



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

INTRODUCTION

The Central Instrumentation Facility (CIF), SPER was established with a vision to provide advance research facilities to all researchers within and outside University. The CIF was inaugurated on July 24, 2002. It has a variety of sophisticated analytical instruments including many state of the art instruments. This facility has been created to provide a centralized facility for all fields including Pharmaceutical, Physical, Biological, Allied and Interdisciplinary sciences. This facility fulfills the need by providing advanced analytical research to all academic research institutes & private industries/ companies. 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 Dr. Abid Kamal and a Lab Assistant Mr. Mushtaq Ahmad. For TEM analysis, we have a TEM operator and a Junior TEM operator to support the TEM facility.

The list of instruments students can avail in CIF includes:

1. [CRYO-TEM](#)
2. LCMS/MS
3. NMR
4. PARTICLE SIZE ANALYSER (DLS)
5. ELEMENTAL ANALYSER
6. DSC
7. DISSOLUTION TEST SYSTEM
8. ELISA READER
9. TEXTURE ANALYSER
10. HPTLC
11. UV-VIS SPECTROPHOTOMETER
12. HPLC WATER PURIFIER

User charges of the equipments

S. No.	Equipment	Usage Charges		
		For JH users	For other academic institutes	Industries/private laboratories
1.	DSC (Perkin Elmer, Pyris-6)	Rs. 300/- per sample	Rs. 500/- per sample	Rs. 1000/- per sample
2.	UV-VIS Spectrophotometer (Shimadzu, UV-1601)	Rs. 200/- per sample	Rs. 200/- per sample	Rs. 700/- per sample
3.	LC-MS/MS (Waters, Xevo TQD)* Intact Mass/MW determination:	Rs. 400/- per sample	Rs. 800/- per sample	Rs. 1500/- per sample
	LC-MS/MS (Waters, Xevo TQD)* MS/MS analysis (Qualitative)	Rs. 600/- per sample	Rs. 2000/- per sample	Rs. 4000/- per sample
	LC-MS/MS (Waters, Xevo TQD)* UPLC-MS/MS analysis (Qualitative)	Rs. 1500/- per Precursor ion	Rs. 5,000/- per Precursor ion	Rs. 10,000/- per Precursor ion
	LC-MS/MS (Waters, Xevo TQD)* MS/MS analysis	Rs. 300/- per Precursor ion	Rs. 600/- per Precursor ion	Rs. 1500/- per Precursor ion

