

Exploring Knowledge Beyond Classrooms

Department of Physics

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An educational trip was organized on 7th March 2025 to NIBE Ltd., Chakan, and Vigyan Ashram, Pabal, Pune. A total of 45 undergraduate students participated in this visit, comprising 17 Third-Year (TY) and 28 Second-Year (SY) students. The trip was coordinated by Dr. Shashikant D. Shinde, with faculty members Prof. S. R. Kate, Dr. S. S. Warule, Dr. B. B. Gabhale, Prof. Akshay Sonawane, Dr. Bhavana Keswani, Prof. Harshada Nagargoje, and Prof. M. Bhujbal accompanying the group. The NIBE Ltd., is a company specializing in technology and sustainability. Established in 2021, it focuses on manufacturing critical components for the defence industry and eco-friendly products in the E-Vehicles division. The company is involved in advanced research on lithium-ion battery packs through its BVM R&D Foundation. NIBE Ltd also contributes to defence production, including mobile weapon launchers and modular bridges for the Indian Army.

NIBE Defence & Aerospace Ltd., Chakan, Pune



The journey commenced at 7:30 am from the Nowrosjee Wadia College campus. The group reached NIBE Ltd., Chakan at 9:30 am, where they spent approximately two hours exploring various projects undertaken by Defence and Aerospace institutes of the Indian Government. Mr. Raju Dhawale, the Plant Head, along with six engineers, guided the visitors through different sections of the company, providing detailed insights into ongoing projects. Following lunch, the group proceeded to Vigyan Ashram at Pabal, Pune. Vigyan Ashram, located in Pabal, Maharashtra, is an innovative educational institution founded in 1983 by Dr. S. S. Kalbag. It operates as a modern version of the traditional Gurukul system, emphasizing "simple living and high thinking." The Ashram focuses on rural development through education and technology,

offering hands-on learning experiences in areas such as agriculture, engineering, energy, environment, and food processing.

Key highlights of Vigyan Ashram:

- **Diploma in Basic Rural Technology (DBRT):** A one-year residential course designed for youth aged 15-20, based on the philosophy of "learning while doing."
- **Skill Development Programs:** Short-term courses for youth, farmers, and women's self-help groups, aimed at enhancing practical skills.
- **Technology Development:** The Ashram develops and disseminates technologies to address rural challenges, promoting sustainable solutions.
- **Community Engagement:** Students participate in socially useful productive work (SUPW) and community services as part of their learning.

Vigyan Ashram, Pabal, Pune



The Ashram's mission is to empower individuals to become entrepreneurs, innovators, and contributors to rural development.

The visit began with a session by Dr. Yogesh Kulkarni, Director of the Vigyan Ashram, who shared the institute's history and ongoing projects. Students were exposed to a wide range of initiatives addressing crucial issues such as environmental conservation, water and air pollution, water and soil testing, food technology, entrepreneurship, FabLab innovation, animation and design, animal husbandry, and waste management. This diverse and enriching experience offered students a deeper understanding of practical applications in these fields.

The students enthusiastically engaged with the activities during the two-hour visit. The group concluded their journey, returning to the college at 9:00 pm.