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A number of steel-related activities involving the participation of more than 200 students were conducted this year, included changes to course curriculum to incorporate steel casting and heat treatment labs, steel-related lectures and guest lectures, and tours of steel manufacturers.

Students were encouraged to attend AISTech, MS&T and Metal Casting Congress, and to apply for AIST scholarships. In addition, undergraduate students were encouraged to participate in steel-related research experiences such as the American Foundry Society student poster presentation competition. During the summer, we held ASM materials camp and three Jackling Introduction to Engineering Camps in which more than 150 high school students participated in steel-related workshops and research demonstration pours involving advanced high-strength and lightweight steel.

Steel Industry Day could not be held in the spring 2018 semester because of scheduling problems. Steel Industry Day will be held this year on 28 November. We anticipate at least 10 companies will participate.

Steel-related student activities from October 2017 to August 2018 included:

- Brought students to MS&T17 and participated in the University-Industry Relations Roundtable (UIRR).
- Tours to Big River Steel, Southern Cast Products steel casting foundry, Amsted Rail Granite City Works and American Foundry Group steel casting foundry.
- Students attended the Peaslee Steel Manufacturing Research Center technical meeting to learn more about steel manufacturing research and to network with our 15 steel industry members and guests.
- Guest lecture by Mike Petrus of American Cast Iron Pipe Co. on iron and steel pipe production.
- Metal Casting Congress conference and technical presentations on steel research by undergraduate students. Ten students were able to make the trip to Fort Worth, Texas, to watch the latest technical presentations on cast steel research.

- A steelcasting laboratory was added to the curriculum of MET 3425 (metals processing) lab.
- Brought students to AISTech 2018 and participated in the UIRR and the Steel to Students Reception.
- Several steelcasting and pouring demonstrations were held in the university's foundry this year. These included opportunities for students to cast stainless steel as part of closed foundry activities for American Foundry Society and Material Advantage Students. Steelcasting demonstrations were performed for a group of 30 high school guidance counselors from all across the country.
- Summer 2018: The university foundry hosted a steel demonstration pour and foundry workshop for more than 100 high school juniors and seniors participating in the Jackling Introduction to Engineering Camp and the ASM Materials Camp. The workshops included patternmaking, sand molding and casting activities as well as a steel heat treatment workshop in which students performed different heat treatments on 1045 and 1018.
- New steelcasting labs have been introduced into the curriculum of MET 4425 (metalcasting lab).

Upcoming steel-related activities and student participation for fall 2018 are to include:

- 4 October: Student tour of Big River Steel and Nucor Memphis (up to 40 students).
- 14 October: Take students to MS&T18.
- 25 October: MET 4420 and Metals Deformation class trip to Alton Steel and Nucor's cold drawing facility.
- 28 November: AIST Foundation Steel Industry Day.
- 29 November: Peaslee Steel Manufacturing Research Center meeting and networking opportunity.