

Engineering Faculty Field Trip to Srinakharin Dam, Kanchanaburi.

A field trip to the Srinakharin Dam, Kanchanaburi province, to learn about state-of-the-art renewable energy power production from hydro resources took place from the 27th to the 28th, February 2007. The trip was arranged as part of course: "Trends and challenges in Engineering", which is taught by Aj.Rajesh Kempegowda as a final year elective for students from the Faculty of Engineering.



Students group with Aj.Rajesh and Rungnapa Chaisikul (EGAT-Hydropower Staff Co-coordinator)

Aj.Rajesh believes that showing students current practices in engineering technology will give them new insights that will complement their conventional class room teaching.



The Hydro-power Station

Srinakharin Dam is the first multi-purpose dam built under the project to develop the Mae Klong River Basin located in Tambon Tha

Kradan, Si Sawat District, Kanchanaburi Province.

The dam is 140 meters high measured from the base, while its ridge is 610 meters long and 15 meters wide. The reservoir has the capacity to store up to 17.45 million cubic meters of water, and the total power production capacity is about 720 MW.



Water flow from the penstock

The trip also included excursions to the historical River Kwai WW2 railway bridge as well as to the Erawan water falls. The students were able to appreciate the beauty of the dam, the water falls and the surrounding forest, which is continually protected by the Thai government under the guidelines of His Majesty the King.



Switch Yard facility for distribution of power

As a result of the trip, the students were able to understand and appreciate the complete energy flow from the water resource to the electrical transmission grid using a variety of

state-of-the-art conversion technologies utilized by EGAT.



Transformer facility at Srinakharin Dam (37 KV transmission)

During the visit, the students listened to a lecture from an EGAT expert on how power production takes place starting from hydro energy. There was also a video presentation lecture on the history of the Srinakharin Dam. The lecture explained how hydro energy helps Thai society without causing much environmental degradation.



Listening to a lecture from an EGAT expert

A Word of Thanks

As a final word, Aj.Rajesh would like to thank Rungnapa chaisikul (of the Electrical Generating Authority of Thailand, EGAT) for her extraordinary support in co-coordinating with her department and obtaining permission for the group to enter the hydroelectric power station as well as for the care shown to the students during the entire trip. He would also like to thank Dr Paul, Dr Apichat and Khun Panit Nilbol for supporting the field trip grant.

Aj.Rajesh Kempegowda

Lecturer,
Mechanical Engineering Department,
Faculty of Engineering & Technology,
Asian University,
P.O.Box 15, Baan Amphur Post Office,
Banglamung, Chon Buri 20250, Thailand.
Tel: +66 (0) 38 754-450 ext. 2758
Fax: +66 (0) 38 754-460