



Since Valentine's Day is right around the corner (like, tomorrow!), we have a sweetheart of an issue today with lots to love: events you won't want to miss, student and faculty awards, research news (including from Prof. Love:-)), and a special, inspiring Black History Month spotlight.

The next issue of TeamMSE will be published Monday, March 6 (after Spring Break).

If you have anything you'd like to submit, please send it to Kristen Freshley at krisfres@umich.edu by Sunday, March 5.



GSC ON ICE. Participants in GSC's ice skating outing yesterday at Yost included: From left: Tzu-Yu Ou, Avery Ansboro, Tony Chiang, Abby Liu, Lingxia Shi, Zijing Zhang, Thomas Valenza, Vishwas Goel, Caleb Phelan, Forrest Wissuchek, Rohan Somashekara, and Douglas Heine.

Upcoming Events

Seminar speaker this Friday: Harvard's Julia Mundy



Julia Mundy, Assistant Professor of Physics at Harvard, will present "*Design of new oxide quantum materials*" this **Friday, February 17 at 10:15 a.m.** in 1013 H.H. Dow.

Zoom: <https://umich.zoom.us/j/98899169074>
Passcode: mse890

Seminar speaker Feb. 24: Karen Kavanaugh

Karen Kavanaugh, Professor of Physics at Simon Fraser University (British Columbia, Canada), will

present "*Mapping Semiconductor Nanowire Junction Potentials*" **Friday, February 24 at 10:15 a.m.** in 1013 H.H. Dow.

Zoom: <https://umich.zoom.us/j/98899169074>

Passcode: [mse890](#)



MMS Valentines rom-com movie night Feb. 16



When: Thursday, Feb 16, 12:30-1:30 p.m.

Where: 2330 Mason Hall

What: MMS is hosting a rom-com movie night. Vote on the movie to watch and give snack suggestions [HERE](#).

MMS Luncheon speaker this Friday, Feb. 17: Intel

When: Friday, Feb 17, 12:30-1:30 p.m.

Where: DOW 1013

What: Intel always give an interesting talk, so please come by. Food will be Dominos! Please bring your MCard for a quick sign-in.



GSC Valentine's Initial Casting February 24

When: Friday, Feb 24, 9:00 a.m.-12:30 p.m. and 2:15-4:30 p.m.

Where: Van Vlack Lab

You can't put a timeline on love! Join us for a 10-minute casting session on Friday, Feb 24. Each session can accommodate 2 people, so find a friend and sign up before spots run out! Block M's, hearts, and letters for initials will be available as molds. We will be pouring a Tin Bismuth alloy (leadless). Long pants and closed-toe shoes are required to participate. [Sign up here](#).

*MSE GSC and
Van Vlack Laboratory presents:*

Valentine's Initials Casting

FEBRUARY 24TH
9AM-12:30PM, 2:15-4:30PM

SIGN-UP FOR A 10 MINUTE
CASTING SPOT HERE:



LONG PANTS AND
CLOSED TOED SHOES
REQUIRED TO
PARTICIPATE.

Prof. Bigelow's 100th birthday celebration March 16!



Join us for what we believe will be an MSE first: a **100th birthday party for faculty emeritus Wil Bigelow!**

When: Thursday, March 16, 2-4:00 p.m.

Where: The Blue Lounge in GG Brown (Room #1280)

Mark your calendars and plan to stop by for a piece of cake!

U-M-OSU Alumni & Friends Mixer @TMS March 20



Monday, March 20, 7:00-10:00 p.m.

If you will be attending TMS2023 in San Diego, please join us for our annual fun social event with OSU - voted the hottest ticket at TMS last year! The event will be held at Level 9 Rooftop Bar (atop Hotel Indigo), just a 12-min. walk from the Convention Center. Come mix and mingle with colleagues while taking in beautiful views of the Gaslamp Quarter and Petco Park! [Register by March 15.](#)

Student News

Two students accepted into CoE Honors Program

We are proud announce that junior **Alexa Goldstein** and sophomore **Elizabeth Troia** were both recently accepted into the College of Engineering's Honors Program! Students in the program develop academic breadth and depth while enhancing their leadership skills. Working closely with faculty and other Honors students, program participants complete a capstone project, develop skills through Honors seminars, and make a difference through community service projects. Congratulations, Alexa and Elizabeth!!



