

Preface

This volume includes selected papers presented at the 7th edition of the International Conference on Material Science and Engineering, held in Galati, Romania, on May 19-21, 2016. The conference was organized by the Department of Materials Science and Engineering, Faculty of Engineering, "Dunărea de Jos" University of Galati, under the patronage of the Romanian Academy of Technical Sciences and the Romanian Chemistry Society, with the participation of Professor Rodrigo Martins, former president of the European Materials Research Society and present day president of the E-MRS Senate.

This edition has brought together, for the first time, three scientific events, already traditional for the field of materials science and engineering at "Dunărea de Jos" University of Galati: *UgalMat*, *ARTCAST* and *UgalNano*.

The conference was attended by 94 participants, including outstanding scientists, as well as young researchers from representative universities and research institutes in Romania and some other European countries (Portugal, Germany, Hungary, Israel). 8 invited talks and 86 contributory papers in oral and poster sessions were delivered in the fields of advanced materials and technologies, nanomaterials and nanotechnologies. Following the peer review process, 39 papers were selected for publication in this volume, and were grouped into two sections. The papers in the first section - Advanced Materials and Technologies in Industrial Production - address the topics of metals and alloys, composite materials and structures, surface processes and surface characterization, mathematical modeling of materials processing and materials properties. Those in the second section - Nanotechnologies and Functional Materials- address focus on thin films for electronic applications, nanofluids, photocatalytic and antimicrobial nanoparticles, protective composite coatings and submicronic structured shape memory alloys.

During *UgalMat 2016* conference - with the traditional section *Casting, from Technique Rigour to Art (ARTCAST)* dedicated to materials and techniques used to obtain art objects-, a presentation of contemporary metal sculptures was organized, and an exhibition of old Romanian sculpture and painting originated in the Galati area was visited.

We address warm thanks to the participating authors for their valuable contributions, and express our gratitude to the scientific committee for the dedicated efforts in reviewing the papers published in this volume.

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Professor Viorica Musat

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