GOVERNMENT ENGINNERING COLLEGE, VALSAD

CHEMICAL ENGINNERING DEPARTMENT

Report

on

Industrial visit

at

NPCIL, KAKRAPAR

08th & 09th JANUARY 2020

Details of Industrial Visit

Name of industry: NPCIL, Kakrapar

Date of Visit: 08-01-2020 and 09-01-2020

Name of department: Chemical Engineering department

Number of Participants: 54 students + 2 Faculties on 08-01-2020

56 students + 2 Faculties on 09-01-2020

Objectives of industrial visit:

- To demonstrate power generation through nuclear energy.
- To demonstrate the importance of Chemical engineering and the role of Chemical Engineer in nuclear power plant.
- To explain the importance and working of various units of nuclear power plant and chemistry behind the same.

Event description:

The Department of Chemical Engineering organized an industrial visit to **NPCIL, KAKRAPAR** on 8th and 9th January, 2020. The visit was organised for eight and sixth semester students of chemical engineering department. The visit comprised 110 students and was accompanied by four faculty members Dr S. K. Srivastava, Prof. Chirag A. Tamboli, Prof Akshaysinh R Magodara and Prof Rohit M Kudtarkar.

At present, in NPCIL, KAKRAPAR, two units with power generation capacity of 220 MW/day are in active mode and two more units with power generation capacity of 700 MW/day are under construction.

First of all, the students and all the faculties go through rigorous/multiple security check and get the passes and enter in the power plant. Thereafter, faculties and students were welcomed by Shri. R. B. Patil, Training, SO/D, and were explained thoroughly about whole plant and about the safety measures to be followed during the main plant visit. This discussion was totally interactive which removed the fear among all as we were at nuclear site. Shri. R. B. Patil clarified all

the theoretical concepts regarding handling, advantages/disadvantages of nuclear energy to the other energy sources. After ending with theoretical discussion, all participants of the event were sent to main plant to visit, where they saw both induced draft cooling towers and natural draft cooling towers which are used to control the heat released from the reactor. Subsequently, we saw the main nuclear reactor, control panel, turbine section and DM water plant. The visit proved to be fruitful for the students and satisfied its objective of demonstrating various roles of Chemical engineering and Chemical engineer in nuclear power plant.

Glimpses of Industrial visit