Alexa Goldstein '24

Extracurriculars: MMS as the Outreach Chair, Society of Women Engineers, Beta Alpha Rho Public Service Fraternity as the Internal Professional Development Chair, Organic Chemistry Study Group Facilitator for the Science Learning Center, and Polymers, Surfaces, and Interfaces Lab.



Elizabeth Troia '23

Extracurriculars: Research in the Maldonado Group (Chemistry), Michigan Marching Band, Michigan Winter Ensemble, Tau Beta Sigma, Michigan Research and Discovery Scholars, Michigan Vertical Flight Technology
Post-graduation plans: A career focused

Post-graduation plans: Pursuing a career in industry in the research and development space for product design or product management.

on sustainability - possibly designing materials to reduce the mass of aircraft, thereby making the aerospace industry more sustainable.

Faculty News & Awards

Joerg Lahann honored as AAAS Fellow



ChE Professor Joerg Lahann, who has a courtesy appointment in MSE, has been honored as an American Association for the Advancement of Science (AAAS) fellow, one of the highest honors in the scientific community. Lahann joins the [Class of 2022 fellows](#) for his distinguished contributions to the field of polymeric materials engineering, particularly related to biointerfaces prepared using chemical vapor polymerization. Read [more](#).

Liang Qi receives 2023 MSE Faculty Outstanding Achievement Award

CONGRATULATIONS to **Associate Professor Liang Qi**, who is the 2023 recipient of the MSE Faculty Outstanding Accomplishment Award. The honor is given annually to a faculty member for stellar performance in materials research and teaching, and service to the department. Qi will receive the award at the MSE graduation dinner on April 27 and will be recognized by the Dean of Engineering at the annual CoE faculty honors banquet, also this spring.



Former MSE chair Peter Green elected to NAE



Peter F. Green, MSE chair from 2005-2014, was recently inducted into the National Academy of Engineering (NAE) for contributions in the physics of polymer diffusion, glass behavior, and organic electronic devices and leadership in the energy technologies. Green currently serves as deputy laboratory director for Science and Technology and chief research officer of National Renewable Energy Laboratory (NREL) and senior vice president of the Alliance for Sustainable Energy—the company that operates NREL for the U.S. Department of Energy.

Staff News

Shelley Fellers earns C.I.D. award for ChE



Shelley Fellers, receptionist for both MSE and Chemical Engineering, was a 2022 recipient of the College of Engineering's Creativity, Innovation and Daring Award for ChE. Part of the Michigan Engineering Strategic Vision, the incentive program for staff was launched in 2018 to recognize and reward people who embody Michigan Engineering's values of creativity, innovation and daring. Congratulations, Shelley!

Research highlights

A game changer for clothing recycling?



Professor Max Shtein and postdoc Brian Iezzi analyze fabric with photonic fibers woven into it.

From the Shtein lab: Photonic fibers borrow from butterfly wings to enable invisible, indelible sorting labels. [Read more.](#)

Love in article: how sports balls impact performance



Professor Brian Love, author of *Uncorked: Tales of Advantage in Competitive*

Sports, was recently featured in a piece in *Crikey*, an Australian electronic magazine. The article, [“Need for speed and bounce: explaining why balls count big time in sport.”](#) is not only an interesting read but also demonstrates the breadth and reach of MSE, both in the sports world and around the world!

