

INTRODUCTION TO MICROFLUIDICS

8 - 26 August 2005
(Miramare, Trieste, Italy)

GUIDELINES FOR REQUESTING PARTICIPATION

GENERAL

- Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend the activity.
- Participants must have an adequate working knowledge of English.
- Although the main purpose of the Centre is to help research workers from developing countries, a limited number of students and post-doctoral scientists from developed countries are also welcome to attend.
- There is no registration fee to be paid

TOPICS

- **Introduction to fluid mechanics in micro/nano-scales**
- **Modeling**
- **Two-phase flows**
- **Micromixing**
- **Elements of microfluidic systems**
- **Microreactors**
- **Bio-chemical systems and instrumentation (lab-on-a-chip and mTAS)**
- **Measurements in microfluidic systems**
- **Applications of microfluidics in various industries**
- **Fabrication technologies for microfluidics**
- **Research topics in microfluidics**

The purpose of this School is to provide an introduction to the flow of fluids in micro/nano-devices with examples chosen from a variety of areas such as biotechnology (lab-on-a-chip and mTAS), chemical and aerospace engineering. Although the applications of microfluidics are in a wide range of areas, the fundamental principles of their operation are governed by fluid mechanics: flow in micro/nano channels, mixing and methods of driving such flows. Examples of microfluidic devices and systems covering a broad spectrum of applications will also be discussed in this School. It is open to graduate students and young researchers interested in the field, with backgrounds in science and engineering.

FINANCIAL SUPPORT

- **May be requested only by candidates who are nationals of, and working in, a developing country, and who are not more than 45 years old.**
- Limited funds are available for a few participants, to be selected by the Organizers, and who accept to attend the entire activity.

REQUEST FOR PARTICIPATION

The **Application Form** should be completed and returned before **31 March 2005** to:

Introduction to Microfluidics
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