

Conference Report – DyProSo XXXI

The 31th Symposium on Dynamical Properties of Solids – DyProSo XXXI was held at the Nacional Museum ‘Soares dos Reis’ in Porto, Portugal, from the 25th to the 29th September, 2007. DyProSo XXXI, hosted in Portugal for the first time after the meeting held in Krumlov in 2005, was organized by the “Grupo Ferroléctricos of the Materials Physical Institute of the University of Porto (IFIMUP). It continued a series which started in 1967 with a long tradition, and it was sponsored under the auspices of the European Physical Society through its Structural and Dynamical Properties of Solids Section.

The aim of the Symposium was to bring together scientists, researchers and students, who are working in the broad area of condensed matter physics, to stimulate discussion, to develop new ideas, and to foster scientific contacts among both younger and more experienced researchers. It is also a long-standing tradition of DyProSo to have some outstanding invited speakers and contributions from both European and non-European countries. The Symposium envisages a limited number of participants, with no parallel talks and no proceedings.

Following the format of previous DyProSo conferences, the Symposium presented the state of the art in the following topics: Carbon Nanostructures; Orbital and charge ordering; Multiferroics; Theory; High-Tc superconductors; Ferroelectric relaxors; Advances in experimental techniques, and Nanosciences. A special evening session was dedicated to multiferroic materials.

About 90 participants from 13 European, and 2 non-European countries (Austria (2), Belgium (5), Czech Republic (5), France (12), Germany (2), Italy (3), Japan (1), Lithuania (2), Netherlands (2), Poland (4), Portugal (70), Spain (7), Switzerland (7), UK (3), USA (1)) were welcomed in Porto.

The Meeting was sponsored by: European Physical Society; Reitoria da Universidade do Porto; Departamento de Física - Faculdade de Ciências da Universidade do Porto; Instituto de Física de Materiais da Universidade do Porto; Sociedade Portuguesa de Física; Associação para o Desenvolvimento da Faculdade de Ciências do Porto; Fundação para a Ciência e a Tecnologia; Fundação Calouste Gulbenkian; Caixa Geral de Depósitos; and Museu Nacional de Soares dos Reis. Since Dyproso XXXI has been endorsed by the “European Physical Society – EPS”, grants were available for 2 participants in the frame of the “East West Fund”. Invited speakers were also supported, thanks to sponsorships from some of the Portuguese scientific institutions referred to above.

The scientific programme consisted of 21 invited lectures, 23 oral communications, and 44 poster presentations. There was also a special session focused on hot current developments on Multiferroics chaired by J. Scott, M. Kenzelmann, and W. Prellier.

The various contributions provided a wealth of information on the dynamical properties of solids covering eight hot research topics, tiding over both fundamental questions and practical aspects of the considered systems. This duality, undertaken by the DyProSo community for over several decades, was apparent in the various contributions and debates during all the meeting. This has been indeed, one of the main aims of DyProSo XXXI.

The active participation of researchers from European, and non-European (Japan and USA) countries confirmed the large interest in the exchange of ideas between the European communities and those from other continents working in the research area of dynamical properties of solids.

The lively ambiance in the 'Soares dos Reis Nacional Museum' in Porto, which allowed relaxed and informal scientific discussions as well as a close contact with the cultural life of the city, surely contributed to the success of the Meeting.

The next Conference of the series, DyProSo XXXII, will be held in Antwerp, Belgium, 2009, under the chairpersonship of François M. Peeters.