

Scope and Objectives

DAE has envisioned an ambitious XIth Plan program for Nuclear Reactors, Accelerators and projects of national importance like security applications, which will require complex instrumentation addressing challenging issues such as reliability, low power operation, compactness, connectivity and high throughput. This has given an impetus to design of a new generation of instruments. Some of the areas of applications are PHWR, AHWR, LWR, PFBR, ADSS and Astrophysics projects as well as instrumentation for large scale physics experiments with international collaboration. A number of instruments required for use in various nuclear installations like reactors, radiological laboratories, accelerators and other allied programs of DAE are presently in different phases of development.

The proposed technologies and systems will support nuclear research in the country and enhance long-term safety and performance of nuclear and accelerator installations. This new generation of instrumentation will be indigenous and thus would combat the threat of component obsolescence and technology denials. These include various nuclear detectors, ASICs, neutron flux measuring instruments, radiation monitors, instrumentation for Astrophysics and nuclear multi-parameter experiments, RF systems, beam diagnostic instrumentation, border monitoring equipment, cargo scanners etc. In the field of allied instrumentation, under sodium ultrasonic imaging system for PFBR and bluetooth and mobile technology based bio-medical instrumentation are a few examples. In all these areas standards and qualification for hardware and software are important issues.

DAE-BRNS National Symposium on Nuclear Instrumentation (NSNI- 2010) would provide a forum for exchange of ideas and focus on new technological issues. This symposium would include a number of invited talks by experts on topics of current interest in the field and presentation of contributed papers from scientists and engineers involved in the development and usage of nuclear instruments. It is also proposed to hold an exhibition of nuclear instruments and related products by industries and research institutions during the symposium.

Topics

- Nuclear Instruments for Reactors, RF & Accelerators, Physics Experiments and other applications
- Detectors/Sensors/ MEMs for Nuclear & Allied Instruments

- Health and Environment Monitoring Systems (smart and portable field instruments)
- Nuclear Security Applications like Cargo Scanning and Event Reporting
- Radiation Detection and Characterization
- Nuclear Medicine and Bio Medical Instruments
- Large area Radioactivity Monitoring
- Nuclear Forensics
- Imaging and Image Processing Systems
- ASICs, FPGAs, CPLDs, DSPs, Micro Controllers/ Processors and System On Chip (SOCs)
- Hardware and Software Qualification/Standards

Call for Papers

Authors are requested to send their contributed papers in the format enclosed.

Registration fees

- * Members of INS, Government Organizations, Educational Institutes : Rs.1000
- * Others : Rs.2500
- * Students : Rs.500
- * Ex -Scientist of DAE : Rs.500

The registration fee should be paid by a crossed Demand Draft drawn in favor of 'NSNI-2010' payable at Mumbai.

Accommodation

Limited accommodation is available at BARC guest house and will be provided on first come first served basis. In addition, private hotel rooms are available with tariff ranging from Rs. 1000/- to 2500/- (double occupancy) at Chembur, about 7 km from Anushaktinagar. Participants desirous of availing accommodation may please write at least 30 days in advance.

Important Dates

Last date for submission of complete paper : 10.12.2009
Notification of acceptance : 10.01.2010
Last date for registration : 31.01.2010

Registration Form DAE-BRNS NATIONAL SYMPOSIUM ON NUCLEAR INSTRUMENTATION – 2010 (NSNI-2010) February 24-26, Anushaktinagar, Mumbai

Name:-----
Designation:-----
Institution:-----
Field of work:-----
Address:-----

Telephone:-----, Fax:-----
E-mail:-----
Accommodation:
 Guest House Tariff Hotel Not required
Presenting Paper: Yes/No
Registration Fee: Rs -----
DD No:-----, Dated:-----
Drawn on:-----
Date:-----

Signature:

Completed forms should be sent to the Convener, NSNI-2010 at the address given below.

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Convener, NSNI-2010
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