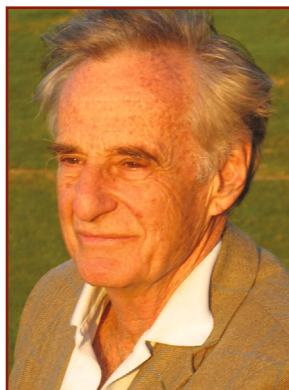


2014 Pan American Conference Sets a New Milestone in Cross-Cultural Collaboration

Lynne Robinson



Marc André Meyers



Sérgio N. Monteiro

The curtain will rise at the Sala São Paulo concert hall on July 21 to open TMS's next chapter of international cooperation with the welcoming program of the ABM-TMS Pan-American Materials Conference. Held in conjunction with the International Annual Congress of ABM (Brazilian Metallurgical, Materials, and Mining Association), July 21–25, in São Paulo, Brazil, the meeting expands significantly upon its predecessor held in 2010, particularly in terms of professional society participation, with representation from Argentina, Peru, Mexico, Chile, and Canada. “This has grown into a true Pan-American event that will accelerate the development of new collaborations across continents,” said Marc André Meyers, Distinguished Professor of Materials Science, University of California, San Diego, and TMS conference co-chair.

“Today in the Americas, several societies are dedicated to metallurgy and materials engineering as well as mining and minerals technology in different countries,” noted Sérgio N. Monteiro, Professor, Instituto Militar de Engenharia, and ABM conference co-chair. “These societies pursue parallel efforts to attend to industrial needs and promote training, technical education, and

scientific research. The Pan-American Materials Conference hopes to achieve, for the first time, an integration of these leading societies. Its symposia will permit interactions of prominent researchers in the most relevant themes and allow collaboration in research and development projects of common interest.”

To structure the cross-cultural learning that defines the conference, Meyers said the program format “is inspired by the TMS annual meetings,” offering ten symposia that “focus on technical themes of contemporary importance.” Many of the symposia organizers, in fact, are familiar names to TMS annual meeting attendees, with a number of new voices from the South American continent adding their perspectives as well. A highlight of the conference will be a special symposium honoring the contributions of the late Robert Franklin Mehl, a member of the first class of TMS Fellows and recognized pioneer in materials science and engineering, who was also a leader in establishing ABM. (See sidebar articles for details.)

While TMS and ABM can trace their common ties back through the decades, the momentum for the collaboration driving the upcoming conference was actually sparked in 2008 with Alliance



The 2014 ABM-TMS Pan American Materials Conference will take place at the Frei Caneca Convention Center in São Paulo, Brazil.

of Americas, a TMS initiative to seek out partnerships both to the south and north of the United States. This commitment led to TMS's signing a Memorandum of Understanding with both ABM and the Metallurgy and Materials Society of the Canadian Institute of Mining, Metallurgy, and Petroleum in 2009. The first ABM-TMS Materials Congress then took place the following year. Since that time, TMS and ABM have developed a joint membership initiative, while also laying the groundwork for new collaborative programming opportunities.

The concept for the Alliance of Americas came to fruition on the watch of 2008 TMS President Diran Apelian, Alcoa-Howmet Professor of Mechanical Engineering and Director, Metal Processing Institute, Worcester Polytechnic Institute. "When one views the material resources of both North and

Robert Mehl Symposium Celebrates Intersections of Influence



Robert Mehl

Materials science and engineering as it is known today owes much to Robert Mehl. As noted in his National Academy of Sciences memoir by C.S. Smith and W.W. Mullins, "His contributions were at several levels: partly in the research he himself did, partly in his effective advocacy of a more fundamental approach to materials, and partly in his establishment of a new concept for a curriculum for the education of metallurgists." He advanced much of this work through his involvement with the American Institute of Mining, Metallurgical, and Petroleum Engineers. In 1963, he was inducted into the first class of what is now the TMS Fellows and the Institute of Metals/Robert Franklin Mehl Gold Medal established in his honor is one of TMS's most prestigious awards.

Robert Mehl's influence extended far beyond the borders of the United States, particularly in his leadership to establish the framework for metallurgical education in Brazil. He spent a year at the Universidade de São Paulo where, among other accomplishments, he played a pivotal role in organizing the Brazilian Society for Metals, the antecedent organization for ABM, in 1945.

In recognition of ABM's 70th anniversary, the ABM-TMS Pan-American Materials Conference is offering a special symposium, organized by Thaddeus B. Massalski and Fernando Landgraf, to celebrate Robert Mehl's influence on the evolution of materials science and engineering throughout the

world, within the context of his legacy to both TMS and ABM.

