



CSIR-Central Building Research Institute Roorkee (Uttarakhand)

Visit of School Students at CSIR- CBRI

18th December, 2024

On December 18, 2024, the Institute successfully hosted an enriching educational visit as part of the Jigyasa 2.0 initiative. This event aimed to spark scientific curiosity and provide students with an insight into the latest research and innovations in building science and technology. Students and teachers from the participating school were graciously received by the Institute.



The visit aimed to showcase the ongoing R&D work at the institute. A total of 70 Students and 10 faculty members from PM Shree KV D.L. Meerut Cantt actively participated in the event. Dr. Chandan Swaroop Meena, Senior Scientist cordially greeted the students and teachers along with Senior Scientists Dr. Tabish Alam and Dr. Hemlata.

The event featured an interactive session between scientists and students, promoting curiosity and engagement with scientific developments. The students were introduced to the institute's prestigious Ctesiphon Exhibition Gallery, which displayed cutting-edge

research and innovations, showcasing the progress made by CSIR-CBRI from its inception to date. Key highlights included innovative fire-resistant panels, advanced technologies in pile foundation, and structural design adaptations tailored to regional requirements. The Institute (CBRI) has played a pivotal role in the structural and foundational designs of the **Pradhan Mantri Gramin Awas Yojana (PMAY-G)**, leveraging scientific innovations to ensure cost-effectiveness, sustainability, and improved ventilation.

Furthermore, during the COVID-19 pandemic, CBRI contributed significantly to public health efforts by developing advanced air purification technology capable of trapping air momentarily, neutralizing viruses, and delivering cleaner, safer air. The gallery also presented CBRI's remarkable journey from its inception to its current achievements, sparking excitement and motivation among the students.

These projects sparked great interest among the students, and they were eager to learn more about the technologies and innovations presented. A vibrant and continuous student-scientist interaction took place throughout the event, allowing students to ask questions and engage with the Scientists.



Following the exhibition, students visited the Rural Technology Park, where Dr. Anup Kumar Prasad ,Scientist and Dr. Chandan Swaroop Meena , Senior Scientist at CSIR-CBRI, gave an in-depth brief on the research and development work carried out at the park. He explained various technologies related to structural building work, providing

students with a hands-on experience of modern-day technologies and research efforts in rural development. He discussed various technologies used in house construction, tailored to different regions based on local needs and emphasized that the technology and materials used should be sustainable, economical, and readily available. The discussion also covered different roofing techniques and water filtration systems commonly employed in rural areas, along with their scientific principles and how they relate to practical, everyday life. The interactive session allowed students to relate what they had learned to real-world scenarios, enhancing their understanding of the significance of technology in today's world.



The students were also given a guided tour of the APEE Department's laboratory, commonly referred to as the Energy Building. During the visit, they explored the Heat Transfer Lab, where they were introduced to ongoing R&D projects such as the Climate Clock and Mechanical Ventilation Heat Recovery systems. Mr. Sanjay, Project Associate, demonstrated and explained the Heat Pump Components and AC Cycle. This experience aimed to inspire students to pursue research careers and contribute to the nation's development. Afterwards, a questionnaires session was conducted, leading to a vibrant and engaging discussion.



The program was enriched by the active participation of Dr. Chandan Swaroop Meena, Dr. Hemlata, Dr. Tabish Alam and Staff members of ODSO. The seamless coordination of the event was expertly handled by Dr. Chandan Swaroop Meena, ensuring its smooth execution and success. At the event's conclusion, students and faculty expressed gratitude to CSIR-CBRI for providing an inspiring learning experience. The showcase of innovations in building science and sustainable technology motivated attendees to critically consider their role in shaping a progressive, sustainable future.