

# **FEF** SANDBOX TIMES

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## WHAT'S UP ON CAMPUS

The spotlight for this issue is on the University of Alabama. Professor Charlie Monroe has been serving as the FEF Key Professor since 2020. Charlie is also an FEF alum from the Penn State class of 2003.

One of the updates happening this fall is installing a 3D laser powder bed fusion machine, which will be used for making tooling and enhancing the program's manufacturing capabilities. In addition, they have installed a prime coat zircon investment dip to complement the existing silica-based backup investment shell system, further improving their investment casting processes. Looking to the future, UA is preparing drawings for a foundry renovation to improve the enclosed portion of the lab, specifically where PPE is suited up and chemistry testing with the spectrometer is performed.

According to Professor Monroe, the overall program continues to grow, with three new faculty members teaching this fall. They have also organized their equipment and foundry space into the new Center for Manufacturing and Materials Design Innovation (CAMMDI), which will provide better support for maintaining equipment and assist both students and faculty in research and lab activities.

Related to students, enrollment in the introduction to metallurgy class, MTE 121, has increased by 50%, bringing the incoming class size to about 30 students. This course provides students their first exposure to the foundry, a key part of the handson learning experience. Charlie said, "Over the summer, UA students were active in internships and extra-curricular programs, and they have returned this fall with great enthusiasm." One of the recent

highlights was a cast iron project where students produced 47 grates for the university's welcome center, pouring over 3,000 pounds of iron in the process

Looking ahead, speakers are being contacted for the student American Foundry Society (AFS)/Materials Advantage (MA) chapter and open foundry days are being scheduled. Students are also forming new teams for the 2025 Cast in Steel competition and collaborating with the forging club on casting anvils for future projects.

If you're interested in helping out at an open foundry day event or making a presentation at a student chapter meeting, I'm sure Charlie would love to get you penciled in.

## WHAT'S COMING UP

Fall is always a busy time on FEF college/university campuses. A couple of events that we wanted to highlight are listed below. If you are in the area, you are more than welcome to attend. Your presence is always an encouragement to the FEF Professors and it's a great opportunity to influence current students into the metalcasting industry. Hope to see you at one of these events.

Trine Open Foundry – 10/4 – 1:15-4:00pm (contact Professor Webber @ webberd@trine.edu) Rosmait Retirement Celebration — 10/5 — 10:00am-2:00pm (contact Professor Rosmait @ rrosmait@pittstate.edu) Platteville Pumpkin Pour – 11/1 – 5:00-9:30pm





It's always fun for FEF staff to attend different types of events where we can reconnect with alumni and friends. This summer has been no different. We hosted a couple of company FEF alumni lunches — one at EJ in Ardmore, OK and one at MetalTek in Waukesha, WI. Professor Luis Trueba (Texas State) was even able to bring a few of his interns to join us at the EJ lunch. We also caught up with some alumni, professors, and friends at several AFS Chapter golf outings over the past few months. (Photo bottom left)

#### **WHY GET** INVOLVED

FEF alumni stay engaged with us for many different reasons. We asked a few to share their motivation for involvement and wanted to share those thoughts with you. Maddie Wilson Smith (Kent 2018) said, "Being involved with FEF is such an important part of my career due to all the support I received while at Kent State University and the first years in Industry. I am even more excited to help the University of Pittsburgh start a student AFS chapter after years of not having one." According to Jay Morrison (Western Michigan, 2008), "Every year, high school students are introduced to the casting process through the Metalcasting Summer Program hosted by Western Michigan University. Being a panelist during this weeklong event and by being a part of FEF allows me to connect with these future researchers and potential leaders of our industry." Kramer Pursell (Trine 2012, MS&T 2014) added, "I would say 'it's a two-way street - to give students a glimpse into what a career looks like in our exciting and challenging industry, and to see what technologies being used at the university-level can be applied in the industry now." There are many reasons to engage with FEF and students currently enrolled in our schools' metalcasting programs. Let us know if you're interested in specific ways you can be involved - pam@ fefinc.org.

#### **HOW YOU CAN BE INVOLVED**

There are many ways to be engaged and involved with FEF. If you would like more information about one of the following, please let us know (pam@fefinc.org).

- Attend the CIC encourage the next generation of metalcasters
- Make a gift for the Pour it Farward campaign https://alumni.fefinc.org/g/pouritforward2024
- Sponsor or help out with a school project
- Follow FEF on social media

We are introducing a new website for FEF alumni – alumni.fefinc.org. This platform will allow alumni to more easily connect with each other, catch up on FEF news, make donations, and even post relevant information and photos. Make sure you visit from time to time to see what's new and to reconnect with old friends.



If you would like to make a donation, use this QR code to access our donation page.

### **NEW GRAD** SPOTLIGHT



Meet Collin Dean, a graduate of the University of Alabama with a B.S. in Mechanical Engineering and a Minor in Manufacturing.

Collin graduated in 2023 and is currently employed at ACIPCO (American Cast Iron Pipe Co.) as a Manufacturing Engineer. As the manufacturing engineer he is responsible for the company's large diameter pipe shop. He supports production throughout the core making, casting, annealing, testing, and cleaning processes of ductile iron pipe from 36" to 64" in diameter.

Collin said, "I got involved in metalcasting by showing up at the

University of Alabama's foundry for a forging demonstration. After seeing the foundry's metalcasting capabilities, I was at the on-campus foundry nearly every day for the rest of my time at Alabama." Along with working full time as a research assistant in the foundry during the summer, Collin also competed in the 2023 Cast in Steel competition and started a forging club. He added, "I enjoyed learning different metalcasting processes to produce a wide array of castings including spears, anvils, and jewelry."

Some of Collin's hobbies include CrossFit, pickleball, and wake-surfing

### **ALUMNI SPOTLIGHT**

Sid Tankersley who is a graduate of the University of Alabama is in the spotlight this quarter. He graduated with a major in Metallurgical Engineering and is currently using his expertise at American Foam Cast with Executive Management responsibilities.

Sid said, "I feel blessed to have studied at a university with a great metalcasting program." He also feels strongly about giving back to that institution. He serves on the UA FEF Advisory Board and the Department of Metallurgical and Materials Engineering Industrial Advisory Board as well as the Dean's Capital Campaign Cabinet for the College of Engineering.

Another opportunity that Sid has had to engage with and influence current students is at the CIC. He has been a speaker at two different conferences sharing his expertise and enthusiasm for this industry. And all indications are that he walks the talk. His daughter, Megan, has just graduated from UA with a degree in MTE and is now an employee at ACIPCO. Additionally, his nephew, Cole, is currently a Metallurgical & Materials Engineering student at UA.

In his free time, Sid enjoys boating, golfing and aviation.



