

INST Mohali moving towards a globally competitive institution in Nano Science & Technology

A cost-efficient and scalable method for graphene-based integrated on-chip micro supercapacitor, which is a miniaturized electrochemical storage device. A 'Nano-Spray Gel' that could be administered on-site for treatment of frostbite injuries and heal the wound; a novel low cost topical hemostatic device to address uncontrolled bleeding, purification devices for water and air respectively.

These are only some of the technologies rolled out by the Institute of Nanoscience and Technology (INST), one of the youngest autonomous institutions of the Department of Science and Technology. INST encourages all aspects of nanoscience and nanotechnology with major thrust in the areas of healthcare, agriculture, medical environment and energy with the ultimate goal to make a difference to society through nanoscience and technology.

INST brings together biologists, chemists, physicists, materials scientists, and engineers having an interest in nanoscience and technology. The scientists, having strengths in basic science together with more application-oriented minds from different backgrounds, work together by joining hands as a cohesive unit, under a congenial work environment, on a common platform apart from carrying out their individual research.



INST offers Ph.D. and Postdoctoral fellowships to students as part of its human resource development objective. Through its various activities, INST is committed to contribute significantly to the National Societal Programs like Swachh Bharat Abhiyan, Swasth Bharat, Smart Cities, Smart Villages, supporting the Strategic Sector, Make in India and Clean & Renewable Energy through scientific means and by generating processes, technologies and devices.

The institute encourages its scientists to publish their research in peer-reviewed international high impact journals which is reflected in their recent publication record in reputed journals like Energy and Environment, Nature Communication, JACS etc. INST supports industry's through joint collaborations to address some of their needs like effluent management.

In addition, the institute imparts advanced training courses and laboratory techniques in the area of nanoscience, organizes important national and international level seminars and conferences, and supports the industry through joint industrial projects. INST is also promoting science amongst the young generation of the nation through its outreach program, especially for rural, remote and under-served schools by delivering talks to motivate the students to explore the world of science.

INST Mohali aims to emerge as India's foremost research institution in Nano Science and Technology, which is globally competitive and contributes to the society through the application of nanoscience and nanotechnology in the field of healthcare, agriculture, energy and environment.