



The Abdus Salam
International Centre for Theoretical Physics

United Nations
Educational, Scientific
and Cultural Organization

International Atomic
Energy Agency

ADVANCED WORKSHOP ON RECENT DEVELOPMENTS IN NANOMATERIALS

15 - 19 January, 2007
Miramare, Trieste, Italy

The Abdus Salam International Centre for Theoretical Physics (ICTP), in collaboration with the International Center for Materials Research (ICMR), University of California, Santa Barbara, U.S.A. and the Academy of Sciences for the Developing World (TWAS), Trieste, Italy will organize an **Advanced Workshop on Recent Developments in Nanomaterials**, which will be held at the ICTP, Trieste, Italy, from **15 to 19 January 2007**.

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 nanomaterials.

Topics:

Inorganic nanomaterials: Synthesis, properties and applications of quantum dots, nanoparticles, nanowires, nanofibers and nanoporous forms of a wide range of inorganic materials.

Fullerenes and other carbon nanostructures: Synthesis, properties and applications of carbon-based nanoparticles.

Organic nanomaterials: Synthesis, properties and applications of dendrimers, micelles, liposomes, block copolymers etc.

Bio-nanomaterials: Biomimetic systems, bioceramics and nanotherapeutics.

Nanomaterials for molecular electronics: Design, Synthesis and device fabrication of organic thin-film transistors, light emitting devices, photovoltaics etc.

Theory and simulation of nanomaterials: Latest developments in first principles methods, molecular dynamics etc. applied to nanomaterial problems.

Advances in characterization of nanomaterials: Latest developments in high resolution TEM, solid state NMR, synchrotron X-ray scattering, neutron scattering, atomic probe microscopies, and other methods applied to nanomaterials.

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. Such support is available only for those who attend the entire activity. There is no registration fee.

The Application Form is obtainable from the ICTP WWW server: http://cdsagenda5.ictp.it/full_display.php?id=a06179 (which will be constantly up-dated) or from the activity Secretariat. It should be completed and returned before **9 October 2006** to:

Advanced Workshop on Recent Developments in Nanomaterials

(smr 1825) (c/o Ms. Patricia Wardell)
the Abdus Salam International Centre for Theoretical Physics
Strada Costiera 11,
34014 Trieste, Italy.
or

smr1825@ictp.it (please save and send file attachments in either: PDF (preferably)
or RTF zipped or DOC format)

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DEADLINE:

9 October 2006