

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Report on Industrial visit to MRPL, Mangaluru

The students of V Sem ECE, AJIET, Mangaluru visited Mangalore Refinery and Petrochemicals Limited (MRPL) on 25-10-2019. MRPL is an oil refinery at Mangalore and is a subsidiary of ONGC, set up in 1988. The refinery has a versatile design with high flexibility to process crudes with high degree of automation. MRPL has a design capacity to process 15 million metric tonnes of crude per annum and is the only refinery in India to have two hydrocrackers producing premium diesel. After the initial inspection by the security personnel, students were given a brief presentation about the refinery. They were then taken for on-site visit to several manufacturing units listed below in the college bus.

- 1. Crude and vacuum distillation units: The Atmospheric, Vacuum Distillation Units and Naphtha Splitter Units are heat integrated, using Pinch Technology to achieve highenergy efficiency, thereby reducing Fuel Oil consumption and in turn reducing air emissions.
- 2. Hydrocracker units: These units produce high quality Sulphur free Diesel and ATF. The Plant is designed for 100 percent conversion of low value Vacuum Gas Oils to lighter, low Sulphur valuable products.
- 3. Soaker Visbreaker: This technology has been adopted to upgrade heavy vacuum residue to Gas, Naphtha and Gas Oil.
- 4. Platforming units: The Continuous Catalytic Regeneration Platforming Unit (CCR), produces Lead free, high Octane Motor Spirit (Petrol) and also LPG. Hydrogen is the bi-product.

The various other units are Hydrogen, Bitumen, DCU (Delayed coker unit), CHTU, SRU, PP unit (Polypropylene unit) and DHDTU (Diesel hydro desulphurization unit. There was also a visit to the control rooms where the operation of the units by trained staff are controlled from a remote place and was briefed up about upcoming De-Salination Project under MRPL.



Total No.of Students:29

Faculties :1)Mr.Manjukiran B,Assistant Professor,ECE

2))Mrs.Pratheksha Rai N, Assistant Professor,ECE3)Mr.Raghavendra Havaldhar, Assistant Professor,ECE

4)Mrs.Sahana Adyanthaya, Assistant Professor,ECE

HOD

PRINCIPAL

CC To:

- 1. President, LMET
- 2. Vice President, LMET
- 3. File