

ADVANCED WORKSHOP

ON

RECENT DEVELOPMENTS IN INORGANIC MATERIALS

16 - 20 January 2006

Miramare, Trieste, Italy

The purpose of this Workshop is to introduce young researchers at the graduate student, post-doctoral and junior faculty level to some of the latest developments in the field of inorganic materials.

TOPICS:

- **Nanomaterials** Synthesis, properties and applications of nanoparticles, nanowires and nanofoils of a wide range of inorganic materials
- **Inorganic Materials for Catalytic and Environmental Applications** Molecular sieves, heterogeneous catalysis, rechargeable lithium batteries, fuel cells, hydrogen storage, etc.
- **Magnetic, Electronic, Optical Materials** Colossal magnetoresistance, charge ordering, spintronics, ferroelectricity, superconductivity, phosphors for solid state lighting, etc.
- **Hybrid Inorganic-Organic Materials** Synthesis, characterization and properties of coordination polymers, hybrid metal oxides and hybrid nanocomposites
- **Biomaterials** Biomimetic systems and bioceramics
- **Theory and Simulation** Latest developments in first principles methods, molecular dynamics, etc. applied to materials problems
- **Advances in Characterization of Materials** Latest developments in high resolution TEM, solid state NMR, synchrotron X-ray scattering, neutron diffraction and other methods

PARTICIPATION

Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend the Workshop. 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, and who are not more than 45 years old. Such support is available only for those who attend the entire activity. There is no registration fee.

The **Application Form** may be downloaded from the ICTP WWW server:

<http://agenda.ictp.trieste.it/smr.php?1737> (which will be constantly up-dated) or from the activity Secretariat. It should be completed and returned before **15 September 2005** to:

Workshop on Inorganic Materials
(smr 1737) (c/o Ms. Suzie Radosic)
the Abdus Salam International Centre for Theoretical Physics
Strada Costiera 11, 34014 Trieste, Italy.

or
smr1737@ictp.it (please save and send file attachments in RTF format)
Telephone: +39-040-2240226 Telefax: +39-040-224163
E-mail: smr1737@ictp.it
ICTP Home Page: <http://www.ictp.it/>

CO-SPONSORS

International Center for Materials Research (ICMR), University of California, Santa Barbara

Academy of Sciences for the Developing World (TWAS)

International Center for Young Scientists, NIMS, Tsukuba

DIRECTORS

A.K. Cheetham (UCSB)

C.N.R. Rao (JNCASR, India)

M. Rühle (MPI, Stuttgart)

LECTURERS

will include:

Y. Bando (Japan)

P.G. Bruce (UK)

A.K. Cheetham (USA)

C.P. Grey (USA)

S.M. Haile (USA)

M.L. Klein (USA)

J. Livage (France)

R. Quijada (Chile)

C.N.R. Rao (India)

M.J. Rosseinsky (UK)

M. Rühle (Germany)

M. Sastry (India)

M. Scheffler (Germany)

M.A. Señaris-Rodríguez (Spain)

O.M. Yaghi (USA)

DEADLINE

for requesting participation

15 September 2005