

# TMS 2015

144<sup>th</sup> Annual Meeting & Exhibition

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

TMS  
PROFESSIONAL  
DEVELOPMENT  
EVENT

## Make the Most of Your Travel to Orlando: Participate in a TMS Professional Development Course

### FRICITION STIR WELDING AND PROCESSING SHORT COURSE

Sunday, March 15, 2015 • 8:30 a.m. to 4:30 p.m.

Sponsored by TMS Structural Materials Division

#### INSTRUCTORS

**Anthony Reynolds**, University of South Carolina; **Yuri Hovanski**, Pacific Northwest National Laboratory

#### COURSE LEAD ORGANIZER

**Anthony Reynolds**, University of South Carolina

#### WORKSHOP OVERVIEW

Friction stir welding (FSW) was invented by TWI, Cambridge, UK and patented in 1991. In the last twenty years, the research community has made significant advances in understanding of the process, and numerous industrial applications have been taken to full implementation. During the same period, friction stir processing (FSP) has been developed in parallel with FSW, and essentially employs FSW tooling to perform local thermomechanical treatments rather than to make joints.

The scientific and technical literature is rich with information on joining of aluminum, steel, titanium, magnesium, metal matrix composites, and even superalloys as well as generic information on process fundamentals. The goal of this course is to provide participants with the essence of the accumulated FSW/FSP knowledge: both fundamental and practical. This course is designed to provide a basic understanding of the process and the linkage to performance by introducing aspects from basic process design, controls, tools, and metallurgical aspects.

#### REGISTRATION INFORMATION

Register for the Friction Stir Welding and Processing Short Course through the TMS 2015 Annual Meeting & Exhibition registration form.

#### REGISTRATION FEES \*

##### Before February 13, 2015

Member \$525  
Nonmember \$575  
Student \$300

##### After February 13, 2015

Member \$600  
Nonmember \$650  
Student \$350

\* Continental Breakfast, lunch, and electronic course notes will be provided.

For more information on professional development courses, visit:

[www.tms.org/PD2015](http://www.tms.org/PD2015)