

# Limited Tender Enquiry

For

Supply, Installation and Commissioning of  
Gas Detection Unit With Digital Interface (Gas  
Chromatograph) and Accessories (Equipment)

At

Department of Chemistry, Faculty of Science,  
University of Allahabad, Prayagraj

NIT No.: UoA/CHEM/SK/24/01

NIT Issue Date: 07.08.2024

Last Date of Submission: 03.09.2024 (05: 00 PM)



University of Allahabad, Prayagraj

[www.allduniv.ac.in](http://www.allduniv.ac.in),

[www.eprocure.gov.in](http://www.eprocure.gov.in)

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## UNIVERSITY OF ALLAHABAD

### Limited Tender Enquiry (LTE)

**Subject:- LTE for supply, installation, and commissioning of Gas Detection Unit With Digital Interface (Gas Chromatograph) and Accessories at Department of Chemistry, Faculty of Science, University of Allahabad (UoA).**

Dear Sir/Ma'am,

The University intends to purchase 'Gas Detection Unit With Digital Interface (Gas Chromatograph) and Accessories' with commissioning and installation at Department of Chemistry in Faculty of Science, University of Allahabad. Kindly send your QUOTATIONS giving lowest rate along with terms and conditions if any in Sealed Covered envelope addressed to **Purchase Officer, Purchase & Stores Department, University of Allahabad, Prayagraj, (UP), Pin-211002**. This must reach the office on or before **03.09.2024 till 5.00 PM**. The word "**Quotation for supply, installation and commissioning of Gas Detection Unit With Digital Interface (Gas Chromatograph) and Accessories at Department of Chemistry in Faculty of Science, UoA**" with our reference no. of LTE and date of LTE must be clearly mentioned on the sealed envelope.

#### **GENERAL TERMS AND CONDITIONS FOR LIMITED TENDER ENQUIRY (LTE)**

1. Mode of submission: Bid documents to be furnished by the bidder in 1 sealed envelope containing following 2 packets:
  - a. Technical bid (All documents other than price bid in sealed envelope).
  - b. Financial bid (Containing price bid in specified format in a sealed envelope)
2. While submitting the quotation following should invariably be mentioned:
  - a. Details of complete specification with model and manufacturer name and address should be given while quoting. Literature / Pamphlets should also be enclosed wherever applicable.
  - b. Lowest rate F.O.R. destination. Period of validity of quoted prices – (Minimum Six Months).
3. If you are manufacturer of the items or if you have proprietary distribution/sales authorization, please mention it in the quotation.
4. For items of equipment nature, the Instruction Manual, Diagram of the circuit drawing, etc must be supplied along with supply without which the delivery shall be incomplete.
5. Vendor must enclose an authorization certificate of the company with tender document.
6. Please fill in and return the Suppliers Profile Form & Mandate Form annexed at Annexure 'A' and Annexure 'B'.
7. Non Transferable tender:

Neither the contract nor any rights granted under the contract may be sold, leased, sublet, assigned or otherwise transferred, in whole or in part, by the vendor and any such attempts shall be void and of no effect without the advance written consent of the University of Allahabad.
8. The rates quoted by the bidders must be inclusive of supply, installation, commissioning, transportation, insurance, training/support and warranty, taxes and duties.
9. Rates must clearly indicate all taxes and the discounts offered, if any.
10. **An Earnest Money Deposit of Rs. 30,000/- (Rupees Thirty Thousand only) in the form of Demand Draft /Bankers Cheque or Bank Gurantee drawn in favor of Finance Officer, University of Allahabad payable at Prayagraj** shall be submitted along with the Technical bid. Agency/Firm/Company registered with NSIC/MSME will be given benefit as per rules.

Note 1: EMD will not accrue any interest.  
Note 2: The EMD shall be returned to the unsuccessful bidders after the Notification of Award of Tender.  
Note 3: The bids not accompanied with earnest money shall be summarily rejected.

Note 4: The EMD amount of the successful bidder will be returned after the completion of the warranty period.

