

From the Organizers

Recent advances in spin electronics have created a demand for a more structured method of sharing and disseminating information and experience gathered by the leading research groups engaged in the subject. Hence the idea of scientific network *New Materials for Magnetoelectronics* – MAG-EL-MAT which was founded early in 2003 and has soon gained support of a number of research institutes in Poland as well as financial support of the Ministry of Scientific Research and Information Technology, now extended until 2008.

Currently, MAG-EL-MAT network extends on 52 research groups bringing together over 300 scientists investigating the electric and magnetic properties of solids, with particular interest in various applications of the spin degree of freedom. A general theoretical and experimental long-term goal is to research electronic and magnetic properties of nanoscopic materials such as thin layers, multilayers, composites, nanocrystalline alloys, intermetallic compounds, molecular systems (including carbon nanotubes) and quantum dots. Knowledge and new materials developed by network members are the basis for the creation of new magnetoelectronic devices.

The first and second annual MAG-EL-MAT Members Meeting was held in Będlewo on 26–28 October 2003 and 13–16 April 2004, respectively. The venue of the third Members Meeting to be held on 2–6 May, 2005 was again Będlewo which has now become the traditional meeting place of MAG-EL-MAT members. Its convenient and attractive location (40 km from Poznań, amidst lakes and forests, in an old palace and modern buildings offering excellent accommodation and conference facilities) has now become recognized by our regular visitors.

The third meeting took a form of seven sessions chaired by leading scientists selected by the coordinating committee (L. Adamowicz, T. Luciński, W. Nawroćik, A. Paja, B. Bułka, G. Chełkowska, T. Story, D. Kaczorowski, R. Micnas, A. Maziewski, H. Puzkarski, T. Balcerzak, T. Stobiecki, E. Zipper, J. Barnaś). Their task was also to decide upon the topics of the sessions, to invite the key-speakers (Z. Wilamowski, A. Hryniewicz, K. Byczuk, J. Martinek, A. Szytuła, J. Sadowski, J. Spalek, S. Stuligrosz, B. Susła, T. Luciński, S. Krompiewski, G. Grabecki) and to select 25 oral and 34 poster contributions. Finally, the topics selected for the third MAG-EL-MAT Meeting were nanostructured semiconductors, alloys and metals, magnetism in intermetallic compounds and semiconductors, structure and magnetic properties of thin films, electronic transport and spin-polarized transport and quantum coherence in mesoscopic systems.

Many presented papers were prepared for publication and then subjected to regular refereeing procedures by at least one referee. Finally, 50 papers were accepted for publication in the *Materials Science-Poland*. The success of 2005 MAG-EL-MAT Members Meeting was due to the active contribution to the program by 102 participants. Especially we would like to thank the chairmen and referees for their hard work in the scientific program and processing of evaluation of the papers for this special issue of *Materials Science-Poland*.

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Participants of the Meeting of the Members of Scientific Network New Materials for Magnetoelectronics, MAG-EL-MAT, Będlewo, 2–6 May 2005