PREFACE

The Summer School on New Magnetics was held on September 15-19, 2003 in Będlewo near Poznań (Poland). The School was organized as a part of activity of the Centre of Excellence for Magnetic and Molecular Materials for Future Electronics at the Institute of Molecular Physics of the Polish Academy of Sciences in Poznań. The School provided an international forum for presentation and discussion of state-of-the-art methods, novel ideas and experimental results of new magnetic materials.

The programme of School covered the following topics: magnetism of correlated electron systems (beyond LDA), multilayers, nanostructures, low-dimensional magnetic systems, magnetic semiconductors, half-metallic systems, f-electron systems, surface magnetism, magnetic anisotropy, non-collinear magnetism, magnetoelectronics, transport in nanostructures, new development in electron spectroscopy and application of new magnetic materials for future electronics.

The programme of the School consisted of 20 invited talks, presented by distinguished physicists representing 7 European countries: Germany (K. Baberschke, S. Blügel, H. Ebert, H. Eschrig, V. Eyert, J. Kirschner, H. Kroha, H. von Löhneysen, K.-H. Müller, R. Wiesendanger), France (J.-M. Greneche, F. Petroff), Sweden (O. Eriksson, L. Nordström), United Kingdom (Z. Szotek, W. Temmerman), Austria (J. Hafner), the Czech Republic (T. Jungwirth), and Poland (A. Ślebarski).

Besides, 40 contributions were presented in either oral or poster form. There were 61 participants from 8 countries.

The editors would like to thank our colleagues, who have ensured the scientific quality of the School and of the proceedings.

Finally we would like to thank all the sponsors of the School (see list). Especially access to the European Union funds is gratefully acknowledged. We do believe that new contacts initiated in Będlewo will be very fruitfully continued in the future, after accession of Poland to the EU.

The Editors
J. A. Morkowski, A. Szajek, A. Jezierski, A. Kowalczyk, S. Blügel