School of Allied Health Sciences | Department of Optometry





Industrial Visit to Essilor Lab Joka



School of Allied Health Sciences | Department of Optometry Industrial Visit to Essilor Lab, Joka Date: 26th June 2025 Location: Essilor Laboratory Facility, Joka, Kolkata No. of Students Attended: 19 **Faculty Attended:** Ms. Dipanwita Ghosh (Head of Department) Mr. Arup Saha Ms. Anusuya Das

1. Introduction

As part of the curriculum enrichment and practical exposure program, the Department of Optometry at Swami Vivekananda University organized an industrial visit to Essilor Lab, Joka—a premier facility renowned for its cutting-edge ophthalmic lens technology. The objective of the visit was to provide students with real-world insight into advanced lens processing and coating systems.

2. Objectives of the Visit

To observe and understand the full cycle of lens manufacturing.

To study lens tinting techniques and their practical applications.

To explore modern coating technologies, particularly electron beam coating.

To help students connect theoretical knowledge with practical industry standards.

3. Participants

A group of 19 Optometry students participated in the visit. They were guided and accompanied by the faculty members.

4. Overview of Activities and Observations

a. Welcome and Orientation

The Essilor team welcomed the students and faculty with an introductory presentation. The session covered the history, global impact, and mission of Essilor in advancing vision solutions.

b. Lens Manufacturing Tour

The students toured various sections of the lab and observed:

Lens Blank Preparation

Surfacing and Blocking

Polishing



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The technical staff demonstrated each step and discussed quality control measures, automation, and precision standards followed by the facility.

c. Tinting Section

Students were introduced to the art and science of lens tinting, which included:

Dip-dye tinting processes

Gradient tinting techniques

Applications for UV protection and vision enhancement

d. Electron Beam Coating Technology

A major highlight of the visit was the detailed demonstration of electron beam coating, which involves:

Application of multi-layer coatings using vacuum and electron beam technology

Enhancements like anti-reflective, scratch-resistant, and hydrophobic surfaces

Students witnessed the importance of coating technology in improving lens performance and customer satisfaction.

5. Learning Outcomes

Firsthand exposure to industrial-scale ophthalmic lens production Detailed understanding of tinting and coating processes Familiarity with modern equipment and high safety standards Reinforced theoretical knowledge with practical industry applications

6. Conclusion

The visit to Essilor Lab, Joka served as a powerful learning platform for Optometry students, offering them valuable exposure to real-world lens manufacturing and coating practices. It also fostered professional awareness and helped prepare students for future clinical and technical roles in the field.

7. Acknowledgement

We sincerely thank Mr.Kanchan Maity, the Essilor Lab team in Joka for their warm hospitality, detailed demonstrations, and willingness to share industry insights. Special thanks to Ms. Dipanwita Ghosh (HOD), Ms. Anusuya Das, and Mr. Arup Saha for their efforts in organizing and accompanying the visit.

We are thankful to Dr. Nandan Gupta sir, Chancellor, Swami Vivekananda University for his immense support; Prof. (Dr.) Subrata Kumar Dey sir, Vice Chancellor, Swami Vivekananda University for making us reach new heights; Prof.(Dr.) Pinak Pani Nath Sir, Registrar, Swami Vivekananda University for guiding us and Mr. Saurabh Adhikari sir, Chief Operating Officer, Swami Vivekananda University being with us since the beginning.



Image Gallery











