

**EC DEPARTMENT ,
L.D.COLLEGE OF ENGG.,AHMEDABAD
REPORT ON
Industrial Visit to Institute of Plasma Research,Gandhinagar , 23
February 2015**

An industrial visit to Institute of Plasma Research(IPR),Bhat Gam,Gandhinagar for BE SEM VIII(EC) Students of L.D. college of Engg. Was arranged on 23rd February 2015. 37 students were present in the visit. **Prof.A.B.Nandurbarkar,Associate Professor-EC and Prof.S.K.Gosai,Assistant Professor-EC** lead the visit.

Shri Pramit Dutta,Scientist-SD,IPR has given the brief presentation on IPR and its activities in the seminar room.In the seminar ,all the basic regarding the states of matter how and why plasma is important was shown. The recent development taking place in IPR was discussed and the fourth state of matter and its contribution in nuclear fusion was explained in detail.

The institute owns two operational tokamaks- ADITYA and steady state tokamak(SST) , which is a machine used for controlling thermo nuclear fusion.The detailed explanation of working in tokamaks were shown in videos and using models. Later on, students were taken to the ADITYA reactor, data acquisition system and monitoring system ,power supply section were shown.

During the site visit, the concepts of power electronics were explained and the various parameters and losses to be taken care off were listed. SMPS and the transformers , their principle and working were shown and in the end, there was an interactive session where all the queries were solved.

It was good learning experience where all the concepts about nuclear physics and plasma were explained and the nuclear fusion as an emerging energy source was explained with real life examples.



We are very much thankful to **Commissionerate of Technical Education,Gandhinagar and Prof.(Dr.)G.P.Vadodaria,Principal,L.D.College of Engg.,Ahmedabad** for giving their kind consent to organize the visit.We also take the opportunity to thank **Institute of Plasma Research(IPR),Bhat Gam,Gandhinagar** .We are very much thankful to **Prof.Usha Neelkantan,Head-EC** for always motivating in curricular and cocurricular activities.

Student report compiled by Sareshwala Maliha,BE SEM VIII(EC)