



AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, Permanently Affiliated to JNT University Kakinada,
ACCREDITED BY NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)
Tamaram(Village), Makavarapalem(Mandal), Visakhapatnam-531113

COLLABORATIVE INDUSTRIAL VISITS OF AIET

ACADEMIC YEAR

2018-19


DEPARTMENT OF MECHANICAL ENGINEERING

S No	Name Of The Industry Visited	Batch/Class	Date	No of Students Visited
1	BHEL Visakhapatnam	II B.Tech MECH Students	19/09/2018	145
2	RAMCO Cements Limited Yelamanchili	IV B.Tech MECH Students	26/12/2018	162
3	Hindustan Shipyard Limited & Steel Plant Museum	III B.Tech MECH Students	29/12/2018	139
4	The Chodavaram Co Operative Sugar Ltd	II B.Tech MECH-1 Students	29/12/2018	69
5	Etikoppaka Sugar Factory Visakhapatnam	II B.Tech Mech - 2 Students	29/12/2018	71


Coordinator


HOD

Head of the Department
Department of Mechanical Engg.
Avanathi Institute of Engg. & Tech.,
Makavarapalem, Visakhapatnam-531113.


Principal
Avanathi Institute of Engg. & Technology
Tamaram, Makavarapalem
Visakhapatnam District.





AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Approved by AICTE, Permanently Affiliated to JNT University Kakinada,
ACCREDITED BY NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)
Tamaram(Village), Makavarapalem(Mandal), Visakhapatnam

DEPARTMENT OF MECHANICAL ENGINEERING
REPORT ON INDUSTRIAL VISIT
BHEL, Visakhapatnam

DATE: 19/09/2018

SECTION: II YEAR – Mech-1&2

TOTAL STUDENTS: 145

EVENT: Industrial Visit

Faculty Coordinators:

- 1) G S M Reddy, Asst Prof.
- 2) S Subramanyam, Asst Prof.
- 3) A Prem Kumar, Asst Prof.
- 4) M S Naidu, Asst Prof.

EVENT DESCRIPTION: An industrial visit has been organized by department of Mechanical Engineering for II-year I semester students on 19th Sep, 2018.

The main objective of the visit was to provide a technical exposure to the students about the manufacturing process and technology. Total 145 students of II-year Mechanical visited BHEL, Visakhapatnam.

SESSION ACTIVITIES: The students were accompanied by 04 faculty members. The buses with students have started from our college at 09.30 AM on 19th Sep, 2018 and reached the BHEL, Visakhapatnam 11:30 AM.

ABOUT BHEL, VISAKHAPATNAM:

BHEL is one of the leading companies in the public sector which manufactures heavy vessels which are used in power plants. BHEL is engaged in the design, engineering, manufacture, construction, testing, commissioning and servicing of a wide range of products and services for the core sectors of the economy, viz. Power, Transmission, Industry, Transportation (Railway), Renewable Energy, Oil & Gas and Defence with over 180 products offerings to meet the needs of these sectors.

ABOUT THE VISIT

Students were allowed into the plant to have a walkthrough about the various functions of the plant. They learned about the machinery and witnessed how very large movable and immovable parts are made. The General Manager gave a brief introduction about the company that There are plants all over India, among which the plant located in Visakhapatnam is one of the major ones. As Visakhapatnam has facilities of port, rail and transportation, major works are being assigned to this plant. BHEL undertakes contracts and builds power plants from the root level to end stage and hands them over to the concerned clients and further approaches if any problem occurs. The company is sourcing raw material from South Africa at

present as per the requirements of clients. BHEL is famous for its accuracy and every finished product is inspected to the grassroot level by using various new techniques.

He cited that BHEL-HPVP unit (first called as BHVP), had its inception in 1971, and has a current turnover of \$26 million. It will range to \$250 million in the near future. BHEL-HPVP with ISO-9001 accreditation serves many sectors such as refineries, petrochemicals, oil & gas, steel, power, nuclear, defence, cryogenics, boiler plant equipment and process plant equipment's.



