

PGTs from Six Regions Learn About Latest Scientific Innovations of CSIR-CBRI

The scientists of **CSIR-Central Building Research Institute, Roorkee**, enlightened the postgraduate teachers participating in the “**In-Service Course for PGTs**” organized by the **Kendriya Vidyalaya, Roorkee** under the “**Jigyasa-Quest for Curiosity**” programme. In this series, the scientists of CSIR-CBRI, Roorkee presented lectures in their area of expertise and informed about the **latest technologies developed by CSIR & CBRI**.



Dr. N. Gopalakrishnan, Director, CSIR-CBRI stressed on the importance of adopting a scientific approach in life, especially for a teacher.

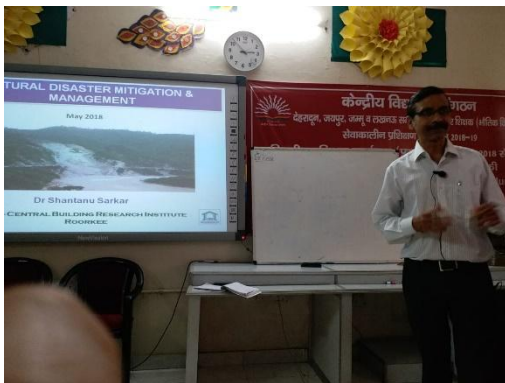
Presenting lectures on "**CSIR & CBRI: A Scientific Journey**", **Dr. Atul Kumar Agarwal**, Senior Principal Scientist and Jigyasa Programme Coordinator, CSIR-CBRI informed the teachers about the glorious history and achievements of CSIR & CBRI. He said that CSIR has contributed in the upliftment of every sector, in every aspect of life, from aerospace to agriculture, from food to pharmaceuticals, from building & construction to biodiversity, health, chemical, energy etc. Working in this direction, CBRI is dedicated to research, development & innovation to provide affordable housing to the nation. He informed that the Institute is providing technical assistance and innovative rural housing techniques for the construction of three million houses in the next five years under the Prime Minister's Rural Housing Scheme (PMAY-G). He told that the Institute is contributing to every area of building construction through its R&D to develop innovative environmentally friendly building materials from waste, building pests & mycology, nanotechnology, pre & post disaster management & risk reduction, guidelines for building construction and norms, energy efficient buildings, building health monitoring and rehabilitation of heritage structures, etc. In addition, the Institute is dedicated to disseminate this information to the masses through publications, articles, exhibitions, awareness programs etc. He also gave detailed information on the Jigyasa programme, launched to inculcate scientific temper in young minds.





Dr. R.D. Dwivedi, Principal Scientist, CSIR-CIMFR Regional Centre, CBRI Campus, Roorkee presented an enlightening lecture on **“Tunnel Engineering”**. He informed about the importance of tunnelling stating that a tunnel shortens the distance thus reduces fuel and carbon emission. It prevents weathering of path due to extreme conditions, avoids accidents and traffic jams dues to landslides and earthquakes and protects from extreme climatic conditions. He informed the teachers about the uses of tunnel, the various techniques and the equipment used such as drilling, blasting and tunnel boring machine. He also informed about the recently inaugurated Chenani-Nashri tunnel in Jammu & Kashmir. This 9 km long tunnel shortens the 42 km long distance between the Chenani and Nashri cities while protecting the travellers from the forces of nature. The main tunnel is provided with escape tunnel, with escape routes at regular intervals to provide a quick and safe exit in case of an emergency.

While presenting the lecture on **"Disaster Mitigation and Management"**, **Dr. S. Sarkar**, Chief Scientist, CSIR-CBRI, provided detailed information about the various natural disasters and transit shelters for disaster victims developed by CSIR-CBRI.



Mr. Tabish Alam, Scientist, CSIR-CBRI, presented a lecture on **“Solar Thermal Collector”** and informed about their applications in the production of electricity. He discussed various types of solar thermal collectors, their functioning process and their application in purification of air & water and air conditioning in residential and industrial buildings, etc.



The participants presented a **prayer meet, thought of the day** to instil a positive atmosphere to the programme, and **visited enriched laboratories of CSIR-CBRI** including Rural Park, Fire Research, Environmental Science Technology, and Energy Efficient Buildings etc. and **interacted with the Institute's scientists.**



The programme was attended by more than **40 PGTs (Physics)** from **Kendriya Vidyalayas of Dehradun, Jammu, Lucknow, Bhopal, Chandigarh, and Jaipur Region.**