

**DEPARTMENT OF INSTRUMENTATION AND CONTROL  
ENGINEERING**

**LD COLLEGE OF ENGINEERING**



**INDIAN FARMERS FERTILISER  
COOPERATIVE LIMITED (IFFCO)**

**INDUSTRIAL VISIT REPORT**

Indian Farmers Fertilizer Cooperative Limited (IFFCO) is one of India's biggest cooperative societies which are wholly owned by Indian Cooperatives. Founded in 1967 with just 57 cooperatives, they are today an amalgamation of over 36,000 Indian Cooperatives with diversified business interests ranging from General Insurance to Rural Telecom apart from their core business of manufacturing and selling fertilizers.

Department of Instrumentation & Control engineering, LD college of Engineering organized visit at IFFCO on 14<sup>th</sup> September, 2018 for the students of 2<sup>nd</sup> year. The purpose of visit was to get instrumentation related knowledge of Industry, Role of IC Engineer in industry and know about the process of IFFCO.

Firstly students had visited in IFFCO plant; Company provided a safety helmet, as the safety is prime importance. The visit started with a brief explanation about what is IFFCO, How IFFCO works, How IFFCO Produces UREA, How much amount of production they do every year etc. This whole explanation was given by our visit guide Mr. Ajay Patel, and then he took us to the department where ammonia, Bio-fertilizer is produced.

In this department of IFFCO students learned about FIELD AREA and CONTROL ROOM. In field area they learn about COOLING TOWER, CONTROL VALVE, MEASUREMENT INSTRUMENT LIKE PRESSURE TRANSMITTER, and MAGNETIC FLOW METER etc. and in control room they learn about DCS, PLC, and CONTROL PANEL.

After that students went to the control room of urea plant. Where the DCS operator explained about process of urea plant and he also explained controlling of plant using DCS. He show mimic diagram of process and explain about how parameter like pressure, temperature display and how FINAL CONTROL ELEMENT react on control action. After understanding of urea plant, Ajay sir shows the Siemens Control Panels and the tagging of wiring

After that he showed them the whole machinery and the process of how the nitrogen and hydrogen were prepared and mixed to prepare ammonia, He also showed them the marshalling system in which the cards of all the processes were inserted.

The making of urea was also shown to the students that how the liquid droplets get solid by the help of rain effect. And then they collect it and took it for packaging purpose. Thus the visit ends with valuable knowledge and irreplaceable memories.



Group photo at IFFCO