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FOR IMMEDIATE RELEASE

AIST FOUNDATION CHOOSES WINNERS OF 2017 ELECTRICAL ENGINEERING GRANT

PITTSBURGH, 31 August 2017 — Two university professors and their teams have been awarded the [Association for Iron & Steel Technology Foundation's](#) Electrical Engineering Grant for proposals that identified an electrical challenge within the steel manufacturing industry. Each winner will receive US\$10,000.

Established in 2015, the objective of the AIST Electrical Engineering Grant is to support professors in promoting the steel industry to electrical engineering students; provide direct interaction for electrical engineering students with the industry; and recruit more electrical engineering students for employment in the industry.

The winners of this year's Electrical Engineering Grant are:

- **Dr. Kelvin T. Erickson, Missouri University of Science and Technology**
"Development of Steel Continuous Annealing Line Simulation"
There currently exists no publicly available dynamic simulation model of a continuous annealing line. This project proposes the development of such a model with the Mimic commercially available simulation software from Mynah Technologies. This model will interact with the currently installed Rockwell controllers to provide a dynamic model of moderate fidelity. The simulation model will also be used in the Plantwide Process Control class starting in the spring 2019 semester, exposing approximately 15 electrical engineering undergraduate and graduate students to the steel industry.
- **Dr. Donald Gray, Purdue University Northwest**
"Advanced Modeling to Optimize and Visualize Strip Flatness"
The general objective is to first develop a procedure for the model identification of flatness actuators for use in simulation models. Secondly, a basic simulation tool will be created to help in the development and implementation of a flatness control system that can be used on both hot and cold rolling mills that include bending, tilting and CVC actuators. Lastly, a visualization tool will be developed to display the final product produced by the closed-loop roll stand simulator.

At the completion of their projects, a report will be submitted to the AIST Foundation defining the effective outcome of their team effort, and the final report will be included in AIST's technical journal, *Iron & Steel Technology*.

Dr. Erickson said, "This grant will enhance the already existing relationship between Missouri S&T and ArcelorMittal that exposes electrical engineering students to careers in the steel industry. The use of the developed model of the continuous annealing line in a regular course will expose even more undergraduate and graduate students to careers in the steel industry."

The AIST Foundation is a Pennsylvania-based 501(c)(3) non-profit corporation organized for charitable, education and scientific purposes to attract technology-oriented professionals to the steel industry by educating the public about the high-tech, diverse and rewarding nature of careers in steel manufacturing. Through a variety of

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programs, the AIST Foundation awards more than US\$750,000 annually in programs and grants to students, instructors and schools to ensure the iron and steel industry of tomorrow will have a sufficient number of qualified professionals.

[AIST](#) is a non-profit technical association of 17,500 members from 70 countries, with the mission to advance the technical development, production, processing and application of iron and steel. The organization is recognized as a global leader in networking, education and sustainability programs for advancing iron and steel technology.

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