

## CHAIR'S NOTE



**RAJAN BHAMBROO**  
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November was a wonderful month! Thanksgiving has come and gone, and the holiday season is quickly approaching. We were honored to host ASM International Trustee Dr. Erik Mueller for two full days.

On Monday, Dr. Mueller toured Engineered Heat Treat, Weldaloy Specialty Forgings, and Element Materials Technology, then joined our ASM Detroit Chapter Board and Chapter meeting. He delivered an engaging presentation on NTSB Materials Failure Analysis of Lithium-Ion Battery Incidents from the Boeing 787.

On Tuesday, he visited Azoth 3D, followed by a luncheon with students from the University of Michigan's Department of Materials Science. We concluded his visit with a tour of the MSE Department. You'll find photos of his time with us below and on page 2 of this edition of the Micro-Examiner.

Looking ahead, we'll take a short break from Chapter meetings in December and January. Our next gathering will be on February 9, 2026, featuring Salim Brahimi, P.Eng., Ph.D., who will present on the Bay Bridge Bolt Failure Investigation.

I look forward to seeing you at the February meeting. Wishing you a joyful holiday season—travel safely and stay healthy!

### HIGHLIGHTS FROM NOV. 10TH MEETING

Our final dinner meeting of the 2025 season was held on Monday, November 10th at the Gazebo Banquet Center, with 36 attendees joining us for an evening of learning and celebration.

We were honored to welcome ASM International Trustee Dr. Erik Mueller as our featured speaker. His engaging presentation on the NTSB Materials Failure Analysis of Lithium-Ion Battery Incidents from the Boeing 787 sparked lively discussion and curiosity throughout the room. Thank you to our Tech Chair, JP Singh, and Maxwell Mayhew (2025-2026 ASM Vice Chair), for their support throughout the evening.

*HIGHLIGHTS continued on page 2*



*Visit to Element Warren: From LtoR: Julie Nimer, Dr. Erik Mueller, Nikki Tiernan, and Jeff Kuczera*



*Visit to Weldaloy: From LtoR, Nikki Tiernan, Dr. Erik Mueller, Andrew Smith, Conor McKinney, and Dr. Ram Canumalla*



*Engineered Heat Treat Visit: From LtoR, Mike Harrison, Dr. Erik Mueller, Nikki Tiernan, and JP Singh*

# Micro EXAMINER

## FEBRUARY 9 MEMBERSHIP NIGHT

### GUEST SPEAKER:

**SALIM BRAHIMI P.ENG. PH.D.**

Director of Engineering & Technology at Industrial Fasteners Institute

### TOPIC:

"Bay Bridge Bolt Failure Investigation"

### LOCATION:

Livonia Marriott

## MARCH 9 SUSTAINING MEMBERS NIGHT

## APRIL 9 – (Thursday) ASM & AFS COMBINED MEETING

## MAY 11 WOODSIDE LECTURE

## INSIDE THIS ISSUE

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## HIGHLIGHTS *continued from page 1*

As it was National Officers Night, Dr. Mark Harper was presented with a plaque in appreciation of his service as our previous ASM Detroit Chapter Chair. David Masha was recognized with a plaque honoring his 30+ years of dedicated photography at our chapter functions.

We also extend our sincere thanks to Solar Atmospheres for sponsoring the social hour, and to Fluxtrol for their continued commitment to supporting student involvement.

We would also like to recognize the following organizations and hosts for graciously opening their doors during Dr. Mueller's visit:

- Engineered Heat Treat (Mike Harrison)
- Weldaloy Specialty Forgings (Ramachandra Canumalla, Ph.D.)
- Azoth 3D (Cody Cochran)
- Element Materials Technology (Nikki Tiernan)
- University of Michigan (Timothy Chambers, Ph.D., and Matteo Carcassi)

Your hospitality and generosity made this season's closing event truly memorable. Thank you for helping us end 2025 on such a high note!

