

CENTRAL INSTRUMENTATION FACILITY (CIF)
SCHOOL OF PHARMACEUTICAL EDUCATION & RESEARCH (SPER)
JAMIA HAMDARD

Central Instrumentation Facility (CIF) at SPER, Jamia Hamdard was established with the aim of providing advanced research/analytical facilities to researchers both within and outside the university. The facility was inaugurated on July 24, 2002, and since then, it has been providing access to state-of-the-art analytical instruments to support research in various scientific fields.

CIF offers a centralized facility for researchers in fields such as Pharmaceutical, Physical, Biological, Allied, and Interdisciplinary sciences. By providing advanced analytical research capabilities, CIF caters to the needs of academic research institutes as well as private industries and companies. We have analysed around 10K samples since the facility started. We also impart instrument training to students few times every year. To support the diverse research requirements of our users, CIF is equipped with a wide range of sophisticated analytical instruments funded by DST, UGC, HNF and Jamia Hamdard. The instruments are regularly maintained, upgraded, and new added to keep pace with emerging research trends.

Some of the instruments available at CIF include CRYO-TEM, LCMS/MS, NMR, LC-MS with TLC interface, Particle Size Analyser (DLS), Elemental Analyser (CHNS), DSC, Dissolution Test System, Elisa Reader, Texture Analyser, HPTLC, UV-VIS Spectrophotometer, and HPLC Water Purifier.

The facility operates on all working days. The CIF is working under headship of Prof. Dr. Asif Husain from Department of Pharmaceutical Chemistry, SPER. CIF is being operated by a full time Senior Technical Assistant and a Lab Assistant. For TEM analysis, we have a TEM operator and a Junior TEM operator to support the facility. We have two dedicated staff members to ensure the smooth functioning of CIF. Additionally, for TEM analysis, we have a TEM operator who looks after overall functioning of TEM and also provide assistance to users of the TEM facility.

CIF at SPER, Jamia Hamdard is a state-of-the-art facility that provides advanced research instruments and support services to researchers in various scientific disciplines. We are happy to contribute to the advancement of knowledge and innovation through this facility.

The following is the list of working instruments in CIF, SPER:

1. TEM
2. LCMS/MS (TQD)
3. NMR 400 MHZ
4. High Performance Thin Layer Chromatograph (HPTLC)
5. Differential Scanning Calorimeter (DSC)
6. Zetasizer (DLS)
7. Elemental Analyser (CHNS)
8. Double Beam UV Spectrophotometers
9. Texture Analyser
10. Elisa Reader
11. Dissolution Test Station
12. Water Purifier (for HPLC analysis)