# भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

शिक्षा मंत्रालय, भारत सरकार द्वारा स्थापित

**सेक्टर-81,नॉलेज सिटी,प॰ ओ॰ मनोली, एस॰ ए॰ एस॰ नगर,मोहाली, पंजाब 140306**

**INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH MOHALI**

(Established by Ministry of Education, Govt. of India)

Sector-81, Knowledge city, PO-Manauli, SAS Nagar Mohali-140306, Punjab

PAN No. - AAAAI1781K GSTIN No:- 03AAAAI1781K2ZS

• **Phone : +91-172-2240086 & 2240121** • **Fax : +91-172-2240124, 2240266** • **http://www.iisermohali.ac.in** • **Email:** stores@iisermohali.ac.in


CPPP/Institute Website

IISERM (1313-E) 20/21-Pur Dated: 26th August 2020

# NOTICE INVITING E-TENDER

Online tenders are invited on behalf of Director, IISER Mohali in **TWO BID SYSTEM** for the **Supply, installation and commissioning of Gas Chromatograph Mass Spectrometer (GC-MS)** as per technical specification and details given below and BOQ list from the original manufacturer/supplier at CPPP i. e. **https://eprocure.gov.in/eprocure/app**. Tender documents may please be downloaded from the E-procurement portal website **https://eprocure.gov.in/eprocure/app**& Institute website **www.iisermohali.ac.in.**

-sd-
(Mukesh Kumar)
Assistant Registrar (P&S)

# भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

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## E-TENDER NOTICE

| | |
|---|---|
| Tender Ref.- IISERM(1313-E)20/21-Pur | Dated :- 26th August 2020 |

**Critical Date Sections**

| Sr. | Description | Date | Time |
|---|---|---|---|
| 1. | Tender Publishing Date and time | 26th August 2020 | 6:00pm |
| 2. | Tender Document download start Date & Time | 26th August 2020 | 6:00pm |
| 3. | Bid Submission start Date &Time | 26th August 2020 | 6:00pm |
| 4. | Bid Submission End date and Time | 28th Sep 2020 | Upto 11:00am |
| 5. | Tender opening Date and Time | 29th Sep 2020 | At 11:30am |

Online tenders are invited on behalf of the Director, IISER Mohali in **TWO BID SYSTEM** for following item(s) from the original manufacturer/supplier at CPPP i.e. **https://eprocure.gov.in/eprocure/app**. Tender documents may please be downloaded from the E-procurement portal website **https://eprocure.gov.in/eprocure/app** & Institute website **www.iisermohali.ac.in.**Tender fee in shape of DD/Banker Cheque of Rs 590/- (Non-refundable) and EMD of Rs.90,000/- should be submitted by DD /Banker Cheque/FDR/ Bank Guarantee in favour of the Registrar, IISER Mohali payable at Mohali or through Online mode in Institute Account (Canara Bank Saving Account Number 4790101001912 and IFSC Code CNRB0004790). However, scanned copy of the both tender fee and EMD should be upload on website along with technical bid part. The hard copy of the same in original to be send to the address mentioned below duly superscribing the supply/work name and reference/ tender ID on the envelope and same must reach before opening the bid and if not received within due date the bid will be rejected summarily.

**The Original EMD and Tender Fee should be sent to:**

Assistant Registrar (P&S)
Indian Institute of Science Education and Research Mohali
Sector-81, Knowledge City, SAS Nagar, Mohali, Punjab,
India, Pin: 140306

