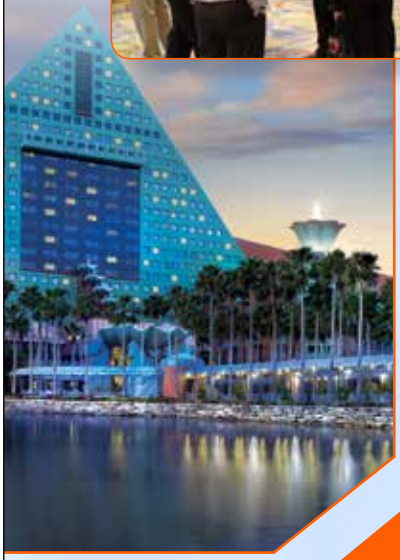
TMS2015

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:

Polycrystalline Materials: Bringing Together Experiments, Simulations, and Analytic Theories

The control of polycrystalline grain microstructures of solid materials through processing is crucial to improve their properties, such as strength, toughness, and electrical conductivity. This symposium will focus on the understanding and prediction of the thermodynamics and kinetics of grain microstructures during recovery, recrystallization, and grain growth. Recent advances in computational hardware and numerical algorithms have opened up new possibilities for theoretical investigations of these phenomena as they occur in real specimens: namely, in 3D. Moreover, ongoing experimental developments—including atomic resolution methods, orientational imaging, and advanced in situ techniques—are providing quantitative insights and data concerning the development of grain structure and motion of individual boundaries that can further inform and validate the theoretical and modeling approaches. We invite contributions that address these issues and current advances in the field, particularly those that aim to bridge the remaining gaps between experiment and theory.

Sponsored by:

- TMS Functional Materials Division (formerly EMPMD); TMS Structural Materials Division
- Chemistry and Physics of Materials Committee

Organized by:

Dana Zöllner, Otto von Guericke University Magdeburg (Germany)
Douglas L. Medlin, Sandia National Laboratories (USA)
Dmitri A. Molodov, RWTH Aachen (Germany)

For more information on how to participate, visit:

www.tms.org/TMS2015

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