

Cleveland Chapter

Web: www.asminternational.org/web/cleveland-chapter Email: ASMClevelandChapter@gmail.com

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Chair's Message

It is sure that 100 years is a long time. There have been many technological and societal changes since the founding of the chapter. But what has not changed is that the chapter is composed of dedicated members and volunteers that give their time and energy to the profession and community.

In the 2017-18 programming year, the chapter gave out over \$5,000 in scholarships and student support. This is consistent with what we have been giving the last few years. The last page of this newsletter has student testimonials from the 2018 MS&T meeting. Nine technical meetings were held. An education symposium brought the latest information on microscopy and characterization to members and guests. A Teachers Camp was held in the summer.

On the following pages, we will summarize the technical meetings so far this year. There have been some great meetings and speakers! Also, in December the chapter held its first Fellows Night, where we heard stories from FASMs about their experience with ASM.

We invite you too, to share your ASM experience with us. As we celebrate 100 years, and look back on many successes and many changes, and we are poised for the same in the next 100 years.

Best regards,

Ryan Paul, Ph.D., P.E. 2018-19 Cleveland Chapter Chairperson

Chapter Sponsors

Special thanks to the following chapter sponsors, whose financial support helps the chapter to put on monthly technical programming, give out scholarships, and serve the interest of our members.

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













September 25, 2018

The first technical meeting of the year had the theme "Connect and Collaborate". It was held at the Toscana Party Center. Special guest Jen Betz (below) gave a motivating talk about the role of volunteerism in the organization and how to motivate change.

October speakers are shown below, as well as two photos of the fun from the October meeting.













October 30, 2018

October was Heat Treaters Night, held at the Toscana Party Center. Special guest Mike Mercer Sr of the Mercer Group gave a talk on Comparing Hot Zone Materials for a Vacuum Heat Treat Furnace.

Bob Marchiando of H.C. Starck spoke about Additional Applications for Molybdenum. Kevin Eberly of SGL talked about Additional Applications for Carbon Graphite.

Also there was a Halloween theme to the night! Attendees were asked to dress up as their favorite scientist.

As you can see on the right pane, a lot of fun was had by all at this technical meeting and Halloween party.



November 27, 2018

Marc Glasser of Rolled Alloys gave of an excellent talk on "Factors of Consideration for Selecting a Heat Resistant Alloy". He spoke on the multitude of variables/factors that need to be considered when selecting a heat resistant alloy for a new application, so that one can select the alloy with the best combination of performance, longevity, and economy.

ASM Cleveland also collected food and cash donations for the Greater Cleveland Food Bank.









Cleveland Chapter Sustaining Members











































December 19, 2018

Fellow's Night and Holiday Party. ASM International established the honor of Fellow of ASM (FASM) in 1969 to provide recognition to ASM members for their distinguished contributions to materials science and engineering. This night the chapter invited all of the local FASMs and asked them to speaker on their ASM experience. We had a great turnout and the night was a lot of fun. In addition, our own Rosanne Brunello gave a talk on the differences between diamond and coal.



January 16, 2019

This night was Student Night at CWRU and a tour of think[box]. Many thanks to Lee Kendall for organizing the tour of the world-class innovation center think[box]. It was great to see the excellent facilities there.

March 26, 2019

Join us on this night as we welcome special guest Roger Jones, CEO Emeritus of Solar Atmospheres and ASM Trustee. He will speak on "Vacuum Heat Treating of Additive Manufactured Components". It will also be Awards Night. Register here.

April 22, 2019

Join us for 2019 Zay Jeffries Night. Zay Jeffries lecture will be delivered by Professor John H. Perepezko who will speak on "High Temperature Mo-Si-B Alloys: Phase Stability and Environmental Resistance". See website for registration information.

May 18, 2019

The year 2019 is the 100th anniversary of the chapter. The celebration will be held Saturday May 18 at the Cleveland Museum of Natural History. <u>Find more information on the website</u>. Buy tickets here.

The Cuyahoga Valley Career Center (CVCC) STEM Showcase was held on February 9th. The event was for 7th-12th grade students throughout northeast Ohio and their parents. Thanks to the chapter volunteers who gave their time to represent the chapter and demonstrate materials science and engineering to students and their parents. It was a successful outreach event. Photos from the event are shown below.







CWRU Students at 2018 MS&T in Columbus, OH



Dear ASM Cleveland Chapter,

This year, we had eighteen people attend the Materials Science and Technology conference in Columbus, OH. Of these eighteen, only a few had previously attended a conference, so it was great to be able to have so many new people attend. Almost the entire group went down on Sunday night and participated in the Materials Advantage Student Mixer, as well as several going to the ASM Student Support Night. Over the next several days, many of us either presented posters, presented talks, attended seminars, and participated in and witnessed Materials Advantage competitions. The money that was provided went towards the pool of money that was allocated by our Undergraduate Student Government, Materials Advantage travel grant, as well as from our Case Alumni Association. This money was used to book several hotel rooms for the duration of the conference, pay for transportation, and help cover a significant portion of the registration fee for everyone. Without your support, many of the students would have not been able to attend due to us not being able to compensate as much of the cost. We sincerely thank you for your continued support as it allows us to provide these important experiences to our student members.

Best, Lee Kendall, CWRU Materials Advantage President

"MS&T provided insight as to what's actually going on in the materials science world. It gives students a chance to interact with professionals and other students and discover what they want to pursue in their future."

Nathaniel Tomczak, Junior

"I enjoyed MS&T because it allowed me to attend presentations on areas of research I have not yet learned about in classes, like failure analysis. Because of this, I think I'd like to go into that field after graduating."

Rhiannon Reese, Junior

"I enjoyed MS&T because it's great way for me to get introduce to research that I never would have crossed paths with that's actually super interesting and cool. It was also a great time to bond with my peers and also get to know some of my professors a lot better. MS and T is an event that makes me realize why I became a Materials Scientist and Engineer. If I am able, I will always try to attend even when I graduate if possible. Also it's a great time to network and find what type of things you want to do."

Andrew Cai, Senior

"I really appreciated the opportunity to attend the MS&T conference with my fellow Materials Science & Engineering majors. It was my first time attending a conference and I now have a general understanding of what to expect and how to get the most out of the experience. Not only was I able to expand my professional network by meeting students and professors from other universities, but I was also able to explore research topics by attending a variety of talks."

Steph Young, Sophomore

"I really enjoy going to MS&T with my fellow materials students, it brings us closer together and allows us to geek out on the subjects that we love. This year I was excited to attend one of the short courses on EIS, present a research poster and network."

Maddie McAllister, Senior

"MS&T was a great opportunity for me to meet other materials students and learn more about their research. In addition, I was able to have lunch with a professional and gained a lot of great advice from the individual. Overall, MS&T was a great experience to see what is out there in the field and learn about what industries interest me."

- Sharon Chen, Senior

"My time at the MS&T was really a worthwhile and one-of-a-kind experience. It is not common that there is an occasion where materials science students, professors, and companies gather together and spend three consecutive days interacting and discussing materials science field. I was lucky to attend such a conference because it has helped me become more determined with the career path that I have chosen. All of those reasons hence help me highly consider signing up for the conference next year again in Portland, Oregon."

Huan Ngo Tan, Sophomore