

**Web:** [www.asminternational.org/web/cleveland-chapter](http://www.asminternational.org/web/cleveland-chapter)  
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## Newsletter, 2018, Vol. 1

Welcome to the next edition of the Cleveland Chapter newsletter. In this edition, the chapter would like to highlight the activities of the 2017-18 year. As you will see, it was an exciting year with a full schedule of programming, networking, student affairs, and social activities for members, students, and guests. Future editions of the newsletter will bring you current news related to the chapter and members. Please contact us if you would like to submit content. Also, please check out our new website. Also, 2019 is the 100<sup>th</sup> anniversary of the chapter, which will be celebrated on Saturday May 18, 2019 at the Cleveland Museum of Natural History.

### September 11, 2017

The first meeting of the program year was held in the Thwing Center Ballroom at Case Western Reserve University. Nora Blackman, certified Archivist, is an



Scholarly Resources & Special Collections in the Kelvin Smith Library at Case Western Reserve University. She spoke on the topic of “History of Science and Technology Resources in the Kelvin Smith Library Special Collections”. Her talk

highlighted several notable items in the Materials Science collection in the library, including several belonging to Zay Jeffries. She also spoke on the NASA and CWRU connection and showed many historically important photos. The Cleveland Chapter had donated several Zay Jeffries materials to the collection.

## Chapter Sponsors

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## October 17, 2017

Mr. Dennis Fox, Materials Research Engineer at NASA Glenn Research Center, was the speaker in a joint meeting with the local chapter of ACerS. He spoke on the history of NASA Glenn. His talk then covered the oxidation of silicon carbide ceramic turbine engine materials and the contributions of NASA Glenn to the understanding of the phenomenon and how to protect silicon carbide materials from water vapor attack using barrier coatings. This was the first joint meeting with local ACerS members.

## November 13, 2017

November was Heat Treaters' Night, with Mr. B.J. Bernard, President of Surface Combustion, as the night's speaker. His talk was "Nitriding and Ferritic Nitrocarburizing (FNC): Process Modelling and Applications". He spoke on the prediction and control of nitriding and ferritic nitrocarburizing atmospheres for optimizing heat treatments.

## December 11, 2017

December's meeting was generously hosted at NSL Analytical Services, and included a talk and a tour of NSL's metallurgical facilities, including their excellent SEM capabilities. The talk was "Robust Production in Additive Manufacturing, Microcracking Eliminated: It Starts with Chemistry" and was presented by Larry Somrak, Kevin Holland, and Dave Kovarik.

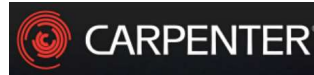
## January 22, 2018

Student Night was held in the Thwing Center at CWRU. Guest and students networked and heard about the latest materials science research on campus, including "Surface Treatment of Co-Cr alloys by Low-Temperature Nitrocarburization", "Microstructural Evolution during

Hot Deformation of Aluminum 2070", and "Solid State Electrolyte for Li-ion Batteries".

## Chapter Sustaining Members

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Nitrocarburization", "Microstructural Evolution during

## February 17, 2018

This was the chapter's 32<sup>nd</sup> Annual Dinner and Theater Social. Dinner was at The Venue Bistro and Wine Bar in Parma Heights followed by a showing of "Barefoot in the Park" at Cassidy Theater. Over 60 attendees signed up for the event. All proceeds from the event went into the scholarship fund.

## February 13, 2018

February's meeting was jointly held with the local chapter of AWS and included a tour of the chemical and mechanical testing and the optical microscopy lab at Lincoln Electric. Tim Peck, Manager of Testing Services for Lincoln Electric, spoke on the types of testing required for welding consumables and the testing capabilities of Lincoln Electric. The talk and tour were proceeded that evening by dinner on site.



## March 12, 2018

Dr. James Boileau, Ford Research & Innovation, was the night's speaker, presenting a talk on Light Weight Materials in the Automotive Industry. He showed the different types of materials that are used in a modern passenger vehicle in order to meet safety and performance requirements. Dr. Boileau has over 30 years of experience as a researcher in metals and materials.



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**April 23, 2018**

April was the annual Zay Jeffries Night, with this year's lecture being delivered by Dr. James. L. Smialek from NASA Glenn Research Center. He spoke on "Oxidation Resistant High Temperature Materials – The Remarkable Performance of  $\alpha$ -Al<sub>2</sub>O<sub>3</sub> Scales". Dr. Smialek has spent a remarkable 49 year career at NASA Glenn, in the field of high temperature oxidation and corrosion of aerospace engine materials. The chapter presented Dr. Smialek a certificate honoring his recognition as Zay Jeffries Award recipient for 2018 as well as a gift. The meeting was well attended by chapter members and guests and was held at the Crown Plaza in Independence.



