



# भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

शिक्षा मंत्रालय, भारत सरकार द्वारा स्थापित

सैक्टर 81, नॉलेज सिटी, प० ओ० मनोली, एस० ए० एस० नगर, मोहाली, पंजाब - 140306

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

(Estd. By Ministry of Education, Govt of India)

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

PAN No. - AAAAI1781K GST No. 03AAAAI1781K2ZS

• Phone : +91-172-2240086 & 2240121 • Fax : +91-172-2240124, 2240266 • <http://www.iisermohali.ac.in> • Email: [stores@iisermohali.ac.in](mailto:stores@iisermohali.ac.in)

Cppp/Institute's Website

IISERM (1403)20/21-Pur

Dated: 13<sup>th</sup> November 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) Instrument with accessories** 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](http://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(1403)20/21-Pur

Dated :- 13<sup>th</sup> November 2020

### **Critical Date Sections**

Sr.	Description	Date	Time
1.	Tender Publishing Date and time	13 <sup>th</sup> Nov 2020	6:00pm
2.	Tender Document download start Date & Time	13 <sup>th</sup> Nov 2020	6:00pm
3.	Bid Submission start Date & Time	13 <sup>th</sup> Nov 2020	6:00pm
4.	Bid Submission End date and Time	15 <sup>th</sup> Dec 2020	Up to 11:00am
5.	Tender opening Date and Time	16 <sup>th</sup> Dec 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](http://www.iisermohali.ac.in). Tender fee in shape of DD/Banker Cheque of Rs 590/- (Non-refundable) and EMD of Rs. 80,000/- 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.**

## ITEM DETAILS:-

Sr.	Description	Qty. (in units)
1.	<p data-bbox="236 259 1235 338"><b><u>Supply, installation and commissioning of Gas Chromatograph Mass Spectrometer (GC-MS) Instrument</u></b></p> <p data-bbox="236 394 555 423"><b><u>Technical Specifications:</u></b></p> <p data-bbox="236 465 387 495"><b>(I) General:</b></p> <ol data-bbox="293 501 1385 801" style="list-style-type: none"><li>1. Fully automated system with programmable controls for injector, detector, purge gas, etc. 2. Instrument should be compatible to desktop computer based user interface with a backup in-built operating system.</li><li>2. System should support two injectors and two detectors and they should be fully automated.</li><li>3. Software controlled splitter to send analytes to FID and MS detectors</li><li>4. All modules asked in tender should be controlled with single software, and the software should come with perpetual license.</li><li>5. System should be suitable for all mass capillary columns.</li></ol> <p data-bbox="236 844 416 873"><b>(II) GC Oven:</b></p> <ol data-bbox="293 880 1235 1081" style="list-style-type: none"><li>1. Temperature range: ambient to 450 °C</li><li>2. Maximum oven heating rate: 100 °C/min or above</li><li>3. Cool down time from 450 °C to ambient temperature in less than 5 minutes.</li><li>4. Programmable ramps and plateaus: a minimum 7 ramps and 8 Plateaus</li><li>5. Temperature set point resolution: 1 °C.</li><li>6. Should be able to accommodate two capillary columns</li></ol> <p data-bbox="236 1124 903 1153"><b>(III) Programmable Split/split less capillary injector:</b></p> <ol data-bbox="293 1160 1385 1361" style="list-style-type: none"><li>1. Temperature-programmable inlet with an operating range of ambient to 400 °C or better 2. Programmable inlet with 5 ramps or better</li><li>2. Split Ratio: 500:1 or better</li><li>3. Pressure setting range: 0 to 100 psi or better with compatible column internal diameter – provide details about the pressure range versus column diameter, and their compatibility</li></ol> <p data-bbox="236 1404 483 1433"><b>(IV) Auto Sampler:</b></p> <ol data-bbox="293 1440 1193 1563" style="list-style-type: none"><li>1. Suitable vial capacity for analysis of 10 samples or better, with a provision to upgrade</li><li>2. Injection speed: should be programmable</li><li>3. Capable to inject sample volume: from 1uL to 20.0 uL or better</li></ol> <p data-bbox="236 1606 435 1635"><b>(V) FI detector:</b></p> <ol data-bbox="293 1641 1257 1809" style="list-style-type: none"><li>1. Fully PC controlled; should also be controlled by the in-built software</li><li>2. MDL: &lt; 1.5 pg c/s or less.</li><li>3. Dynamic range: &gt; 10<sup>7</sup> or better</li><li>4. Data acquisition rate: up to 500 Hz or better.</li><li>5. In line with the oven temperature, the temperature range should be up to 450 °C</li></ol> <p data-bbox="236 1852 464 1881"><b>(VI) MS detector:</b></p> <ol data-bbox="293 1888 1313 2116" style="list-style-type: none"><li>1. Fully PC controlled; should also be controlled by the in-built software</li><li>2. Ion Source operating temperature: Programmable upto 300 °C or better</li><li>3. System must have EI (Electronic ionization), upgradable to CI (chemical ionization)</li><li>4. Mass range: m/z up to 1000 amu or better</li><li>5. Scan rate upto 15,000 amu/sec or better</li><li>6. EI Voltage: 50 eV or better</li><li>7. Analyzer: should be monolithic hyperbolic quadrupole with programmable</li></ol>	01

