

Foreword

The 20th Brazilian Conference on Materials Science and Engineering, CBECIMAT, was held at the Convention Center Cau Hansen in Joinville, State of Santa Catarina, from November 4th to 8th, 2012. The organization of this event was held by the Federal University of Santa Catarina (UFSC), State University of Santa Catarina (UDESC), University of the Joinville Region (Univille) and Educational Society of Santa Catarina (IST/SOCIESC). The Materials Societies supporting this event were the Brazilian Ceramic Society (ABCeram), Brazilian Society of Metallurgy, Materials and Mining (ABM), and Brazilian Polymers Society (ABPol).

CBECIMAT is the most traditional meeting of the Materials Science and Engineering community in the country occurring since 1974. This edition presented a record number of submitted and presented contributions (2290 and 1336, respectively) as well as participants (1495).

The 20th CBECIMAT was very representative both nationwide (26 Brazilian States represented) and internationally (participants from Argentina, Australia, Colombia, Cuba, Ecuador, Germany, Italy, Portugal, UK, USA and Uruguay).

The opening plenary session was held by Prof. James Shackelford, from the University of California at Davis, USA. The conference featured presentations from distinguished scientists and technologists, including 9 keynote lectures and 14 technical lectures.

Four short courses on materials characterization techniques were offered. Two workshops were part of the program, respectively, “Opportunities of Research in Germany”, sponsored by the German agencies DAAD and DFG; and “Materials Education”, with participation of educators from Europe, USA and Brazil. Finally, a meeting of the Materials Science and Engineering Nucleus (NUDCIMAT) from the Universities of the Montevideo Group (AUGM) was held during the conference.

Celebrating the 20th edition of CBECIMAT, four distinguished members of the Materials Community in Brazil were awarded for their lifelong contribution for the development of this area in our country and particularly for the outstanding support in earlier editions of this event. The award recipients and respective institution/area were José Carlos Bressiani (IPEN/Ceramics), Fernando Cosme Rizzo Assunção (PUC-RJ/Metals), Luiz Antonio Pessan (UFSCar/Polymers), Berend Snoeijer (UFSC, Materials Education) and Lucio Salgado (in memoriam, Metallum/Organization).

From the papers presented at the Conference, 135 have been approved for publication in Materials Science Forum after a peer review process. The papers selected cover a wide range of topics in materials structure, processing, characterization and application.

On behalf of the Organizing Committee, we would like to express our most sincere gratitude to all participants in the event, the scientific committee and to the support staff for their collaboration before, along and after this very successful conference.

Volume Editors

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