4.	¹H NMR (Bruker Avance, 400 MHz)	Rs.200/- per sample. Note: Solvent Charge Extra D ₂ O/DMSO-D ₆ - Rs100/-; Acetone: Rs 400/-; Methanol D ₄ : Rs 200/-	Rs. 350/- per sample. Note: Solvent Charge Extra D ₂ O/DMSO-D ₆ - Rs100/-; Acetone: Rs 400/-; Methanol D ₄ : Rs 200/-	750/- per sample. Note: Solvent Charge Extra D ₂ O/DMSO-D ₆ - Rs100/-; Acetone: Rs 400/-; Methanol D ₄ : Rs 200/-
	¹³C and DEPT	Rs.300/- per sample. Note: Solvent Charge Extra D ₂ O/DMSO-D ₆ - Rs100/-; Acetone: Rs 400/-; Methanol D ₄ : Rs 200/-	Rs. 500/- per sample. Note: Solvent Charge Extra D ₂ O/DMSO-D ₆ - Rs100/-; Acetone: Rs 400/-; Methanol D ₄ : Rs 200/-	1200/- per sample. Note: Solvent Charge Extra D ₂ O/DMSO-D ₆ - Rs100/-; Acetone: Rs 400/-; Methanol D ₄ : Rs 200/-
	2D Experiment	Rs.500/- per sample. Note: Solvent Charge Extra D ₂ O/DMSO-D ₆ - Rs100/-; Acetone: Rs 400/-; Methanol D ₄ : Rs 200/-	Rs. 1000/- per sample. Note: Solvent Charge Extra D ₂ O/DMSO-D ₆ - Rs100/-; Acetone: Rs 400/-; Methanol D ₄ : Rs 200/-	2000/- per sample. Note: Solvent Charge Extra D ₂ O/DMSO-D ₆ - Rs100/-; Acetone: Rs 400/-; Methanol D ₄ : Rs 200/-
5.	FTIR (Shimadzu, IR Affinity)	Rs. 250/- per sample	Rs. 250/- per sample.	Rs. 750/- per sample
6.	LC-MS (Shimadzu, 2020) For Direct Mass	Rs. 500/- per sample (without method development)	Rs. 800/- per sample (without method development)	Rs. 1500/- per sample (without method development)
7.	CRYO-TEM (Thermo Scientific, TALOS L 120C G2) Sample preparation for non-biological/nanoparticle	Rs. 400/- per sample	Rs. 800/- per sample	Rs. 1500/- per sample
	CRYO-TEM (Thermo Scientific, TALOS L 120C G2) TEM Viewing per sample (Max. no of images-10)	Rs. 400/- per sample	Rs. 800/- per sample	Rs. 2000/- per sample
	CRYO-TEM (Thermo Scientific, TALOS L 120C G2) Cost per image thereafter	Rs. 40/-	Rs. 80/-	Rs. 150/-
	CRYO-TEM (Thermo Scientific, TALOS L 120C G2) EDX	Rs. 300/- per sample	Rs. 600/- per sample	Rs. 1000/- per sample
8.	Texture Analyzer (Stable Microsystems, TA.XT PLUS)	Rs. 200/- per sample	Rs 300/- per sample	Rs 800/- per sample
9.	Elisa Reader (Electronic Corp. India Ltd., MS 5608A)	Rs. 300/- per plate	Rs 500/- per plate	Rs 1000/- per plate
10.	HPTLC (Camag, TLC)	Rs. 400/- per sample	Rs. 800/- per sample	Rs. 1500/- per

	Scanner 3, Linomat 5)			sample
11.	Elemental Analyzer (Elementar, Unicube) Carbon, Hydrogen, Nitrogen & Sulphur	Rs. 200/- per sample	Rs. 300/- per sample	Rs. 600/- per sample
12	Zetasizer (Malvern, Advance Series-Lab Blue)	Rs. 50/- per sample	Rs. 100/- per sample	Rs. 300/- per sample

*Specific biochemical, consumable, plastic/glassware has to be brought by users.

[**ONLINE PAYMENT INSTRUCTIONS**](#) NEW!

[**ONLINE PAYMENT LINK**](#) NEW!

Download the requisition form from our website & send the filled requisition form by e- mail to drabidkamal@jamiahamdard.ac.in

Note: Users have to pay service tax with user charges according to GST Act

**Prof. Asif Husain
Incharge CIF, SPER**



Central Instrumentation Facility (CIF)
School of Pharmaceutical Education & Research (SPER), Jamia Hamdard
Requisition Form

Student/User Name

Supervisor Name

E-mail

E-mail

Department / Centre

Name and address of the institute

Telephone/mobile number

Date of Request

Expected date of Measurement

Technique to be used

- DSC
- HPTLC
- LC-MS
- UV-Visible Spectrophotometer
- Texture Analyzer
- Elemental Analyzer
- FT-IR
- Zetasizer (DLS)

User category

- JH (Please write enrolment no)
- Other Institution
- Industry

Mode of payment

Online (Please write reference no)

Number of samples

Sample type and name

Details of DD/Cheque (For others):

Nature of the characterization required:

- Sample characterization only
- Sample characterization and analysis

Important Note:

Kindly consult CIF staff for sample preparation details before characterization.

Undertaking:

I/we undertake to abide by the safety and sample preparation guidelines and precautions during testing of my sample. I/we shall not claim for any damage/harm to my samples submitted for the analysis using CIF equipment.

I/we shall give due acknowledgment to CIF for measurement and help in the results (if any) so published in journals and inform CIF about the publications which acknowledges the use of CIF facilities. A copy of the published paper may please be submitted for CIF records.

User/Student Signature

Supervisor Signature/Stamp

Contact Details:

Dr. Abid Kamal

Central Instrumentation Facility, Room No.312, Second Floor, School of Pharmaceutical Education
Research, Jamia Hamdard, Hamdard Nagar, New Delhi-110062.

