



## A Report on Industrial Visit at “Nuclear Power Corporation of India Limited” Kakrapar

Nuclear Power Corporation of India Limited (NPCIL) is a Public Sector Enterprise under the administrative control of the Department of Atomic Energy (DAE), Government of India. Nuclear Power Corporation of India Limited is located at Kakrapar, Dist. Tapi. in Gujarat state. The company was registered as a Public Limited Company under the Companies Act, 1956 in September 1987 with the objectives of operating atomic power plants and implementing atomic power projects for generation of electricity in pursuance of the schemes and programmes of the Government of India under the Atomic Energy Act, 1962. NPCIL also has equity participation in BHAVINI, another PSU of Department of Atomic Energy (DAE) which implements Fast Breeder Reactors programme in the country.



**Chemical engineering Students at NPCIL, Kakrapar**

NPCIL is responsible for design, construction, commissioning and operation of nuclear power reactors. NPCIL is a MoU signing, profit making and dividend paying company with the highest level of credit rating (AAA rating by CRISIL and CARE). NPCIL is presently operating 22 commercial nuclear power reactors with an installed capacity of 6780 MW. The reactor fleet



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comprises two Boiling Water Reactors (BWRs) and 18 Pressurised Heavy Water Reactors (PHWRs) including one 100 MW PHWR at Rajasthan which is owned by DAE, Government of India and two 1000 MW VVER reactor KKNPS-1&2, in this, latest addition to the fleet is the unit-2 of Kudankulam Nuclear Power Station, a 1000 MW VVER (Pressurised Water Reactor type), which has started its commercial operation on March 31, 2017. Currently NPCIL has eight reactors under various stages of construction totalling 6200 MW capacity.

The main agenda for arranging this visit was to enhance the practical knowledge of the students, to relate the theoretical concepts with real time problems and solutions, and most importantly to give them the exposure to an industrial setup wherein they are going to be eventually working as Chemical Engineers.

This technical visit was organized on 04/09/2018, where total 45 students of 4<sup>th</sup> year (7<sup>th</sup> Semester) Chemical Engineering branch have benefitted from this visit. The visit was conducted by Prof. Vishal U. shah & Mr. Bhavin Desai.



**Electricity Generation System, NPCIL, Kakrapar**



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### **Natural Draft Cooling Tower**

- Seminar based on company guidance and whole process was delivered by Mr. P.R. Gujjar (Technical, Process, NPCIL, Kakrapar).
- We are thankful to Mr. M. V. Parikh (Training Superintendent), Mr. Vyas (Technical department), Mr. P. R. Gujjar (Process, Technical) and All NPCIL, Kakrapar team who have given good platform to our students during industrial visit.