

Chapter Newsletter, 2023, Vol. 1**Chapter Chair's Message**

All of us on the Chapter Executive Committee are excited to welcome you to the 2023-24 program year. This newsletter will cover the highlights of the 2022-23 year and introduce you to what is planned so far for this year.

Last year, we continued with a hybrid in-person/virtual meeting schedule and were happy to see many of our colleagues and friends. Dr. Othmane Benafan, FASM, led a highly successful Educational Symposium on Shape Memory Alloys in November 2022. The 2023 Educational Symposium will be held at America Makes on November 9th and will no doubt be an event not to miss.

The financial support the Chapter receives from membership and sponsorship goes towards helping students and promoting materials science education. The annual Northeastern Ohio Science and Engineering Fair (NEOSEF) was held in-person in March 2023, the first since 2019. We gave a total of \$1500 in awards to four excellent students and also three honorable mentions. We gave two \$1300 Donald-Kiefer scholarships. We supported a Teachers Camp in June 2023 held in Beachwood.

Our Zay Jeffries Lecture in April 2023 honored Prof. Chris Wolverton from Northwestern University.

Please read on as we review our monthly talks and cover the awards that our outstanding chapter members have won both locally and nationally.

I hope to see you soon at a chapter event!

Respectfully submitted,
Ryan Paul

**Sustaining Members**

Special thanks to our Sustaining Members, whose financial support helps the chapter to put on monthly technical programming, give out scholarships, and serve the interest of our members. The list is updated on a monthly basis.

Contact us to renew or become a Chapter Sponsor and help us increase the level of student support, educational opportunities, and outreach we provide to our members and community.



During IMAT 2022, the Cleveland Chapter received an ASM Chapter Award in Student Outreach, Size Category 4.

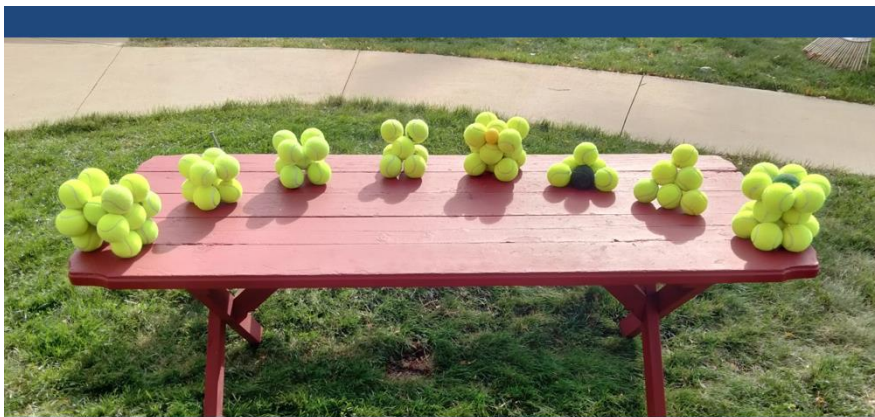
"For investment in using Chapter resources, events, and innovative approaches to expand student outreach and growth."

Dave Kovarik was present at IMAT 2022 and accepted the award certificate on behalf of the chapter. The chapter also received \$500 as part of the award.



Did you know?

Cleveland Chapter folks are involved in many outreach and educational activities. Special thanks to Tom Glasgow, who updated us on several activities that we are sharing here. One, overall the last several years, almost 50 sets of crystal structure models, made with tennis balls, were sent out to teachers. A photo of a set is shown below. Each set uses about 75 tennis balls. Tom estimates that about 6000 tennis balls have been used, all sets constructed by volunteers, including Dave Kovarik and Ray Cribb. Tom also sends out numerous materials science demo sets to teachers, many of them custom, for heat treating, mechanical behavior and fracture, composites, electrical conductivity, and thermal conductivity.



A set of models includes our four crystal structures common to metals plus slip plane models for face centered cubic and body centered cubic structures.

2022-2023 Annual Cleveland Chapter Summary Report

The 2022-2023 term year for the Cleveland Chapter saw us continue a hybrid meeting model while also pushing for more in-person attendance. We held meetings from September through May.

Our September 2022 meeting kicked off the year with Dr. Ajay Misra from NASA Glenn Research Center and a talk titled "Status of Electrified Short-Range Air Transportation & Materials Requirements".

Our October 2022 meeting was Heat Treater's Night with special guest Greg Schuerling from Solar Atmospheres and his talk on "Processing Considerations for Cryogenic Treatments in Steels".

November 2022 saw two events. One, Dr. Othmane Benafan of NASA Glenn Research Center organized our Educational Symposium on Shape Memory Alloys held at The Aviator. It was a highly successful event. Second, Dr. Kirk Rogers of The Barnes Global Advisors spoke on Binder Jet Additive Manufacturing of 4130 Steel.

December 2022 saw us hold a Holiday Party Social organized by Rosanne Brunello. Special guest speaker Dr. Jennifer Carter gave a talk on the Materials Science and Engineering of a Holiday Feast.

