



surface  
technologies

# Aalberts University

MAY 20 & 21, 2025

LIVONIA, MI

A two-day educational event intended for design engineers, purchasing agents and other professionals who could benefit from this expertise.

Aalberts  
University

This is a non-  
commercial event

Aalberts will provide  
breakfast, a catered  
lunch and dinner

Attendees are  
responsible for their  
own transportation  
and lodging

Space is limited  
Please contact  
Cynthia Crowley  
today at  
734-744-9937 or

[cynthia.crowley@aalberts-st.us](mailto:cynthia.crowley@aalberts-st.us)

Metallurgy, metal casting and heat treatment are complex and technical subjects. The goal of this event is to provide education and inspiration in the areas of casting production and heat treatment of iron, steel, and aluminum components.

Aalberts surface technologies is a global leader in metallurgical technology and training. The expert-level instructors at this seminar will help you to meet your operational goals. The agenda is as follows:

<b>Night Before</b>
6:00 PM Dinner at a local Tap House
<b>Day 1</b>
8:00 AM Introduction - Logistics, history, participant introductions
9:00 AM Overview of Heat Treatment
BREAK
10:45 AM Ferrous Heat Treatment
LUNCH
1:00 PM Marquenching
2:00 PM Travel to Aalberts Plant
2:30 PM Tour of Aalberts Plant
6:00 PM Dinner at TBD
<b>Day 2</b>
8:00 AM Austempering 101 including cast iron and steel
BREAK
11:00 AM Introduction to Design
LUNCH
1:00 PM Surface Treatments including nitriding and FNC
2:00 PM Heat Treatment of Aluminum

All education costs and materials will be covered by Aalberts surface technologies. In addition, Aalberts will provide a light breakfast, lunches both days, as well as dinner the night before class and on the first night. Attendees are responsible for their own transportation and lodging.

**Session location:**

Marriott | 17100 North Laurel Park Drive | Livonia, MI 48152 | 734-462-3100

**Aalberts surface technologies location:**

12202 Newburgh Road - Livonia, MI 48150 | 734-464-8000

**Area lodging:**

Marriott | 17100 North Laurel Park Drive | Livonia, MI 48152 | 734-462-3100

More info to come with a discount rate and booking link.

**Restaurants:**

Monday - TBD

Tuesday - TBD

Note: Attendees are responsible for their own transportation to and from Aalberts surface technologies. Carpooling is encouraged.

## **INSTRUCTOR BIOGRAPHIES**

**Kathy L. Hayrynen, PhD, FASM** - Kathy has a BS, MS and PhD in Metallurgical Engineering from Michigan Technological University. Her graduate work focused on production of ductile iron and ADI. Following a post-doctoral research position on Ausformed/Austempered Ductile, Kathy joined Aalberts surface technologies (Applied Process) companies in 1995. She is currently the Vice President of Research & Development. Kathy is well known in the Austempering world having authored and co-authored many papers on ADI and frequently speaks on said topics. She is a past Chair of the AFS Cast Iron Division, a former President of the Foundry Educational Foundation and a member of the AFS Research Board as well as the External Advisory Board for the Department of Materials Science & Engineering at Michigan Tech. Kathy has received several industry/academic honors including: an AFS Award of Scientific Merit, an AFS Ray H. Witt Management Award, the AFS Women in Metalcasting Award of Excellence, ASM Fellow, ASM Education Foundation George Roberts Award and induction into the MSE Academy at Michigan Tech. More recently, she received an AFS John H. Whiting Gold Medal for her exemplary work in cast iron research and standards, leadership in streamlining the AFS Cast Iron Division committee structure, as well as for advocacy and mentorship of students and women in metal casting. Kathy is a passionate advocate of STEM education and spends her spare time organizing an annual ASM Teachers' Materials Camp that enables high school and middle school teachers to offer materials-based education to their students.

**Jeremy Lipshaw** - Jeremy received a Bachelor's in Materials Science and Engineering in 2017 and a Master's in Mechanical Engineering in 2018 from the University of Michigan. In addition to his studies, Jeremy worked at and eventually managed Joyworks Studio, a prototype foundry specializing in castings education and ductile iron research. After graduation, he joined Aalberts surface technologies (Applied Process) as the Product Development Engineer in R&D. Recently promoted to Technical Services Manager for the austempering division, he assists with technical inquiries and quality concerns, designs lightweight and sustainable casting conversions, characterizes novel heat treatments, and improves internal modeling capabilities. Jeremy also serves as the Chair of the Ductile Iron Society Research Committee.

**Angella Sell** - Angella received her BS and MS in Metallurgical Engineering from Missouri University of Science & Technology. After graduation Angella went to work in the ferrous foundry industry in eastern Ohio for five years. There she gained experience as a Plant Metallurgist, a Quality Engineer, and met her husband Dan. Angella joined Aalberts surface technologies (Applied Process) in 2015 as a Research and Development Engineer where she manages the lab and equipment, assists with cycle development, and provides technical support for plant production and customers. Angella is also the Chair of the AFS Cast Iron Research Committee.

**Jeremiah Ferguson** - The newest addition to the Aalberts HTU instructor's team, Jeremiah earned a Bachelor's in Metallurgical and Materials Engineering from the Colorado School of Mines in 2018. Immediately after graduation, he joined Aalberts surface technologies (Atmosphere Annealing) as a Metallurgical Engineer in the Canton facility. With responsibilities in process development and quality control for steel heat treatment, he quickly moved on to the Quality Manager role for the Wadsworth facility. He specializes in heat treating aluminum alloys for applications in aerospace and defense industries and recently accepted a promotion as Technical Services Manager - Ferrous & Aluminum. He will continue to apply his metallurgical knowledge as a go-to resource for aluminum and ferrous business inquiries. Jeremiah is noticeably passionate about his work and is excited to share his technical expertise.



# Aalberts University

Please return to  
Cynthia Crowley at

[cynthia.crowley@aalberts-st.us](mailto:cynthia.crowley@aalberts-st.us)

(734) 744-9937

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Phone #: \_\_\_\_\_

Email: \_\_\_\_\_

Are you facing an obstacle you would like to discuss during the session? If yes, please explain:

\_\_\_\_\_  
\_\_\_\_\_

Attendance, please check all that apply:

Evening Before Class: Dinner (Optional)       Yes       No

Day One: Class & Lunch       Yes       No

Day One: Dinner       Yes       No

Day Two: Class & Lunch       Yes       No

Aalberts surface technologies is a Defense Contractor and must know the citizenship status of all visitors. Please check the box which accurately describes your status (required):

United States       Citizen       Green Card Holder       Visa

List type if applicable: \_\_\_\_\_

Please report any dietary restrictions, including food allergies: \_\_\_\_\_  
We will do our best to accommodate you.

We reserve the right to publish photos on our website and social media sites.