CONFERENCE on SINGLE MOLECULE MAGNETS and HYBRID MAGNETIC NANOSTRUCTURES

(27 June - 1 July 2005)

(Míramare, Tríeste, Italy)

The Abdus Salam International Centre for Theoretical Physics (ICTP) is organizing a Conference on Single Molecule Magnets and Hybrid Magnetic Nanostructures to be held from 27 June - 1 July 2005 in Trieste, Italy.

This Conference will focus on fundamental physical properties of single molecule magnets and their integration into electronic and spintronic devices in hybrid magnet/magnet, magnet/superconductor and magnet/semiconductor nanostructures.

The Conference will serve to facilitate existing cooperation and promote new cooperation between researchers in developed and developing countries working in the field of single molecule magnets and in hybrid magnetic nanostructures.

<u>Main Topics:</u>

Fundamental physical properties of single molecule magnets; Quantum tunneling of the large magnetic moment; Molecular symmetry and magnetic anisotropy; Integration of single molecule magnets and magnetic nanoparticles into hybrid magnet/magnet, magnet/superconductor and magnet/semiconductor nanostructures; Application of single molecule magnets and hybid magnetic nanostructures for high-density information storage and spintronic devices.

PARTICIPATION

Scientists and students from all countries that are members of the United Nations, UNESCO or IAEA may attend the Conference. As it will be conducted in English, participants should have an adequate working knowledge of this language. Although the main purpose of the Centre is to help research workers from developing countries, through a programme of training activities within a framework of international cooperation, a limited number of students and post-doctoral scientists from developed countries are also welcome to attend.

As a rule, travel and subsistence expenses of the participants should be borne by the home institution. Every effort should be made by candidates to secure support for their fare (or at least half-fare). However, limited funds are available for some participants who are nationals of, and working in, a developing country. Such support is available only for those who attend the entire activity. Support for some students and post-docs from US will be provided by NSF via Texas A&M University. There is no registration fee.

The **Application Form** is obtainable from the ICTP WWW server: <u>http://agenda.ictp.trieste.it/smr.php?1664</u> (which will be constantly up-dated) or from the activity Secretariat

CO-SPONSORS:

National Science Foundation through the project on Molecular Nanomagnets DMR-0103455 at Texas A&M University

DIRECTORS:

A. BHATNAGAR (Pondicherry, India) I. LYUKSYUTOV (Texas A&M Univ., US) D. PESCIA (ETH Zürich, Switzerland) M. SARACHIK (CUNY, US)

PARTIAL LIST OF INVITED SPEAKERS:

- S. Bader (ANL, US)
- L. Bulaevskii (LANL, US)
- A. Buzdin (Bordeaux, France)
- G. Christou (Florida Univ., US)
- E. Chudnovsky (CUNY, US)
- E. Coronado (Valencia, Spain)
- G. Crabtree (ANL, US)
- K. Dunbar (Texas A&M Univ., US)
- **K. Efetov** (Rühr Univ., Germany)
- J. Friedman (Amherst College, US)
- H.-U. Guedel (U. of Bern, Switzerland)
- D. Hendrickson (UC San Diego, US)
- S. Hill (Florida Univ., US)
- A. Kent (NYU, US)
- G.-H. Kim (Sejong Univ., Korea)
- V. Moshchalkov(U. of Loewen, Belgium)
- **M. Pederson** (NRL, US)
- V. Pokrovsky (Texas A&M Univ., US)

It should be completed and returned before **<u>1 MARCH 2005</u>** to:

the Abdus Salam ICTP **SMR.1664** (c/o Ms. Doreen Sauleek) Strada Costiera 11, 34014 Trieste, Italy

or via email: <u>smr1664@ictp.trieste.it</u> (please save and send file attachments in RTF format) V. Ryazanov (ISSP, Russia)
I. Schuller (UC San Diego, US)
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W. Wernsdorfer (LLN-CNRS, France)

DEADLINE 1 MARCH 2005

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