We kicked off 2023 and a January talk and Past Chair's Night with Dr. David Sponseller, P.E. and "The Golden Age of Metallurgy: Our Rich Heritage".

Our February 2023 talk was given by Nate Bulcroft of ASM International on ASM Technologies / Data Ecosystem. It was particularly interesting to see how ASM has developed digital tools and a data ecosystem. This was also Student Night.

In March 2023, we had special guest and one of our own John Harkness give a talk titled "Update on Materials and Processes in the Manufacture of Civil Ware Small Arms". He also brought several historical items for show.

One of our highlights of the year, Zay Jeffries Night, was held at the Linsalata Alumni Center at CWRU. The lecturer was Prof. Chris Wolverton from Northwestern. He spoke on "The Phase Diagram of All Inorganic Materials". We also gave two \$1300 Donaldson-Kiefer scholarships during the event, one to Ryan McGinnis and one to Mikala McCay. Congratulations to both!

Our Awards Night was held as per tradition in May at The Dome. Our guest speaker of the night was Keith Smith from Materion. He spoke on his extensive experience at Materion and on the role of beryllium in NASA's James Webb Space Telescope. There are 18 beryllium hexagonal primary mirror blanks, secondary and tertiary optics, and structural components that were produced at the Materion Elmore, OH facility.

Also during Awards Night, the chapter gave out the Science Fair Awards. A total of \$1500 was given to four outstanding student projects in materials science & engineering. Several students attended with their families and projects. The chapter awards were also given, with a summary on the following page. The chapter awards demonstrate the sustained dedication and commitment that the Cleveland Chapter members bring to their role. Hearty congratulations to all.

Furthermore, Cleveland Chapter members have been recognized at a regional and national level as well. Award winners of CTSC awards and ASM International awards are shown on the next page. Again, huge congratulations to all.

This summer, the Cleveland Chapter hosted a Teachers Camp at Beachwood High School from June 26 to June 30. Tom Glasgow was the Master Teacher. Nine teachers attended and there was a tour of HC Starck during the week. Special thanks to Dave Kovarik who tirelessly works to fundraise, prepare for, and execute the camp on behalf of the chapter. It takes a lot of work and we are very grateful to Dave and the others who make the camp a success each time.

2023 ASMI Cleveland Chapter Award & Honor Recipients

ASMI Cleveland Chapter Awards

ASMI Cleveland Chapter Award of Distinction: May 8, 2023

Rosanne Brunello, Delta H® Technologies

ASMI Cleveland Chapter Distinguished Service Award: May 8, 2023

John W. Pickens, P.E., Materials & Process Innovation, LLC

ASMI Cleveland Chapter Outstanding Company Support Award: May 8, 2023

Kowalski Heat Treating Co.

ASMI Cleveland Chapter President's Award: May 8, 2023

Jeremy P. Isler, BWX Technologies Nuclear Operations Group, Inc. - Euclid

ASMI Cleveland Chapter Technical Educator Award: May 8, 2023

Othmane Benafan, PhD, FASM, NASA Glenn Research Center

ASMI Cleveland Chapter Young Member Award: May 8, 2023

David S. Scannapieco, Case Western Reserve University

ASMI Cleveland Chapter Chairman Award - 105th Chairman: May 8, 2023

Ryan M. Paul, Ph.D., P.E., GrafTech International Holdings Inc.

Cleveland Technical Society Council (CTSC) Professional Awards

CTSC Robert B. Cummings Distinguished Leadership Award: May 2023

John C. Harkness, FASM, Materion Corp. (retired)

CTSC Technical Educator Award: May 2023

Ryan M. Paul, Ph.D., P.E., GrafTech International Holdings Inc.

CTSC Technical Achievement (Young Member) Award: May 2023

David S. Scannapieco, CASE Western Reserve University

ASMI National Awards & Leadership

ASMI Treasurer, Board of Trustees (1st yr. term): (IMAT 2023, Detroit, MI)

Larry Somrack, President-Emeritus, NSL Analytical Services, Inc. (October 16-19, 2023)

ASMI Albert Sauveur Achievement Award: (IMAT 2023, Detroit, MI)

Mrityunjay Singh, Ph.D., FASM, Ohio Aerospace Institute (October 16-19, 2023)

ASMI Alan Ray Putnam Service Award: (IMAT 2023, Detroit, MI)

Robert E. Vigneulle, General Motors Co. (retired) (October 16-19, 2023)

The 72nd Annual Zay Jeffries Night was held at the Linsalata Alumni Center in April 2023.



The 72nd Annual Zay Jeffries speaker was Prof. Chris Wolverton from Northwestern. He was presented his certificate from Bob Carter, Co-Chair of the Zay Jeffries Committee.

Mikala McCay was one of the recipients of the 2023 Donaldson-Kiefer Scholarships. She was presented her certificate and \$1300 check by Eric Brizes, Co-Chair of the Donaldson-Kiefer Scholarship Committee.



