

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

Materials and Society

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

Materials Science and Engineering is a field that has emerged in the twentieth century and is having a major impact on society. The social consequences of science and technology are being increasingly recognized as of great relevance, and the role of MSE in this context will be examined. The relations between materials technology and society, and/or contributions to materials technology that have had major impact on society will be presented at this symposium. The changing emphasis of materials research away from defense and toward societal needs and benefits will be presented. Materials play a pivotal role in the sustainability and recycling is a major component in the materials cycle. Different organizational structures to materials research have evolved in the different countries, and this has been closely connected with political systems. The different approaches will be discussed.

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** (Pontifca 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)

Mechanical Properties of Materials with Emphasis on Grain-size Effects

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

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>