**Non-receipt of original EMD and Tender Fee will lead to rejection of tender.**

| Sr. | Description | Qty. (in units) |
|---|---|---|
| 1. | **Supply, installation and commissioning of Gas Chromatograph Mass Spectrometer (GC-MS)**<br>**Technical specifications of Gas Chromatograph Mass Spectrometer (GC-MS)**<br><br>***A) Requirement***: One Gas Chromatograph – Triple Quadrupole Mass Spectrometry (GC-MS/MS) system ininvolving highly sensitive, accurate and reproducible Gas Chromatograph, Mass Spectrometer and Flame Ionization Detector system for qualitative and quantitative analysis of natural products, synthetic organic/inorganic compounds, etc.<br><br>***B) Conditions***:<br>(i) The Gas Chromatograph (GC) integrated with Mass Spectrometer (MS) and Flame Ionization Detector (FID) system must be manufactured, sold and installed by a single vendor to provide better service and operation.<br>(ii) The quoted model should have been launched within the last five years in the global market and, the manufacturer should guarantee the supply of spares till 10 years from the date of installation.<br>(iii) Tendered price should include delivery, installation, commissioning and training at IISER Mohali.<br>(iv) All the spare parts of the system should be from the same genuine brand of the manufacturer.<br>(v) The quoted GC-MS/MS model should have at least 10 installations (until the date of bid submission) in Government Institutes/Universities/Colleges in India.<br>(vi) The supplier must have an active support in the Tricity (Chandigarh/Mohali/Panchkula) region.<br><br>**C) Technical Specifications**:<br><br>***1. Basic requirements***:<br>(i) The system should be capable of supporting two inlets and, at least, two detector ports simultaneously.<br>(ii) The system should include hardware, software, consumables, methods and additional tools to accelerate sample turnaround and minimize cost of operation.<br>(iii) The system should have gas saver mode or any other similar/equivalent mode(s) to reduce the consumption of gases without affecting the overall performance of the machine.<br>(iv) The system should have digital control(s) for maintaining the pneumatic/pressure of the gases.<br><br>***2. Gas Chromatograph and oven***:<br>(i) Column oven with temperature range from near ambient to 400 $^{o}$C or higher.<br>(ii) Maximum oven heating rate: 110 °C/min or above.<br>(iii) Temperature accuracy: ± 1% or better.<br>(iv) Oven cooling speed: 400 $^{o}$C to 50 $^{o}$C within 5 min.<br>(v) Temperature program 8 ramps & 9 plateaus or better.<br>(vi) PPC/EPC/AFC/IEC for auto-sampler, injector & detector (with all zones) with single point control through software.<br>(vii) Fully automated duel channel system with real-time graphical display of chromatogram.<br>(viii) The system must have touch screen or PC based user interface for instrument operation and all the modules should be controlled with single software.<br>(ix) The system should be suitable for all capillary columns.<br>(x) Carrier Gas Pneumatic program rates 0-100.0 psi/min/ 0-100.0 mL/min/0-200.0 cm/sec or ballistic or suitable as per instrument requirement.<br><br>***3. Split/splitless capillary injector***:<br>(i) Temperature range should be 5 $^{o}$C above ambient up to 400 $^{o}$C or better. | **01** |

(ii) Split ratio: 500:1 or better.
(iii) Temperature-programming up to 2 ramps and at up to 700 deg C/ Min.
(iv) PPC/AFC/EPC/IEC pneumatics include automatic control of split vent by split flow or split ratio.
(v) Two choices of liner: 2-mm and 4-mm internal diameter.
(vi) Pressure setting range: 0 to 100 psi or better
(vii) The system should be suitable for all capillary columns.

***4. Auto Sampler***:
(i) Suitable vial capacity of minimum 15 samples with area reproducibility of 0.3% RSD or less.
(ii) Injection speed: Slow, normal and fast options should be available.
(iii) Capable of injecting sample volume from 1 μL to 50.0 μL or more.
(iv) Auto-sampler should be operational for both the inlets without any hardware change.

***5. Triple Quadrupole Mass Spectrometer***:
(i) It should have an non coated inert EI source with dual filaments and it should be programmable up to 350°C.
(ii) It should have a high capacity, split flow, dual-stage turbomolecular vacuum pump for high vacuum build-up.
(iii) Mass range(m/z) upto ≥ 1000 amu.
(iv) Dynamic range (electronic) $10e^6$
(v) Mass resolution must have unit mass adjustment by tune, 0.7 to 2.5 daltons.
(vi) Scan rate up to 12,500 amu/sec or better.
(vii) Collision energy: up to 60 eV or better.
(viii) Detector: High Sensitivity electron multiplier detector or triple off axis detector or equivalent.
(ix) Pumping system: Highly efficient turbo molecular pump with capacity of at least 250 L/sec or better.
(x) MS Data Collection: Full Scan & Selected Ion Monitoring (SIM) and Acquisition Rate should be 100 points/sec (SIM).
(xi) Resolution : 0.4 to 2.5 amu or better and, the sensitivity of the MS/MS system MUST be demonstrated on site at the time of the installation.

***6. Flame ionization Detector***:
(i) Minimum detection limit: <3 pg c/s or better.
(ii) Dynamic range $10^7$ (± 10%).
(iii) Data acquisition rate: up to 250 Hz or better.
(iv) Electronic gas control for Air, Hydrogen, Nitrogen, Helium & Argon.

