SUBMIT AN ABSTRACT BY JULY 1

FEBRUARY 27-MARCH 3, 2022
ANAHEIM CONVENTION CENTER & ANAHEIM MARRIOTT
ANAHEIM, CALIFORNIA, USA
#TMSAnnualMeeting

SUBMIT AN ABSTRACT FOR THE FOLLOWING TMS2022 SYMPOSIUM:

ADVANCED MATERIALS

High Performance Steels

Steels are critical for effectively all industries that form the core of human civilization. This key role motivates collaborative research efforts amongst industry, academia, and national laboratories to continuously improve the fundamental understanding of steel behavior, addressing at the same time current challenges to make steel production and applications more sustainable.

The High-performance Steels Symposium, therefore, focuses on novel developments in steel design, and on new insights regarding processing-microstructure-property relationships in steels. Improved understanding of these relationship calls for multi-probe approaches that incorporate:

- Conventional mechanical tests (tensile, charpy, bending, etc.) and microstructure analyses methods (SEM, EBSD, XRD)
- Advanced characterization techniques (e.g., HRTEM, APT, and in-situ SEM/TEM/Synchrotron/neutron diffraction)
- Advanced modelling and computational efforts (e.g., ab initio methods, computational thermodynamics, discrete dislocation dynamics, crystal plasticity), in the spirit of integrated computational materials engineering (ICME).

This symposium welcomes contributions in all of these directions, and especially those that integrate these different techniques and approaches, to create a venue to discuss the future of steel design.

ORGANIZERS
Ana Luiza Araujo, CBMM North America Inc.
C. Cem Tasan, Massachusetts Institute of Technology
Jonah Kleem-Toole, Colorado School of Mines
Louis G. Hector, General Motors Global Technical Center
Tilmann Hickel, Max-Planck-Institut Fuer Eisenforschung
Benjamin Adam, Portland State University

SYMPOSIUM SPONSORS
TMS Steels Committee

www.tms.org/TMS2022

QUESTIONS?
Contact programming@tms.org