S. R. Kumar

Coordinator

↓

HOD

**Head of the Department
Department of Mechanical Engg
Avanathi Institute of Engg. & Tech.
Makavarapalem, Visakhapatnam-531113**



AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Approved by AICTE, Permanently Affiliated to JNT University Kakinada,
ACCREDITED BY NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)
Tamaram(Village), Makavarapalem(Mandal), Visakhapatnam

DEPARTMENT OF MECHANICAL ENGINEERING
REPORT ON INDUSTRIAL VISIT
RAMCO Cements Limited, Visakhapatnam

DATE: 26/12/2018

SECTION: IV YEAR – Mech-1&2

TOTAL STUDENTS: 162

EVENT: Industrial Visit

Faculty Coordinators:

- 1) S. Ganesh, Asst Prof.
- 2) S. Ravi Taja, Asst Prof.
- 3) CH. Phanindher, Asst Prof.
- 4) B Ramesh, Asst Prof.
- 5) V V Naidu, Asst Prof.
- 6) Y Amar babu, Asst Prof.

The IV- B.Tech year students of Mechanical Engineering branch have gone on one-day industrial visit at RAMCO CEMENT INDUSTRY (VISHAKAPATNAM) on 26th Dec, 2018. A total of students have attended the visit accompanied by 2 faculty members.

The visit started at 9.30 A.M from Our College. This encourages the students to develop their skills with interest while they are learning.

Senior engineer have accompanied the students in the process of explanation which included the various steps involved in the cement manufacture. The found of RAMCO was Shir P.A.C Rama Swamy Raja. In this village it was set up in few years ago here first clinkerisation done in vizag and that ready material was sent to the Vijayawada post to the final manufacturing of cement.

In this company the raw material was brought from Vijayawada (Ibrahimpatnam) flyash, slag, gypsum, lime stone, iron ore. These are added to the cement before manufacturing next it was divided to wet and dry process. In this 30% of flyash is added to cement this is done because it is environmental friendly. The main motto of this company is to have a pollution free environment.