Mob: 9899037073 ; Email: drabidkamal786@jamiyahamdard.ac.in



Central Instrumentation Facility
UPLC-MS/MS Lab
School of Pharmaceutical Education and Research (SPER)

Date: _____

Requisition for LCMS Spectral Analysis

1. Name of Student _____
2. Name of Supervisor _____
3. Department & Faculty _____
4. Course _____
5. Total no. samples _____
6. Fill up the following table

S.No.	Sample Code	Solubility	Expected Mol. Wt.	Mol. formula	Spectra Required

NOTE:

1. LCMS grade solvent should be provided by the candidate a
2. Compounds should be pure and completely soluble in the solvent
3. Certified that the samples submitted for LCMS spectral analysis belong to the research work of the concerned student only.
4. Bring one **empty CD**.

Sign (Candidate)

Sign (Supervisor)

CIF Incharge, SPER

E-mail ID of Supervisor:

Contact No. of students:



**Central Instrumentation Facility
School of Pharmaceutical Education and Research
Jamia Hamdard**

Date:

Requisition for NMR spectra

1. Name of student:
2. Name of Supervisor
3. Department/ Faculty:
4. Course:
5. Total number of free sample analyzed till date:

Code no. of sample	Solubility	Spectra required

Note:

1. Compound should be pure and completely soluble in the solvent. Kindly check it before submitting the samples.
2. This is to certify that the sample submitted for NMR spectra analysis belong to the research work of the concerned student only

Signature of Candidate

Signature of Supervisor

Dr. M. Shaquiquzzaman
Assistant Professor

(Prof. Asif Husain)
In charge CIF, SPER



Central Instrumentation Facility
School of Pharmaceutical Education & Research (SPER), Jamia Hamdard, New Delhi.
Requisition Form for TEM

Request for:

Sample Preparation	EM Viewing	EDX
--------------------	------------	-----

S.No. _____

Date: _____

Name & Address of
Investigator with
Designation: _____

Email & Mobile No: _____

User Name &
Designation: _____

Email & Mobile No: _____

User Category:	JH	Other Govt. Institutions	Industry/ Private
<i>Mode of Payment:</i>	Internal Fund Transfer/Online	Online (please mention reference no)	Online (please mention reference no)
<i>Details</i> :			

Type of Sample: _____ Number of Samples: _____ Name of fixative: _____

Hazard/ Toxicity: _____ Solvent to be used: _____ Desired magnification (if any): _____

Any other (please specify): _____

Undertaking

I/We undertake to abide by the safety and sample preparation guidelines and precautions during testing of my samples. I/We shall not claim for any damage/harm to my samples submitted for the analysis by CIF equipments.

I/We shall give due acknowledgement of CIF in published journals and also inform CIF about the publications which acknowledges the use of CIF facilities.

CIF shall not take any responsibility about the analysis, interpretation and publication of data acquired using equipments at CIF.

Signature of User

Date of submission of requisition

Signature of the Investigator

Signature

In charge-TEM

Signature of CIF Incharge

Date of submission of requisition

Note:

- Biological samples will be accepted only after primarily fixation with suitable fixative.
- For TEM, samples should be trimmed into 1.0-1.5mm thick pieces (4-5 pieces for each sample).
- Fixation may be done in 2.5% Glutaraldehyde and 2% paraformaldehyde made in 0.1M sodium phosphate buffer (pH7.2). The fixed sample should be brought at CIF, JH in fixative or in phosphate buffer at 4°C preferably between 10 am to 1 pm (Working days).
- Maximum of 10 samples per requisition form will be accepted for analysis in one day.

For Office Use Only:

Deposit Amount:

Details of Slip:

Signature of Depositor:

Important Note: Kindly consult CIF staff for sample/sample preparation before bringing your samples for analysis.

Contact Details:

Dr. Abid Kamal, Central Instrumentation Facility, Room No.312, Second Floor, School of Pharmaceutical Education & Research, Jamia Hamdard, Hamdard Nagar, New Delhi-110062. Mob: **9899037073**;

Email ID: **drabidkamal@jamiahamdard.ac.in**

Note: For internal students, limited number of samples is free and then they have to pay according to the user charges.