



# The Abdus Salam International Centre for Theoretical Physics



## Regional School on Physics at the Nanoscale: Theoretical and Computational Aspects

14 - 25 December 2009

Hanoi, Vietnam

The Abdus Salam International Centre for Theoretical Physics (ICTP) and the Institute of Physics (IOP) of the Vietnam Academy of Science and Technology, in collaboration with the Asia Pacific Center for Theoretical Physics (APCTP), are organizing the Regional School on Physics at the Nanoscale: Theoretical and Computational Aspects to take place in Hanoi, Vietnam from 14th to 25th December 2009.

Nanophysics has emerged in the last decade as a new distinct sub-branch of physics. It deals with the fundamental physical phenomena that take place at the nanoscale and that find application in the rapidly developing field of nanotechnology.

Theoretical and computational aspects of Nanophysics will be covered during this activity.

The school is intended for young promising scientists (students and researchers) from Vietnam, Laos and Cambodia, and other South-East Asian countries.

- Topics:**
- Introduction to nanophysics
  - Physics of carbon nanotubes
  - Physics of graphene and graphene nanoribbons
  - Mesoscopic systems
  - Quantum dots
  - Nanowires, nanoclusters and nanostructures on surfaces
  - Computational approaches based on:
    - o Density functional theory
    - o Molecular dynamics

### Participation

Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend the School. Priority will be given to advanced undergraduates, graduate students, post-doctoral researchers, faculty and research scientists from countries in the South-East Asia region.

As it will be conducted in English, participants should have an adequate working knowledge of that 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.

### HOW TO APPLY FOR PARTICIPATION

The application form can be accessed at the activity website

<http://agenda.ictp.it/smr.php?2081>

Once in the website, comprehensive instructions will guide you step-by-step, on how to fill out and submit the application form.

You may address general requests for information to:

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ICTP Home Page: <http://www.ictp.it>

ICTP's School in Hanoi (smr.2081)  
Institute of Physics (IOP,VAST)  
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## DEADLINE

for requesting participation  
**11 September 2009**