

CENTRAL INSTRUMENT FACILITY

| SR/ FACILITY | NAME OF THE INSTRUMENT | ACADEMIC CHARGES | INDUSTRY CHARGES |
|----------------------------------|--|--|--|
| A. Spectroscopic Facility | | | |
| 1 | UV-VIS | Rs. 400/hr | Rs. 1000/hr |
| 2 | UV-VIS NEAR INFRARED | Rs. 800/hr | Rs. 2500/hr |
| 3 | FOURIER-TRANSFORM INFRARED SPECTROSCOPY (FTIR) | Rs. 600/hr | Rs. 2000/hr |
| 4 | ATTENUATED TOTAL REFLECTANCE-FOURIER TRANSFORM INFRARED (ATR-FTIR) | Rs. 800/hr | Rs. 2500/hr |
| 5 | FLUORIMETER | Rs. 600/hr | Rs. 2000/hr |
| 6 | TIME-CORRELATED SINGLE PHOTON COUNTING (TCSPC) | Rs. 1000/hr | Rs. 2500/hr |
| 7 | RAMAN SPECTROSCOPY WITH CONFOCAL | Rs. 800/hr | Rs. 2500/hr |
| 8 | TRANSIENT ABSORPTION SPECTROSCOPY (ULTRAFAST) | Rs. 5000/hr | Rs. 10000/hr |
| 9 | CIRCULAR DICHROISM | Rs. 400/h | Rs. 1000/h |
| 10 | NUCLEAR MAGNETIC RESONANCE (NMR) | <p>*Rs.500 per sample per element (1H, 13C, 19F, DEPT etc. in CDCl₃ or D₂O);</p> <p>*Rs.700 per sample per element (1H, 13C, 19F, DEPT etc. in DMSO-d₆);</p> <p>*Rs.1000 per sample (2D experiments (COSY, HSQC, HMBC, NOESY or ROESY)in CDCl₃ or D₂O);</p> <p>*Rs.1200 per sample (2D experiments (COSY, HSQC, HMBC, NOESY or ROESY)in DMSO-d₆)</p> <p>* If solvent provided Rs.100/- less for above all fee Only DMSO solvent Rs.200/- less for additional spectra for same sample</p> | <p>*Rs.1000 per sample per element (1H, 13C, 19F, DEPT etc. in CDCl₃ or D₂O);</p> <p>*Rs.1400 per sample per element (1H, 13C, 19F, DEPT etc. in DMSO-d₆);</p> <p>*Rs.2000 per sample (2D experiments (COSY, HSQC, HMBC, NOESY or ROESY)in CDCl₃ or D₂O);</p> <p>*Rs.2200 per sample (2D experiments (COSY, HSQC, HMBC, NOESY or ROESY)in DMSO-d₆)</p> <p>* If solvent provided Rs.100/- less for above all fee Only DMSO solvent Rs.200/- less for additional spectra for same sample</p> |
| 11 | X-RAY PHOTOELECTRON SPECTROSCOPY (XPS) | Rs. 2000 per sample | Rs. 4000 per sample |
| | ULTRAVIOLET PHOTOELECTRON SPECTROSCOPY (UPS) | Rs. 2000 per sample | Rs. 4000 per sample |
| 12 | Broad Band FMR spectrometer | Rs. 900 per hour | Rs. 1500 per hour |

B. Microscopic Facility

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| 1 | ATOMIC FORCE MICROSCOPY (AFM) | Rs. 1500/hr | Rs. 3000/hr |
| 2 | TRANSMISSION ELECTRON MICROSCOPY (TEM) | Rs. 3000/sample | Rs. 10000/sample |
| 3 | SCANNING ELECTRON MICROSCOPE (SEM) | Rs. 2000/sample | Rs. 5000/sample |
| 4 | CONFOCAL | Rs. 3000/sample | Rs. 5000/sample |

C. Scattering Facility

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|---|------------------------------------|----------------|-----------------|
| 1 | POWDER X-RAY DIFFRACTOMETER (PXRD) | Rs. 400/sample | Rs. 1000/sample |
| 2 | SMALL ANGLE X-RAY | Rs. 1000/hr | Rs. 1500/hr |
| 3 | PARTICLE SIZE ANALYSER | Rs. 850/hr | Rs. 2000/hr |

