

EVENT REPORT

Title: **Innovation in Cement Manufacturing Process**

Date: **14th September 2023**

Venue: **B & B Institute of Technology, Vallabh Vidyanagar**

Organized by: **Civil Engineering Department, B & B Institute of Technology**

The "Innovation in Cement Manufacturing Process" seminar, organized by the Students Startup and Innovation Policy Cell and the Civil Engineering Department of B & B Institute of Technology, Vallabh Vidyanagar, was held on 14th September 2023. This event was specifically designed for the students of Civil Engineering at BBIT to enhance their knowledge about the latest advancements and innovations in the cement manufacturing industry.

Objectives

- To provide insights into modern cement manufacturing processes.
- To discuss innovations that improve the efficiency and sustainability of cement production.
- To bridge the gap between academic knowledge and industry practices.
- To inspire students to engage in innovative projects related to cement and construction.

Keynote Speaker

Mr. Ashish Bharadava, Senior Manager at J K Cement, RE - Nadiad AO. CTS GREY cement division, an expert in cement manufacturing and innovation.

Program Highlights

Welcome Address

The event began with a welcome address by Dr. S. K. Dave, Head of the Civil Engineering Department, BBIT. He emphasized the importance of innovation in civil engineering and the role of sustainable practices in modern construction.

Introduction to Cement Manufacturing

Mr. Ashish Bharadava provided an overview of traditional cement manufacturing processes, explaining each stage from raw material extraction to the final product. He highlighted the energy-intensive nature of the process and the environmental challenges associated with it.

Innovations in Cement Manufacturing

The core of the seminar focused on recent innovations aimed at reducing the carbon footprint of cement manufacturing. Mr. Ashish Bharadava discussed the following key innovations:

- **Alternative Raw Materials:** Use of industrial by-products such as fly ash and slag to replace traditional raw materials.

- **Energy Efficiency:** Implementation of energy-efficient technologies such as pre-calcination and advanced kiln designs.
- **Carbon Capture and Storage (CCS):** Techniques to capture and store carbon dioxide emissions from cement plants.
- **Green Cement:** Development of eco-friendly cement variants like geopolymers and limestone calcined clay cement (LC3).

Case Studies and Practical Applications

Mr. Ashish Bharadava presented several case studies where these innovations have been successfully implemented, leading to significant improvements in sustainability and cost-effectiveness.

Interactive Session

The seminar included an interactive Q&A session where students had the opportunity to ask questions and engage directly with the speaker. Topics of discussion included the feasibility of adopting new technologies in developing countries and the potential career paths in the field of sustainable construction.

Conclusion and Future Directions

In his concluding remarks, Mr. Ashish Bharadava emphasized the ongoing need for research and innovation in the cement industry. He encouraged students to pursue projects and internships that focus on sustainable practices.

Vote of Thanks

The event concluded with a vote of thanks by Prof. Vipul Solanki, Department coordinator of the Students Startup and Innovation Policy Cell, who expressed gratitude to Mr. Mathur, the organizing team, and the participants for their active involvement.

Outcomes

- **Enhanced Understanding:** Students gained a deeper understanding of the cement manufacturing process and the latest innovations in the industry.
- **Inspiration for Innovation:** The seminar inspired students to think creatively about sustainability and efficiency in construction.
- **Networking Opportunities:** Students had the chance to connect with industry experts, potentially opening doors for future collaborations and internships.

Feedback

The feedback from the students was overwhelmingly positive. They appreciated the comprehensive coverage of the topic and the opportunity to interact with an industry expert. Many expressed interest in pursuing further studies and projects related to cement innovation.