

# TMS



## First TMS-ABM International Materials Congress

July 26-30, 2010 • Intercontinental Rio Hotel • Rio de Janeiro, Brazil

*To be held in conjunction with the  
65th Annual Congress of ABM and the 18th IFHTSE Congress*

### Organizing Committee

S. Neves Monteiro (overall coordinator of the 2010 ABM meeting), G. T. Gray III (TMS president, 2010), R. Peterson (TMS president, 2009), M. A. Meyers (ABM representative at TMS)

### About the Congress

Held in conjunction with [65th Annual Congress of ABM \(Brazilian Metallurgical, Materials and Mining Association\)](#) and the [18th IFHTSE Congress](#), this inaugural congress will feature seven proposed symposia covering important contemporary issues in materials science and engineering. This congress builds on the TMS Alliance of the Americas initiative to work together with Society partners in South America and Canada. The congress will be held at the [Intercontinental Rio Hotel](#). A host of social events will be organized, including a conference banquet, networking reception, and an afternoon excursion. Also, industrial tours will be offered, as well as a number of local sight-seeing tours (Ilha Grande, Parati). Details will be added to the 2010 TMS-ABM conference website as they become available, please visit <http://www.tms.org/meetings/specialty/ABM-TMS/home.aspx>.

### Symposium Themes

#### *Mechanical Properties of Materials with Emphasis on Grain-size Effects*

**Organizers:** M.E. Kassner (USC), P.R. Cetlin (Univ. Federal de Minas Gerais)

This Symposium will include the mechanical behavior of structural materials with emphasis on the grain size effects.

The topics in this study include (but are not limited to):

- Grain size effects in ultrafine grained (UFG) materials and nanoscale grain-sizes on the mechanical properties. A variety of techniques have been developed to fabricate and test materials within the small length scales including various deposition techniques and severe plastic deformation (SPD).
- Grain-size effects in superplasticity and creep.
- Other areas, including grain-size effects on fracture and fatigue, behavior are welcome.

#### *Other Topics Include:*

##### *Characterization and Application of Biomaterials*

**Organizers:** S.N. Monteiro (UENF, Brazil), K.G. Satyanarayana (UFPR, Brazil), R. O. Ritchie (U C Berkeley), P. Rohatgi (U. Wisconsin-Milwaukee), K. G. Satyanarayana (UFPR, Brazil)

##### *Composite Materials*

**Organizers:** N. Chawla (Arizona State University, United States), R.D. Toledo Filho (Universidade Federal do Rio de Janeiro, Brazil), K.K. Chawla (University of Alabama at Birmingham, United States), J.R. D'Almeida (Pontifica Universidade Catolica do Rio de Janeiro, Brazil)

##### *Computational Modeling and Advanced Characterization*

**Organizers:** Michael J. Kaufman (Colorado School of Mines), Rajarshi Banerjee (Univ. of North Texas), Andre Costa e Silva (EEIMVR- Universidade Federal Fluminense - IBQN), Fernando C Rizzo (PUC Rio de Janeiro RJ)

##### *Dynamic Behavior of Materials*

**Organizers:** G. T. Gray III (LANL), M.A. Meyers (UC San Diego), Joao Carlos Miguez Suarez and Ricardo Pondé Weber, (Instituto Militar de Engenharia, Rio de Janeiro, Brasil)

##### *Light Weight Materials for Transportation: Processing and Properties*

**Organizers:** Carlos de Moura Neto (ITA), Ray D. Peterson, (Aleris International), Diran Apelian (WPI), Helio Goldenstein (USP)

##### *Materials and Society*

**Organizers:** M. Meyers (U. C. San Diego), T. Massalski (Carnegie-Mellon University), Fernando Rizzo (PUC, Brazil), Diran Apelian (WPI)

### To submit an abstract:

Abstracts must be submitted by November 30, 2009 via ProgramMaster featured on the 2010 TMS-ABM home page at <http://www.tms.org/meetings/specialty/ABM-TMS/home.aspx>