Black History Month Spotlight

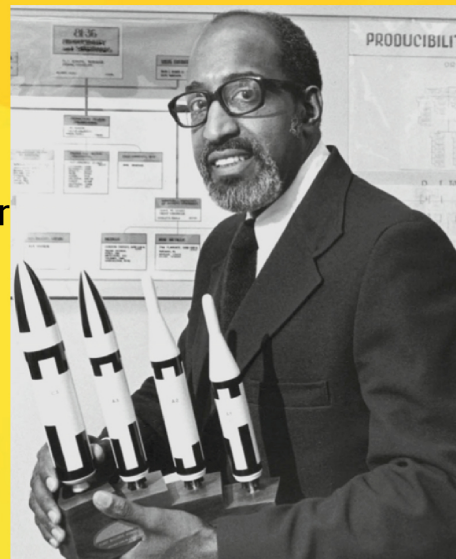
Frank Crossley: First Black man to earn PhD in metallurgy engineering and titanium alloys pioneer

In honor of Black History Month, we wanted to share with you the inspiring story of **Frank Crossley**, the first African American to earn a Ph.D. in metallurgical engineering and titanium metallurgy pioneer (who invented ti-Al-4V, or ti-64, a material still used today in aircraft/spacecraft as well as hip and knee replacements).

Crossley was born in 1925 and grew up on the South Side of Chicago during the Depression. After being inspired by Lloyd Hall, an African American chemist who gave a talk in his high school science class, Crossley enrolled in 1942 as a chemical engineering major at the Illinois Institute of Technology (IIT) in Chicago, one of the only schools where he could commute through non-racially-hostile neighborhoods.

He completed his bachelor's degree in 1945 and promptly entered the U.S. Naval Reserve Midshipmen's School for training as a naval officer - the only African American in a class of 1,500 students.

Crossley returned to civilian life and IIT in 1946 and was introduced to metallurgy by an IIT professor; he completed his doctoral studies in 1950. He would go on (despite original hiring difficulties) to work in



management for the Illinois Institute of Technology Research Institute (IITIR) for 16 years.

During his tenure at IITRI, he began developing a new class of high-strength titanium alloys initially intended for use on submarines. This would become his signature work.

In 1966, he left IITRI—and Chicago—for Lockheed Missiles & Space Company in California. He continued his groundbreaking work at Lockheed for 20 years, significantly contributing to the advancement of titanium technologies in the aerospace industry. After Lockheed, he worked at GenCorp AeroJet, retiring from there in 1991. Over the course of his career, he received seven patents and authored numerous technical papers. Crossley died in 2018 at the age of 93.

Despite his many achievements and barriers he broke in his life, Crossley maintained that his proudest achievement was helping to advance racial progress while serving in the U.S. military. Commissioned as a Navy ensign, Crossley had 40 men placed under his command as part of an experimental program. Crossley's and others' success in the program compelled President Truman to issue an executive order to ban discrimination in the U.S. armed forces in 1948.

To read more about Frank Crossley and his extraordinary life, [click here](#).

Opportunities for PhDs/Postdocs

PhDs/Postdocs: Below are two Materials Education Symposia for your consideration: The **International Materials Education Symposium April 4-5 in Cambridge, UK**, and the **North American Materials Education Symposium August 7-9 in San Luis Obispo, Calif.** For more info: materialseducation.com



Materials Education SYMPOSIA

IMES

Cambridge, UK - April 4-5 2023

preceding workshops on April 3rd



International **Materials Education Symposium**



Materials Education SYMPOSIA

at



CAL POLY

in collaboration with **Ansys**



NORTH AMERICAN MATERIALS EDUCATION SYMPOSIUM

California Polytechnic State University
San Luis Obispo, CA, USA

August 7-9, 2023



**MORE
INFO**

Happy Valentine's Day!



***“Finding love in lithium”** Fracture surface of Li - by Catherine Haslam (Sakamoto group)*



Copyright © 2020, Materials Science & Engineering, University of Michigan

Our mailing address is:

2300 Hayward St.
3062 H.H. Dow Building
Ann Arbor, MI 48109

Want to change how you receive these emails?
You can [update your preferences](#) or [unsubscribe from this list](#).