

# TMS 2015

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

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



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

### CHARACTERIZATION TECHNIQUES FOR MAGNETIC MATERIALS WORKSHOP

Sunday, March 15, 2015

Sponsored by the TMS Functional Materials Division (Formerly EMPMD)

#### INSTRUCTORS

**Juan Rodríguez-Carvajal**, Institut Laue-Langevin; **Charles F. Majkrzak**, National Institute of Standards and Technology; **David N. Seidman**, Northwestern University; **Brad Dodrill**, Lake Shore Cryotronics; **Shi Li**, Quantum Design; **Gisela Schütz**, Max Planck Institute for Metals Research; **Dan Dahlberg**, University of Minnesota; **Rudolf Schaefer**, Technical University Dresden; **Amanda Petford-Long**, Argonne National Laboratory; **Michael Donahue**, National Institute of Standards and Technology

#### WORKSHOP LEAD ORGANIZERS

**Victorino Franco**, Sevilla University; **J.M. Barandiarán**, Basque Center for Materials, Applications & Nanostructures; **R.D. Shull**, NIST

#### WORKSHOP OVERVIEW

Renowned experts in the field will present the fundamentals of structural, compositional and functional characterization techniques applied to magnetic materials. Computational methods will also be covered in this course, which is aimed toward undergraduates, graduate students, and postdocs in topics related to magnetic materials, as well as to industrial researchers who are involved in the production or application of magnetic materials. Researchers more involved in theory and simulation will also benefit from this course, as they will gain a better understanding of experimental data to which they can compare their results.

The course will include the following topics: X-ray, neutron and electron diffraction, Neutron reflectometry, Compositional determination at the nanoscale, Atom probe tomography, Magnetic moment characterization, Vibrating sample magnetometry, SQUID magnetometry, X-ray magnetic circular dichroism, Imaging techniques, Magnetic force microscopy, Magneto-optics, Lorentz Microscopy, Modeling of magnetic materials, and Micromagnetic simulations

#### REGISTRATION INFORMATION

Register through the TMS 2015 Annual Meeting & Exhibition registration form.

#### REGISTRATION FEES \*

##### Before February 9, 2015

Member \$125  
Nonmember \$175  
Student \$75

##### After February 9, 2015

Member \$175  
Nonmember \$225  
Student \$125

#### SPONSORED BY

**Lake Shore Cryotronics, Inc.**  
**BCMaterials**

\* Organizers are planning to provide partial support to students and young scientists in order to participate in this event. The actual number of scholarships and their amount will depend on external sponsorship. For further information, contact [mgallagher@tms.org](mailto:mgallagher@tms.org).

For more information on professional development courses, visit:

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