

TMS2015

144th Annual Meeting & Exhibition

March 15-19, 2015 • Walt Disney World
Orlando, Florida, USA

Connecting the global minerals, metals, and materials community.



Plan Now to Attend:

High-Performance Aerospace Alloys Design using ICME Approach

The aim of this symposium is to facilitate a broad discussion of aerospace metallic alloys microstructure design using an ICME approach to advance science-based development of advanced aerospace materials, which include, but are not limited to, nickel base superalloys, titanium alloys, aluminum alloys, and high-temperature materials. Integrating with experimental data to calibrate and validate models is critical in materials design. It is evident that bridging manufacturing, design, and materials will benefit the art of new materials development.

We are seeking abstracts in the following general topic areas:

- Property improvement by optimizing processing parameters of traditional processing methods, such as casting, forging, and heat treatment
- Validation and verification of processing and property prediction models using experimental data
- Data management, materials informatics
- Uncertainty quantification and uncertainty propagation
- Development of new or advanced high-performance materials, creative processing methods or novel structural materials including nickel-base superalloys, titanium and aluminum alloys
- Microstructure/topography enhancement guided by models
- Improved performance through introduction of anisotropic properties of ordered microstructure
- Concept design of new functional high-performance metallic materials
- Multi-scale modeling and development of computational tools for the prediction of properties and for microstructure sensitive design

Sponsored by:

- TMS Materials Processing & Manufacturing Division
- Integrated Computational Materials Engineering Committee

Organized by:

Awadh Pandey, Pratt & Whitney (USA)
Somnath Ghosh, John Hopkins University
Dongsheng Li, Pratt & Whitney

**For more information on how
to participate, visit:**

www.tms.org/TMS2015

Questions? Contact programming@tms.org