D. Chromatography Facility

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|---|--|--|---|
| 1 | GAS CHROMATOGRAPHY-THERMAL CONDUCTIVITY-FLAME IONIZATION DETECTOR (GC-TCD-FID) | Rs. 750/ injection | Rs.1500/ injection |
| 2 | GAS CHROMATOGRAPHY-MASS SPECTROMETRY (GC-MS-FID) | Rs. 1500/ sample | Rs.3000/ sample |
| 3 | HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC) PDA DETECTOR | Rs. 500/sample | Rs. 1500/sample |
| 4 | HPLC-QUADRUPLE DALTON | Rs. 700/sample | Rs. 2000/sample |
| 5 | GEL PERMEATION CHROMATOGRAPHY (GPC) | Rs. 1000/sample | Rs. 2500/sample |
| 6 | ULTRA PERFORMANCE LIQUID CHROMATOGRAPHY-SINGLE QUADRUPOLE | Rs. 800/ sample | Rs.2500/ sample |
| 7 | INDUCTIVELY COUPLED PLASMA MASS SPECTROMETRY (ICPMS) + MICROWAVE SYNTHESIZER | Rs. 500/sample/element Subsequent element per sample: Rs 300/element | Rs. 1000/sample/element Subsequent element per sample: Rs 600/element |

E. Surface Characterization Facility

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| 1 | ELEMENTAL ANALYSER (CHNSO) | Rs. 800/ sample for CHNS & Rs. 1600/ sample for CHNSO | Rs. 1600/ sample for CHNS & Rs. 3200/ sample for CHNSO |
| 2 | PHYSISORPTION | Rs. 5000/ sample | Rs.10000/sample |
| 3 | CHEMISORPTION | Rs.10000/ sample | Rs.20000/ sample |
| 4 | HIGH PRESSURE BET | Rs.15000/ sample | Rs.30000/ sample |
| 5 | ELLIPOSOMETER | Rs.500/sample | Rs. 1000/sample |
| 6 | DROP SIZE ANALYSER | Rs.400/sample | Rs.700/sample |
| 7 | LASER ENGRAVER | Rs.500/sample | Rs.1000/sample |
| 8 | PLASMA CLEANER | Rs.200/sample | Rs.500/sample |
| 9 | NANO SPRAY COATER & DRYER | Rs.7000/ hr | Rs.14000/ hr |
| 10 | SURFACE PROFILER | Rs.400/sample | Rs.700/sample |

F. Advance Material Characterization Facility

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| 1 | ELECTROCHEMICAL WORK STATION | Rs. 300/hr for cv | Rs.1000/hr for cv |
| 2 | THERMOGRAVIMETRY (TG) AND DIFFERENTIAL THERMAL ANALYZER (DTA) | Rs 800/sample | Rs 2000/sample |
| 3 | DIFFERENTIAL SCANNING CALORIMETERS (DSC) | Rs 800/sample | Rs 2000/sample |
| 4 | RHEOMETER | Rs. 1000/hr | Rs. 2500/hr |
| 5 | ISOTHERMAL TITRATION CALORIMETER (ITC) | Rs. 200/hr | Rs. 400/hr |
| 6 | BIO-LAYER INTERFEROMETRY (BLI) | Single run (without sensors) Rs. 2000 INR/sample | Single run (without sensors) Rs. 4000 INR/sample |
| 7 | LOW TEMPERATURE DIFFERENTIAL SCANNING CALORIMETER (DSC) | Rs. 200/hr | Rs. 400/hr |
| 8 | PHYSICAL PROPERTY MEASUREMENT SYSTEM (PPMS) | Rs 500/ Hr (with magnetic field) Rs 300/ Hr (without magnetic field) | Rs 1000/ Hr (with magnetic field) Rs 700/ Hr (without magnetic field) |
| 9 | PULSED LASER DEPOSITION (PLD) | Rs 1000 / sample (substrate and target) | Rs 2000 / sample (substrate and target) |
| 10 | E-BEAM EVAPORATOR | Rs 800/sample (crucible and target to be provided by user) | Rs 1600/sample (crucible and target to be provided by user) |
| 11 | IMPEDANCE ANALYSER | Rs 400/sample | Rs 1000/sample |
| 12 | PC LOOP TRACER | Rs 400/sample | Rs 1000/sample |
| 13 | MASKLESS LASER MICRO WRITER | Rs 1000/sample | Rs 1500/sample |
| 14 | 3-D PRINTER | Rs 500/sample | Rs 1000/sample |
| 15 | ELECTROSPINNING | Rs 500/hr | Rs 1200/hour |
| 16 | ULTRASONIC HOMOGENIZER | Rs 1000/ hr | Rs 2000/ hr |
| 17 | BALL MILLING | Rs 1000/ hr | Rs 2000/hr |
| 18 | SOLAR SIMULATOR | Rs 100/ hr | Rs 200/ hr |
| 19 | IPCE/ IV (WITH SOLAR SIMULATOR) INCL FABRICATION | Rs 10000/ sample | Rs 20000/ sample |
| 20 | CORONA POLING | Rs. 200/sample | Rs. 500/sample |