ASM Materials Camp – Teachers

A 2023 Teachers Camp was held in Beachwood. As part of our outreach, the Chapter provided funding towards this event.

Please see the following pages for a thank you from the teachers who attended.




What's the best way to reach you?

With everyone being bombarded by messaging from every direction, it can be difficult to get break through the noise.

How would you like to receive Chapter information?

Let us know:
ASMClevelandChapter@gmail.com

GET SOCIAL

	ASMI Cleveland Chapter
	asmclevelandchapter
	www.linkedin.com/groups/13983045

Cleveland Chapter Officers for 2023-2024

Chapter Chairperson – Ryan Paul

Chapter Vice Chair – David Scannapieco

Chapter Treasurer – Jeremy Isler

Chapter Secretary – Laura Wilson

Email – ASMClevelandChapter@gmail.com

Executive Committee Members

Audit Committee Chairperson - Roseanne Brunello

Awards Committee Chairperson - Bob Vigneulle

Chapter Historian/Archivist - Dave Kovarik

Constitution and Long-Range Planning – John Pickens and Dave Kovarik

CTSC Committee Chairpersons - Dave Brown and Rosanne Brunello

ExComm Advisor - Diana Essock

ExComm Advisor – Jennifer Carter

ExComm Advisor - Greg Petrus

ExComm Advisor - Jim Hyres

ExComm Advisor - Justin Sims

ExComm Advisor - Mark DeGuire

ExComm Advisor - Thomas Glasgow

Hospitality Committee Chairperson – vacant

Membership Committee Chairperson - John Kuli

Nominations Committee Chairperson – John Pickens

Publications - Website/Newsletter – Ryan Paul / Juli Chiara

Registration Committee Chairperson – Matthew Gaydos

Social Committee Chairperson - Bob Vigneulle

Student Affairs and Scholarship Committee Chairperson – Dave Brown

Student Chapter Liaison - CWRU – Aidan Bohac

Symposium Coordinator – Othmane Benafan

Young Members Committee Chairperson - Dave Brown

Zay Jeffries Night Chairperson – Bob Carter and David Ellis

JOIN US!

FREE STEM PROFESSIONAL DEVELOPMENT FOR TEACHERS

BEACHWOOD HIGH SCHOOL
BEACHWOOD (Cleveland), OH | JUNE 26-30, 2023

OUR PROGRAM

ASM Materials Camp®-Teachers is a free, week-long, idea-generating workshop introducing teachers to methods that make math and core science principles more enticing and relevant to their middle and high school students. Materials topics are great motivators in any engineering, technology or science course as students learn concepts that are reflected in their everyday lives.

WHAT MAKES US DIFFERENT

Teachers leave our camps able to engage students using simple, low-cost experiments that integrate into existing lesson plans. Participants are eligible to receive four (4) Continuing Education Units (CEUs) and can opt for two (2) graduate level credits.

REGISTER TODAY

For more information and to view the 2023 ASM Materials Camp®-Teachers Summer Schedule, please visit asmfoundation.org



SCAN ME! Watch a video about
ASM Materials Camp® Teachers!



"I couldn't help but say many times 'I can't believe this camp is free!' I knew that this camp had a sterling reputation based on blogs read from other teachers, but my expectations were exceeded between the physical materials used for labs, freebies, wealth of information, and lessons provided by master instructors. This was the best professional development camp I have ever attended."

—Amanda S.

QUESTIONS?

Jeane Deatherage, Administrator of Foundation Programs
jeane.deatherage@asminternational.org | 440.671.3831



MATERIALS CAMP®
ASM MATERIALS EDUCATION FOUNDATION

Thank you for providing this opportunity for me to feel more confident in presenting materials science to my high school students. Victoria

Thank you!!! Camp was very informative with lots of great stuff & ideas to take back to the classroom. This is my 3rd camp & I will be back for year 2 next year! Carey Maske BHS



ASM Materials Camp® - Teachers

Beachwood High School

June 26-30, 2023

Thank you so much for providing this amazing opportunity! I am leaving equipped to teach my full year materials classes which will be new to me next year. Thank you again!
- Sarah Morales

Thank you to
ASM Cleveland Chapter



INTERNATIONAL

This camp is PHENOMENAL! I am so fortunate to be a recipient of the knowledge offered here. Can't wait to bring it back to my kids!

Royal Antongby

Folks, we had a very active camp this year with 2 H.S. teachers as experienced mentors. Lots of heat on metals, No burns. Tom Glasgow

Thank you so much for offering this wonderful opportunity! I look forward to sharing what I learned with my students.
Christine McMullan

Thank you for supporting this camp! It will seriously enrich my science courses!
Emily Hardy

Thank you for supporting this camp. It was so informative & the products/information provided can be easily transferred into my classes. My students will benefit greatly from this camp. Bree McNeil

Thank you so much for providing us with this opportunity! I will be able to take so much of what I learned back to my classroom!
-Allise Kulbago