



**CHAITANYA BHARATHI
INSTITUTE OF TECHNOLOGY**

An Autonomous Institute | Affiliated to Osmania University
Kokapet Village, Gandipet Mandal, Hyderabad, Telangana-500075. www.cbti.ac.in

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COMMITTED TO
RESEARCH,
INNOVATION AND
EDUCATION

46
years

Department of Chemical Engineering

Industrial Visits Organized for the Academic Year 2024-25

Sno	Name of the Industry Visited	No. of students participated	Faculty Participated	Date of Visit
1	Nuclear Fuel Complex, ECIL, Hyderabad	89	Dr R. Prasanna Rani, Dr B.V.S. Praveen, Sri V. Sanjiva Reddy.	23-10-2024
2	Sai Life Sciences, Turkapally, Secunderabad	41	Dr. M. Mukunda Vani, Sri. I. Balakrishna, Dr. P. Madhuri.	17-02-2025

1. Brief report on industrial visit on 23-10-2024 to Nuclear Fuel Complex, ECIL, Hyderabad

An Industrial visit was organised by department of Chemical engineering, “Chaitanya Bharathi Institute of Technology” on 23-10-2024 to Nuclear Fuel Complex, ECIL, Hyderabad for 41 final year and 48 third year students and were accompanied by faculty Dr R. Prasanna Rani and Dr B.V.S. Praveen, and Technician Sri V. Sanjeeva Reddy. Under the guidance of Principal Dr C. V. Narasimhulu, the head of department Prof. M. Mukunda Vani and senior faculty Dr Naga Prapurna have coordinated the visit.

Objectives:

- to enhance students practical learning of the chemical process plant.
- To understand the comprehensive manufacturing cycle from ore to core at NFC, which is the only organization in the world today for this.
- to observe the processing of both Uranium and Zirconium streams under the same roof.
- to learn the fuel bundle requirements and core components of nuclear power reactors.
- to gain awareness about the safety protocols followed in nuclear units.
- to interact with the nuclear scientist and learn about their roles and responsibilities

Visit Details:

The officials at NFC have delivered an talk for one hour and interacted with the students and faculty and explained about the process technologies, innovations and production facilities like:

- Melt Shop Plant,
- processing units,
- Quality Assurance,
- control system,
- Safety norms,
- Environment Protection units.

The major outcome of this visit is that it has helped the students to relate their theoretical knowledge as per curriculum with practical aspects, design and operations.



Chemical Engg, CBIT BTech 3rd and 4th year students attending Industry Visit at NFC, Hyderabad

Industrial Visit to Nuclear Fuel Complex by CBIT Chemical Engineering Students



DECCAN NEWS SERVICE
HYDERABAD

The Department of Chemical Engineering at Chaitanya Bharathi Institute of Technology (CBIT) organized an industrial visit to the Nuclear Fuel Complex (NFC) in ECIL, Hyderabad, for 41 final-year and 48 third-year students. The students were accompanied by faculty members Dr. R. Prasanna Rani and Dr. B.V.S. Praveen, along with Technician Sri V. Sanjeeva Reddy. The visit was coordinated under the guidance of Principal Dr. C.V. Narasimhulu, Head of Department Prof. M. Mukunda Vani, and senior faculty member Dr. Naga Prapurna.

The primary objective of the visit was to enhance the students' practical learning by allowing them to experience

the working environment of a chemical process plant. NFC is unique as it is the only organization globally with a comprehensive manufacturing cycle that processes both Uranium and Zirconium streams under one roof, catering to the fuel bundle requirements of nuclear power reactors in India.

During the visit, NFC officials provided insights into process technologies, innovations, and production facilities, including the Melt Shop Plant, processing units, quality assurance systems, control systems, and safety and environment protection measures. This visit significantly helped students relate their theoretical knowledge from the curriculum to practical aspects of design and operations in the chemical engineering field.

2. Brief report on industrial visit on 17-02-2025 to Sai Life Sciences, Turkapally, Sec-bad

An Industrial visit was organised by department of Chemical engineering, “Chaitanya Bharathi Institute of Technology” on 17-02-2025 to Sai Life Sciences, Turkapally, Secunderabad, for 41 third year students. They were and were accompanied by HoD and Professor Dr. M. Mukunda Vani and faculty Sri. I. Balakrishna and Dr. P. Madhuri. Under the guidance of Principal Dr C. V. Narasimhulu, the head of department Prof. M. Mukunda Vani and senior faculty Dr Naga Prapurna have coordinated the visit.

Objectives:

- To witness the Research and Development (R&D) laboratories with analytical instruments
- To learn the operation of reactor units of pharma industry.
- to observe the first-hand practical implementation of processing from raw material to product
- to connect the theoretical concepts with practical applications in the pharma unit
- to gain insights into scale-up considerations, "what if" analysis for risk assessment
- to interact with the pharma engineers and learn about their roles and responsibilities

Visit Details:

Industry Sai Life Sciences is a prominent Contract Research, Development, and Manufacturing Organization (CRO-CDMO) and was helpful for the students to gain tangible understanding of pharmaceutical industry practices and bridge the gap between theoretical knowledge and practical application. The visit included a comprehensive safety briefing, ensuring students were well-prepared for the industrial environment. Subsequently, Sai Life Sciences experts delivered an informative session detailing the company's mission, operational procedures, and unwavering commitment to delivering high-quality pharmaceutical products within stipulated timelines. A significant portion of the session was dedicated to elucidating the intricacies of process design, a critical aspect of pharmaceutical manufacturing. Students were provided with insights into material selection protocols, pilot plant operations, and the application of industry-standard software such as Aspen One. This detailed exposition aimed to provide a holistic understanding of the process design lifecycle. Following the informative session, students were granted a guided tour of Sai Life Sciences' state-of-the-art facilities.



Chemical Engg, CBIT BTech 3rd year students attending Industry Visit to SaiLife Sciences, Turkapally.

Deccan Vision

CBIT Chemical Engineering Students Gain Industry Exposure at Sai Life Sciences



DECCAN NEWS SERVICE

■ HYDERABAD

The 6th-semester Chemical Engineering students from Chaitanya Bharathi Institute of Technology (CBIT) visited Sai Life Sciences, a leading Contract Research, Development, and Manufacturing Organization (CRO-CDMO), for an industrial tour aimed at bridging the gap between classroom learning and practical applications in the pharmaceutical sector.

Coordinated by Prof. M. Mukunda Vani, Head of the Chemical Engineering Department, the visit was accompanied by faculty members Sri I. Balakrishna and Dr. P. Madhuri. Experts from Sai Life Sciences, including Mr. Kishore, Dr. Suresh, and Dr. Tasleem, provided students

with an overview of the company's mission, operations, and commitment to delivering high-quality pharmaceutical products.

The session focused on process design, scale-up considerations, "what if" analysis, material selection, pilot plant operations, and the use of industry-standard software like Aspen One. Students later toured the company's state-of-the-art R&D laboratories, analytical labs, and reactor units, gaining firsthand exposure to real-world pharmaceutical manufacturing and quality control processes.

This immersive experience enhanced their understanding of core chemical engineering applications, reinforcing CBIT's commitment to practical learning and industry interaction.

Print Media Coverage - Newspaper clipping - attending Industry Visit to Sailife Sciences, Turkapally