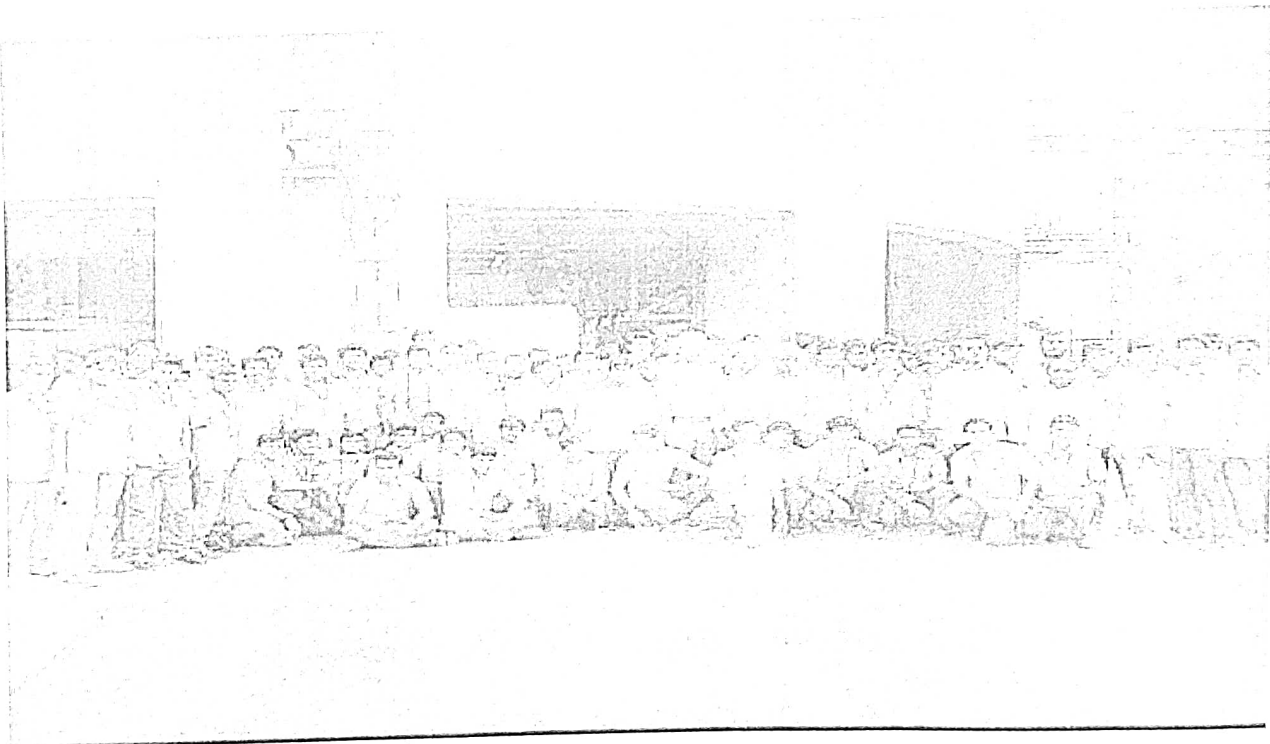
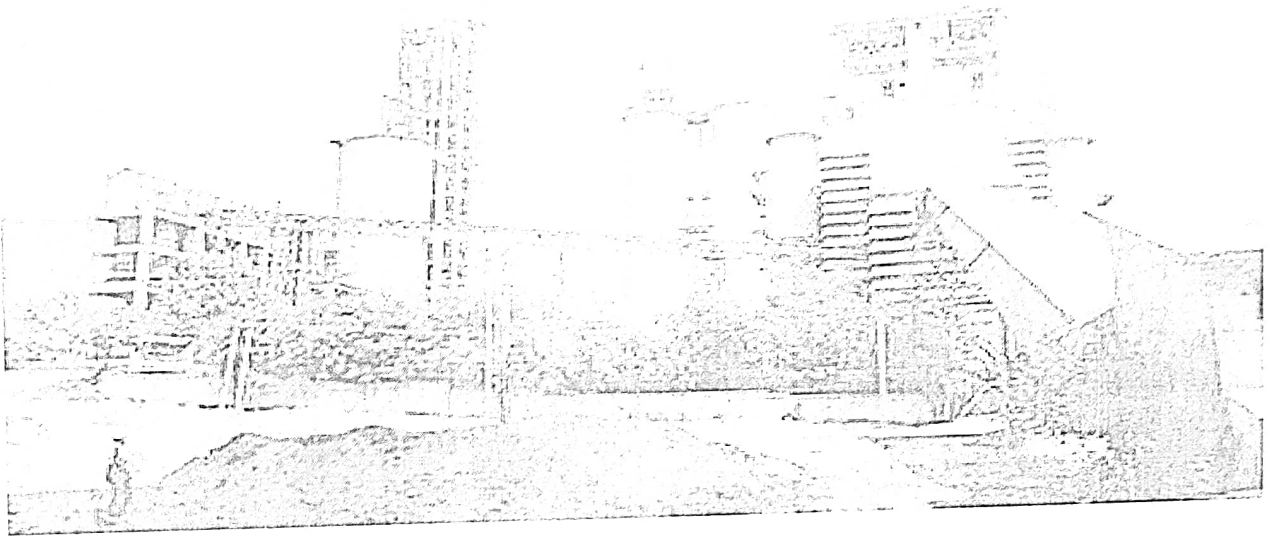
The process of manufacturing of cement here involved is dry process. For this clinker is heated up to 1600°C while calcination occurs then clinker is formed. By using the cement manufacturing process in this 7-minute animation. Common materials used to manufacture cement include limestone, shells, and chalk or marl combined with shale, clay, slate, blast furnace slag, silica sand, and iron ore.

