

## **Global Tender notification for the Procurement of GC-MS.**

### **Tender Summary**

1	Tender Number	IPC/SH/2023/GCMS-01
2	Tender Date	17 <sup>th</sup> July 2023
3	Item Description	GC-MS
4	Tender Type	Two bid system: (a) Technical Bid (Part A) (b) Commercial Bid (part B)
5	Place of tender submission	To The Chairperson Attn: Dr. Susanta Hazra Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bengaluru 560012, India
6	Last Date and Time for tender submission	7 <sup>th</sup> August 2023, 5:00 PM

This is a Request for quote (RFQ) from from Global manufacturers or their authorized Indian distributor for the procurement of a GC-MS system at the Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore (dated 17<sup>th</sup> July 2023). All interested vendors shall submit a response demonstrating their capabilities to produce the requested equipment to the primary point of contact listed below.

*As per the OM No.F.4/1/2023-PPD dated 03-04-2023 on Relaxation on Procurement of Certain Items through GTE, GC-MS Systems (among 364 Medical devices) are exempted from the instructions related to GTE (for details, see the Annexure A of the OM, Sl. No. 203).*

### **General Terms and Conditions**

1. Quote should come only from the Global Manufacturers or their authorized Indian distributor.
2. The bid should be submitted in the two-cover system, i.e., technical bid and commercial bid separately in sealed covers. The technical bid should contain all commercial terms and conditions except the price. The SEALED COVER superscribing tender number / due date & should arrive Main office, Inorganic and Physical Chemistry Department, Indian Institute of Science, Bangalore 560012, India, on or before due date mentioned in the tender notice. In case the due date happens to be a holiday the tender will be accepted and opened on the next working day. If the quotation cover is not sealed, it will be rejected.
3. The technical bid must contain a point-by-point technical compliance document. The technical proposal should contain a compliance table that should describe your compliance in a "yes" or "no" response against each of the items in the table listed in this RFQ. If the response is "no", the second column should state the extent of the deviation. The third column should state the reason for the deviation, if any. The fourth column can be used to compare your tool with that of your competitors or provide details as requested in the technical requirement table below.
4. In the commercial bid, the price (in INR) should be inclusive of all discounts.
5. The price of every line item in the commercial bid should be quoted along with the total quoted price for the instrument to be operational (installed and ready to use) in our facility. Please quote the price of each optional line item separately.
6. The vendor should have qualified technical service personnel for the equipment based in India (preferably in Bangalore).
7. The delivery time of the equipment should not be more than 3 months from the date of receipt of our purchase order. It should be clearly mentioned in the technical and commercial bids.

8. All quotations must be valid for at least 90 days at the time of submission.
9. The Bidder should have supplied similar equipment in reputable institutes, preferably IITs, IISc, IISERs, NITs, CSIR Labs, etc. Please provide the details and contact information of the individuals.
10. The Bidder must NOT be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere. A declaration certificate should be provided.
11. Vendors are encouraged to highlight the advantage of their tools over comparable tools from the competitors.
12. If required, a meeting for any technical clarifications can be scheduled with the undersigned by sending an email.
13. The Institute reserves the right to accept or reject any bid or to annul the bidding process and reject all bids, at any time before the award of the contract without thereby incurring any liability of the affected bidder or bidders.
14. Lowest bid will be calculated based on the total price of all items tendered for Basic equipment along with accessories selected for installation, operation, preprocessing and post processing, optional items, recommended spares, warranty, annual maintenance contract.
15. After receiving the purchase order, the vendor must provide an Order Acknowledgement within 30 days from the receipt of the Purchase Order.
16. The vendor should have a good track record of having previously supplied similar equipment in IISc and other centrally funded universities/institutes.
17. The vendor should be able to provide End User Certificates from at least five users.
18. The vendor is encouraged to provide recommendation letters from the user's university/institute, and the contact of people with the PO number.
19. If the goods are found to be defective, they have to be replaced or rectified at the cost of the supplier within 30 days from the date of receipt of written communication from us.
20. The detailed technical literature and make of each component should be submitted by the bidders.
21. The quotations should be on CIF/CIP-IISc Bangalore basis.
22. GST/other taxes, levies etc., are to be indicated separately. The BIDDER should mention GST Registration and PAN in the tender document.
23. If price is not quoted in Commercial Bid as per the format provided in tender document the bid is liable to be rejected.

#### **Service, Training, and Warranty**

1. The vendors must have a locally dedicated Sales & Service team & Application lab in Karnataka.
2. The vendors must have an appropriate set-up and capability to provide after-sales service efficiently and effectively. The supplier should give training with a similar system in their facility to that proposed in this tender.
3. Installation and training should be conducted by a qualified trained engineer.
4. Support should be available on working day from 9:00 am to 5:00 pm (excluding Public Holidays), local time.
5. A declaration of Conformity certificate, and System Validation certificate must be provided.
6. Three years of complete system warranty should be given for all the components. If the system requires service during the warranty period, the vendor must guarantee or replace the instrument free of cost. Vendors should have logistic support to ensure that over at least 95% of the service parts are readily available and upkeep delivery within 3-5 days.
7. Terms and conditions for the annual maintenance contract (AMC) beyond the warranty period should be mentioned.
8. Vendors should provide a copy of the Site-Preparation checklist.
9. Problems occurred during the warranty period should be rectified within 2 weeks or less.
10. If there is any delay in replacement or rectification, the warranty period should be extended accordingly.

## Technical requirements

The requirements listed below are only guidelines, vendors are requested to quote for equipment that fulfills the requirement to the best extent possible and least deviations, if any. Deviations are NOT an automatic reason for disqualification. A technical group will discuss them before making an informed decision.

