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March 10–14, 2019 San Antonio, Texas, USA

JOIN US FOR THIS TMS2019 SYMPOSIUM:

CHARACTERIZATION

Interfaces in Structural Materials: An MPMD Symposium in Honor of Stephen M. Foiles

The key to the development of advanced materials with tailored microstructures and architectures is a detailed understanding of interfaces. In particular, the significance of internal (grain and phase) boundaries as well as free surfaces becomes more dominant in applications where a reduction of system size or scale of microstructure is desired to optimize properties. It is to this field that Dr. Stephen M. Foiles made significant contributions over a period of over 35 years.

The scope of this symposium, which is in honor of Foiles, is to bring together researchers across a wide range of disciplines to communicate recent advancements pertaining to the study of materials interfaces (free surfaces, solid-liquid, grain boundaries) both computationally and experimentally. The contributions of Foiles to the development of interatomic potentials for atomistic simulations and study of materials interfaces will be highlighted.

Topics of choice for this symposium include, but are not limited to:

- Interatomic potential development and its use to model materials behavior
- Thermodynamics of interfaces
- Dynamical behavior of interfaces (crystal surfaces, grain boundaries (GB), phase boundaries, solid-liquid)
- Phase transitions and microstructural evolution
- Interface properties (energy, mobility, etc.)
- Interface segregation/adsorption
- Interface-defect (dislocation/vacancy) interactions (radiation, mechanical, etc.)

ORGANIZERS

Fadi Abdeljawad, Sandia National Laboratories, USA Eric R. Homer, Brigham Young University, USA Elizabeth A. Holm, Carnegie Mellon University, USA Mark D. Asta, University of California Berkeley, USA