THE WORLD COMES HERE

TMS2020

149th Annual Meeting & Exhibition

February 23-27, 2020 • San Diego, California, USA

Submit an abstract to:

Materials Design

Microstructural Template Consisting of a Face-Centered Cubic Matrix with Ordered Precipitates: Microstructural Evolution and Properties

The microstructural template based on a homogeneous distribution of ordered precipitates (such as L12 or DO22) within a face-centered cubic (FCC) matrix, is one of the most prevalent templates used in multiple alloy systems including nickel-base and cobalt-base superalloys, austenitic steels, aluminum-base alloys, and more recently in high entropy alloys, or complex concentrated alloys. These ordered precipitates have been established to be potent strengtheners, both at room and at elevated temperatures, in case of these alloy systems.

This symposium will bring together the different communities working on these alloy systems under one umbrella. The areas of interest include, the mechanism of precipitation of the ordered phase within the FCC solid solution matrix, distribution of the alloying elements between matrix and precipitate, other related phase transformations, and the influence of these on the overall microstructural evolution and mechanical properties of these alloys. Both experimental and computational work on these topics are welcome. We strongly encourage researchers working in this field, but often on different alloy systems, to participate in this unique symposium.

ORGANIZERS
Rajarshi Banerjee, University of North Texas, USA
Eric Lass, National Institute of Standards and Technology, USA
Ashley Paz Y Puente, University of Cincinnati, USA
Tushar Borkar, Cleveland State University, USA
Keith Knipling, Naval Research Laboratory, USA
Sophie Primig, University of New South Wales, Australia

SYMPOSIUM SPONSORS
TMS Materials Processing & Manufacturing Division
TMS Phase Transformations Committee

Abstract Deadline is July 1, 2019. Submit online at
www.programmaster.org/TMS2020.

Questions?
Contact programming@tms.org