



Introduction to Nanofluidics

20 - 24 August 2007

Miramare, Trieste, Italy

BRIEF DESCRIPTION

The purpose of this School is to provide different perspectives of nanofluidics – basics, research topics, applications in various fields of science and technology. The lectures will attempt to establish its connection to biology, biophysics, condensed matter, hydrodynamic lubrication and other fields of technological interest.

Since this is a relatively new area of research, the topics covered will be based on the research activities of the lecturers in this field. General areas are:

- Single-phase flows in nanochannels and nanotubes
- Transport of macromolecules in nanochannels and membranes
- Electrokinetic phenomena in nanochannels
- Two-phase flows, wetting and nanocapillarity
- Thermal transport through nano interfaces
- Hydrodynamic considerations in biological cells
- Fabrication technologies for nanofluidics
- Research topics in nanofluidics
- Participant presentations

PARTICIPATION

Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend the activity. 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, 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 from developing countries, to be selected by the organizers. There is no registration fee.

The **Application Form** is available on the ICTP WWW server: <http://agenda.ictp.it/smr.php?1857> (which will be constantly updated) or from the activity Secretariat. It should be completed and returned before **31 March 2007** to:

Introduction to Nanofluidics
(smr 1857) (c/o Ms. Suzie Radosic)
the Abdus Salam International Centre for Theoretical Physics
Strada Costiera 11, 34014 Trieste, Italy.

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APPLICATION DEADLINE

31 March 2007