Outreach & Dissemination Services Office
CSIR – Central Building Research Institute
Roorkee – 247667 (UK)
Deenbandhu Chotu Ram University of Science and Technology
Engineering Students
Gain Hands-On Technical Exposure
February 25, 2025

CSIR-CBRI, Roorkee, organized a one-day educational visit for a group of 40 engineering students and three faculty members from Deenbandhu Chotu Ram University of Science and Technology (DCRUST), Murthal, Haryana. The visit aimed to enhance their technical knowledge and provide firsthand exposure to cutting-edge building technologies, innovative research, and sustainable construction practices.

The delegation was warmly received by Dr. Chandan Swaroop Meena, Senior Scientist at CSIR-CBRI, who introduced the students to the institute's pioneering research and its contributions to structural engineering, disaster resilience, and sustainable infrastructure. During the visit, students explored advancements in 3D printing for construction, disaster-resilient building materials, and energy-efficient infrastructure. Dr. Ashish Kapoor, Structural Engineer, provided an in-depth overview of 3D printing technology, explaining its advantages, limitations, and key technical aspects. He elaborated on the motion mechanism of the printing process, important terminologies such as Open Time and VMA (Viscosity Modifying Agent), and the impact of print speed on final output, demonstrating various shapes printed using the technology.

Students also toured the CSIR-CBRI Exhibition Gallery, where they explored key engineering innovations and research contributions. A highlight of the exhibition was the Ram Mandir Project, a three-story sandstone structure built in the Nagara Shaili architectural style, designed to last 1,000 years. Other notable projects included the safe demolition of twin towers, Air disinfection purification systems to prevent SARS-CoV-2 transmission in Buildings, and advancements in net-zero energy solutions for sustainable infrastructure.

The visit also included an interactive session at the Rural Technology Park, where students were introduced to affordable and sustainable housing technologies designed for different regional requirements. They explored water filtration systems, the effect of insulation in walls, brick masonry construction techniques, beams and modules, and PCC layer applications.

The educational visit provided students with valuable exposure to emerging trends in building sciences, reinforcing their understanding of structural engineering, sustainability, and disaster mitigation. The hands-on experience inspired them to explore future opportunities in engineering, research, and technological innovation, emphasizing the crucial role of applied research in shaping modern infrastructure. The visit to CSIR-CBRI, Roorkee, proved to be a

transformative learning experience, broadening the students' technical perspectives and encouraging them to contribute to advancements in the field.

Interaction with visitors




Visit of laboratories and Rural Technology Park and Ctesiphon Exhibition Gallery