

THE WORLD COMES HERE.
TMS2024
153rd Annual Meeting & Exhibition

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



SUBMIT AN ABSTRACT FOR THE FOLLOWING TMS2024 SYMPOSIUM:

MATERIALS DEGRADATION AND DEGRADATION BY DESIGN

Refractory Metals 2024

The refractory metals tungsten, rhenium, tantalum, molybdenum, and niobium have extremely high melting temperatures, from 2,468°C up to 3,180°C. Alloy systems based on these elements are of renewed interest in designing new alloys for ultra-high temperature applications. Barriers that must be overcome in designing and implementing new refractory-metal-based alloys suitable for ultra-high temperature service include: maintaining high melting temperatures in multicomponent systems, effectively using strengthening mechanisms at very high temperatures, dealing with poor oxidation resistance, and avoiding problems with corrosion. This symposium offers a venue to communicate research addressing these barriers and other issues related to the design, testing, manufacturing, and implementation of refractory metal alloys in ultra-high temperature applications. We encourage both experimental and theoretical work from academic, government, and industrial sectors to promote a diverse group of presentations from professionals and students.

ORGANIZERS

Christopher Thom, Rhenium Alloys, Inc., USA
Wolfgang Pantleon, Technical University of Denmark, Denmark
Michael Kirka, Oak Ridge National Laboratory, USA
Gaoyuan Ouyang, Ames Laboratory, USA
Marie Charpagne, University of Illinois, USA
Eric M. Taleff, University of Texas at Austin, USA
Thomas R. Bieler, Michigan State University, USA
John H. Perepezko, University of Wisconsin-Madison, USA

SYMPOSIUM SPONSORS

TMS Structural Materials Division
TMS Refractory Metals and Materials Committee

www.tms.org/TMS2024

QUESTIONS?
Contact programming@tms.org