### Technical Specifications:

#### Gas Chromatography-Mass Spectrometry (GC-MS) system:

System Capabilities:	Detailed Specification
Gas Chromatograph	<ul style="list-style-type: none"> <li>Column Oven can accommodate two columns with maximum temperature range up to 400 degree C with set point resolution of 0.1 degree C.</li> <li>It should support 15 ramps &amp; maximum temperature ramp rate of 100 degree C/min.</li> <li>Cool down of Oven from 400 degree to 50 degree in less than 8 minutes.</li> </ul>
Auto Leak tests	Autonomous (hands-free) leak tests and detection
Column Oven:	<ul style="list-style-type: none"> <li>Column Oven can accommodate two columns with maximum temperature range up to 400 degree C with set point resolution of 0.1 degree C.</li> <li>It should support 15 ramps &amp; maximum temperature ramp rate of 100 degree C/min.</li> <li>Cool down of Oven from 400 degree to 50 degree in less than 8 minutes.</li> <li>Auto retention time adjustment feature.</li> <li>Touch screen display.</li> </ul>
Inlets	<ul style="list-style-type: none"> <li>Split Split Less Injector for split, split less with fully – 1 no.</li> <li>EPC and pressure range upto 100 p.s.i.</li> <li>Maximum temperature should be 400-degree C.</li> </ul>
Autosampler	<ul style="list-style-type: none"> <li>Auto sample injection device which is capable of self-dilution.</li> <li>Software controlled sampler.</li> <li>2 ml vial volume for liquid injection.</li> <li>Vial capacity for both should be 8 nos or more.</li> </ul>
<b>Single Quadupole Configuration</b>	The following are specifications for a Mass Spectrometer which is to be interfaced in a gas chromatograph
<b>MS specification</b>	
Specification	<ul style="list-style-type: none"> <li>Electron Ionization (EI) source with maximum temperature of 300 degree C or better.</li> <li>Dual Filament design. • Electron energy up to 150 eV or more.</li> <li>Mass Analyzer: Quadruple.</li> <li>Mass range: 2 to 1,050 m/z</li> <li>Scan rate of 10000 amu/sec or more.</li> <li>Sensitivity: 200:1 S/N of injecting 1 pg/μL OFN for Standard scanning from 50 to 300 u at nominal 272.0 u ion.</li> <li>Vacuum pump : Turbo molecular pump with capacity of 250L/sec or more</li> </ul>
Computer and Software Features	<ul style="list-style-type: none"> <li>Latest Branded 64-bit computer with Intel i5 processor, 8 GB RAM, 500GB, minimum 21” branded monitor, keyboard and Mouse with Licensed Windows 10 OS.</li> <li>preloaded software tools should be quoted.</li> <li>Suitable data acquisition software to acquire the data.</li> <li>Identification of compound spectra with standard libraries and includes chromatographic deconvolution with retention index using application specific database.</li> <li>GC/software should have a provision for automatic retention time adjustment if the column is changed/trimmed</li> </ul>

	<ul style="list-style-type: none"> <li>Should have Suitable Quantitation tools for Scan. SIM</li> </ul>
Library	<ul style="list-style-type: none"> <li>Licensed NIST 2020 or latest Library</li> </ul>
Consumables	<ul style="list-style-type: none"> <li>Auto Injector 10<math>\mu</math>L syringes – 5 nos</li> <li>Maintenance Kit</li> <li>EI filament, 2 extra Nos to be added</li> <li>Septa – 200 Nos</li> <li>Liner -25 nos</li> <li>Ferrule- 20 no</li> <li>Column nut – 20 no</li> <li>O-ring – 20 no</li> <li>Gas Filter Kit to be included.</li> <li>Screw cap: 500 no</li> <li>Column &amp; Interface nut – Each 2 No.</li> <li>Autosampler vials: 500 nos</li> <li>Autosampler vial glass-insert (100 - 150 <math>\mu</math>L with plastic feet) : 500 no</li> <li>Vacuum oil – 2 L</li> <li>Helium (He) gas cylinders with regulators - 02</li> <li>Gas panel with gas purifiers set up</li> <li>Branded 2 tons air condition system and installation</li> </ul>
column	<ul style="list-style-type: none"> <li>HP-5MS 30m X 0.25 mm X 250 <math>\mu</math>m film thickness – 2 nos</li> </ul>
Accessories	<ul style="list-style-type: none"> <li>Helium cylinders (02) with regulator and Gas Purification panel and manifold for each gas which can switch empty cylinder to filled cylinder. All the cylinders should be covered with four side caging system and enough tubing should be supplied so that cylinders can be connected with GCMS.</li> <li>Interested vendors can visit and inspect the site and distance from lab to cylinder place</li> </ul>
Printer	<ul style="list-style-type: none"> <li>A latest branded laser monochrome Printer</li> </ul>
Training	<ul style="list-style-type: none"> <li>Onsite demonstration and training for the faculty/scientists to be provided periodically for handling of the system and its application</li> </ul>
Warranty	<ul style="list-style-type: none"> <li>3 Years extensive warranty to be offered for the GC-MS</li> </ul>

**Optional items:**

- Total warranty of 3 years + 3 years AMC optional

**Other requirements**

- The payment terms will be specified in the commercial proposal and is subject to negotiations.
- A set of basic experiments for performing routine checks of acceptable operation with clear instructions to be provided. A standard sample to estimate column efficiency should be included.
- Please provide details of the number of trained personnel in Bangalore who can service the instrument.
- Please include other options currently available which can be added in the future.
- The vendor should attach product brochures along with the technical bid.

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