



EDUCATIONAL TRIP TO CENTRAL INSTRUMENTS LABORATORY UNIVERSITY OF HYDERABAD



**Department of Biotechnology
Tara Government College (A),
Sangareddy**

EDUCATIONAL TRIP TO CENTRAL INSTRUMENTATION LABORATORY, UNIVERSITY OF HYDERABAD ON 07/07/2022

As a part of the curriculum of B.Sc. Biotechnology, a one-day educational trip was organised by the Biotechnology Department to Central Instrumentation Laboratory – University of Hyderabad, on 07/July/2022

- The main objective of the trip is to provide students an insight of the practical applications of what they are learning in theoretical part of the curriculum.
- Students gets acquainted with the working principle and instrumentation of advanced Microscopy - SEM TEM and Confocal Microscope.
- It provides students with an opportunity to learn practically through interaction and working methods, with the experts.

A group of 25 students of I & III B.Sc. Biotechnology was accompanied by D. Annapurna Head, Department of Biotechnology. The students were taken to the advanced research facilities of University of Hyderabad housed in the central Instrumental Laboratory. Various advanced instruments were shown through demonstration by experts and students were made aware of the working and applications of this facilities. S Pavan Kumar, Scientific Officer at CIL, showed the students the Scanning Electron Microscope, Circular Dichroism (CD) Spectropolarimeter and Confocal Microscope available at the CIL. It was an interactive session where students were explained about the steps, principle and instrumentation involved in Scanning Electron Microscope.





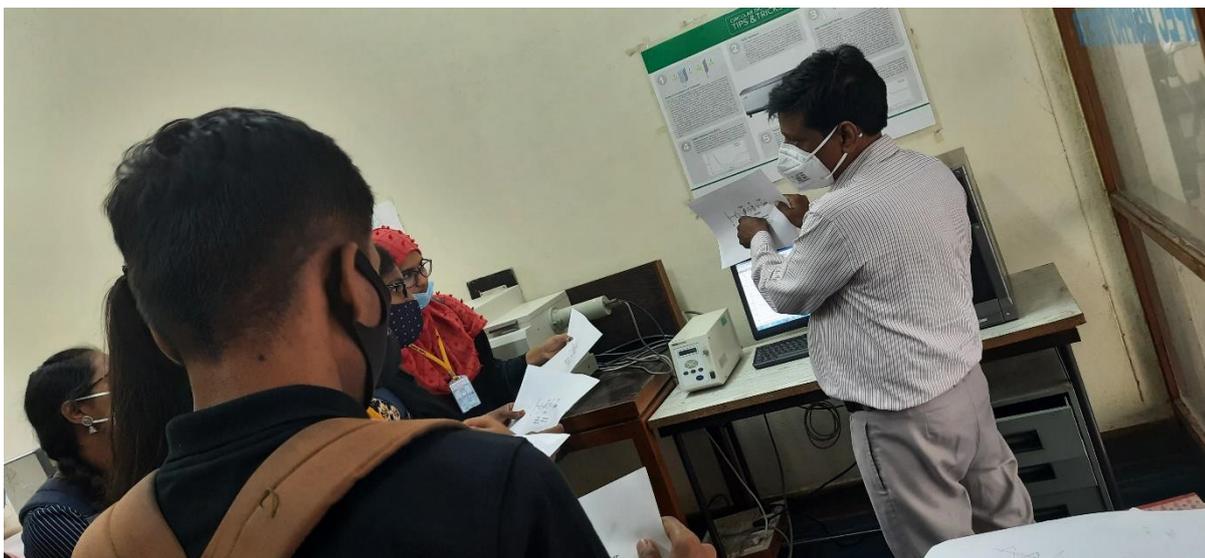
Dr. S Pavan Kumar, demonstrated how dry and wet samples are prepared for SEM and Confocal microscope, precautions to be taken before the sample is analysed. He explained the principle of how the SEM works, students were so enthusiastic to ask queries and sir has addressed.



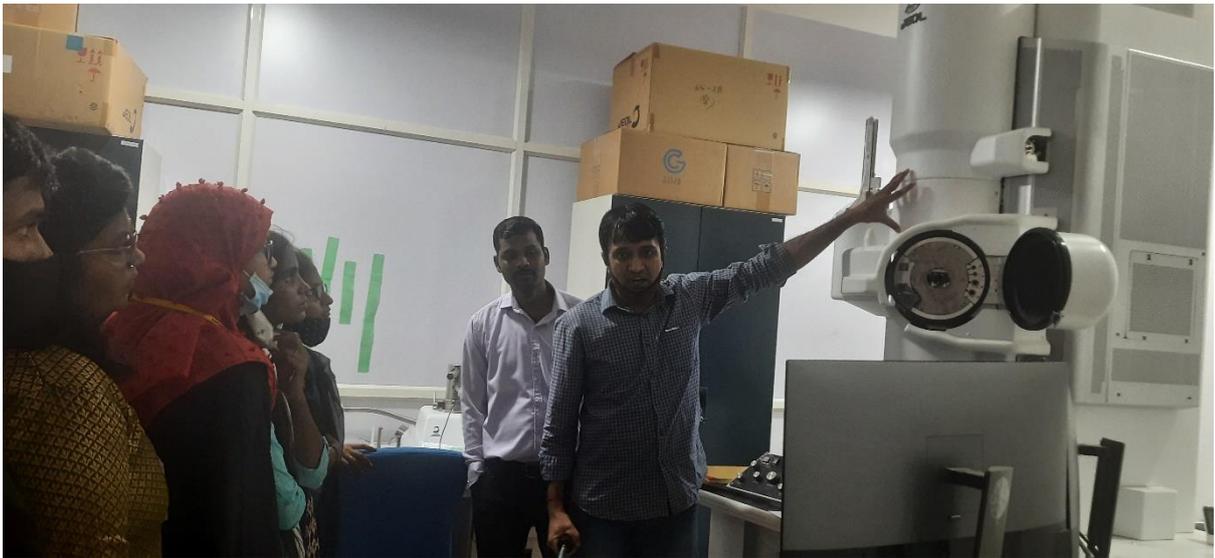


Dr. Pavan kumar, showing how to enhance the image resolution in the monitor





Later, on we were taken to the school of Chemistry, where we were shown the Transmission Electron microscope. Mr. Rajesh, Technical officer explained the working principle, instrumentation and how to detect the elemental samples. He has shown pictures of the analysed samples. It was interesting and informative for students to know, how to prepare a dry and wet samples for analysing in SEM and Confocal and elemental analysis of samples through TEM.





The students showed their interests and actively participated in the visit. This Educational trip was extremely successful and helpful to the students in developing their interest in research and learning about the current important areas of research and development.

