Preface

This issue of the *Materials Science-Poland* contains a selection of papers presented during the 8th International Conference on Intermolecular and Magnetic Interactions in Matter held in Nałęczów (Poland) between 8 and 10 September 2005. The conference was organized by the Institute of Physics of Lublin University of Technology in cooperation with the Institute of Physics of Szczecin University of Technology, the Faculty of Physics and Mathematics of Gdańsk University of Technology, the Department of Physics of University of Athens (Greece) and the Polish Society for Crystal Growth.

The scope of the conference covered theoretical and experimental aspects of various intermolecular and magnetic interactions in strongly arranged and disordered matter. This included the following topics:

- crystal field, dipole-dipole, exchange interactions,
- crystallization and dissolution processes,
- phase transitions,
- low-dimensional structures and related phenomena,
- nanocrystalline materials and nanocomposites,
- synthesis and characterization of thin films,
- superconductors, magnetic and organometallic materials
- nonlinear interactions in materials,

The conference was a successor of seven previous meetings, organized by various Polish technical universities with the intention to bring together experimentalists and theoreticians representing various disciplines dealing with the intermolecular and magnetic interactions in the matter. A wide range of topics presented at the conference reflects research carried out in physical and chemical institutes affiliated to Polish technical universities as well as other national and foreign scientific institutions dealing with similar topics.

The conference was organized with the assistance given by the financial support of the Polish Committee for Scientific Research and the Lublin University of Technology.

Jan M. Olchowik Chairman