## GC-MS/MS User Charges

1. **GC-MS/MS (Triple Quadrupole- TQ8050).** External users must pay extra 18% GST

<table>
<thead>
<tr>
<th>NIPGR, NCR-Cluster Institutes</th>
<th>Academic, Research Institutions and Start-ups</th>
<th>Private Organizations</th>
<th>Important user information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. GC-MS (Scan Mode):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Untargeted - 450 INR per sample</td>
<td>1. GC-MS (Scan Mode):</td>
<td>1. GC-MS (Scan Mode):</td>
<td></td>
</tr>
<tr>
<td>Raw data processing assistance- 1000 INR for untargeted metabolomic data analysis including library search guidance, methods of peak selection/filtering and normalized data generation.</td>
<td>1.1.1) Untargeted - 1000 INR per sample</td>
<td>1.1.2) Untargeted - 2500 INR per sample</td>
<td>Output to user of GC-MS = peak separation profile + RT + Area+ Base peak</td>
</tr>
<tr>
<td>450 INR per sample</td>
<td>1.2.1) Raw data processing assistance- 2000 INR</td>
<td>1.2.2) Raw data processing assistance- 4000 INR</td>
<td></td>
</tr>
<tr>
<td>Targeted (Scan mode/relative quantification)</td>
<td>1.3.1) Targeted (Scan mode/relative quantification)</td>
<td>1.3.2) Targeted (Scan mode/relative quantification)</td>
<td>Relative quantification based on external standard</td>
</tr>
<tr>
<td>450 INR per sample</td>
<td>1000 INR per sample</td>
<td>2500 INR per sample</td>
<td></td>
</tr>
<tr>
<td><strong>GC-TQ-MS/MS (SIM Mode):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4) Targeted - 2000 INR per sample + 100 INR per precursor ion MS/MS (i.e. per metabolite)</td>
<td>GC-TQ-MS/MS (SIM Mode):</td>
<td>GC-TQ-MS/MS (SIM Mode):</td>
<td>Output to user of GC-MS/MS =</td>
</tr>
<tr>
<td>1.4.1) Targeted - 5000 INR per sample + 200 INR MS/MS analysis (per precursor ion)</td>
<td>1.4.2) Targeted - 10000 INR per sample + 1000 INR MS/MS analysis (per precursor ion)</td>
<td>Absolute quantification based on authentic standards, precursor ion and reference ion</td>
<td></td>
</tr>
</tbody>
</table>
## LC-MS/MS User Charges

**Proposed User Charges for UHPLC-MS/MS (QTRAP 6500).** External users must pay 18% GST

<table>
<thead>
<tr>
<th>NIPGR, NCR-Cluster Institutes</th>
<th>Academic, Research Institutions and Start-ups</th>
<th>Private Organizations</th>
<th>Important user information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phytohormone estimation:</strong></td>
<td><strong>2.1.1) Defense phytohormones (JA, JA-Ile, cis-OPDA, SA, ABA):</strong></td>
<td><strong>2.1.2) Defense phytohormones (JA, JA-Ile, cis-OPDA, SA, ABA):</strong></td>
<td>Uses a mix of labelled internal standard for each sample provided by the facility</td>
</tr>
<tr>
<td>2000 INR per sample + 100 INR per precursor ion MS/MS (i.e. per phytohormone)</td>
<td>4000 INR per sample + 100 INR per precursor ion MS/MS</td>
<td>10000 INR per sample + 500 INR per precursor ion MS/MS</td>
<td></td>
</tr>
<tr>
<td>Total charge for all five defense phytohormones per sample: 2500 INR</td>
<td>Total charge for five defense phytohormones per sample: 4500 INR</td>
<td>Total charge for five defense phytohormones per sample: 12500 INR</td>
<td></td>
</tr>
<tr>
<td><strong>2.2) Growth phytohormones [IAA (Auxin), trans-zeatin (Cytokinin)]</strong></td>
<td><strong>2.2.1) Growth phytohormones [IAA (Auxin), trans-zeatin (Cytokinin)]</strong></td>
<td><strong>2.2.2) Growth phytohormones [IAA (Auxin), trans-zeatin (Cytokinin)]</strong></td>
<td>Uses a mix of labelled internal standard for each sample provided by the facility</td>
</tr>
<tr>
<td>2300 INR per sample + 100 INR per precursor ion MS/MS (i.e. per phytohormone)</td>
<td>4600 INR per sample + 200 INR per precursor ion MS/MS (i.e. per phytohormone)</td>
<td>10000 INR per sample + 500 INR per precursor ion MS/MS (i.e. per phytohormone)</td>
<td></td>
</tr>
<tr>
<td>Total charge for two growth phytohormones per sample: 2500 INR</td>
<td>Total charge for two growth phytohormones per sample: 5000 INR</td>
<td>Total charge for two growth phytohormones per sample: 11000 INR</td>
<td></td>
</tr>
<tr>
<td><strong>2.3) Amino acids</strong></td>
<td><strong>2.3.1) Amino acids</strong></td>
<td><strong>2.3.2) Amino acids</strong></td>
<td>Uses a mix of labelled internal standard for each sample provided by the facility</td>
</tr>
<tr>
<td>2000 INR/sample (UPLC-MS/MS charge)</td>
<td>5000 INR/sample (UHPLC-MS charge)</td>
<td>10000 INR/sample</td>
<td></td>
</tr>
</tbody>
</table>

