

## PREFACE

The *International Symposium on Metastable, Mechanically Alloyed and Nanocrystalline Materials*, ISMANAM-96, was held in Rome, Italy, on May 20-24, 1996 at the "Aula Magna" of the National Research Council (CNR) under the auspices of ENEA (the National Agency for Energy, Environment and New Technologies) and CNR. The Symposium follows a series of symposia previously held in Kyoto (1991), Grenoble (1994) and Quebec City (1995).

The purpose of the Symposium was to provide a state of the art of ongoing research activity and to discuss the latest developments in the field of metastable and nanocrystalline materials, in order to advance understanding of their fundamental properties with a view to new technological applications.

As an international forum for materials scientists working on different aspects of metastable and nanoscale materials, the topics were remarkably interdisciplinary. Theory, materials preparation and processing, structural characterization, thermodynamics and physical and chemical properties (magnetic, electrical, optical, mechanical, catalytic..) were all within the remit of the meeting. Particular attention was devoted to synthesis and processing routes, especially to mechanical alloying and mechano-chemistry, and to the correlation between synthesis parameters and physical properties.

About 180 scientist, from 27 countries, attended the Symposium and presented papers, of which 20 as invited talks, 46 as oral and about 120 as poster contributions. After the usual review process, most of the papers appear in this special issue of Materials Science Forum.

The ISMANAM-96 prize for best scientist was awarded to Dr. A Reza Yavary, "Directeur de Recherche" at the "Laboratoire de Thermodynamique" LTPCM, CNR, Grenoble, for his significant contribution in various research fields of nanocrystalline materials over the last two years.

The ISMANAM-96 prize, for best young scientist under 35 years, was awarded to Kiyonori Suzuki of New South Wales, Sidney, Australia, for his contribution in the development of new nanocrystalline soft magnetic alloys.

We are pleased to announce that the Steering Committee has accepted the candidature of Prof. Maria Dolores Barò and her colleagues to hold ISMANAM-97 in Barcelona. The Committee has also tentatively accepted the candidature for ISMANAM-98 in Australia. A definite announcement will be made in Barcelona.

We thank all the Symposium participants for their stimulating presentations and their contributions to these Proceedings. We would also like to thank all the people involved in the organisation of ISMANAM-96, whose collaboration was crucial in making the meeting such a success: the members of the Steering Committee, the Advisory Board, the local Organising Committee and the Secretariat. Finally, we also thank the research institutions and industrial sponsors without whose help the Symposium would not have been possible.

The Editors

Dino Fiorani

Mauro Magini

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