

Scope of Seminar:

The topic of Applications of particle accelerators is chosen because there are about ten thousands accelerators running all over the world. Out of which almost fifty percent are being used for various studies in the field of industries, basic research in nuclear physics, radio-isotope production, biology, oncology, material studies, space environment etc and the rest for Medical applications. Now a days the generation of gamma rays and neutron by electron accelerators is gaining importance mainly because of their utility in radiotherapy, radiography, BNCT, agriculture, sterilization, etc. Charged particles are also being used for studies of radiation damage in crystals, synthesis of nanoparticles, processing and characterization of materials, explosive analysis, elemental analysis, accelerated driven sub-critical systems (ADSS), Nuclear reaction analysis, Rutherford backscattering, Elastic recoil detection, etc.

In view of the renewed interest in the nuclear and radiation physics in the country, accelerators are likely to play a key role in deciding the future thrust research areas. The Department of Physics, University of Pune has made remarkable progress in the fields of accelerators and nuclear reaction analysis. The Department had developed unique accelerator facilities such as 8 MeV Race Track Microtron, 14 MeV Neutron Generator, 500eV – 30 KeV electron source, 200 KeV electron accelerator, 200 KeV Ion accelerator, 15 eV atomic source etc. A workshop/seminar on this topic should prove to be valuable and useful to the researchers in the area of accelerator physics, technology and related fields.

Topics to be covered:

1) Radiation damage in semiconductors / polymers / glasses etc, 2) Radiation processing of materials, 3) Ion beam techniques for materials characterization, 4) Industrial and Medical applications, 5) Explosive analysis by prompt gamma/ Neutron activation analysis, 6) Space Radiation Environment 7) Synchrotron Radiation.

List of Speakers (tentative):

- 1) Dr. S. Kailas, BARC, Mumbai.
- 2) Prof. V. N. Boraskar, UoP, Pune.
- 3) Prof. S. B. Ogale, NCL, Pune.
- 4) Dr. D. Kanjilal, IUAC, New Delhi.
- 5) Dr. Pitambar Singh, BARC, Mumbai.
- 6) Dr. Y. K. Vijay, Jaipur.
- 7) Dr. A. M. Narsale, Mumbai
- 8) Dr. D. C. Kothari, Mumbai
- 9) Dr. S. Ganesh, Mangalore.
- 10) Dr. N. S. Shinde, Mie University Japan.
- 11) Dr. S. N. Pethe, SAMEER, Mumbai.

Local Organizing Committee:

Prof. V. B. Asgekar	Prof. P. D. Sahare
Prof. S. I. Patil	Prof. D. S. Joag
Dr. M. A. More	Prof. C.V. Dharmadhikari
Dr. A. G. Banpurkar	Dr. S. W. Gosavi
Dr. K. P. Adhi	Dr. V. L. Mathe
Dr. A. L. Kshirsagar	Dr. Pradeep Kumar
Dr. G. R. Pansare	Dr. V. P. Godbole
Dr. S. T. Chavan	Dr. (Mrs) P. S. Bhawe

Registration Fees:

Participants from:
Researchers / College Teachers / Scientist : Rs.200/-

Fees are payable in advance by D. D. in favor of Indian Physics Association, Pune Chapter along with the registration form. For all communication use address for correspondence mentioned overleaf.

One Day National Seminar on Applications of Particle Accelerators

11th May 2007

Registration Form

Name: _____

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PIN Code: _____

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E-Mail: _____

Accommodation required – Yes / No

Completed form may be sent to the
Convenor latest by May 5th 2007.

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Particle Accelerators**

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Centre for Advanced Studies in Materials
Science and Condensed matter Physics,
Department of Physics,
University of Pune,
Pune - 411 007

&

Indian Physics Association
(Pune Chapter)

<http://physics.unipune.ernet.in/>

National Advisory Committee:

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Department of Physics, UoP, Pune.

Convenor : Dr. S. D. Dhole*

Department of Physics, UoP, Pune.

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Dr. D. Kanjilal, IUAC, New delhi.

Dr. D. C. Kothari, Mumbai.

Prof. V. C. Sahni, RRCAT, Indore.

Dr. (Mrs) Shikha Verma, Bhubaneshwar.

Dr. K. G. M. Nair, Kalpakkam.

Dr. M. C. Uttam, ISRO-UoP STC.

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