

THE WORLD COMES HERE
TMS2019
 148th Annual Meeting & Exhibition

REGISTER TODAY!

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

JOIN US FOR THIS TMS2019 SYMPOSIUM:

MECHANICS & STRUCTURAL RELIABILITY

Fatigue in Materials: Multi-scale and Multi-environment Characterizations and Computational Modeling

This symposium features new discoveries and advances in the fields of materials fatigue and life prediction. It brings together research scientists and design engineers from all over the world to present their latest work on current issues in investigation and simulation of fatigue damage; identification of fatigue weak links; enhancement of fatigue strength and resistance; quantitative relationships among processing, microstructure, environment and fatigue properties; and life prediction. This symposium provides a platform for fostering new ideas about fatigue at different scales and in different environments both theoretically, numerically, and experimentally.

The symposium will be organized into six sessions:

- Data-Driven Investigations of Fatigue;
- Relationships Among Processing, Microstructure, and Fatigue Properties
- Fatigue Characterization Using Advanced Experimental Methods in 2D and 3D
- Load and Environment Interaction Effects on the Mechanical Response during Fatigue
- Multi-Scale and Multi-Physics Models in Fatigue to better Predict Behavior and Lifetime
- Crack Initiation and Propagation during Fatigue

The proposed six sessions will be carried out over three full days, with morning and afternoon sessions each day. Throughout the six sessions, there will be an estimated 50 oral presentations, with 2-4 of those being keynote presentations. Additionally, a poster session will be held to supplement the oral presentations and to encourage student involvement. Students may submit an abstract for a poster presentation, an oral presentation, or both. Prizes for best posters will be awarded. A possible edited volume of extended articles on select topics discussed in this symposium will be evaluated during the meeting.

ORGANIZERS

Jean-Briac le Graverend, Texas A&M University, USA

Ashley D. Spear, University of Utah, USA

Antonios Kontsos, Drexel University, USA

Garrett Pataki, Clemson University, USA

Filippo Berto, Norwegian University of Science and Technology, Norway

Nearly 4,000 presentations are planned at more than 80 symposia at TMS2019.

Visit www.tms.org/TMS2019 today to register and book housing.