In its simplest form, the rotary kiln is a tube up to 200 metres long and perhaps 6 metres in diameter,

hot end, then falls out of the kiln and cools down. The material formed in the kiln is described as 'clinker' and is typically composed of rounded nodules between 1mm and 25mm across.

After cooling, the clinker may be stored temporarily in a clinker store, or it may pass directly to the cement mill. The cement mill grinds the clinker to a fine powder. A small amount of gypsum - a form of calcium sulfate - is normally ground up with the clinker. The gypsum controls the setting properties of the cement when water is added.

Finally the visit ended by thanking the engineer for giving this valuable opportunity.




Coordinator


HOD

Head of the Department
Department of Mechanical Engg.
Avanthi Institute of Engg. & Tech.,
Makavarapalem, Visakhapatnam-531113.



AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Approved by AICTE, Permanently Affiliated to JNT University Kakinada,
ACCREDITED BY NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)
Tamaram(Village), Makavarapalem(Mandal), Visakhapatnam

DEPARTMENT OF MECHANICAL ENGINEERING

REPORT ON INDUSTRIAL VISIT

HSL & Steel Plant Museum, Visakhapatnam

DATE: 29/12/2018

SECTION: III YEAR – Mech-1&2

TOTAL STUDENTS: 139

EVENT: Industrial Visit

Faculty Coordinators:

- 1) G S M Reddy, Asst Prof.
- 2) M S Naidu, Asst Prof.
- 3) J Janardhan, Asst.Prof.
- 4) P Rama Krishna, Asst Prof
- 5) B Ramesh, Asst Prof
- 6) S Ravi Teja, Asst Prof.

EVENT DESCRIPTION: An industrial visit has been organized by department of Mechanical Engineering for III-year students on 19th Sep, 2018.

The main objective of the visit was to provide a technical exposure to the students about the manufacturing process and technology. Total 139 students of III-year Mechanical visited HSL & Steel Plant Museum, Visakhapatnam.

SESSION ACTIVITIES: The students were accompanied by 06 faculty members. The buses with students have started from our college at 09.30 AM on 19th Sep, 2018 and reached the HSL, Visakhapatnam 11:00 AM.

ABOUT HINDUSTAN SHIPYARD LIMITED, VISAKHAPATNAM:

Hindustan Shipyard Ltd (HSL), set up in the year 1941, strategically located on the East Coast of the Indian peninsula, at Visakhapatnam, Andhra Pradesh, is the nation's premier shipbuilding organization catering to the needs of shipbuilding, ship repairs, submarine construction and refits as well as design and construction of sophisticated state-of-the-art offshore and onshore structures. Direct sea access, excellent infrastructure, skilled work force, rich expertise garnered over the years in building 200 vessels, refitting 5 submarines and repairing 2000 vessels of various types enable HSL to offer competent services for the defence and maritime sectors