11. The tenderer should also mention the validity period of quotation.
12. No advance payment or payment against performa invoice will be made to the successful bidder.
13. All the pages of the bid document being submitted must be signed and sequentially numbered by the bidder. Unsolicited / conditional / unsigned tenders shall not be considered.
14. IT, TT and GST would be recovered as per rules.
15. **Special Terms & Conditions are also attached.**
16. All the above instructions along with STC must be complied, failing which your offer may be liable for rejection.
17. All suits shall be in the courts of **Allahabad Jurisdiction** only.
18. Terms & conditions of purchase as per University rules shall be applicable.
19. Tender should be addressed to the "**Purchase Officer, Purchase & Stores Department, University of Allahabad, Prayagraj- 211002 (U.P.)**". Quotations will be received only through **Speed Post/Register Post in Purchase & Stores Department, UoA. Quotations received other than Purchase Office and after the due date and time shall not be considered.**
20. If required number of quotations will not be received by the last date of the LTE, the date may be extended as per rule.

#### **SPECIAL TERMS & CONDITIONS (STC)**

1. Bidder must quote as per technical specification.
2. Supply and installation shall be completed in 30 days of receipt of purchase order at the University Campus. The offered delivery period shall have to be strictly adhered to in case an order is placed.
3. **Schedule for completion of task** after issue of Purchase order will be as follows which has to be strictly adhered by the successful bidder:
  - a. Supply and installation of Gas Detection Unit With Digital Interface (Gas Chromatograph) and Accessories – 30 days
  - b. Testing and acceptance of the Gas Detection Unit With Digital Interface (Gas Chromatograph) and Accessories – 15 days
4. **Inspection and Acceptance:**
  - a. System will be considered as installed and accepted only after successful uninterrupted operation of the entire system at the site for period of minimum 15 days.
  - b. Payment will be made only after Installation, inspection and testing.
5. Operational services will be provided free of cost up to warranty period. Charges after warranty period may be quoted.
6. Tender conditions, if any, or otherwise sent with the quotation shall not be binding on us.
7. The acceptance of the quotation will rest with the competent authority of Allahabad University, who does not bind himself to accept the lowest quotation and reserves the right to himself to reject, or partially accept any or all the quotation without assigning any reasons.
8. **Liquidated damages** rate for delay in delivery is 0.5% per week & max. 10% of the total amount.
9. **Scope of supply** (bid price includes all cost components):
  - a. Supply, installation, testing and commissioning of goods with 1 year standard warranty at University of Allahabad, Prayagraj.
  - b. Warranty for a period of one year for the entire system which includes rectification/replacement of defective components and preventive maintenance like checking of software functioning, critical components of the equipment, etc are covered under the scope of vendor.
  - c. Any application software as required for completion of the project is covered under the scope of vendor.

- d. For Software which is used in the system for a period of not less than 1 year must have genuine license key and software backup system, to restore the data for a period not less than one year, if the system crashes due to any reason.
10. Equipment supplied shall be warranted against any manufacturing defects, poor workmanship, defective material, and quality design. Their performance shall also be warranted. The warranty period shall be 1 year from the date of commission. If any equipment is found defective regarding design construction or performance, the same shall be replaced free of cost. The to and fro freight charges shall be borne by the vendor during the warranty period.
11. The vendor should also supply or demonstration/training if required regarding the operational procedure of the system.
12. Tenderer must have experience of selling Gas Detection Unit With Digital Interface (Gas Chromatograph) and Accessories with installation in last 3 years in any PSU/ Central/ State / Central or State Funded organization. (Proof of experience must be enclosed with the quotation).
13. **Purchase preference** shall be given to local suppliers in all procurements undertaken by procuring entities in the manner specified hereunder.

“In the procurement of goods in respect of which the Nodal Ministry has communicated that there is sufficient local capacity and local competition, and where the estimated value of procurement is Rs. 50 lakhs or less, only local suppliers shall be eligible.”

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## Technical Bid

Technical specifications mentioned below are minimum. Any better specification will also be accepted.