***7. Columns***:
GCMS Capillary Columns with dimension 30m X 0.25mm X 0.25 μm: Qty. 2

***8. Libraries***:
Latest and licensed versions of the following mass spectral libraries containing mass spectral and GC data of natural products, fragrances, pheromones, drugs, pesticides, pollutants and their metabolites should be integrated with the MS search mode.
(i) NIST library (2020)
(ii) Willey library (optional)
(iii) Fiehn GC/MS Metabolomics RTL Library (>1000 RTL spectra with free updates).

***9. Workstations and Software***:
(i) The system should be provided with one processing and one acquisition computer. Minimum computer specifications for each computer: preinstalled Windows 10 or higher version, Intel Core i5 Duo or a higher processor 3.0 GHz, 16 GB RAM, 1 TB hard disk, mouse, English keyboard, 24-inches LCD monitor Graphics Media accelerator, USB Ports, ethernet port, optical USB Mouse, DVD+ RW, laser printer and suitable online UPS with minimum 1 Hour backup.

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|---|---|---|
| | (ii) System should be quoted with original licensed software needed to control the system along with original CDs for GC as well as MS. No migration kit or Copy to right software is acceptable. Software should include free upgrades up to 5 years. All software (and potential upgrades) should be compatible with the given operating system.<br>(iii) GCMS software solution should be capable of obtaining data from MS and GC detectors simultaneously or separately. It should optimize MS parameters automatically or manually through software tuning programs and print an auto tune report.<br>(iv) Software should display the real-time plot for chromatograms and instrument parameters and, print a real-time plot report. The software should be compatible with MS Office for easy import and export of the data.<br>(v) Operating Software should be amenable to automated calibration, auto tuning, automated switching from MS to MS/MS and should have all Ion MS mode and effective data mining tools.<br><br>***10. Essential Accessories***:<br>(i) Gas Cylinders & Gas Purification Panel: Helium Gas cylinders (2 Qty), Hydrogen Gas Cylinder (1 Qty), Zero Air Gas Cylinder (1 Qty.), Nitrogen Gas Cylinders (1 Qty), double stage SS regulators for each cylinder, purification panels, Tubing, Fitting etc. with ISI marked regulators.<br><br>***11. Other requirements***:<br>(i) IISER will provide empty space with electricity and AC connections. It will be vendor's responsibility to install the equipment and other accessories to run the instrument.<br>(ii) The tender price should include delivery, installation and commissioning at IISER Mohali.<br>(iii) The vendor should provide a copy of site-preparation checklist.<br>(iv) The vendor should provide the vibration-resistant table platform for mounting the entire system.<br>(v) The vendor must highlight the desired specifications in their technical brochure sheets and mention compliance with proposed specifications.<br>(vi) Familiarization & application Training should be given at our institute with no additional charge.<br><br>***12. Warranty***:<br>Five years warranty on complete system including Gas Chromatograph, Autosampler, Computer, Printer, Gas Purification Panel, Gas Regulators & UPS from the date of installation and commissioning**.**<br><br>***13. Essential Consumables***:<br>Note: All Consumables should be quoted with OEM standard Part numbers.<br>(i) Auto-sampler Syringe: 6<br>(ii) Liner for split/splitless mode: 5 each<br>(iii) Compatible Ferrules for MS 20<br>(iv) MS Filament for EI 5<br>(v) Vacuum Pump Oil: 10 Litres<br>(vi) 2 ml Vials with screw cap: 1000/pk at least 5 Nos<br>(vii) Inlet Septa: 500/PK 1<br>(viii) Jet for FID: 2<br>(ix) Column net for FID: 10 Nos<br>(x) Column net for MS: 10 Nos<br>(xi) Calibration standard for EI Mode: 1<br>(xii) Restriction Capillary 10 m: 1<br>(Xiii) Column Union: 10 Nos | |

**A) IMORTANT NOTES:-**

I. **The online updated Price BOQ is in INR format. If bidder want to quote other than INR please specify the quoted currency in the technical bid/part and fill the amount in same**

**updated BOQ.**

II. **If quoted in currency other than INR, kindly specify shipping terms/dimensions and weight of the shipment/ mode of shipment/payment terms.**

III. **The Online bids should be submitted directly by the original manufacturer/Service Provider, If quotation is submitted/filled by any representative/agent/dealer then they must upload a authority certificate from the principal company.**

IV. **All MSME/NSIC/Startup Units shall be considered as per provisions/rules prescribed by Govt of India.**

V. **Kindly do not quote end of life model. Spares should be available minimum period of 5 years for quoted models.**

## B) SUBMISSION OF TENDER

I. All bid/ tender documents are to be uploaded online at Central Public Procurement portal i.e. **https://eprocure.gov.in/eprocure/app** only and in the designated cover/ part on the website against tender ID. Tenders/ bids shall be accepted only through online mode and no manual submission of the same shall be entertained except tender fee and EMD. Late tenders will not be accepted.