- temperature. 8. Detector: High sensitivity electron multiplier detector.
8. Pumping system: single 250 L/sec turbo molecular pump or better
  9. Resolution: MS must have at least 1 amu mass resolution.
  10. Data Collection: Full Scan & Selected Ion Monitoring (SIM).
  11. EI scan sensitivity: 1500:1 S/N for 1 pg OFN.
  12. Libraries: original, licensed latest version of NIST 2020 library in CD and dongle. Complete details including catalogue number and retention indices

**(VII) Software:**

1. System should be quoted with 64 bit original licensed software needed to control the entire system along with original CDs for GC as well as MS. Should also come with single point control of all GC-MS and its modules, customizable report.
2. Imports information directly from the acquisition method.
3. Compatible with mac/windows 10
4. Automatic adjustment of retention time

**(VIII) Columns:**

1. Low bleed 30 meter capillary columns (Qty: 02): 5% diphenyl dimethyl polysiloxane -01 and polyethylene glycol-01 with OEM part numbers for the analysis of organic compounds.
2. Quote any additional recommended columns under optional category.

**(IX) Other essentials:**

1. **Gas Cylinders & Gas Purification Panel:** Helium Gas cylinders (01), Hydrogen Gas Cylinder (01), Zero Air Gas Cylinder (01), Nitrogen Gas Cylinders (01), double stage ISI marked SS regulators for each cylinder, purification panels, Tubing, Fitting with all associated material.
2. **Wall-mount gas purification system** for He, N2, H2, Zero air
3. **Online UPS:** Suitable on-line UPS with at least one hour back up
4. **Computer:** Intel i7 processor with Windows desktop (i5 or better processor with Mac). 22 inch screen or better. Full HD monitor. HDD minimum 500 GB. Minimum 16 GB RAM. Optical DVD Recordable, wired and wireless operating system with latest operating system for Mac/Windows, Mouse and Keyboard.
5. **Printer:** compatible Laser printer with a resolution of 1200 x 1200 dpi or better.

**(X) Warranty:**

**5 years warranty on complete system including Gas Chromatograph, Autosampler, Computer, Printer, UPS and all other associated components.**

**(XI) Consumables:**

1. Should be quoted with standard part numbers
2. Should not be quoted as optional items
3. Any additional instrument-specific consumables should be provided

Description	Qty
Auto-sampler Syringe	5
Liner for split/splitless mode	5
Compatible Ferrules for MS	10
Filaments	5
Vacuum Pump Oil	10 ltrs
2 ml Vials with screw caps	2000
Screw Caps & Septa for 2 ml vials	2500
Inlet Septa	500
Jet for FID	2
Column nut for FID	10
Column nut for MS	10
Calibration standard for EI Mode	1
Column cutter	1

O-rings 20	20
Glass wool	1

**(XII) Training:**

1. Installation and comprehensive training related to operation, calibration, maintenance, and safety should be given at our lab with no additional charge. Vendor should also address queries over phone and email.
2. The vendor should have office or agents in India (preferably in Chandigarh/Mohali region).
3. Qualified service and maintenance of the instrument by the direct company personnel is preferred.

**(XIII) Others:**

1. All the requirements laid down under the above specifications must carefully read and understood before claiming your instrument as “complied”.
2. Provide compliance sheet along with the technical bid, any deviation from the aforementioned specifications should be clearly highlighted in the remarks section.
3. Any deviation from the above two conditions will be considered as violation.

**(XIV) Optional items:**

1. **Hydrogen generator with 5 year warranty:**
  - a. 99.999% or better purity of hydrogen
  - b. >100 cc/min flow rate or better
  - c. Automatic, portable, reliable and durable
  - d. Leak-detection tool which should alert the user or auto shutdown feature
2. **Nitrogen generator with 5 year warranty:**
  - a. 99.999% or better purity of nitrogen
  - b. >250 cc/min flow rate or better
  - c. Automatic, portable, reliable and durable
3. **Zero-air gas generator with 5 year warranty:**
  - a. >1500 cc/min flow rate or better
  - b. ultra-pure gas with <0.05 ppm total impurities (predominantly hydrocarbons or those that interfere with the GC analysis)
4. **Air compressor with 5 year warranty**
  - a. Convert ambient air to compressed air
  - b. Noise-free, portable with least vibrations
5. **Columns:** low-bleed 5% diphenyl dimethyl polysiloxane -01 and polyethylene glycol-01 30 meter columns and any other suggested columns with latest advancements.
6. **Consumables**
7. **AMC terms and conditions for an additional 3 years**

**A) IMPORTANT NOTES:-**

- I. **The online updated Price BOO 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 BOO.**
- II. **Please bifurcate the price on shipping terms i.e. Ex-works -> FCA/FOB -> CIP/CIF in price BOO and specify the same in technical bid without price.**
- III. **If quoted in foreign currency, kindly clearly specify the terms of delivery/country of origin/bank details with swift code/weight/size/dimension of shipment.**

- IV. **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.**
- V. **Kindly specify the weight of the product including weight of packing for assessment of Freight charges, if quoted in foreign currency. Also mention in Technical Bid/Compliance sheet the currency in which quoted.**
- VI. **Kindly do not quote end of life model. Spares should be available minimum period of 5 years for quoted models.**
- VII. **All MSME/NSIC/Startup Units shall be considered as per provisions/rules prescribed by Govt of India.**
- VIII. **WARRANTY: MIN ONE YEAR. IF NOT SPECIFIED ABOVE.**
- IX. **Auto-extension of last date has been activated by CPP Portal for the tenders which has participation less than 2 bids.**

**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)