

Preface

This issue is a compilation of the papers selected amongst those presented at the International Symposium on Macro-, Meso-, Micro- and Nano-Mechanics of Materials (MM2003), held on December 8-10, 2003 at the Hong Kong University of Science & Technology (HKUST), Hong Kong. The principal objective of MM2003 was to create an international forum for the exchange, dissemination and discussion of the state-of-the-art technologies and recent developments in macro-, meso-, micro-, nano-mechanics of materials and structures. While MM2003 focused on the most recent advances in strength, fracture and mechanics of micro- and nano-structured materials, it also served to link the gaps between the conventional macro/mesosystems and the emerging micro/nano-materials technology. 128 papers were presented at MM2003, covering the following areas: Nanotube/Nanofiber; Thin films; Biomaterials & Biomimetics; Polymer/Composites/Interface; Fatigue & Creep; Piezoelectrics & Ferroelectrics; Fracture Mechanics; Fracture Physics; Computational Mechanics; Mechanics of Rock & Concrete; Dynamic Fracture & Damage. Amongst these topical areas, papers in the fields of composite materials; thin films and coatings; as well as fracture, fatigue and strengths of advanced materials are included here.

MM2003 was originally incepted to honor Professor Pin Tong, an eminent scholar and educator, who has made many important contributions during his fifteen years at HKUST, on the occasion of his 65th birthday. Along with regular sessions with presentations of contributed papers, many reputed speakers were invited amongst his former/current colleagues, friends and graduate students from different parts of the world. These invited presentations reflect Professor Pin Tong's past and present research interests on computational mechanics of a broad range of materials and structures.

We wish to thank all authors who contributed their papers to MM2003. Thanks are also due to the members of the International Advisory Committee and the Local Organizing Committee for their efforts in making MM2003 a success. We also appreciate very much for the financial and moral supports by various sponsors, including the K.C. Wong Education Foundation, the US Natural Science Foundation, the US Army Research Office – Far East, the Far East and Oceanic Fracture Society (FEOFS), the Hong Kong Society of Theoretical & Applied Mechanics (HKSTAM), the Micro Materials Measuring Technology, the Guyline (Asia) Ltd., and the Department of Mechanical Engineering, HKUST.

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