



PREFACE

The 11th International Conference on Magnetic Fluids (ICMF 11) was held on July 23-27, 2007 in Košice, Slovakia. The attendance was high and motivated, in line with previous ten conferences within the ICMF series organized in Udine, Orlando, Bangor, Sendai-Tokyo, Riga, Paris, Bhavnagar, Timisoara, Bremen and Guaruja. The conference in Slovakia reflected the enthusiasm of the scientific community from all around the world, with 256 participants from 30 countries.

The main objective of ICMF 11 was to promote the progress and the knowledge in the field of magnetic fluids regarding their chemistry, physical and magnetic properties, heat and mass transfer, surface phenomena, as well as their technological and biomedical applications. As the research on magnetic fluids is essentially interdisciplinary, experts from related areas were invited to present their contributions with a view to extend the frontiers of knowledge in the field and to present the new trends. Submitted communications were refereed by the members of the Scientific Organizing Committee and abstracts were assembled in the Book of Abstracts. Participants presented 180 posters in 2 poster sessions and 56 oral presentations. All presentations helped to expand the frontiers of the area and to establish new bridges between physics, chemistry, technology, biology and medical sciences. Outcomes of this conference are presented by 115 scientific papers, which are published partly in the *Journal of Physics: Condensed Matter (JoPCM)* and partly in *Magnetohydrodynamics (MHD)*.

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