

Educational Visit Report to Glass Blowing Lab

Institute visited: IIT Delhi

Date of the visit: 10/02/2025

Organized by: Department of Chemistry



An educational visit arranged by the Department of Chemistry; Sri Aurobindo College allowed students to witness firsthand how scientific glassware is made at the Glass Blowing Lab of IIT Delhi. A total of 32 undergraduate students including Physical Sciences and Life Sciences students along with four faculty members of the department joined the educational tour where they learned about the essential role that glassblowing plays in scientific research.

Lab experts led students through an introduction about why customized glass equipment matters in scientific research at the beginning of the session. The glassblowers executed their work with accuracy by performing precise cuts and bends and sealing the glass materials to completion. The lab relies on borosilicate glass as its main material since it demonstrates superior strength together with high heat tolerance. The manufacturing procedure utilizes borosilicate glass exclusively.

Students at the interactive session of the visit asked questions about the safety standards followed within the laboratory. Protective eyewear made from pure silica serves as the fundamental protective equipment according to the technicians since it defends eyes from the intense flames in the process. The discussion about precise melting temperatures was limited but students could observe that shaping and sealing borosilicate glass requires both precision and detailed methods.

Students gained exposure during their visit to obtain customized laboratory glass items for their future experiments if needed as part of their doctoral research program. Several students found out about the additional cost of the fabrication service and viewed this information useful for future scientific investigations.

Students developed a fresh understanding of glassware production after this educational field trip which demonstrated laboratory glass engineering expertise to them. Experimental research depends on scientific glassblowing's technical proficiency which becomes evident through this visit.

Conclusion:

Students acquired beneficial knowledge about scientific research activities during their visit to IIT Delhi's Glass Blowing Lab. The Department of Chemistry plans to schedule additional visits in the future to enhance students' hands-on experience and boost their practical science education.