Report on the Educational Trips to the Sewage
Treatment Plant (STP) operated by the Ganga
Pollution Control Unit

United Institute of Pharmacy, Prayagarj

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Date of Visit: [18/05/2023]

Participants:

- [B. Pharm 1st year]
- Faculty
 - 1. Prof (Dr.) Alok Mukerjee
 - 2. Mr. Utkarsh Verma
 - 3. Ms. Shalini Kesharwani

Introduction

On 18/05/2023, B. Pharma students from United Institute of Pharmacy, (UCER), Naini, Prayagaraj embarked on an educational trip to the Sewage Treatment Plant (STP) operated by the Ganga Pollution Control Unit in Naini, Prayagaraj. The objective of this trip was to provide students with a practical understanding of wastewater treatment processes and the role of pharmaceutical industries in environmental conservation.

Background

As pharmaceutical industries play a significant role in water pollution due to the discharge of various chemicals, this educational trip was organized to raise awareness among B. Pharma students about the importance of responsible waste management and environmental protection. The **Ganga Pollution Control Unit's STP** was chosen as it represents a real-world example of waste water treatment, addressing the concerns of water pollution in the Ganges River.

Trip Highlights

1. Overview of the Sewage Treatment Plant

Upon arrival at the STP, students were given a comprehensive overview of its functions and objectives. They learned about the primary purpose of the facility, which is to treat and purify wastewater collected from domestic and industrial sources before releasing it back into the environment.

2. Wastewater Treatment Processes

Students were guided through each stage of the wastewater treatment process, which included primary, secondary, and tertiary treatment. They observed various physical, chemical, and biological processes used to remove impurities, organic matter, and contaminants from the wastewater. This part of the trip allowed students to see how scientific principles are applied in practice to mitigate water pollution.

3. Environmental Impact Assessment

The students had the opportunity to interact with environmental engineers and experts who discussed the environmental impact assessment of the STP. They learned about the monitoring and quality control measures in place to ensure that the treated water meets regulatory standards before being discharged into natural water bodies.

4. Pharmaceutical Industry's Role

The trip also emphasized the pharmaceutical industry's role in controlling water pollution. Students were informed about the importance of responsible pharmaceutical manufacturing practices, including proper disposal of waste, adherence to environmental regulations, and the development of eco-friendly technologies.



5. **Q&A Session**

A question and answer session followed the tour, allowing students to clarify doubts and gain deeper insights into the wastewater treatment processes and the environmental challenges associated with the pharmaceutical industry.

Key Takeaways

The educational trip to the Sewage Treatment Plant provided B. Pharma students with several key takeaways:

- 1. Understanding of Wastewater Treatment: Students gained a practical understanding of wastewater treatment processes and the importance of clean water for the environment and public health.
- 2. Environmental Responsibility: The trip underscored the importance of responsible waste management in the pharmaceutical industry and highlighted the industry's potential to contribute to environmental conservation.
- 3. Real-World Application: Students witnessed how scientific principles are applied in real-world scenarios to address environmental challenges.
- 4. Regulatory Compliance: The importance of adhering to environmental regulations and the role of monitoring and quality control measures in ensuring water safety were emphasized.







Conclusion

The educational trip to the Ganga Pollution Control Unit's Sewage Treatment Plant was an enriching experience for B. Pharma students. It not only expanded their knowledge of wastewater treatment processes but also instilled a sense of environmental responsibility. Such practical exposure is invaluable in preparing future pharmaceutical professionals to contribute positively to society and the environment. It is hoped that this trip will inspire students to champion sustainable practices within the pharmaceutical industry and work towards a cleaner and greener future.

Acknowledgments

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