

## Outreach & Dissemination Services Office CSIR-Central Building Research Institute Roorkee - 247667 (Uttarakhand)

Visit of Students and Faculties from NITTTR Chandigarh

08th May, 2026

Organized under the aegis of CSIR

The CSIR–Central Building Research Institute (CSIR–CBRI), Roorkee, welcomed a group of 20 students along with their faculty members from the National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh, on 8 May 2026 for an educational and insightful academic visit. The visit aimed to provide students with practical exposure to advanced research, sustainable technologies, and innovative developments in the field of building science and engineering. The academic interaction was coordinated by **Dr. Neeraj Jain, Head ODS and Senior Principal Scientist, CSIR–CBRI, Roorkee**. The visit was organized as part of CSIR–CBRI’s continued efforts to promote scientific awareness, academic collaboration, and industry-oriented learning among students and young researchers.



The students and faculty members were warmly received at the institute and provided with an overview of CSIR–CBRI’s history, research contributions, and achievements in the area of building science and technology. The visit commenced with a tour of the Exhibition Gallery, where students learned about the institute’s legacy, ongoing research projects, and innovative technologies developed over the years.

The gallery showcased several pioneering contributions made by CSIR–CBRI in the fields of disaster-resistant construction, sustainable housing, energy-efficient buildings, fire safety engineering, and rural development technologies. The exhibits helped students understand how scientific research is translated into practical applications that benefit society and support national development.

## Visit to Research Laboratories

Following the Exhibition Gallery tour, the students visited the NEETF Lab, the 3-D Concrete Printing Lab, and the Fire Safety Engineering (FSE) Lab. During the visit to the NEETF Lab, students were introduced to various sustainable and energy-efficient technologies being developed and tested by the institute. The laboratory demonstrations highlighted innovative solutions designed to improve building performance, reduce energy consumption, and promote environmentally responsible construction practices.



**Dr. Billings Exhibition Gallery**



**NEETF Lab**



**3-D Lab**

A major attraction during the visit was the 3-D Concrete Printing Lab, where students observed advanced construction technologies based on automated and additive manufacturing techniques. Scientists explained the process of 3-D concrete printing and its potential applications in rapid, cost-effective, and sustainable construction. Students gained insights into how this emerging technology can revolutionize the construction sector by reducing material wastage, improving construction speed, and enabling innovative architectural designs. The live demonstrations and technical discussions provided students with valuable exposure to futuristic construction practices and digital fabrication technologies. At the Fire Safety Engineering (FSE) Lab, students gained valuable insights into fire safety research, testing methodologies, and preventive engineering solutions. Researchers and scientists explained the importance of fire-resistant materials, building safety standards, and emergency preparedness in modern infrastructure development. The demonstrations provided students with practical exposure to scientific approaches used to enhance safety in residential, commercial, and industrial

structures. The laboratory visits proved highly informative, enabling students to connect theoretical concepts studied in classrooms with real-world scientific research and engineering applications.



**Fire Lab**

The academic tour also included visits to the Rural Technology Park and the Demonstration Park established within the CSIR–CBRI campus. These facilities offered students an opportunity to observe sustainable and cost-effective construction technologies developed by the institute for rural and urban applications. Students explored different models and demonstrations related to affordable housing, eco-friendly construction materials, waste utilization technologies, rainwater harvesting systems, and energy-efficient building techniques. The visit emphasized the significance of sustainable development practices and the role of innovative technologies in improving the quality of life in both rural and urban communities. The practical demonstrations helped students understand how research outcomes can be effectively implemented on the ground to address challenges related to housing, environmental sustainability, disaster resilience, and resource management.



**Rural Technology Park**



**Demonstration Park**