

THE WORLD COMES HERE.  
**TMS2024**  
153<sup>rd</sup> Annual Meeting & Exhibition

MARCH 3–7, 2024  
HYATT REGENCY ORLANDO  
ORLANDO, FLORIDA, USA  
#TMSAnnualMeeting



**SUBMIT AN ABSTRACT FOR THE FOLLOWING TMS2024 SYMPOSIUM:**

**DATA-DRIVEN AND COMPUTATIONAL MATERIALS DESIGN**

**Thermodynamics and Kinetics of Alloys II**

The thermodynamics and kinetics of alloys play a pivotal role in understanding and optimizing their properties and performance. This symposium aims to bring together experts from academia, industry, and research institutions to exchange knowledge, discuss recent advances, and explore future directions in the field of thermodynamics and kinetics of alloys.

The symposium will cover a wide range of topics related to thermodynamics and kinetics of alloys, including, but not limited to:

- Experimental investigations of thermodynamics and kinetics of alloys, such as phase transformations, microstructural evolution, diffusion kinetics, and solidification behavior.
- Theoretical studies on kinetic mechanisms in phase stability/transformation and atomic diffusion, such as nucleation, and growth in alloys.
- Theoretical studies on alloy thermochemical and/or thermophysical properties (thermal/electrical conductivity, elastic properties, etc).
- Thermodynamic modeling and kinetic assessment of multicomponent systems. Modern approaches coupling with the CALPHAD method for alloy design and development, as well as processing optimization.

The proposed symposium on "Thermodynamics and Kinetics of Alloys" is more focused on the CALPHAD method and will be a unique catch-all forum for researchers working in the field of both experiment and modeling to discuss the latest advancements and challenges related to thermodynamics and kinetics of alloys.

**ORGANIZERS**

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

**SYMPOSIUM SPONSORS**

TMS Structural Materials Division  
TMS Alloy Phases Committee