*From LtoR: Dr. Erik Mueller, FASM, (November 10th Speaker), JP. Singh, FASM (November 10th Tech Chair) and Maxwell Mayhew (25-26 ASM Detroit Chapter Vice Chair)*



*Tour of Azoth 3D: from LtoR, Dr. Yi Liu, Cody Cochran, Dr. Erik Mueller and Nikki Tiernan*



*At the November 10th Dinner meeting, Dr. Mark Harper was awarded a plaque for being the ASM Detroit Chapter Chair for the 25-25 Chapter Season. The Award was presented by Maxwell Mayhew (25-26 ASM Detroit Chapter Vice Chair)*



*At the November 11th Dinner meeting, David Masha was awarded a plaque for being the ASM Detroit Chapter Photographer for over 30 years. (Presented by Maxwell Mayhew (25-26 ASM Detroit Vice-Chair))*



*Pizza Luncheon at UofM with Dr. Erik Mueller, MSE students, and faculty members Timothy Chambers, Ph.D. and Professor John Allison*

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## ASM Detroit Chapter Awards Three Teacher Scholars for Promoting Materials in the Classroom

As part of its Student Outreach Program, the ASM Detroit Chapter has created the Teacher Scholar Program to assist Materials Camp alumni in demonstrating Materials Science to their students. The Scholar Award consists of a \$250.00 grant to the teacher to be used for the purchase of equipment and supplies needed to perform materials-related experiments.

The ASM-Detroit Chapter is proud to announce our twelfth class of Teacher Scholars:

- **STEPHANIE BRODDIE** (Bradford Academy High School- Southfield, MI)  
*Kathy Hayrynen Scholar*
- **ELISA N. MURPHY** (Southgate Anderson High School- Southgate, MI)  
*Peggy Jones Scholar*
- **NICK ORR** (Nevada Learning Academy, Las Vegas, NV)  
*Betty Blazok Foundation Scholar*

Their intended uses of the grants include the purchase of digital microscopes, small kilns, small 3D printers as well as material supplies for performing introductory material science experiments in the classroom.

\*We received the following note of thanks from one of the Teacher Scholars, Nick Orr:

*Participating in the Materials Science Camp this past summer reminded me how powerful hands-on, inquiry-based learning can be. I plan to use this scholarship to purchase a portable monitor and a TI-Nspire calculator to bring that same level of interactivity into my online science classroom. These tools will help me model data analysis, explore real-world materials concepts, and engage learners in authentic STEM problem-solving, no matter where they're logging in from. This support will directly help me keep that camp spirit of curiosity and discovery alive for my students year-round. Thank you for your kindness and support!*

The Chapter is proud to name two grants in honor of Dr. Kathy Hayrynen and Dr. Peg Jones. Both have played an instrumental role in the formation, organization, and operation of the Year 1 and Year 2 Materials Camps for Teachers in Ann Arbor, dedicating many years of service to this important initiative. In recognition of their extraordinary commitment and the time they have given, these grants will be awarded to teachers who demonstrate exceptional determination in supporting their students.

Additionally, the Chapter is honored to name a grant after the Betty Blazok family, whose generous donations ensure that our educational outreach activities will continue for many years to come.

Congratulations to our Teacher Scholars, and heartfelt thanks to our chapter members whose contributions make these grants possible.

## CHAPTER PROGRAM

### FEBRUARY 9: MEMBERSHIP NIGHT

**GUEST SPEAKER: SALIM BRAHIMI P.ENG. PH.D.**

**TOPIC:** "Bay Bridge Bolt Failure Investigation"

**LOCATION:** Livonia Marriott

### MARCH 9: SUSTAINING MEMBERS NIGHT

**GUEST SPEAKER: MARTIN KRAMER**

**TOPIC:** "Development of Spray Bore for Engine Block"

### APRIL 9: ASM & AFS COMBINED MEETING

**GUEST SPEAKER: DR. ALAN TAUB**

### MAY 11: WOODSIDE LECTURE

**GUEST SPEAKER: ANIL SACHDEY**

## CHAPTER OFFICERS

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Vice - Chair

**YI LIU**

Secretary

**DANIEL BAKER**

Treasurer

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Young Members/Student Affairs – Co-Chair

**KAE POOR**

Chapter Council Representative/National Affairs and Education/MEI/ Roundtable Chair

**TIM STACHOWSKI**

Entertainment Chair

**MANISH MEHTA**

Awards/Recognition Chair

**ERIC MCCARTY**

Finance/Council of Fellows Chair

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## 2025-2026 ASM Detroit Chapter STEM Outreach Sponsor!