G. Advanced Biological Characterization Facility

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| 1 | PEPTIDE SYNTHESIZER | Rs. 1000/hour | Rs. 3000/hour |
| 2 | FLUORESCENCE-ACTIVATED CELL SORTING (FACS) | Rs. 200/sample | Rs.500/sample |
| 3 | CELL HOMOGENIZER | Rs 400/ sample | Rs 800/sample |
| 4 | PCR | Rs. 400/- | Rs. 1000/- |
| 5 | PLATE READER | Rs. 200/hr | Rs. 500/hr |
| 6 | FREEZE DRIER | Rs.1000 per sample up to 100 ml / 24 hr. | Rs. 2000 per sample up to 100 ml / 24 hr. |
| 7 | PROBE SONICATOR | Rs. 100/hr | Rs. 500/hr |
| 8 | ULTRACENTRIFUGE | Rs. 100/hr | Rs. 300/hr |



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|----|-----------------------------------|---|---|
| 9. | Nano Magnetic Hyperthermia system | <p>Calorimetric measurement in aqueous suspension* Rs. 1500/sample at 1 field and 1 frequency (Further change in 1 parameter either frequency or field will cost Rs 500) <i>*no organic solvents allowed.</i></p> <p>Measurement with Cell lines* Rs. 2500/sample at 1 field and 1 frequency (Further change in 1 parameter either frequency or field will cost Rs 500)</p> <p><i>* Provide cell line/ or cells treated with nanoparticles</i></p> | <p>Calorimetric measurement in aqueous suspension* Rs. 2500/sample at 1 field and 1 frequency (Further change in 1 parameter either frequency or field will cost Rs 500) <i>*no organic solvents allowed.</i></p> <p>Measurement with Cell lines* 3000/sample at 1 field and 1 frequency (Further change in 1 parameter either frequency or field will cost Rs 500)</p> <p><i>* Provide cell line/ or cells treated with nanoparticles</i></p> |
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Note:

- 1) The users may send their queries/request to email: cif@inst.ac.in
- 2) External user are suggested to check our available instruments, specifications and types of sample compatibility and after confirmation by the CIF, payment should be done.
- 3) Once the payment is processed, then there is no provision of returning the payment due to sample compatibility issues or any issues.

GST extra@18% as applicable



Sample Analysis Request Form

Name of Principal Investigator/Scientist: _____

Institution/Organisation: _____

Type of Organization (tick): i) Govt. ii) Private/Industry

E-mail and contact number: _____

Postal address: _____

Sample description in details (Attach separate sheet): _____

Number of samples in details: _____

Sample Code and quantity: _____

If your sample is any of these: (Tick)

(Corrosive, Inflammable, Radioactive, Toxic, Carcinogenic, Volatile, Light sensitive, Explosive, Unstable)

Solvent/Medium used: *Please Specify* _____

Instrument/Machine required for analysis (in details): _____

Any special protocol for disposal, post-evaluation (Attach separate sheet, if required): _____

Payment Details*: _____

An amount of Rs. _____ (including GST@18%), dated _____ vide **DD/Online transfer no/UPI No** _____ drawn on (Bank name) _____ Mohali / Chandigarh, in favour of **DIRECTOR, INST** is enclosed.

