

Report on Experiential Learning of students of the Department of Physics, Asutosh College to Jadavpur University.

The Department of Physics, Asutosh College have arranged a visit for Semester V Physics (Hon's) students to the Department of Physics, Jadavpur University Kolkata, on 23/02/2024. Dr. Surjya Sarathi Bhattacharyya and Dr. Parikshit Dutta have accompanied 6 selected participants from Asutosh College.

We were given a demonstration by Prof. Kaustuv Das on resolving power of SEM and TEM, followed by a demonstration by Prof. Abiral Tamang on UV spectroscopy. This was followed by demonstration of instruments by scholars.

The instruments included:

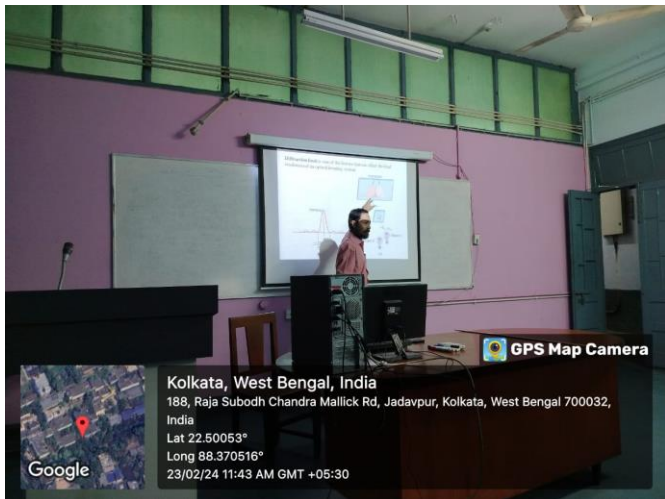
1. XRD (X-Ray diffractometer) for the analyzing the crystal structure of samples. Working principles and type of measurements obtained explained.
2. SEM (Scanning Electron Microscope) for taking surface morphology images of samples. Demonstration of samples where shown. Importance of vacuum operation was emphasized.

=====Followed by Lunch at University Guest House=====

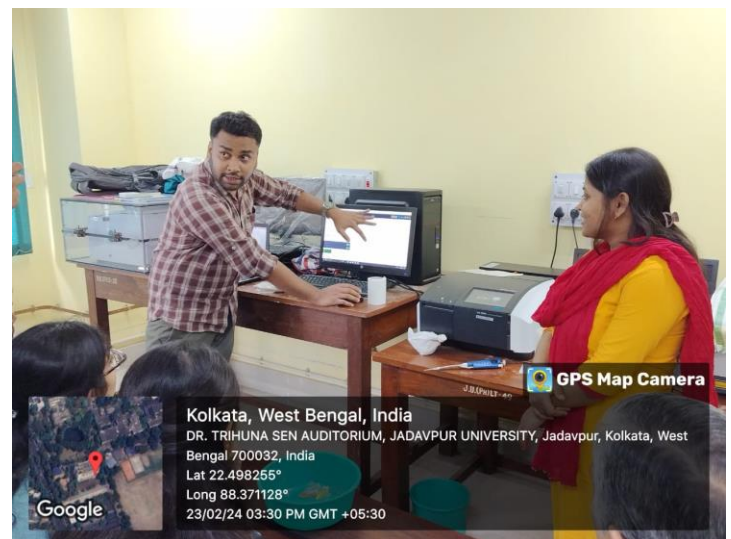
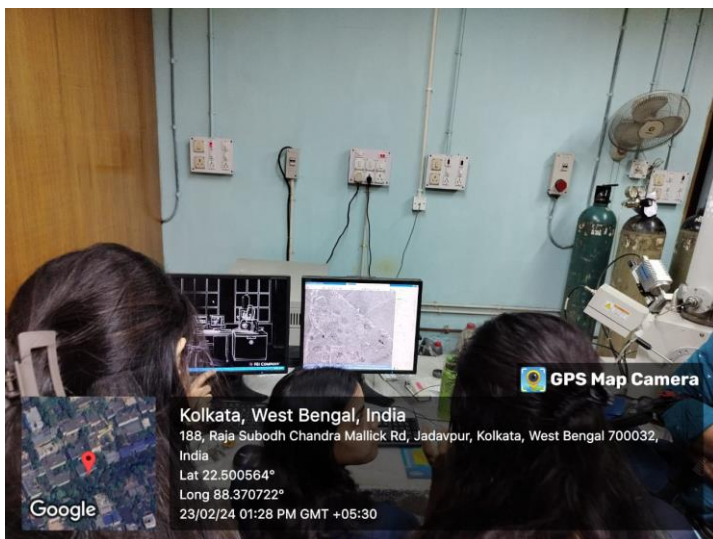
3. UV-Spectrometer for analyzing characteristics of samples, by checking absorption spectrum.
4. IR- Spectrometer for analyzing characteristics of samples, by checking absorption spectrum.
5. Fluorescent Spectrometer for analyzing characteristics of samples, by checking emission spectrum.
6. Raman Spectrometer.
7. Apparatus for Distillation of water (apparatus which distils water upto 99% purity)
8. Synthesis of Nano particles.

List of Selected Candidates from our Department :

1. Pramith Mukherjee
2. Arijit Das
3. Nirmalya Guray
4. Agnishikha Chakraborty
5. Debasmita Saha
6. Manmeet Buddhadev Sarkar



Demonstration of working principle by Prof. Kaustuv Das and Prof. Abiral Tamang.



Demonstration of various apparatuses by research scholars at Jadavpur University.

Spectroscopic Data demonstrated by Research scholars.

