

Government Degree College for Women Srikalahasti

(NAAC Accredited with B+ Grade)

Field Trip

Brief Report

Date	15-02-2024
Name of the Activity	Field Trip
Place Visited	Floating Solar Panels, Electrical Substation
Names of the staff participated:	Dr. C. Sai Vandana & Smt. K. M. Prasanna Lakshmi
No. of Students Attended:	5

Brief Report: As part of the experiential learning and practical exposure activities, the Department of Physics, Government Degree College for Women, Srikalahasti, organized a field trip for B.Sc. students to visit the Floating Solar Power Plant and Electrical Substation at Tirupati. The visit was conducted under the supervision of faculty members to provide students with real-time understanding of renewable energy systems and power distribution networks.

At the Floating Solar Plant, students observed how photovoltaic panels are installed on water surfaces, utilizing unused reservoirs for power generation while minimizing land use and water evaporation. They learnt about the working principles of solar modules, inverters and grid connectivity, emphasizing the advantages of floating systems over traditional solar farms. Students also learned about the environmental and economic benefits of solar energy as a sustainable alternative.

The visit continued to a nearby Electrical Substation, where students gained insights into power transmission, voltage regulation, transformers, and safety mechanisms. They understood how electricity generated from solar and other sources is integrated into the grid and distributed to consumers.

The trip proved highly educational, bridging theoretical knowledge with practical exposure, and inspired students to explore careers and research in renewable energy and electrical engineering.

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