlines!



The countdown to graduation is on! Here are some important dates for you to keep in mind:

**Thursday, March 10 -** Graduation application deadline to have your name listed in the commencement program.

Monday, March 28
(10-11 a.m., 3-4 p.m.) - Professional photographer will be in MSE student lounge in Dow to take official portraits of Spring, Summer and December 2022 graduates.

**Tuesday, April 19 -** Last day of classes and deadline to apply for spring graduation.

**Thursday, April 28 (6-8:00 p.m.) -** MSE graduation dinner in Robotics Lobby. Invitations coming soon.



## **MSE Graduation Dinner 2022**

Thursday, April 28 • 6-8:00 p.m. • Robotics Lobby

\*Celebrating all undergraduate, master's and Ph.D. graduates from Fall 2021 and Spring 2022

## **DEI Events**



My Journey to QuantCrit: How the Scientist Met The Fugitive In The Borderlands

February 2022

## **DEI LECTURE SERIES**



Presented by U-M postdoctoral fellow Paulette Vincent-Ruz, Chemistry Education at the University of Michigan, LSA.

## **FEBRUARY 24**

12-1 pm I Zoom webinar (registration required)

Why do we study how to become better educators? Historically, the methods used to do this research can perpetuate racial bias. As such, research produced by these faulty methods fails to provide insight that could dismantle unjust systems in STEM education. Equitable research methods in Discipline Based Education Research (DBER) are necessary for equity-centered research and teaching.

In this talk U-M Postdoctoral Fellow Paulette Vincent-Ruz (she/ella) will present:

- 1. The "Resources for Equitable Activation of Chemical Thinking Framework", a framework she proposed to center equity theories in DBER.
- 2. Her QuantCrit (Quantitative Critical Theory) methodological approach.

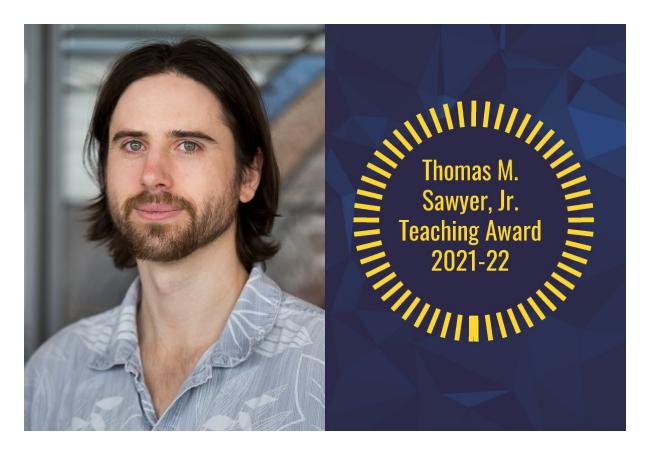
She will use this framework to unearth a counterstory to traditional and harmful explanations of the "underperformance" of Black students in an Introductory Chemistry course and practical implications that improve instructors' practice, and better support their marginalized students.

Dr. Vincent-Ruz will engage the Michigan community in conversation on how to center equity in Discipline Based Education Research and practice.



## **Staff News**

## Chambers recieves CoE teaching award



MSE is proud to announce that the College of Engineering has selected **Tim Chambers**, instructional labs supervisor and adjunct lecturer, as the recipient of the Thomas M. Sawyer, Jr. Teaching Award for 2021-22. The award is given to non tenure-track faculty who have demonstrated sustained excellence in instruction and guidance at the undergraduate level. Congratulations, Tim! **Read more**.

# **Alumni News**

## Yurko inducted into NAE

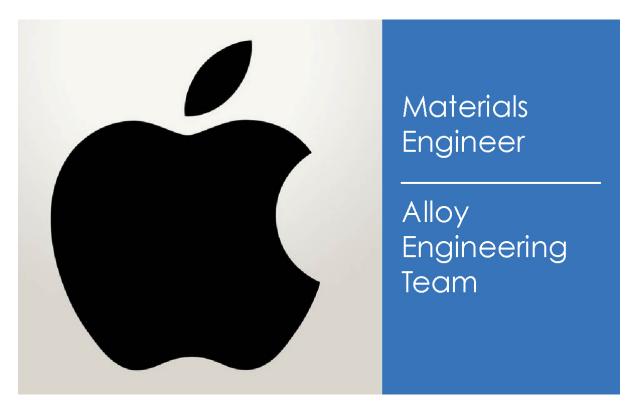


**Dr. Jim Yurko (BSE '97)**, Senior Distinguished Engineer with Apple, has been elected to the National Academy of Engineering, the nation's most prestigious engineering association. Yurko is one of 111 U.S. members inducted this year. Fellow 2022 inductees include SpaceX CEO Elon Musk and Microsoft CEO Satya Nadella.



# Job Opportunities

**Apple looking for Materials Engineer** 



As a member of the Alloy Engineering team at Apple, you will help create the next generation of Apple products. You will drive the rapid advancement of alloys and processes that are the building blocks of our products. This position will interface within Alloy Engineering and directly with other Product Design, Operations, and Industrial Design teams to advance and shape Apple's advanced materials. To learn more about the position and/or apply, click <a href="here">here</a>.

## Start-up Magrathea looking for Research Chemist or Chemistry Engineer

Magrathea is a technology start-up based in San Francisco in deep stealth mode focused on the production of structural metals that can be effectively decarbonized through electrification and novel processing methods. We are aiming to solve several key technical problems associated with the production of light metals which are critical for the transition to a low-carbon civilization. Magrathea is on a mission to reduce the environmental impacts of producing structural metals by implementing innovative process technologies that will reduce the need for mining metals for steel and aluminum, thus reducing deforestation and encroachment on unceded territory of Indigenous people

worldwide.

We are looking for an individual who will be working with a small team of scientists and engineers at a private laboratory in Ann Arbor. We are moving at startup growth speed in order to accomplish our technical goals as quickly as possible so that we can scale up as soon as possible. We are looking for new team members who are motivated by our mission of promoting environmental and social justice, and who are passionate about science and technology. We value excellence and we are looking for team members who share this value.

#### **Role Description**

- Leading development, validation, documentation, and implementation of mini pilot scale process studies
- Designing mini pilot plant scale processes to prove out key production processes.
- Designing experiments to test hypotheses and answer key questions.
- Help develop new process technologies internally and with external collaborators to protect novel technology through intellectual property.
- Running elemental analysis of lab samples and ensuring accuracy of the results.
- Observing best safety and lab practices and contributing to a positive and proactive safety culture.

### Ideal Types of Skill, Competence, and Experience

- Bachelor's degree (MS and PhD also strongly considered) in chemistry, chemical engineering, or similar field.
- Experience designing, constructing, and operating lab and pilot scale processes.
- Experience with inorganic chemistry, gas-phase chemistry, catalysis, salt chemistry, metallurgy, alloy technology, or other structural metals are all helpful.
- Understanding and experience in basic analytical chemistry such as how to calibrate an instrument like an ICP-OES and similar devices.
- Creative and open-minded with the ability to rapidly learn about and think

through complicated problems generating hypotheses for their resolution.

The ability to conduct playful and respectful creative destruction to debate effectively and constantly test decisions made by the team.

#### **How to Apply**

Send resume or CV to Steffen Ball (<u>steffenmball@gmagratheametals.com</u>) with a 3-5 sentence description of your story/background and why you want to help decarbonize structural metals globally.

Magrathea deeply values the inclusion of women, LGBTQ people, and people of color on our team at every level from the laboratory to management. We will correct for adversity in applicants' lives in order to reduce the impact of historic disadvantage on our selection process.