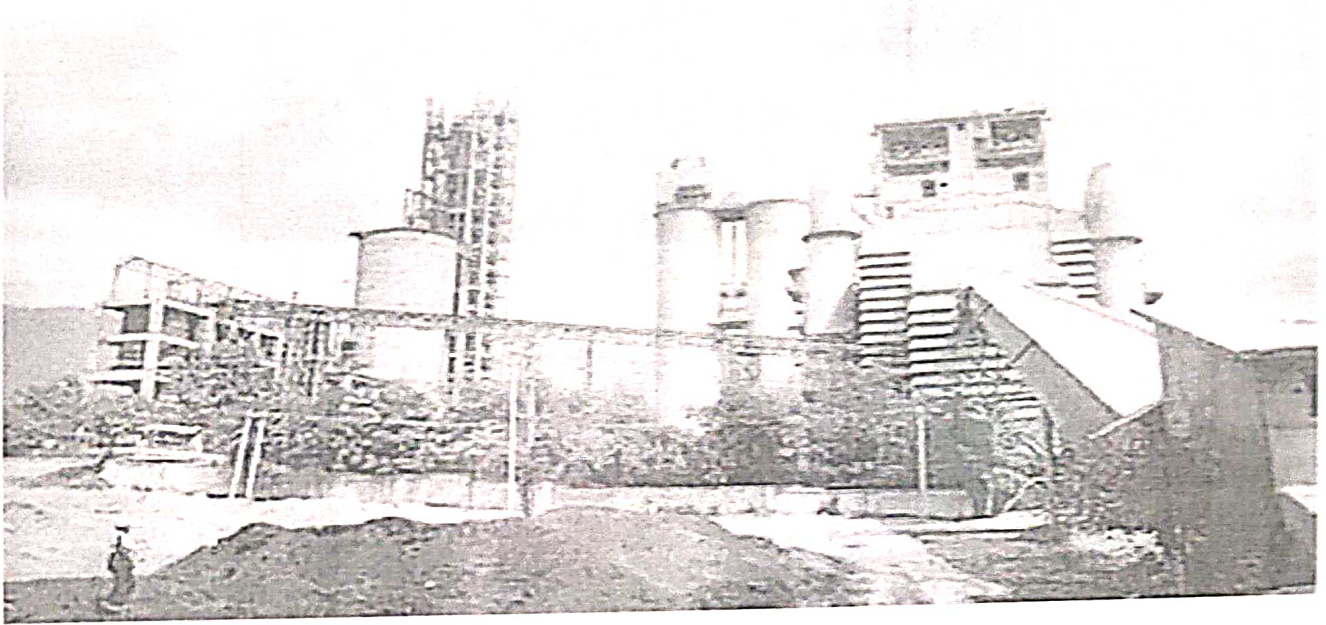
ABOUT THE VISIT

We have reached the venue on scheduled time and then we entered the plant where we accompanied by the guide who was allotted to us for the visit and he took us throughout the plant and explained about all the divisions in the HSL.


hot end, then falls out of the kiln and cools down. The material formed in the kiln is described as 'clinker' and is typically composed of rounded nodules between 1mm and 25mm across.

After cooling, the clinker may be stored temporarily in a clinker store, or it may pass directly to the cement mill. The cement mill grinds the clinker to a fine powder. A small amount of gypsum - a form of calcium sulfate - is normally ground up with the clinker. The gypsum controls the setting properties of the cement when water is added.

Finally the visit ended by thanking the engineer for giving this valuable opportunity.




Coordinator


HOD

Head of the Department
Department of Mechanical Engg.
Anvanthi Institute of Engg. & Tech.,
Makavarapalem, Visakhapatnam-531113.



AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Approved by AICTE, Permanently Affiliated to JNT University Kakinada,
ACCREDITED BY NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)
Tamaram(Village), Makavarapalem(Mandal), Visakhapatnam

DEPARTMENT OF MECHANICAL ENGINEERING

REPORT ON INDUSTRIAL VISIT

Chodavaram Co-Op Sugar Limited, Govada

DATE: 29/12/2018

SECTION: II YEAR – Mech-I

TOTAL STUDENTS: 69

EVENT: Industrial Visit

Faculty Coordinators:

- 1) D. Trinadh, Asst Prof.
- 2) A. Prem Kumar, Asst Prof.

EVENT DESCRIPTION: An industrial visit has been organized by the department of Mechanical Engineering for II-year students on 29th Dec, 2018.

The main objective of the visit was to provide a technical exposure to the students about the manufacturing process and technology. Total 69 students of II-year Mechanical visited HSL & Steel Plant museum, Visakhapatnam.

SESSION ACTIVITIES: The students were accompanied by 02 faculty members. The buses with students have started from our college at 09.30 AM on 29th Dec, 2018 and reached the Chodavaram co-op Sugar Limited, Govada by 11:30 AM.

