Department of Paint Technology

Harcourt Butler Technical University, Kanpur

Title:

Industrial Visit of 3rd Year B.Tech Students to Kansai Nerolac Paints, Jainpur (Kanpur Dehat)

Date: 21st March 2026

Venue: Kansai Nerolac Paints Ltd.

Organized By:

- Department of Paint Technology, HBTU Kanpur

Participants:

- 3rd Year B.Tech Students (Paint Technology)
- Faculty Members

1. Introduction

The Department of Paint Technology, HBTU Kanpur, organized an industrial visit for 3rd year B.Tech students to **Kansai Nerolac Paints Ltd.** on 21st March 2026.

The visit was aimed at providing students with practical exposure to **industrial manufacturing processes, quality control practices, and real-world applications of paint technology**, thereby bridging the gap between theoretical knowledge and industrial practice.

2. Objectives of the Industrial Visit

- To understand **industrial-scale paint manufacturing processes**
- To observe **plant operations and production workflow**
- To gain insights into **quality control and testing methods**
- To familiarize students with **industrial safety practices**
- To enhance awareness of **career opportunities in coatings industry**

3. About the Industry

Kansai Nerolac Paints Ltd. is one of India's leading paint manufacturing companies, known for its strong presence in **industrial, automotive, and decorative coatings**.

The Jainpur facility plays a significant role in manufacturing high-quality coatings, incorporating advanced technologies and stringent quality standards.

4. Visit Overview

The industrial visit included:

- Welcome and introductory session
- Plant tour covering different production units
- Demonstration of manufacturing processes
- Interaction with industry professionals
- Discussion on quality control and safety practices

5. Manufacturing Process Observed

Students were exposed to various stages of paint manufacturing:

5.1 Raw Material Handling

- Storage and handling of resins, pigments, solvents, and additives
- Importance of material quality and consistency

5.2 Mixing and Dispersion

- Use of high-speed dispersers and mixers
- Pigment dispersion techniques

5.3 Grinding and Milling

- Use of bead mills for achieving required particle size
- Importance of uniform dispersion

5.4 Let-Down and Tinting

- Adjustment of formulation properties
- Addition of additives for performance enhancement

5.5 Filtration and Packaging

- Removal of impurities
- Automated filling and packaging systems

6. Quality Control and Testing

The visit provided insights into quality assurance practices, including:

- Viscosity measurement
- Gloss and color evaluation
- Drying time analysis

- Adhesion and durability testing
- Batch consistency checks

Students understood the importance of maintaining **product standards and regulatory compliance**.

7. Safety and Environmental Practices

The company emphasized:

- Use of **personal protective equipment (PPE)**
- Fire safety and hazard management
- Waste management and environmental compliance
- Safe handling of chemicals

This helped students appreciate the importance of **industrial safety and sustainability**.

8. Interaction with Industry Experts

Students had the opportunity to interact with plant engineers and technical staff, where discussions focused on:

- Industrial challenges in paint manufacturing
- Career opportunities in coatings industry
- Skill requirements for industry readiness
- Technological advancements in coatings

9. Learning Outcomes

After the visit, students were able to:

- Understand **industrial paint manufacturing processes**
- Gain knowledge of **quality control techniques**
- Appreciate the importance of **safety and environmental practices**
- Relate theoretical concepts to **practical applications**
- Develop awareness of **industry expectations and career paths**

10. Impact of the Industrial Visit

Academic Impact

- Enhanced practical understanding of course concepts
- Improved teaching-learning effectiveness

Student Development

- Increased interest in industrial processes
- Better preparation for internships and placements

Institutional Impact

- Strengthened industry–academia relationship
- Opportunities for future collaboration

11. Relevance to NAAC/NBA Criteria

NBA Alignment:

- **Criterion 3:** Program Outcomes (Practical knowledge, industry exposure)
- **Criterion 5:** Faculty Contributions
- **Criterion 7:** Professional Activities

NAAC Alignment:

- **Criterion 2:** Teaching-Learning Enhancement
- **Criterion 3:** Research and Extension
- **Criterion 5:** Student Development
- **Criterion 7:** Best Practices

12. Conclusion

The industrial visit to **Kansai Nerolac Paints Ltd.** was highly informative and beneficial for the students. It provided valuable exposure to **real-world industrial practices, manufacturing technologies, and quality control systems** in the paint industry.

Such visits play a crucial role in developing **industry-ready professionals** by integrating academic knowledge with practical experience.