

Advanced School on Nano, structural and single molecule approaches to biology: understanding and handling life at higher resolution

4-15 January 2016

Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore, India



The Abdus Salam International Centre for Theoretical Physics (ICTP, Trieste, Italy), in cooperation with Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore, India is organizing a School on "Nano, structural and single molecule approaches to biology: understanding and handling life at higher resolution" to be held in Bangalore, India.

The aim of the school is to introduce young researchers to the latest developments in the field of nano-biophysics/biochemistry and structural biology, and to their revolutionary impact on biology, biotechnology, drug design and delivery as well as early diagnostics of wide spread diseases. The rapid development of nano-sciences and novel nano-materials has in fact made available a new range of tools and approaches that have revolutionized biological and medical research, by allowing scientist to manipulate nano-particles and macromolecular objects, to build supramolecular entities with improved functionalities, to monitor the function of single molecules, and to understand cell behavior at molecular level.

Topics will include: single molecule approaches, optical manipulation, scanning probe techniques, high resolution optical techniques, nanoscale bio-devices, novel bio-inspired nanomaterials, molecular design and structural biology techniques.

The unique location (Bangalore, India) will provide an exciting learning and research environment stimulating the development of local research initiatives in such a multidisciplinary field. A few practical sessions will provide the students with hands-on experience in some of the subjects covered by the lectures.

PARTICIPATION:

Scientists and students from all countries that are members of the United Nations, UNESCO or IAEA may attend, with particular emphasis on scientists coming from the Indian subcontinent and other Asian countries. As the event will be conducted in English, participants should have an adequate working knowledge of this language.

As a rule, travel and subsistence expenses of the participants should be borne by their home institution. Every effort should be made by candidates to secure support for their fare. However, very limited funds are available for partial support of 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 Workshop. There is no registration fee for attending this activity.

Application for participation is online and found at:







DIRECTORS

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INVITED SPEAKERS

Sarit S. AGASTI (Bangalore, India) Padmanabhan BALARAM (Bangalore, India) Santanu BHATTACHARYA (Bangalore, India) Dan COJOC (Trieste, Italy) **Gabriele CRUCIANI** (Perugia, Italy) Luisa DE COLA (Strasbourg, France) **Julio FERNANDEZ** (New York, U.S.A.) Krishna N. GANESCH (Pune, India) **Uday MAITRA** (Bangalore, India) N.M.R. MURTHY (Bangalore, India) **Nisanth N. NAIR** (Kanpur, India) Meher K. PRAKASH (Bangalore, India) **Menico RIZZI** (Novara, Italy) G. J. SANJAYAN (Pune, India) **G.V. SHIVASHANKAR** (Singapore and Milan, Italy) Francesco STELLACCI (Lausanne, Switzerland) Sriram SUBRAMANIAN (Bethesda, U.S.A.) **Ilaria TESTA** (Stockholm, Sweden) **Ester VAZQUEZ FERNANDEZ-PACHECO**

(Ciudad Real, Spain)

http://indico.ictp.it/event/a14238/

Please follow the prompts to form submission. (Due to logistic laboratory reasons this activity is of "limited participation")

Deadline for Application: 12 OCTOBER 2015

(Due to logistic laboratory reasons this activity has "limited participation")







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