A Report on Industrial Visit at

UKAI HYDRO POWERPLANT

Organized by **Training and Placement Cell** Department of Mechanical & Automobile Engineering

> for B-Tech Mechanical /Automobile engineering (3rd Semester)

> > Date of the Visit: 20th September, 2016

> > Faculty Coordinators **Prof. Urvin Patel Prof. Sandip Parmar**

Dr. Chinmay Desai HOD – Mech/Auto Dept. Dr. N. C. Shah Director-CGPIT



Chhotubhai Gopalbhai Patel Institute of Technology Uka Tarsadia University, Bardoli.

Schedule of Visit:

| Time | | |
|------------|------------|---|
| То | From | Location |
| 8:30 a.m. | - | Surat and CGPIT (Bardoli) |
| 9:15 a.m. | - | Left from Songadh |
| 10:30 a.m. | - | Reached at ukai hydropowerplant (ukai) |
| 11:00 a.m. | 02:00 p.m. | Visit of Different Units of ukai hydro powerplant |
| 02:00 p.m. | 2:45 p.m. | Lunch at ukai hydro powerplant |
| 3:00 p.m. | - | Left from ukai hydro powerplant. |
| 5:00 p.m. | | Surat and CGPIT (Bardoli) |

Total No of Visitors = 210 (201 Students + 09 Faculties)

List of Faculties:

- Mr. Jignesh Gadhiya
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- Mr. Umang Patel

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Mr. Sandip Patel

- Mr. Urvin Patel
- Mr. Chirag Patel

Mr. Viren BagadhiyaMr. Kapil Gohil

Mr. Kapil Gohil

About Ukai Hydro Powerplant:

Ukai Hydro Powerplant. Ltd. established on 1972 under the name of our honourable PM Morarji Desai. They are capable to supply overall surat district the power of electricityIt's Construction began in the year 1964.It's construction cost was Rs.1389.6 Million.It's height is 80.772meters and length is 4,927 meters.It has 22 spillways and that too radial.The spillway capacity is of 46,269m3/s.It creates the reservoir of vallabhsagar which has the total capacity of 7,414 MCM.A very big catchment area of 62,225 square kilometers with the active capacity of 6,730MCM. An hydraulic head of 57 meters and has installed capacity of 300 MW dividing the generation with 4 turbines each of 75 MW. The storage capacity of ukai dam is almost 46% of the total capacitynof all the other existing dams in Gujarat if put together. The dam's left bank canal feeds water to an area of 1,522km square and it's right canal provides water to 2,275 km square of land.

Mr.Jignesh Gadhiya was guided for understanding of various technologies like hydro power plant, Generators, Turbine and other machinery established by themselves.

RESERVOIR:

Reservoir is a very useful and important prospects for the power plant.

- Usually much deep and is used in the time of scarcity.
- It's has a depth of max 340.5 ft.



Water flowing through Gates'



Group Photo Special thanks to the staff members of ukai dam for let us persuading the great knowledge.