



LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING (Autonomous)

L.B.REDDY NAGAR, MYLAVARAM-521 230.A.P. INDIA

Affiliated to JNTUK, Kakinada & Approved by AICTE, New Delhi

NAAC Accredited with "A" grade, Accredited by NBA

New Delhi & Certified by ISO 9001:2008

DEPARTMENT OF CIVIL ENGINEERING (C.E Dept)

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INDUSTRIAL VISITS ORGANIZED

A.Y	PROGRAM	NAME OF INDUSTRY/COMPANY	DATE	NO OF STUDENTS PARTICIPATED
2017-18	B.Tech	REPORT ON INDUSTRIAL VISIT TO PULICHINTALA HYDRO ELECTRIC PROJECT	03-01-2018	60
2017-18	B.Tech	REPORT ON INDUSTRIAL VISIT TO PULICHINTALA HYDRO ELECTRIC PROJECT	05-02-2018	66
2017-18	B.Tech	REPORT ON INDUSTRIAL VISIT TO MILK PROJECT	16-03-2018	60



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L.B.Reddy Nagar, Mylavaram-521230, Krishna Dist, Andhra Pradesh, India

DEPARTMENT OF CIVIL ENGINEERING

REPORT ON INDUSTRIAL VISIT TO PULICHINTALA HYDRO ELECTRIC PROJECT

Event Type: Industrial visit

Date / Duration: 03-01-2018

Resource Persons: --

Name of Coordinators:

1. Sri J. Rangaiah-Associate Professor
2. Sri B.Ramakrishna-Assistant Professor
3. Sri K.Harish Kumar - Assistant Professor
4. Sri.J.Eeshwar ram - Assistant Professor

Target Audience: 3rd year B.Tech Civil Engineering students of LBRCE

Total no of Participants: 66

Objective of the event: 1. To bridge the gap between theory and practice

Outcome of event:

1. Students became aware of the detailed account of various technical issues of the plant
2. Students became aware about working process and its parts such as stator, rotor and electromagnetism phenomena, draft tubes, penstocks

Feedback / Suggestions: Positive. More programmes are required.

REPORT

As a part of IE (I) Civil Engineering Student Branch LBRCE activity, an industrial visit to Pulichintala Hydro Electric Project, a 120 MW hydroelectric power station (4 units of 30 MW each), located in Nalgonda District was organized on 30.01.2018. Around 100 B.Tech civil students from 3rd and 4th year along with 5 faculty members took part in the visit.

The Pulichintala dam built across the Krishna River between areas in Nalgonda on one side and Guntur on the other side, is the third major irrigation project, after Srisailem and Nagarjunasagar. It was opened on 7 December 2013 by Chief Minister of Andhra Pradesh.

The project has a total pondage of 45.77 TMCft out of which 30 TMCft will be live storage while the rest will be dead storage. This dam has a height of 42.23m, length of 2922m, and width of 31m. It gives irrigation facility to 13 lakh acres. It has 24 gates in all with a balancing reservoir of capacity of 45.77 TMCft. The plant is currently under the control of TG (Telangana) GENCO. When water impinges on turbine through a penstock with a high velocity, propeller blades rotate. The 3 phase alternator or simply generator coupled to the turbine produces electric power.

The plant consists of a 3 Phase ac alternator consisting of 48 poles and generates power of 120MW, is currently in designing process. The plant is fitted with 4 Kaplan turbines each having 6 blades capable of producing 30 MW each. Kaplan turbines are widely used throughout the world for electrical power production.

The plant authorities gave a detailed account of various technical issues of the plant such as alternator working process and its parts such as stator, rotor and electromagnetism phenomena, draft tubes, penstocks, working and advantages of Kaplan turbines, pumping system beneath the dam, location of the dam, and principles of energy conversion – hydro – mechanical – electrical and subsequently generation of electricity.

The visit, primarily an educational tour, helped the students and the faculty members to get a very good exposure of the basics behind planning, construction, working and various practical aspects of a hydro electric project. The help and cooperation from the plant authorities was excellent as they explained all the necessary details in a lucid manner.

Photographs:



Students are assembled at LBRCE Campus



Students are assembled at Hydro Power Plant



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DEPARTMENT OF CIVIL ENGINEERING

REPORT ON INDUSTRIAL VISIT TO PULICHINTALA HYDRO ELECTRIC PROJECT

Event Type: Industrial visit

Date / Duration: 05-02-2018

Resource Persons: --

Name of Coordinators: 1. Sri J. Rangaiah-Associate Professor
2. Sri B.Ramakrishna-Assistant Professor
3. Sri K.Harish Kumar - Assistant Professor

Target Audience: 3rd year B.Tech Civil Engineering students of LBRCE

Total no of Participants: 60

Objective of the event: 1. To bridge the gap between theory and practice

Outcome of event: 1. Students became aware of the detailed account of various technical issues of the plant
2. Students became aware about working process and its parts such as stator, rotor and electromagnetism phenomena, draft tubes, penstocks

Feedback / Suggestions: Positive. More programmes are required.

REPORT

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DEPARTMENT OF CIVIL ENGINEERING **REPORT ON INDUSTRIAL VISIT TO MILK PROJECT**

Event Type: Industrial visit

Date / Duration: 16-03-2018

Resource Persons: --

Name of Coordinators: 1. Sri B.Narasimha Rao-Assistant Professor
2. Sri.J.Eeshwar ram - Assistant Professor

Target Audience: 3rd year B.Tech Civil Engineering students of LBRCE

Total no of Participants: 60

Objective of the event: 1. To bridge the gap between theory and practice

Outcome of event: 1. Students became aware of the wastewater generation from various sources.
2. Students became aware about wastewater treatment plant for treating dairy wastes.

Feedback / Suggestions: Positive. More programmes are required.

REPORT

The 3rd year B Tech civil engineering students underwent an industrial visit to The Krishna District Milk Producer's Mutually Aided Co-Operative Union Limited (Milk project), Vijayawada on **16-03-2018**. The visit is intended to develop exposure to the students in understanding the (i) process operations in Milk project (ii) wastewater generation from various sources (iii) study of drainage systems (iv) study of wastewater treatment plant for treating dairy wastes.

The students visited the several operations that are carried out in the plant. Raw milk is processed and converted various grades of toned milk, ghee, butter, butter milk, curd etc. The finished products are sent to several outlets in and around the city for sale. The wastewater generation sources and their entry into the drainage system are observed. The drainage system consists of open and underground drain pipes which is collected for treatment in a treatment plant located within the premises. The treatment plant employs secondary biological treatment and consists of sedimentation tank, aeration tank, oil trap and sludge drying beds. The treated sewage is finally used for gardening and other minor uses in the plant for washings.

The industrial visit helped the students in visualising wastewater generation, its collection and flow in sewers/drains in industrial operations, wastewater treatment operations and the related equipment. The visit is fully interactive and all the students participated enthusiastically and enjoyed the experience.

Photographs:



Students are assembled at LBRCE Campus



Students are assembled at Milk Project