



CENTRAL INSTRUMENTATION FACILITY (CIF)



The **Central Instrumentation Facility**, equipped with high value sophisticated instruments, has been created in order to cater the needs of researchers and for maximum utilisation of instruments. The facilities are extensively used by Post Graduate Students, Doctoral Research Scholars and Sponsored Projects for Advanced Research. This facility is also extended to External Organisations, mainly academic institutions of the region on nominal chargeable basis. This facility is also used for organizing short term courses/ workshops on the use and application of various instruments and analytical techniques.

Objectives of the CIF:

- To carry out analysis of samples received from students, researchers, faculty members of the institute, other academic institutions and industries.
- To provide facilities of modern analytical instruments to students and researchers enabling them to keep pace with developments taking place globally, publish their research findings in peer



reviewed high impact factor journals and through their concerted efforts, contribute to the upliftment of the society at large.

- To acquire and develop capability for preventive maintenance and repair of the high end instruments.
- To organize short-term courses/workshops on the use and application of various spectroscopic and analytical techniques for students, teachers and technical personnel from our University, affiliated institutions, universities and industry in the region.
- To train technicians for maintenance and operation of sophisticated instruments.

Services provided by the CIF :

1. Analytical Services:

- **Sample Analysis :** The CIF carries out analysis of samples received from researchers and provides spectra/results of analysis on routine basis
- **Sample Preparation:** The CIF provides facilities and assistance in sample preparation to the users.
- **Testing facility :** The CIF carries out testing of quality of raw materials and end products for industries.

2. Short Term Courses/ Training Programmes : The CIF organizes the following types of short term courses/Training Programmes / Workshops:

- Application and use of various instruments and analytical techniques for UG /PG students, research scholars, faculty members, teachers and personnel from other academic institutions, R&D Labs and industries.
- Repair/maintenance and operation of sophisticated instruments for technicians.

3. Consultancy on analytical problems: The CIF offers consultancy on solution to analytical problems including development of analytical



methods for specific needs, sampling problems, spectrum analysis and interpretation of results etc. as well as on R&D problems/issues.

4. Repair and maintenance of high end instruments: The CIF personnel make a concerted effort to develop expertise to repair and maintain the high end instruments available with them.

Presently, around 30 Post Graduate Students, 20 Doctoral Research Scholars are working regularly in the lab.

CIF facilities includes following instruments :

- FTIR Spectrophotometer
(Perkin Elmer Spectrum 2)
- HPLC (Shimadzu LC-2010CHT)
- Malvern Zetasizer
- UV Vis Spectrophotometer
(Shimadzu 1601 & 1800)
- Semi Autoanalyser (Care lab 300)
- Phase Contrast & Brightfield
Research Microscope (Leica DM 2500)
- Brookfield Viscometer (Brookfield DVE)
- 8- station Dissolution Tester (Electro Lab 8DT)
- Disintegration apparatus
(Electro Lab)
- Differential Scanning
Digital Calorimeter (Systronics)
- Ultrasonic Bath
- Digital Photo Fluorimeter (Systronics 152)





- Digital Nepheloturbidity meter
- Cooling Centrifuge
- Photo micrographic apparatus
- Tissue Homogenizer
- Other equipments – Potentiometer, conductivity meter, pH meter, Polarimeter, Refractometer, Micro centrifuge, Filtration assembly, Rota Vap, Moisture balance etc.

Submitting samples for analysis-

The various instrumental facilities at CIF, Department of Pharm. Sciences, Kumaun University may be availed by others at nominal charges. The samples should be submitted in the prescribed format which is then signed by the respective departmental head/Supervisor before submission of the samples.

The samples will be registered for analysis and taken up for measurement as per the number of users for the instrument concerned. Users have to collect the results/data either in electronic form or in hardcopy from the CIF office or through e-mail on special request.

For more information, please correspond in the contact details provided.

Contact Us :

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