





## CSIR-Central Building Research Institute Roorkee (Uttarakhand) Visit of School Students at CSIR- CBRI 27<sup>th</sup> December, 2024

On December 27<sup>th</sup>, 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 200 Students and 20 faculty members from Govt. Girls Inter College, Deoband, Sahranpur actively participated in the event. Dr. Hemlata, Senior Scientist cordially greeted the students and teachers along with Senior Scientist Dr. Tabish Alam.

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. Dr. Tabish Alam and Dr. Hemlata highlighted the mission of CSIR-CBRI, Roorkee, emphasizing its dedication to advancing building science and addressing societal needs. They discussed various parameters essential for building science and elaborated on CBRI's significant contributions to numerous government projects. Notably, the institute has played a key role in designing the structural and foundational elements of Navodaya Vidyalaya schools and developing Zig-Zag technology to reduce pollution levels.

Among the standout projects was the Ram Mandir, where CSIR-CBRI Roorkee made a significant contribution to the structural and foundation design. Equally impressive was the innovative technology behind Surya Tilak, which leverages a sophisticated Opt mechanical system. 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.



Dr. Hemlata inaugurated the program with an inspiring introduction, while Dr. Tabish Alam delivered a heartfelt vote of thanks and highlighted the Jigyasa program's mission to ignite scientific curiosity and nurture a spirit of inquiry among school students. A thought-provoking lecture on the utilization of plastic waste in building products captivated the audience, deepening their understanding towards the awareness of global warming, its technological drivers, and the critical importance of recycling plastics for a sustainable future. She further elaborated on human exposure to microplastics and its toxicity mechanisms, along with insights into lignocelluloses waste biomass. She presented detailed statistics on the advantages and limitations of natural wood-plastic composites

The program was enriched by the active participation of Dr. Tabish Alam, Dr. Hemlata, and Staff members of ODSO. The seamless coordination of the event was expertly handled by Dr. Hemlata, 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.