II. The online bids shall be opened at the office of the Assistant Registrar (P&S), IISER Mohali, on above given date and time. If the tender opening date happens to be on a holiday or non-working day due to any other valid reason, the tender opening process will be attended on the next working day at same time and place. IISER Mohali will not be responsible for any error like missing of schedule data while downloading by the Bidder.

III. The bidder shall upload the tender documents duly filled in and stamped by the authorized signatory on each and every page. Tender not submitted/uploaded in the prescribed form and as per the tender terms and conditions shall be liable for rejection.

IV. The bidder shall upload scanned copy of the PAN Card, GST number duly signed and stamped. **Also bidders applying against 'MSME/NSIC Certificate" issued by appropriate Authority, should ensure that the certificate attached is relevant to the area of service/supply. For example, If the tender is for "supply & installation of Desktop"** ***the certificate should be issued for activity/area of "Computer supply and services activities etc" otherwise bid will be REJECTED without notice.***

V. E-procurement system ensures locking on the scheduled date and time. The system will not accept any bid after the scheduled date and time of submission of bid.

## C) INSTRUCTIONS

1. The Online bids should be submitted directly by the original manufacturer/supplier, If quotation is submitted/filled by any representative/agent/dealer then they must upload a authority certificate from the principal company for quoting the price otherwise such quotation will be rejected.

2. The quantity mentioned in this inquiry is and shall be deemed to be only approximate and will not in any manner be binding on the Institute. Before the deadline for submission of the online bid, IISER Mohali reserves the right to modify the tender document terms and conditions. Such amendment/modification will be notified on website against said tender ID.

3. The rates offered should be FOR Chandigarh/Mohali in case of firms situated outside Chandigarh/Mohali, and free delivery at the Institute premises in case of local firms. Supplier from outside India should mention the Ex-works/FOB/FCA/CIF/CIP price clearly. Conditional tenders will be summarily rejected.

4. In case of Ex-godown terms the amount of packaging forwarding freight etc. should clearly be indicated by percentage or lump sum amount. Institute has policy not to make any advance payments towards any purchase, Letter of credit can be opened if required.

5. THE INSTITUTE IS EXEMPTED FROM CUSTOM DUTY under notification no- TU/V/RG/-CDE(1062)/201 CUSTOM DT.30.08.2016.

6. Tax: This Institute is not exempted from the payment of GST. The current rate (i.e. percentage of GST should be clearly indicated included or excluded) wherever chargeable. Please also provide/upload the copy of PAN card, GST number duly self-attested.

7. Concessional GST is applicable for all the items purchased for Research labs vide Ministry of Finance, notification no. 45/22017 dated 14.11.2017 and 47/2017 dated 14.11.2017.

8. Bidder/s quoting in currency other than **Indian Rupee (INR**) should explicitly mention the currency in which tender quoted wherever applicable in Technical Bid along the tender documents.

9. The delivery period should be specifically stated. Earlier delivery will be preferred.

10. The firms are requested to provide/upload detailed description and specifications together with the detailed drawings, printed leaflets and literature of the article quoted. The name of the manufactures and country of manufacture should also invariably be stated. In the absence of these particulars, the quotation is liable for rejection.

11. Validity of offer: 90 days. The warranty period after satisfactory installation should be mentioned and firm should replace all manufacturing defect parts/ whole item under warranty without any extra cost including clearance, freight, taxes. Security deposit/ Bank Performance Guarantee @ 10 % of the value of supply order as per norms may be sought from the firms.

12. The right to reject all or any of the quotation and to split up the requirements for itemized L-1 or relax any or all the above conditions without assigning any reason is reserved by the IISER Mohali. For any corrigendum and addendum please be checked the website https://eprocure.gov.in/eprocure/app and http:/www.iisermohali.ac.in

13. Disputes, if any, shall be subject to jurisdiction in the court of Mohali only.

–sd-
(Mukesh Kumar)
Assistant Registrar (P&S)