Please attach the receipt of the payment made.

*[*Once the payment is processed, then there is no provision of returning the payment, due to sample compatibility issues or any issues. External user are suggested to check our available instruments, specifications and types of sample compatibility and after confirmation by the CIF, any payments should be done].*

GSTIN of Applicant's institute/organization: _____

Undertaking:

- I. I/We undertake to abide by the sample preparation guidelines. I/We submit the sample(s) in good faith and INST will not be held responsible for loss/damage due to reason(s) beyond its control.
- II. I/We shall give due acknowledgement to the facility in the results so published in the journals.
- III. After handing over the sample to the CIF/ respective instrument's in-charge, if some additional information is required regarding sample, researcher will have to provide it.
- IV. **I/We abide by the terms and conditions, as mentioned in page 2 of this form.**

(Name, Signature of Indenter/User and date)

(Signature & date) (Dean/Chairperson/Head of Institute/Organisation with seal)



Terms and Conditions

1. **No sample will be processed without duly sample analysis request form and the payment.**
2. ***The samples will be analysed on first come first served basis after completion of all formalities. No enquiry from outside party regarding completion of analysis of samples will be entertained before 30 working days.***
3. **Samples for the analysis should be submitted according to the specific instruction given by the corresponding instrument in-charge. So external user are suggested to check our available instruments, specifications and types of sample compatibility before making any payments. Once the payment is processed, then there is no provision of returning the payment due to sample compatibility issues or any issues.**
4. ***The samples must be submitted in separate covers for different instruments to the authorized person with proper sample code, name of instrument, analysis required and quantity of sample. The same should be clearly mentioned on requisition form.***
5. ***In case of short payment/ incomplete form/ samples not prepared according to the specific instructions/ system problem; actual experiment will be done after sorting all issues and INST will intimate about the same.***
6. ***Samples requiring a specific method will not be accepted unless accompanied with detailed method and availability of requisite infrastructure/chemicals at INST. The receipt of payment should also be deferred in these cases till the time full clarity is obtained from party.***
7. ***The decision to analyse materials with following nature will be taken by the instrument in-charge: corrosive/Inflammable/Radioactive/Toxic/Carcinogenic/Volatile/Light sensitive/Explosive/Unstable***
8. ***Data to be only supplied in CD/DVD for all instruments except NMR which will be sent via Email for NMR. No USB is allowed.***
9. ***No responsibility will be taken for loss of sample during analysis.***
10. ***Samples will not be returned after analysis.***
11. **Samples will be analysed only for research & development purposes and these results cannot be used as certificates in legal disputes.**
12. **The Director's decision shall be final in case of any dispute.**

This is to certify that I have read the above terms and conditions and agreed for the same.

(Signature of External User and date)

For Official Use

1. Sample Analysis Request No : _____
2. Sample Receiving Date : _____
3. Name of instrument in-charge : _____
4. Data/Analysis Completion Date : _____
5. Report Number : _____
6. Remarks : _____
7. **(Name and Signature of INST Official and date)**



Bank Details of INST, Mohali

| | |
|-------------------------|--|
| FAVOR: | DIRECTOR, INSTITUTE OF NANO SCIENCE AND TECHNOLOGY, MOHALI |
| BANK NAME: | CANARA BANK |
| ADDRESS: | SECTOR-34A, CHANDIGARH-160022 |
| TYPE OF ACCOUNT: | CURRENT ACCOUNT |
| ACCOUNT NO.: | 2452201001102 |
| IFSC CODE: | CNRB0002452 |
| MICR CODE | 160015003 |
| PAN No | AAAI4829E |
| GST IN No | 03AAAI4829E1Z3 |

Please send your sample with proper descriptions to address mentioned below:

CENTRAL INSTRUMENT FACILITY

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Technology, Ministry of Science and Technology,
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