TMS2015

144th Annual Meeting & Exhibition

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



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MULTIPHYSICS MATERIALS SIMULATIONS USING THE OPEN SOURCE MOOSE FRAMEWORK WORKSHOP

Sunday, March 15, 2015 • All Day Sponsored by the TMS Structural Materials Division

INSTRUCTORS

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WORKSHOP LEAD ORGANIZER

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WORKSHOP OVERVIEW

The Multiphysics Object Oriented Simulation Environment (MOOSE) is an open source framework aiding in the development of scientific simulation tools widely utilized for materials studies at the engineering and mesoscales. MOOSE is open source and freely available and is already being used by industry, national laboratories, and universities across the world. This tutorial will cover everything necessary to utilize MOOSE and its modules in the creation of new materials applications, and will be valuable for any student, scientist, or engineer interested in creating scientific simulation tools for materials related applications. For more information on MOOSE, please see: http://mooseframework.org.

Winner of 2014 R&D 100 Award, an international competition that recognizes the 100 most technologically significant products introduced into the marketplace over the past year by R&D Magazine.

Workshop Outline

- 1. Overview of the MOOSE framework and C++
- 2. How to create a MOOSE-based simulation tool
- 3. Solving Mechanics Problems in MOOSE
- 4. Developing Phase Field Models with MOOSE

REGISTRATION INFORMATION

Register for the Multiphysics Materials Simulations using the Open Source MOOSE Framework Workshop 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

For more information on professional development courses, visit:

www.tms.org/PD2015