



Top: Invited dignitaries from the ranks of senior officers of BARC launch the training course booklet during the inaugural session.

Bottom: Training course participants pose for a group photograph.

Training Course on 'Safety in Accelerators'

Dr. Manjiri Pande

BARC Safety Council Secretariat organized a one-day training course on 'Safety in Accelerators' on Feb 14, 2026 in Multipurpose Hall, Training School Hostel, Anushakti Nagar. This training course benefitted the new entrants working in the area of accelerators and the accelerator community as a whole.

It has brought the safety committees, radiological safety officers, designers, operating personnel, etc. on a single platform for sharing their knowledge and experience on safety and regulation of accelerators. It has improved the safety awareness of all personnel involved in design, development and operation of Accelerators.

Training Course topics

Overview of Accelerators

Regulatory Requirements, Framework and Regulation of Accelerator Facilities

Accelerator - Radiological, Occupational Safety & Emergency Response

Industrial Safety and Hazards in Accelerators

Accelerators in Medical Applications

Cryogenic Safety in Accelerators

Industrial Applications of Accelerators - ICS, Medical Sterilisation, Agriculture, Semi-Conductors Operational Safety Management in Accelerators

Sharing Experiences in Regulation and Path Ahead in Proton and Electron Accelerators



Clockwise from top: Inaugural Session of InPAS-2025, Valedictory Session of InPAS-2025 and Group Photo of InPAS-2025 participants.

InPAS 2025

The Indian Particle Accelerator School 2025

Dr. Sista V.L.S. Rao and Mr. Manas R. Mishra

The Indian Particle Accelerator School 2025 (InPAS 2025) was organized under the aegis of the Board of Research in Nuclear Sciences (BRNS) and the Indian Society of Particle Accelerators (ISPA) from 15–20 September 2025 at BARC, Mumbai. InPAS-2025 emerged as a significant national initiative, successfully blending academic rigor with experiential learning. A total of 50 participants from DAE labs, universities, and research institutions across India engaged in an intensive week-long program on RF Linear Accelerators, featuring expert lectures, simulation-based sessions, and facility visits. The curriculum covered key aspects of LINAC science and technology, including transverse and longitudinal beam dynamics, space-charge effects and mitigation, beam diagnostics, accelerator controls, machine protection, RF systems (Couplers and power supplies etc), magnet designs, ion sources, electron guns, and heavy-ion accelerators. Specialized sessions on superconducting RF (SCRF) technology addressed cavity design, processing, and associated mechanical challenges, providing participants with exposure to both normal-conducting and superconducting accelerator systems.

A major highlight was the seamless integration of theory with practical exposure, through hands-on training in simulation tools along with RF measurement exercises and magnet design studies. Participants also gained first-hand insights during field visits to LEHIPA, FOTIA, and the Electron Beam Centre (EBC), Kharghar, where they observed operational accelerator systems in action. The special evening lectures by senior scientists on emerging areas in accelerator science and technology provided valuable insights into current research frontiers. The inaugural ceremony, graced by Prof. Avinash Chandra Pandey, Director IUAC (Chief Guest), Dr. Pitamber Singh, Ex-Head, IADD (Guest of Honour), Shri U. D. Malshe, Director, MRG, BARC and the valedictory function led by Shri Martin Mascarenhas, Director, BTGD, BARC added distinction to the event. InPAS-2025 was widely appreciated for its well-structured curriculum, exceptional faculty, and effective organization, making it an enriching platform for young scientists and engineers to advance their understanding of accelerator science.