**May 21, 2018**

This year's Awards Night was again held at the ASM Dome in Metals Park. There was a strong attendance by chapter members as well as from ASM International staff. The speaker was the evening was Dr. David Furrer, current Vice Present of ASM International. He attended the Executive Committee meeting and delivered a talk titled "Formalizing the Process-Structure-Property-Performance Approach to Materials, Process and Component Design and Development"



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We also gratefully acknowledge **David Ellis, FASM**, and **Gregory Petrus, FASM** as Chapter Sustaining Members. Thank you for your support.

A Sustaining Membership is an investment in your business and in the Cleveland Chapter. By signing up, your company will be featured on the chapter website and newsletter. Your company will also be featured on the chapter letterhead.

Chapter Sustaining Member dues help the chapter put on programming throughout the year and give scholarships to area students.

Consider becoming a Sustaining Member today.



A number of chapter awards were given out at Awards Night at the ASM Dome. Each has made significant contributions to the Cleveland Chapter!

Cleveland Chapter Award of Distinction

Warren Haws, Ph.D., FASM

Cleveland Chapter Distinguished Service Award

Alan Vormelker

Cleveland Chapter Outstanding Company Support Award

General Metal Heat Treating

Cleveland Chapter President's Award

Rosanne Brunello

Cleveland Chapter Technical Educator Award

Jennifer Carter, PhD.

Cleveland Chapter Young Member Award

Jessica Clinton

Further, the chapter had two recipients this year of awards from CTSC:

CTSC Technical Educator Award

Charlie Li, Ph.D.

CTSC Technical Achievement Award

Jessica Clinton

In addition, there is great pleasure in announcing the following awards or honors at the national level. It is excellent to be able to announce such recognition.

ASMI Nominating Committee

John Shields, Jr., Ph.D., FASM

ASMI Board of Trustees

Larry Somrack

ASMI Fellows

Michael Halbig

ASMI Historical Landmarks Award

Materion Elmore, Ohio Plant

ASMI William Hunt Eisenman Award (2019)

B. Lynn Ferguson, Ph.D., FASM

ASMI Edward DeMille Campbell Memorial Lecture (October 2020)

Mrityunjay Singh, Ph.D., FASM

Please join us in congratulating all the award recipients. They are thanked for their hard work and dedication to the chapter and national society. It is a pleasure to be able to recognize the contributions that are made. The Cleveland Chapter truly has some of the best and most dedicated members.

Awards Night is surely one of the best nights of the year, not only because it is held at the historic ASM Dome, but because of the chance to recognize members' accomplishments.

## Science Fair Scholarships

On March 13, several volunteer chapter judges attended the 65<sup>th</sup> Northeastern Ohio Science and Engineering Fair (NEOSEF) at Cleveland State University. The judges selected several outstanding materials science themed projects to receive awards. Awards were given at the Chapter Awards Night on May 21<sup>st</sup>. Almost \$1,000 in awards were given to the students. As always, the students and their projects were excellent.



The chapter formally presented the awards and recognition at the Awards Night. The students brought out their science fair posters to the Dome and presented to their work to the chapter members, guest, and folks from ASM International.

1<sup>st</sup> Prize: Tanish Makadia, “Thermoplastic Composites using Carbon Fiber”

2<sup>nd</sup> Prize: Abraham Condrich, “Shape Memory Alloy, the Last Line of Defense”

2<sup>nd</sup> Prize: Megan Collins, “Experimental Verification of Stokes Law”

3<sup>rd</sup> Prize: Clayton Ferguson, “High Dielectric Epoxy Resins for Structural Energy”

3<sup>rd</sup> Prize: Colleen Martin, “High Dielectric Epoxy Resins for Structural Energy”

3<sup>rd</sup> Prize: Thaddeus Salwan, “Metal Corrosion”

## Donaldson-Kiefer Scholarships

The chapter was pleased to again award three Donaldson-Kiefer scholarships this year. The scholarship is named after two former chapter members who made significant contributions to the chapter. The chapter is committed to supporting and inspiring motivated students who have demonstrated strength in academics as well as leadership and character. Congratulations to the recipients!

This year’s recipients were:

- Lee Kendall
- Lyla Graham
- Lindsey Shahan

## Educational Symposium

The Cleveland Chapter held its annual educational symposium on June 6<sup>th</sup>, on the topic of Microscopy for Materials Characterization. A total of 55 were in



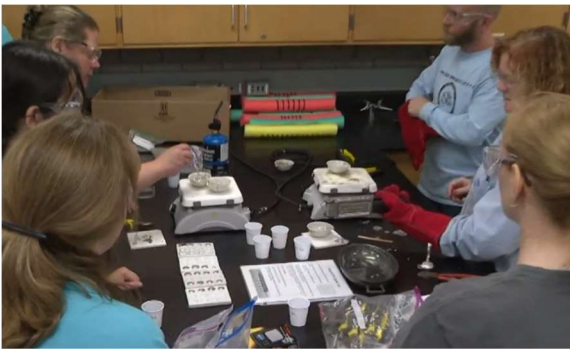
attendance, including ASM members and local students. Nine speakers covered a range of topics including;

optical microscopy, scanning electron microscopy, transmission electron microscopy, image analysis, X-ray microscopy, time-of-flight secondary ion mass spectroscopy, and atom probe tomography.

