

MASS SPECTROMETRY FACILITY

CSIR-CDRI, Lucknow

Charges & Sample Requirement

SL NO.	Analysis	Requirements	Charges in INR./hr./ Spectrum (18% GST will be extra)
1.	ESI-MS analysis of purified compound only	1-2 mg sample. (Solubility: Methanol, waters or acetonitrile)	450/- per sample
2.	ESI-MS/MS analysis of purified compound only	1-2 mg sample. (Solubility: Methanol, waters or acetonitrile)	900/- per sample
3.	ESI-HRMS analysis of purified compound only	1-2 mg sample. (Solubility: Methanol, waters or acetonitrile)	900/- per sample
4.	ESI-HRMS/MS analysis of purified compound only	1-2 mg sample. (Solubility: Methanol, waters or acetonitrile)	900/- per sample
5.	Qualitative LC/ESI-MS method development and sample analysis.	5-10 mg sample with information about Nature of sample and solubility (in Methanol, waters or acetonitrile)	1350/- per sample/hr (Minimum: 3 hour experiment; $1350 \times 3 =$ 4050/- per sample)
6.	Qualitative LC/ESI-MS sample analysis. (Previously developed analysis method at CDRI facility)	5-10 mg sample with information about Nature of sample and solubility (in Methanol, waters or acetonitrile)	450/- per sample/hr (Minimum: 2 hour experiment; $450 \times 2 =$ 900/- per sample)
7.	Relative quantitative LC/MS method development, validation, and analysis. (only for maximum five targeted compounds)	20 mg each sample along with minimum 2 and maximum 6 samples for relative quantitative analysis. Information about Nature of sample/matrix and solubility (Methanol, waters or acetonitrile).	1350/- per hrs (Total: 8 hours experiment; $1350 \times 8 =$ 10800/- per batch)
8.	Quantitative LC/MS method development and validation.	5-10 mg sample along with 1-2 mg standard (reference compound). Information about Nature of sample/matrix and solubility (Methanol, waters or acetonitrile) for 1-3 compounds	1350/- per sample/hrs (Option A, 40 hrs) (Option B, 16 hrs) (Option C, 8 hrs) Pl. see page no. 4
9.	Quantitative LC/MS sample analysis. (Previously developed analysis method at CDRI facility)	5 mg sample along with 1 mg standard (reference compound). Information about Nature of sample/matrix and solubility (Methanol, waters or acetonitrile).	1350/- per sample/hrs
10.	Qualitative LC-MS/MRM Based targeted analytes analysis.	5 mg sample along with 1 mg standard (reference compound). Information about Nature of sample/matrix and solubility (Methanol, waters or acetonitrile).	900/- per sample/hr (Minimum: 2 hour experiment; $900 \times 2 =$ 1800/- per sample)

Note- The above charges are for acquiring and providing the data only.

Terms and conditions:

1. As per government rules, GST (18%) will be charged extra on the analysis charges.
2. The analytical data/spectra are provided only for research/development purposes. These can't be used as certificates in legal disputes.
3. Analytical service charges are payable in advance by **National Electronic Funds Transfer (NEFT)** in favour of the Director, Central Drug Research Institute, Lucknow-226031.
4. Samples and payment details should be sent preferably in the same cover.
5. Separate samples should be sent for different analysis.
6. Maximum 5 samples per lot for any type of analysis are accepted at a time.
7. Please send the samples in quantity as mentioned in the above brochure. Samples are not recovered unless a special request is made.
8. Radio-active, unstable and explosive compounds are not accepted for analysis.
9. Interpretation of spectra/data is not undertaken normally. In special cases, this service can be provided as a sponsored project on payment of extra charges.
10. **In case of electronic payment, transaction details must be mention in correspondence letter.**

All correspondence should be address to:

Facility In-charge,

Mass Spectrometry Unit,

Sophisticated Analytical Instrument Facility & Research

CSIR- Central Drug Research Institute, B.S. 10/1 Sector-10, Jankipuram Extension, Sitapur Road, Lucknow-226031 (U.P.) Phone-+91-522-2772450, Ext. 4510,

For technical enquiry/guidance

E-mail: sanjeev_kanojiya@cdri.res.in,

Mobile: +91-9935146775 (only Monday to Friday, between 10 AM to 12.30 PM)

Electronic payment by NEFT:

Name of A/C Holder: Director CDRI, Lucknow

Account number: 30269374557

Name of Bank: State Bank of India, **Branch:** CDRI, **IFSC code:** SBIN0010174

Place: Lucknow 226031



सत्यमेव जयते

GSTIN

09AAATC2716R8Z6

Legal Name

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

Trade Name, if any

CENTRAL DRUG RESEARCH INSTITUTE

GUIDELINE FOR LC-MS FACILITY USERS

Liquid chromatography–mass spectrometry (LC-MS, or HPLC-MS) is an analytical chemistry technique that combines the physical separation capabilities of liquid chromatography (or HPLC) with the mass analysis capabilities of mass spectrometry (MS).

Stepwise experiments

1. HPLC/LC-MS Method development: The **method** is the collection of conditions in which the HPLC and MS operates for a given analysis Or **Method development** is the process of determining what conditions are adequate and/or ideal for the analysis required.
2. LC-ESI-MS/MS analysis: **Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)** is technique in which fragmentation of molecules/compounds/analytes use to identify/ confirm the chemical structure.

INFORMATION REQUIREMENTS FOR LC-MS ANALYSIS

S.NO.	Analysis	Information require for analysis
1.	HPLC/LC-MS Method development & analysis.	Nature of sample: plant extracts/chemical reaction products/pure isolated compound from column Or Fraction of plant extract: like hexane, chloroform, ethyl acetate etc. Solubility: Acetonitrile, Methanol or Water Expected: Molecular weight of analytes
2.	[LC-MS/MS] analysis or Liquid chromatography- Tandem mass spectrometry (LC-MS/MS)	1. Column: 2. Mobile Phase: 3. HPLC Program: 4. Flow Rate: 5. Injection Volume: 6. Concentration of sample: 7. MS Ionization Mode: 8. UV absorption: 9. Peak list: 10. Total ion chromatogram: Retention time of peaks (with their m/z value): example 3.51 min (m/z 395), 5.43 min (m/z 275) and 6.86 min (m/z 520)

Note- Analysis can't be performed without required information. After determination of molecular weight of analyte from LC-MS data analysis. It is advice to send your sample for LC-ESI-MS/MS analysis.

QUANTITATIVE ANALYSIS (BY LC-MS/MS)

Option A [Minimum 40 hrs experiment]

1. Sample preparation
2. HPLC/LC-MS/MS Method development
3. HPLC/LC-MS/MS Method validation (ICH guide lines)
 - a. Linearity b. Detection Limit c. Quantitation Limit d. Precision e. Accuracy
4. Data acquisition and processing
5. Data analysis
6. Report generation

Option B [Minimum 16 hrs experiment]

1. Sample preparation
2. HPLC/LC-MS/MS Method development
3. Data acquisition and processing
4. Report generation

Option C [Minimum 8 hrs experiment]

1. Sample preparation
2. HPLC/LC-MS/MS Method development
3. Data acquisition and processing
4. Processed data (only)

Note- Charges may vary depending upon complexity of sample or actual time taken in experiment/analysis.