Many of the symposium's invited speakers are Mehl Gold Medal winners themselves, and at press time include:

- Herbert Gleiter, Karlsruhe Institute of Technology
- Horst Hahn, Karlsruhe Institute of Technology
- Ke Lu, Institute for Metal Research
- W.A. Mannheimer, COPPE
- Thaddeus Massalski, Carnegie Mellon University
- Evando Mirra, Federal Universidade of Minas Gerais
- Jagdish (Jay) Narayan, North Carolina State University
- Robert O. Ritchie, University of California at Berkeley

Each of the symposium speakers will receive a commemorative Mehl Medal at the conference's opening program on July 21.

"It is Robert Mehl who actually laid the groundwork for TMS's collaboration with ABM, as well as the principles guiding the Alliance of Americas initiative," said Hani Henein, 2014 TMS President. "This symposium is a wonderful way to reflect on what has been accomplished so far, through the words of some of our most distinguished members, as we look ahead to continued, emerging, and expanding collaborations on the American continents."

South America, the opportunity to bring together the various voices of the materials community is evident," he said, recalling the impetus for the initiative. "Professional societies such as ABM and TMS, along with other societies in North and South America, are catalysts in the development of new technologies and innovations that will fuel the

economies on those continents. People make innovations, and our professional material societies are all about people."

Apelian said he is particularly pleased that materials professional societies beyond TMS and ABM are supporting the upcoming Pan-American Conference. "A diverse materials community will serve us

much better than a community that is not diverse," he commented. "We learn the most from people with whom we have the least in common. The Alliance of Americas will make every one of the individual professional societies much stronger by virtue of collaboration that will enable us to learn from each other."



Pan American Materials Conference 2014

Sao Paulo, Brazil • July 21-25, 2014

A New Name Reflecting Wider Participation

Organizers:

Associação Brasileira de Metalurgia, Materiais e Mineração (ABM)

The Minerals, Metals & Materials Society (TMS)

Co-Organizers:

Asociación Argentina de Materiales (SAM)

Asociación Peruana de Metalurgia, Materiales Y Minerales (APMMM)

Asociación Mexicana de Ingenieros de Minas, Metalurgistas Y Geólogos de Mexico (AIMMGM)

The Metallurgy and Materials Society of the Canadian Institute of Mining, Metallurgy and Petroleum (MetSoc)

Sociedad Chilena de Metalurgia y Materiales (SOCHIM)

Sociedad Mexicana de Materiales (SMM)

In 2010, the first collaborative effort between TMS and ABM was presented as the ABM-TMS International Materials Congress. That name has since been refined to the Pan-American Materials Conference, reflecting participation by an array of additional professional societies from throughout the American continents (see listing at left).

The technical program for the 2014 conference has likewise expanded its scope to encompass a broad range of disciplines and interests. At press time, the ten technical symposia under development and their organizers are:

Materials for Energy

Organizers: Paulo Emilio Valadão de Miranda, COPPE, Universidade Federal de Rio de Janeiro; Fernand Marquis, U.S. Naval Postgraduate School

Light Metals and Alloys

Organizers: Carlos A. Moura Neto, Instituto Tecnológico da Aeronautica (in memorian); Carlos Schvezov, Universidade Nacional de Misiones, Argentina

Composites and Hybrid Materials

Organizers: Nikilesh Chawla, Arizona State University; Pedro Dolabela Portella, BAM, Germany; K.K. Chawla, University of Alabama

Biomaterials, Smart Materials, and Structures

Organizers: Carlos Elias, Instituto Militar de Engenharia; Po -Yu Chen, National Tsinghua University; Roger Narayan, University of North Carolina

Mechanical Behavior of Structural Materials

Organizers: Paulo R. Cetlin, Universidade Federal Minas Gerais; Michael Kassner,

University of Southern California; Andrea Hodge, University of Southern California; Leonardo Godefroid, E. Minas Ouro Preto

Processing of Materials

Organizers: Olivia Graeve, University of California, San Diego; Lawrence E. Murr, University of Texas at El Paso; André Tschiptschin, Universidade de São Paulo

Modeling and Simulation of Processes, Microstructures, and Behavior

Organizers: Diana Farkas, Virginia Polytechnic Institute; Eduardo Bringa, Universidade Nacional de Cuyo/CONICET; André Luiz Vasconcellos da Costa e Silva, IBQN/UFF; André Costa e Silva, UFF, Rio de Janeiro

Bulk Metallic Glasses, Nanocrystalline Materials, and Ultrafine-Grain Materials

Organizers: Terence G. Langdon, University of Southampton; Roberto Figueiredo, E. E. U. Federal de Minas Gerais

Dynamic Properties of Materials

Organizers: George T. Gray, Los Alamos National Laboratory; N. Thadhani, Georgia Institute of Technology; Luis Henrique Leme Louro, Instituto Militar de Engenharia

Mineral Processing

Organizers: Fernando Freitas Lins, CETEM; Alejandro López Valdivieso, U. A. of San Luis Potosi, Mexico; Claudio Schneider, CETEM; Shaoxian Song, Wuhan University of Technology

For additional information and to register for the Pan-American Materials Conference 2014, access the conference website through the TMS Meetings and Events portal at www.tms.org/meetings.

