Students' Educational Tour-NEEPCO Visit

On 25th August, 2023 a group of Physics Honours students embarked on an educational tour to the NEEPCO (North Eastern Electric Power Corporation) Gas Power Plant,located at Laxmipur,Agartala near Banikya Chowmuhani.

The purpose of the tour was to provide students with a practical understanding of the concepts they had learned in their coursework and to offer insights into the real-world application of physics principles in the field of power generation.

Plant Overview:

The NEEPCO Gas Power Plant is a state-of-the-art facility that utilizes natural gas as a fuel source to generate electricity. The students were greeted by knowledgeable plant personnel who guided them through various aspects of the plant's operations.

Activities and Learning Experiences:

Plant Tour: The students were taken on a comprehensive tour of the power plant. They were shown the different sections of the plant, including the gas turbines, generators, control room, and cooling systems. This hands-on experience allowed them to witness the various stages of electricity generation.

Gas Turbine Operation: The students had the opportunity to observe the gas turbines in action. The plant staff explained the working principles of the turbines, how combustion occurs, and how the energy is converted into mechanical motion.

Control Room Visit: The visit to the control room was a highlight of the tour. Students gained insight into the intricate monitoring and control processes that ensure efficient and safe operation of the power plant. They were able to witness real-time data analysis and control adjustments.

Environmental Impact: The tour also addressed the environmental aspects of power generation. Students learned about the plant's efforts to minimize emissions and manage waste, as well as the challenges faced in balancing energy production with environmental responsibility.

Q&A Session: Towards the end of the visit, students had the chance to interact with the plant engineers and technicians. This provided an opportunity for them to ask specific questions about the plant's operations, technology used, and career prospects in the field.

Conclusion: The educational tour to the NEEPCO Gas Power Plant proved to be an enriching experience for the Physics Honours students. It not only expanded their practical knowledge of power generation but also highlighted the importance of interdisciplinary learning. The hands-on exposure and interactions with industry professionals enhanced their understanding of the real-world applications of physics principles. This tour will undoubtedly contribute to their academic growth and future career endeavors.

Acknowledgments:

We extend our sincere gratitude to the NEEPCO team for graciously hosting our students and providing them with a valuable learning experience.

Photographs of the site below.