Amino acids in internal standard are: Ala, Ser, Pro, Thr, Ile, Asp, Glu, Met, His, Phe, Arg, Tyr, Trp, Asn, Gln, Lys.
<table>
<thead>
<tr>
<th>2.4) Flavonoids (based on external calibration curve)</th>
<th>2.4.1) Flavonoids</th>
<th>4. Flavonoids</th>
</tr>
</thead>
<tbody>
<tr>
<td>600 INR/sample</td>
<td>1500 INR/sample</td>
<td>3000 INR/sample</td>
</tr>
</tbody>
</table>

**External calibration curve made for following Flavanoids:**
- Naringenin, Quercetin
- Rutin, Myricetin
- Kaempferol
- Epicatechin gallate
- Epigallocatechin
- Catechin, Cyanidin
- Delphinidin, Pelargonidin
- Petunidin, Peonidin
- Malvidin

<table>
<thead>
<tr>
<th>2.5) Other targeted metabolite quantitation</th>
<th>2.5.1) Other targeted metabolite quantitation</th>
<th>5. Other targeted metabolite quantitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 INR/sample (UPLC-MS/MS charge) + 100 INR per precursor ion MS/MS (i.e. per metabolite)</td>
<td>5000 INR/sample (UHPLC-MS/MS charge) + 200 INR per precursor ion</td>
<td>10000 INR/sample (UHPLC-MS charge) + 1000 INR per precursor ion</td>
</tr>
<tr>
<td>Total charge per metabolite per sample: 2100 INR</td>
<td>Total charge per metabolite per sample: 5200 INR</td>
<td>Total charge per metabolite per sample: 11000 INR</td>
</tr>
</tbody>
</table>

**External users can send students to do sample preparation in the facility**

**External users can also send lyophilized powder of plant tissue (25mg) for defense phytohormone sample preparation if required**

<table>
<thead>
<tr>
<th>2.5.6) Sample preparation charge: 2000INR per sample for defense hormone and aminoacids.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Growth hormone sample preparation will not be provided.</strong></td>
</tr>
</tbody>
</table>

**The users must have a published method, column and standards**
The users are requested to contact the metabolome facility in case of queries regarding price slot and analysis to be used. Email of metabolome facility: metabolome@nipgr.ac.in

The samples will be accepted only after the indents are processed by NIPGR. The users may give indents to Metabolome staff (008) and the indents after signature from Metabolomics facility in-charge are sent to Administration. The indents are further processed as normal consumable indents. Once the indents are approved, the user can give the samples to the facility.

Only after indents are approved by purchase committee/ performa invoices are generated and payed (for external users) can the user start sample preparation or send samples

Samples can be provided to Metabolome Staff after the indents are approved

Samples submitted in person or via post, without proper communication and prior approval by the competent authority, will not be entertained. Payments processed regarding the same, without prior approval of the competent authority, will not be the direct responsibility of Metabolome facility, NIPGR.

Sample list in Excel sheet must be provided to the facility with weight of samples and the sample tubes must have similar codes for ease of handling (Lab name- day and month- sample number. Eg. JV-2611-01).

Average processing time after sample submission is 3 weeks for metabolites in price list, for other user specific metabolites with a known method it is 6-8 weeks. The sample processing time starts after the indent is approved by NIPGR and due verification of submitted samples.

Equipments required for sample preparation will be provided by the facility. Equipments for sample preparation will be handled by the user with the guidance of the Facility-in-Charge/Authorized Operator without any extra charges.

User will be liable for any damage of the equipments by improper handling during sample preparation and will be liable for compensation for any major damage (i.e. which will hamper equipment operation).

All the samples and standards must be prepared by using MS grade solvents for good quality result.

After analysis the raw data will be provided without any statistical processing.

Equipments required for sample preparation will be provided by the facility. Equipments for sample preparation will be handled by the user with the guidance of authorized Operator without any extra charges.

User will be liable for any damage of the equipments by improper handling during sample preparation and will be liable for compensation for any major damage (i.e. which will hamper equipment operation).

Facility will not be responsible for data processing/experimental result.

Kindly acknowledge the metabolome facility in your publications

For External users, the payment has to be done in advance (online transfer) to the Institute.

The payment will be done in the following bank detail for external users:

Accounts Holder’s Name: DIRECTOR, NIPGR
Bank Name and its address: State Bank of India, Jawaharlal Nehru University, New Delhi
Account Number (Saving account): 10596550290
IFSC code: SBIN0001624
Email of the Beneficiary: finance@nipgr.ac.in