ABOUT CHODAVARAM CO-OP SUGAR LIMITED, GOVADA:

Chodavaram Co-Op Sugar Limited, Govada is one among the sugar manufacturing companies in India. Its allied business consists of manufacturing and marketing of sugar. The company is located in Visakhapatnam District, Chodavaram mandal, Govada -531023 Andhra Pradesh, having an aggregate crushing capacity of 2,500 tons per day.

ABOUT THE VISIT

This visit was mainly focused on to understand the procedures involved during sugar preparation, the technology and the equipment's used. Students were split into two groups. The supervisors explained about the equipment's involved in processing of sugar like Cane Carrier, Mill Tandem, Cane Knives, Power Plant, Juice Heater, Clarifier, Filter, Evaporator, Vacuum pan, Crystallizer, Dryer & Cooler.

OUTCOME OF THE VISIT

The technology and the equipment used for production of sugar. The various processes involved in collection, separation and storage of raw material were explained. Discussion on the difficulties faced and possible solutions to overcome these difficulties was held.

We left the premises of HSL by 2.00p.m. and went to Steel Plant Museum, Visakhapatnam at 2.30p.m. Students were allowed into the Museum to have a walkthrough about the various Displays of the Museum. Students thoroughly enjoyed and It helps in upgrading the skills of the students.

Through this visit the students were able to witness the practical workings of the organization and could relate it to the theories taught in classrooms. The visit proved to be fruitful for the students and would greatly help in molding them into corporate ready professionals



SP

Coordinator

V

HOD

Head of the Department
Department of Mechanical Engg.
Sri Vanthi Institute of Engg. & Tech.,
Makavarapalem, Visakhapatnam-531113.



AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Approved by AICTE, Permanently Affiliated to JNT University Kakinada,
ACCREDITED BY NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)
Tamaram(Village), Makavarapalem(Mandal), Visakhapatnam

DEPARTMENT OF MECHANICAL ENGINEERING

REPORT ON INDUSTRIAL VISIT

Etikoppaka Sugar Factory, Visakhapatnam

DATE: 29/12/2018

SECTION: II YEAR – Mech-1

TOTAL STUDENTS: 71

EVENT: Industrial Visit

Faculty Coordinators:

1) V V Naidu, Asst Prof.

2) K Naga raju, Asst Prof.

EVENT DESCRIPTION: An industrial visit has been organized by department of Mechanical Engineering for II-year students on 29th Dec, 2018.

The main objective of the visit was to provide a technical exposure to the students about the manufacturing process and technology. Total 71 students of II-year Mechanical visited Etikoppaka Sugar Factory, Visakhapatnam.

