

ABOUT THE WORKSHOP

Objective: The objective of this workshop is to provide exposure to fundamental scientific concepts of Particle Accelerators and their applications in Material Science and Medical Physics. This 6-day workshop will cover exciting topics that lie at the interface of Accelerator, Plasma, Beam manipulation and Medical applications. Special emphasis will be given to the use of physical approaches to understand particle dynamics. There will be also lab sessions in related areas

Application: Proton therapy has in recent years become a key part for improving cancer treatment and diagnostics in worldwide with major investments. Compact ion accelerators could have major impact as a next generation, cost effective technology for use in cancer therapy.

COURSE CONTENTS

Basic concepts of EM theory, Radiation Physics, linear accelerators, Design, Measurement and operational concepts, Sources for Accelerators, Beam Dynamics, Diagnostics for particle detection, Synchrotron and Free electron laser, Applications in Mat. Sc., Laser plasma accelerators, Medical applications.

INTENDED PARTICIPANTS

The workshop is intended for faculty, research scholars and students from academia and participants from relevant industries interested in any areas of engineering particularly interested in understanding modern day particle accelerator technologies. No prior knowledge of the area is expected. The maximum number of participants will be 30. On successful completion of the course, participation certificate will be awarded.

*to be confirmed

REGISTRATION FEES

There is no fee for participants from TEQIP-sponsored colleges. Nominations along with registration forms should be sent through the coordinator to bhuvan@iith.ac.in. For participants from Non-TEQIP institutions, the course fee is INR 10,000.

All payments should be made in any of the below two modes:

1. Demand Draft in favour of 'IIT Hyderabad', payable at Hyderabad.
2. Electronic Fund Transfer (Recommended):
Name of the Bank: State Bank of India
Branch: IIT Kandi (Branch code: 14182), Hyderabad, India
SWIFT Code: SBIN0014182
Account Number: 30859878032 (Current A/c)

ACCOMMODATION

Limited accommodation is available within IITH premises. Participants who wish to avail this facility are advised to write to the coordinators at the earliest (bhuvan@iith.ac.in). CGR Manjeera, Redlas Inn, Hotel Janapriya and Pankaj Palace are some hotels/lodges near the IITH campus.

IMPORTANT DATES

Application deadline: 15th JAN 2019

Participant intimation: 25th JAN 2019

Workshop dates: 17th-22nd FEB 2019

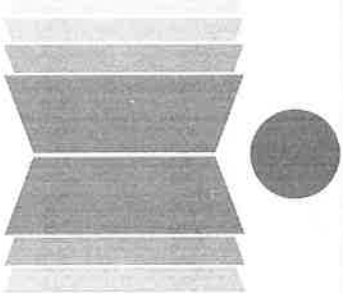
Contact:

Dr B Ramakrishna, Dr J Mohanty

bhuvan@iith.ac.in; jmohanty@iith.ac.in

SPEAKERS

Dr. P. A. Naik, RRCAT Director*
Dr. D. Kamjial, IUAC Director*
Dr Subhendu Ghosh, IUAC*
Dr Srinivas Krishna Gopal, BARC*
Dr Jyoti Ranjan Mohanty, IITH
Dr Aravind Kumar Rengan, IITH
Dr Bhuvanesh Ramakrishna, IITH
Prof Anjan Giri, IITH
Prof. Kuriki, KEK, Japan
Prof. Kashiwagi, KEK, Japan
Prof. J Yang, KEK, Japan
Prof. Aryshev , KEK, Japan
Prof. J. Urakawa, KEK, Japan
Dr. Abhay Deshpande, SAMEER



भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

6-DAY WORKSHOP ON

Radiation and Applications (A confluence of Material Science and Accelerators)

(Includes hands-on Experiment sessions,
simulation tutorials & case studies)

SPONSORED BY TEQIP

17th – 22nd Feb 2019

Indian Institute of Technology Hyderabad

ABOUT IITH

IITH started functioning in August 2008. Currently it has 2374 students in total and offers undergraduate programs in 9 disciplines, M. Tech in 16 disciplines, M.Sc. in 3 disciplines, M. Phil program in 5 disciplines, M.Des program and Ph. D in all engineering, science, liberal arts and design. IITH is in its 10th year and has 185 faculty members. It recently achieved 9th rank among the top universities and educational institutes in India (NIRF).

Conveners

Dr B Ramakrishna, Dr. J Mohanty,

Prof Anjan K Giri

Department of Physics

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