

REPORT ON STUDY TOUR TO KAIGA NUCLEAR POWER PLANT

On 28th of January 2017, The Department of Mechanical Engineering of Don Bosco College of Engineering organized an Industrial Visit to Kaiga Atomic Power Station in association with **Institution of Engineers, India, DBCE student chapter** for **TE and BE Mech** students for their study tour as a part of the curriculum. Kaiga Power generating station situated at kaiga, near the river Kali in Uttara Kannada district of Karnataka, India. The plant has been in operation since 2000 and is operated by the Nuclear Power Corporation of India (NPCIL).It has four units and all of the four units are small sized plants of 220MW. The unit, fueled by indigenous uranium, will supply the electricity to Karnataka, Andra Pradesh, Kerala and Tamilnadu.

Students had the opportunity to hear and learn from the training officials regarding the geometrical structure of the plant, its construction and working, the method of power generation, the safety and security measurements. Students visited the model room. A detailed presentation on the 'Nuclear Power Plant Aspects and Radiation' was given by **Shri U.P. Subramanya kumar, scientific assistant F**, .bringing out the advantages of nuclear energy, it was stated that nuclear power is compact source and does not emit any greenhouse gases. The plant process was explained pictorially with figures and schematics. The radiation dose due to Kaiga Units is negligible compared to natural background radiation he said. The environmental radiological survey is carried regularly to assess the radioactivity in the region. It was highlighted that radiation is present everywhere and even in the food consumed by us. Radiation dose received due to air travel and medical exposures are higher dose compared to radiation dose from the plant to public. He stated that apart from the power generation, Kaiga Generating Station is also committed to welfare of the neighborhood. Since beginning, Kaiga is engaged in the welfare activities particularly in the field of Healthcare, Education, infrastructure and skill development. Later the students were taken to the simulation center where one can learn actual simulation of controlling and keeping track with the operations of entire power plant using computer with specific softwares like UNIX, SCADA. The trainees first need to get proper training in the simulation center before they could be placed in to the actual control unit.

On their return journey the students also visited Kadra Dam. Asst. Prof Sharad Shanbhag, Asst. Prof Manjunath Narwate, Prof. Suraj Marathe and Prof. and HOD Ajit Salunke accompanied the students in their visit.