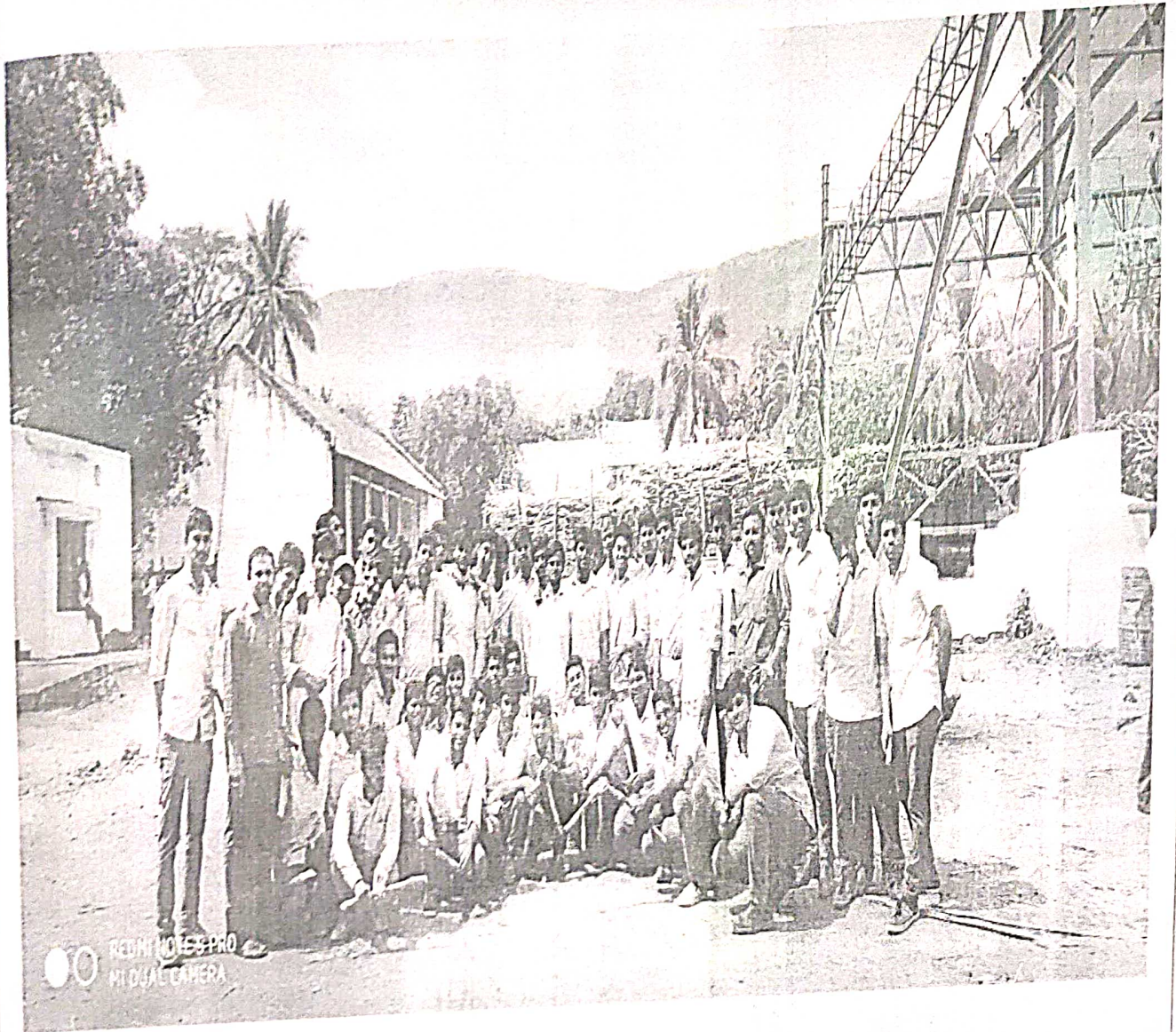
ABOUT THE VISIT

According to the route and time plan, bus was departed from Aiet campus at 9.30 am and reached the Etikoppaka Sugar Factory, at 11:00 am. Sugar factory visit was arranged successfully with the help of administrative officer & Security Officer. After completion of entry procedure at the main gate to enter inside the plant, two appointed mechanical engineers welcome us with safety helmets and guided us about the plant.

The important role of sugar factory in the region was explained to all students. They gave a brief introduction for general processing of sugar manufacturing and utilization of its by-products in other industrial applications. All the students along with the faculties were divided into three batches for the tour of different parts of sugar production units (e.g. Extraction of Juice, Clarification, Evaporation, Centrifugation, Gradation & Packing).

Sr Engineer Sir, have explained the Sugar manufacturing process with details about reactors, Effluent Treatment Plant & Cooling Tower. Sir also explained the chemistry behind the sugar manufacturing process.

Students enjoyed watching the systematic packing procedures of sugar into plastic bags & automatic transportation system of this packed sugar bags to trucks. Wonderful channel from packing of sugar to its marketing was explained. All the students were gathered at the main building gate, where a group photo with faculties was taken. Bus was departed from the Etikoppaka Sugar Factory & reached safely to College campus at 3.00 pm.



Coordinator

HOD

Head of the Department
Department of Mechanical Engg.
Avanathi Institute of Engg. & Tech.,
Makavarapalem, Visakhapatnam-531113.