



Akron Chapter

Established in 1947

ASM Akron Chapter Meeting Date: March 20, 2019

Sponsor: ASB Industries, Inc.

Next Meeting: April 17, 2019

Please contact Deborah Curtis, deborah@asbindustries.com for reservations.

Reservations are requested no later than 3:00 pm on Monday March 18, 2019.

Speaker: Dr. David L. Ellis, FASM, Materials Research Engineer at NASA Glenn Research Center

Dr. Ellis earned his PhD in Materials Science from the Case Western University. He has been with NASA Glenn for over 30 years working on various aerospace applications. Majority of his research and development has been on high thermal conductivity, high strength materials for rocket engine liners.

Topic: Additive Manufacturing and Coatings Technologies for Rocket Engine Liners

Rocket engine liners represent an extreme materials environment. Temperatures can range from cryogenic liquid hydrogen at less than -253°C to flames that can exceed $3,000^{\circ}\text{C}$. Separating these two extremes is a liner wall typically 1mm or less in thickness. Heat fluxes typically far exceed one megawatt per square meter. Maximum thermal conductivity is required to prevent the liner from melting while high strength is required to contain the gas pressure. Typically, a low alloy Cu based material is used, but can be difficult to AM. A series of Cu-Cr-Nb alloys (GRCop) were developed for reusable launch vehicles. Various SLM, AM, thermal spray and cold spray coatings will be explored.

Location: New Era Café, 10 Massillon Rd. Akron, OH 44312, 330-784-0087

Networking begins at 5:30 p.m., Dinner at 6:30 p.m. Presentation 7:30 p.m.

Cost: \$25 Members & Spouses, \$30 Non-Members/Guests, \$20 ASM Retirees, \$10 ASM Life Members & Students. Please note: Only cash or checks will be accepted, NO Credit Cards.

Dinner Buffet: Chicken Paprikas, Stuffed Pork Chops, Potatoes, Vegetables, Salad, Coffee/Soda/Iced Tea and Dessert. Please specify if you require a vegetarian dinner when you make reservation.



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ASM Akron Sustaining Members

ASB Industries, Inc.

Akron Steel Treating Co.

Allied High Tech Products, Inc.

Solar Atmospheres

ASM Akron Chapter Officers 2019:

Chair: Lou Cseko Jr. American Friction Technologies, Inc. lou.cseko@americanfriction.net

Vice Chair: Dave Houser, P.E. Babcock & Wilcox – Retired davidhouser519@gmail.com

Secretary: Deborah Curtis ASB Industries, Inc. deborah@asbindustries.com

Treasurer: Gene Homer P.E. Babcock & Wilcox – Retired ghomer@neo.rr.com

Executive Committee:

Education: Dr. Robert Shemenski, FASM RMS Consulting bobski646@gmail.com

Membership: Amit (AP) Pandey, PhD ANSYS amitpandey02@gmail.com

Awards/Hospitality/Nominations: Dave Houser, P.E. davidhouser519@gmail.com

Student Affairs: Wayne Niehoff BWXTechnologies wayne.niehoff@sbcglobal.net

Eric Colwell McAfee Tool & Die Co. quality@mcafeetool.com

Engineers Week: Lou Cseko Jr. lou.cseko@americanfriction.net

Contributing Advisors: Dr. Rajeev Gupta University of Akron rgupta@uakron.edu

Materials Advantage Chapter: Benjamin Blazek University of Akron bb97@zips.uakron.edu

Mitchell Felde University of Akron mrf74@zips.uakron.edu



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ASM TECHNICAL PROGRAMS (2019)

Apr 17 – Member Appreciation & Student night (Wayne Niehoff)

May (TBA) – ASM AKRON MAY SOCIAL ACTIVITY

This is an advanced notice for ASM Akron Chapter May social activity. We plan to tour The Age of Steam Roundhouse Museum, which will open for the first time in May. There will be a guided tour for ASM Akron Chapter on Saturday, May 11, at 10 am. Tickets for the roundhouse tour are \$20.00 for adults and \$12.00 for youths 16 and under.

If you would like to attend the tour, please contact Eric Colwell, Quality Manager, McAfee Tool & Die, Inc., phone (330) 896-9555, or e-mail quality@mcafeetool.com,

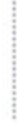
More information about tour plans will be available soon.

Robert Shemenski
Cell 330-705-2563



AGE OF STEAM ROUNDHOUSE
PO Box 427, Sugarcreek, OH 44681
330.852.4676 • www.ageofsteamroundhouse.org

July 22 – 26, 2019, ASM Material Camp for Teachers at the University of Akron



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