Grant Recipient Report

Kent D. Peaslee Junior Faculty Award

JingJing Qing, Georgia Southern University

Goals of the project include: (1) students from Georgia and adjacent states can obtain higher-quality engineering education on steel and iron at Georgia Southern University (GSU) and they will be prepared with knowledge and skills to become the engineers in the steel and iron industry; (2) a greater number of students at GSU will take advantage of the training and education programs offered by AIST and plan a future career path in the steel and iron industry; (3) additional students at GSU are offered with abundant opportunities to directly network with the steel and iron industry in the Southeast region and beyond the region for internships, co-ops and full-time jobs; (4) students at GSU will have access to steel and iron processing and metallurgy facilities and become equipped with knowledge and skills to conduct research on steel and iron.

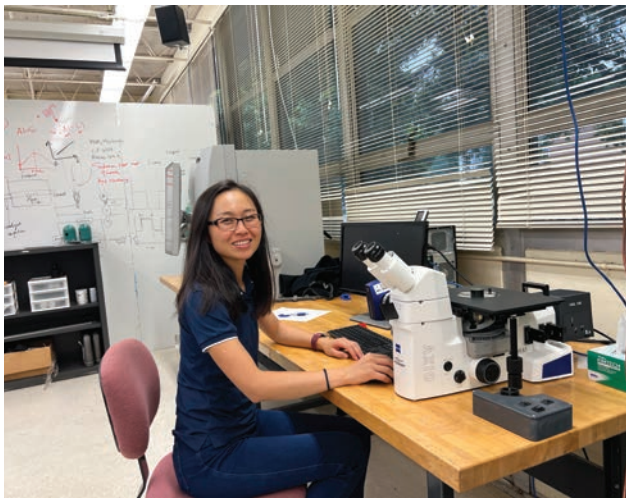
With the support of AIST Kent Peaslee Junior Faculty Grant, Dr. Qing is organizing and leading various events and activities to enhance the education on steel and iron and promote the steel and iron industry at Georgia Southern University (GSU). With the strong support from the local steel and metalcasting industry as well as the Allen-Paulson Computing and Engineering College of GSU, Dr. Qing has established a well-equipped metallurgy and analytical lab to pair with the GSU foundry/metalcasting lab. These labs have been utilized to host research and education activities for GSU students.

Dr. Qing has been working closely with the AIST Foundation to promote AIST training and scholarship programs among GSU students. An increasing number of students from GSU are sponsored to attend training conferences focused on the iron and steel industry. Dr. Qing is working actively with the local AIST Member Chapters and committees of various technical organizations to host and sponsor events for attracting students' interest in steel and iron metallurgy and processing.

Steel plant tours have helped GSU students to identify their interest in steelmaking and shape their future career path.

Dr. Qing has established a Material Advantage (MA) chapter for GSU, and the GSU MA chapter is working closely with the GSU American Foundry Society student chapter to host various events and maintain close connections to the iron and steel industry. Outreach activities like summer camps on metalcasting and lectures for high school students have helped draw greater attention to the engineering education program on steel and iron at GSU.

Curricula covering topics on iron and steel have been developed, offered and continuously improved to prepare GSU students with necessary knowledge of ferrous metallurgy and processing.



In addition, Dr. Qing sponsored two senior design projects: (1) building a steel rolling mill station to enable the capability of thermomechanical processing of steel, and (2) building a cupola furnace to enhance the outreach activities. ✦