

ASM Heat Treating Society Student Competitions

Are you a current college student studying materials science and engineering? If so, your full conference registration for the IMAT 2022 Conference & Exposition is only \$25! This reduced registration fee includes access to a wide variety of student programming, competition and activities during IMAT.

Take advantage of this unique opportunity to network with professionals in the industry, learn about all aspects of the field through technical programs, and get to know the company you could work for one day. Get a taste of your future within the heat treating industry. Register as a student and bring your Student ID with you to the show.

FLUXTROL STUDENT RESEARCH COMPETITION

SEPTEMBER 13 - 14, 2022

IMAT 2022 will offer the young, innovative scientists/professionals competition-based award and recognition program, seeking to encourage participation of young scientists in the ASM Heat Treating Society, and to provide attractive offers and opportunities in the worldwide Thermal Processing community. We are soliciting abstract submissions based on thermal processing of metal/metal containing components for this competition.

ELIGIBILITY:

Students' pursuing an undergraduate or post graduate degree at a University or are within one year of graduation, but conducted the research while still enrolled at a University, having completed an aspect of thermal processing research. Submission of completed abstract must be presented by the student author on-site in New Orleans, Louisiana.

REVIEW:

Phase 1: students will prepare a poster highlighting their work and present during a special poster session during IMAT 2022. The submitted posters will be evaluated by an international team of thermal processing professionals from both academia and industry. The student posters with the highest cumulative scores from the judges will be named semi-finalists; and the student authors will be invited to present their work orally in a special session at IMAT 2022.

Phase 2: Semi-finalists selected from the poster session will give an oral presentation. Presentations will be no more than seven minutes in length with three minutes for questions from the judges. Each oral presentation will be evaluated and scored for originality, experimental and research results and presentation style.

SUBMISSION:

Students will follow guidelines for Heat Treat 2021- technical program abstract submission.

SUBMISSION DEADLINE: MAY 20, 2022

FINALIST:

All semi-finalists will be required to present on-site in New Orleans, Louisiana. Presentations will be no more than seven minutes in length with three minutes for questions from the judges. The winner of the competition will be announced at the end of the session and will receive the following, courtesy of Fluxtrol:

1ST: \$2,500 • 2ND: \$1,000 • 3RD: \$500

HTS STRONG BAR COMPETITION

SEPTEMBER 13 - 14, 2022

GOAL:

Student teams will heat treat steel bar to achieve the highest combination of bending strength and bend deflection.

DESCRIPTION:

Four cold drawn cylindrical pieces of 9254 spring steel will be provided by the ASM Heat Treating Society to each team (only one complete sample must be submitted for testing at IMAT 2022; three samples are for experiment and analysis). Teams will heat treat the specimen according to their best choice and bring the heat treated cylinders to IMAT 2022. Teams will provide a poster that describes their heat treatment method, the hardness profile, and microstructure.

DEADLINE:

TEAM SUBMISSIONS DUE BY FEBRUARY 25, 2022

ELIGIBILITY:

College student teams (Material Advantage or other) are invited to participate.

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