THE WORLD COMES HERE.

# TMS2025

**154th Annual Meeting & Exhibition**

**March 23–27, 2025**
MGM Grand Las Vegas
Hotel & Casino
Las Vegas, Nevada, USA
#TMSAnnualMeeting


## SUBMIT AN ABSTRACT FOR THE FOLLOWING TMS2025 SYMPOSIUM:

### MATERIALS DEGRADATION AND DEGRADATION BY DESIGN

## Refractory Metals 2025

The refractory metals W, Re, Ta, Mo, and Nb have extremely high melting temperatures, from 2468 up to 3180˚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 a 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**
**Matthew Osborne,** Global Advanced Metals**; Paul Rottmann,** University of Kentucky; **Gianna Valentino**, University of Maryland

**SYMPOSIUM SPONSORS**
TMS Structural Materials Division, TMS Refractory Metals & Materials Committee

**www.tms.org/TMS2025**

**QUESTIONS?**
Contact programming@tms.org