The chapter is grateful to the speakers, their companies, and the exhibitors, including: NSL Analytical, Carl Zeiss Microscopy, MIPAR Software, Allied High Tech Products, Materion Corporation, Swagelok Center for Surface Analysis of Materials, and Brook Anco Corporation.

## ASM Materials Camp

The 2018 Cleveland Materials Camp was held from June 26-28 at the Cuyahoga Valley Career Center. Over 12 teachers participated in this year's camp. The master teachers were Todd Bolenbaugh, Caryn Jackson, and Thomas Glasgow. This year a new format was piloted. Instead of a one-week workshop, the first phase of the new structure was a three-day workshop. This will be followed up by six monthly webinars or 3 industry tours. Then in 2019 another three-day workshop is planned. At least one local news outlet picked up the camp. **Special thanks are due to all the sponsors who helped make the camp a reality this year, they are listed below.**



### Thanks to our sponsors!!!



## 2018-19

With a new chapter year starting, the following is a list of incoming chapter officers.

Chairman – Ryan Paul

Vice Chair – Rosanne Brunello

Treasurer – Joe Snyder

Secretary – Kitty Conroy

There have already been a number of activities. Rosanne Brunello, Kitty Conroy, and Ryan Paul attended the CTSC annual collaboration forum. The purpose was to exchange



ideas with other area technical societies and look for ways to work together. Most of the societies

in the area are facing the same challenges as ASM.

The first executive committee meeting was held on August 29, in order to kick off the year ahead. Joining the committee were Material Advantage students from



CWRU and CSU. One of the new things for this year will be a student mentoring program. The details are

being worked out. Please contact Rosanne Brunello at [rosannemccay@gmail.com](mailto:rosannemccay@gmail.com) if you would like to be in the mentoring program. In addition, the following programming for the remainder of 2018 is announced.

## **September 25, 2018**

Join us for the first meeting of the 2018-19 program year. Guest speaker will be Jen Betz, to help us "Connect and Collaborate". Jen Betz is a private consultant who specializes in team building, small group organization, and leadership skills. She will E.D.G.E. you through the process while entertaining you. ASM Cleveland will have some fun as we identify topics, events, and people to cultivate and grow.

The event starts at 6:00 PM at the Toscana Party Center, 4972 E 71st St, Cleveland, OH 44125. Please visit our website to register or watch for the registration email in your inbox.

## **October 30, 2018**

October is Heat Treaters' Night! Mike Mercer Sr. of The Mercer Group will give a talk titled "Comparing Hot Zone Materials for a Vacuum Heat Treat Furnace". The event starts at 6:00 PM at the Toscana Party Center, 4972 E 71st St, Cleveland, OH 44125. Please watch for the registration email to register a few weeks before the event. Come dressed as your favorite materials scientist or material! There will be a winner for best costume. Come dressed to impress!

## **November 27, 2018**

Marc Glasser of Rolled Alloys will be the night's speaker. The talk will be "Material Selection and Characteristics of Steels". There will also be a Thanksgiving Food Drive for Cleveland Food Bank. The event starts at 6:00 PM at the Toscana Party Center, 4972 E 71st St, Cleveland, OH 44125. Please watch for the registration email to register a few weeks before the event.

## **December 19, 2018**

December is Fellows' Night. There will be a Holiday Party for members, family, and Fellows. The costume contest winner will pass out presents. The event starts at 6:00 PM at the Toscana Party Center, 4972 E 71st St, Cleveland, OH 44125. Please watch for the registration email to register a few weeks before the event.

## **2018-19 Chapter Officers and Committees**

Chairman – Ryan Paul

Vice Chair – Rosanne Brunello

Treasurer – Joe Snyder

Secretary – Kitty Conroy

Audit – Rau Pop

Awards – Bob Vigneulle

CTSC – Dave Brown

Student Chapters – Lee Kendall (CWRU) and Jessica Gialamas (CSU)

Educational Symposium – Ryan Paul

Golf Outing – Rosanne Brunello / Kitty Conroy

Historian – Diane Essock

Long Range Planning and Constitution – Warren Haws

Membership – John Kuli

Nominations – Radu Pop

Registration – Matt Gaydos

Scholarships – Brad Lerch, David Ellis

Science Fair – Ryan Paul

Sponsorship – Dave Kovarik

Student Affairs – Dave Brown

Teacher's Camp – Dave Kovarik

Website – Ryan Paul / Kitty Conroy

Zay Jeffries – Dave Ellis

In addition, there is a committee working on the 100<sup>th</sup> anniversary celebration, which will be held on Saturday May 18, 2019 at the Cleveland Museum of Natural History starting at 6:00 PM. Watch out for more details to come as the chapter looks to hold a celebration worthy of honoring 100 years of the Cleveland Chapter.