Thanks to Fluxtrol's generous donation we are able to offset the dinner cost at our monthly chapter dinner meetings for our STEM Outreach attendees. These attendees include: Teacher Scholarship Winners, University Scholarship Winners, Community College Scholarship Winners, Metro Detroit Science Fair Winners, and ESD Future City Winners.

College and university students can also attend our ASM Detroit Chapter dinner meetings for just \$5 thanks to this generous donation!



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ASM International offers more than twenty distinct awards, each designed to recognize outstanding achievements in various aspects of materials science and engineering. These awards honor individuals and organizations for:

- Technical accomplishments
- Innovative research and development
- Excellence in teaching
- Advancement of ASM's mission and purpose

For detailed information on the nomination process, awards categories, and application procedures and deadlines, please visit [ASM AWARDS](https://asmawards.com).

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## Volunteers Needed for Future City Competition

Future City is a flexible, cross-curricular educational program that gives students an opportunity to do the things that engineers do; identify problems; brainstorm ideas; design solutions; test, retest and build; and share their results. This process is called the engineering design process. With this at its center, Future City is an engaging way to build students' 21st century skills.

This year's theme, **"Farm to Table,"** challenges students to design a city that eliminates food waste while keeping citizens healthy and safe. More details may be found on the ESD website Future City page [ESD.ORG/PROGRAMS/FUTURECITY/](http://ESD.ORG/PROGRAMS/FUTURECITY/).

The competition will take place on **Tuesday, January 20, 2026, at Suburban Collection Showplace in Novi.** We need your help to be a guest judge at this year's event! Competition begins at 8 AM and concludes by 11 AM. Complimentary breakfast is provided.

Mark your calendar and consider volunteering as an ASM judge for this program. Express your interest by emailing [ASMDETROITCHAPTER@GMAIL.COM](mailto:ASMDETROITCHAPTER@GMAIL.COM). Your involvement will contribute to the success of this exciting initiative!

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## Three Scholarships Available for Materials Science & Engineering Students

The ASM Detroit Chapter is pleased to announce that we will be awarding three scholarships to students pursuing a degree in materials science and engineering.

- **THE MARION SEMCHYSHEN SCHOLARSHIP** and the **JAMES A. MANSFIELD SCHOLARSHIP** will be awarded again this year.
- We are also excited to introduce a new opportunity: **THE LEO AND BETTY BLAZOK UNIVERSITY SCHOLARSHIP**, made possible by a generous donation from the Leo and Betty Blazok Foundation.

These scholarships recognize high scholastic achievement and active involvement in the field of Materials Science or Metallurgy. Eligible applicants include sophomores, juniors, and first-year seniors. Each scholarship includes:



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Presentation at an ASM Detroit Chapter meeting in March or April

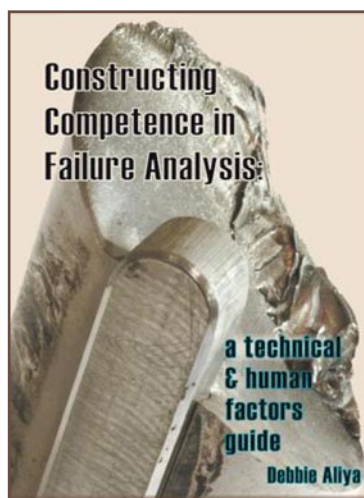
***If you know a college or university student studying Materials Science or Metallurgy, please share this opportunity with them!***

Take a moment to think of that outstanding co-op student or intern you've worked with—send them a quick email and encourage them to apply!

### APPLICATION DETAILS:

- Applications will be sent to university advisors and posted on the ASM Detroit website by January 2, 2026.
- Completed applications must be submitted to the ASM Detroit Chapter by midnight on Sunday, January 30, 2026.

RETURN  
TO PG 1



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Reliability at work



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