

THE WORLD COMES HERE.
TMS 2023
152nd Annual Meeting & Exhibition

MARCH 19–23, 2023
SAN DIEGO CONVENTION CENTER &
HILTON SAN DIEGO BAYFRONT
SAN DIEGO, CALIFORNIA, USA
#TMSANNUALMEETING



SUBMIT AN ABSTRACT BY JULY 1 FOR THE FOLLOWING TMS2023 SYMPOSIUM:

MATERIALS DESIGN

Thermodynamics and Kinetics of Alloys

With the advances of computer science and instrumentation technology, alloy design has been transformed from traditional trial-and-error to the integrated design of computer simulation and experimental verification. Thermodynamics and kinetics are always the fundamental focuses to understand the various properties of alloys during design, process, and service. In this symposium, we encourage submissions regarding theoretical calculation, thermodynamic and kinetic assessment, experimental investigation, as well as modern approaches to alloy design such as CALPHAD and Artificial Intelligence methods.

Topics of choice for this symposium include, but are not limited to:

- Thermodynamic/physical properties and their experimental measurements
- Thermodynamic assessments of alloy systems
- Experimental study on kinetic properties such as diffusion and microstructure evolution
- Computer simulation on phase transformation (solidification, diffusion, precipitation, microstructure evolution, etc.)
- Study on phase stability such as spinodal decomposition and meta-stable phases
- High entropy alloy design
- Development on thermodynamic and physical property databases

ORGANIZERS

Ji-Cheng Zhao, University of Maryland
Wei Xiong, University of Pittsburgh
Chuan Zhang, CompuTherm LLC
Shuanglin Chen, CompuTherm LLC

SYMPOSIUM SPONSORS

TMS Structural Materials Division
TMS Alloy Phases Committee

www.tms.org/TMS2023

QUESTIONS?
Contact programming@tms.org