Sr. No.	Item Name	Specification	Compliance (Yes/ No)	Deviation (if any)
01	Gas Detection Unit With Digital Interface (Gas Chromatograph) and Accessories	<p><b><u>General Specification of Gas Detection Unit With Digital Interface (Gas Chromatograph)</u></b></p> <ul style="list-style-type: none"> <li>❖ Column Oven of approximately 12-15 liters.</li> <li>❖ System should have Multichannel &amp; Multifunction control with accuracy and ease of operation.</li> <li>❖ Method / Program can be developed, stored, recalled and run with simple keyboard operation.</li> <li>❖ Column Oven Temperature Range must be Ambient to 400 °C.</li> <li>❖ No. of Ramps should be at least 20.</li> <li>❖ Programme Rates: 0 to 50 °C/min. in steps 0.1 °C/steps.</li> <li>❖ Facility for the storage of at least 20 method files. Should be retained in memory when Mains is switched off.</li> <li>❖ Event controls, Auto diagnostics and RS232 interface for Data Communication should be provided.</li> <li>❖ Multiple Way Temperature Control System (Oven, Inj, Det, TCD, Aux1, Aux2 etc.).</li> <li>❖ Injector system should consist of a SS body which fits into a universal base and accepts Removable Glass insert.</li> <li>❖ Injector Ports (Dual for Capillary and Packed Columns)</li> <li>❖ Fast Heating and Cooling Speed by suitable Double Air Flow Cold Hot alternate system.</li> <li>❖ Large Screen with Backlight Lattice to show all parameters with user friendly key Board design. Must have simultaneous display of Set &amp; Actual Temperature.</li> <li>❖ Live Graph on Display of GC.</li> <li>❖ Digital display of pressure and flow of carrier gas, Hydrogen, Air etc.</li> <li>❖ All SS Diaphragm Regulators</li> <li>❖ Built in Auto Program Start system.</li> <li>❖ Unique Zero Crossing Pulse Triggering Control system that resists the electromagnetic interference enormously.</li> </ul>		

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- ❖ Over heat protection for all the 6 heated Zones.
- ❖ DFC Valves for Packed Columns.
- ❖ System should have latest Electronics and Programs.
- ❖ High Sensitivity for testing of Mixing at Ultra Low/ Trace (ppm) Levels.
- ❖ Intelligent breakdown self-checking and alarm function.
- ❖ Carrier Gas cut off Protection facility.

**Detectors: (Number of detectors-2)**

(a) Flame Ionization Detector (FID) with excellent sensitivity and wide linear dynamic range. It should have Quartz jet permitting a use of a total all glass separation system and minimizes degradation and absorption of samples. Sensitivity Better than  $2 \times 10^{-12}$  g/sec, Linearity  $10^7$ . There should be Separate Hydrogen line for dual FID.

(b) Thermal conductivity Detector (TCD). Should have Dual Path, Tungsten Rhenium 4 filaments and should work in Dual Column mode.

**Recording Device:**

System should have Windows based Dual channel Chromatography Data Station with following specifications:

- a. **HARDWARE:** A-D Conversion: Voltage to frequency type, Sampling Rate: 80 samples per second, Dynamic Range: 10, Range: 10mV to 1V, Sensitivity: 0.1uV/sec.
- b. **SOFTWARE:** Should run on MS WINDOWS.
- c. **QUANTITATION:** Type: Area%, Height%, Normalisation, Internal & External Standard,  
No. of Levels: At least 100,  
Curve Fittings: Point to Point, Linear, Quadratic, Cubic, Fourth Order, Fifth order and Exponential.
- d. **BASE CORRECTION FUNCTIONS:**
  - i) Area Inhibit, Autozero,
  - ii) Force base, Valley to Valley, Horizontal Base,

- iii) Extensions forward and reverse,
- iv) Tangential and Exponential skimming,
- v) Negative Peak detection
- v) Manual Base correction

**e. REPROCESSING:**

- i) Zoom with mouse and reference plot,
- ii) Plot annotation includes peak numbers, retention times, peak names, component numbers, area height, amount,
- iii) Batch reprocessing of upto 100 chromatograms should be possible

**f. CHROMATOGRAM VIEWING:**

Overlay upto and at least 8 chromatograms with programmable angle of projection and chromatogram spacing. Stock mode of display should be available.

**g. REAL TIME PROCESSING:** Real time Processing of channel. Background correction with Multi tasking.

**Following Standard Accessories have to be included.**

- i) Argon, Hydrogen and Zero Air Gas Cylinders of 47 Litre water capacity filled with ultra high purity gases and equipped with Double stage pressure regulators of best quality.
- ii) Appropriate gas purification unit Argon, Hydrogen and Zero Air etc.
- iii) Column, 2 Nos. (Capillary 30m for non-polar and polar compounds)
- iv) Column, 2 Nos (packed column for Gaseous sample analysis)
- v) Gas Tight Syringe 1 mL - 2 Nos.
- vi) Liquid Syringe – 10 uL – 2 Nos.
- vii) Methanizer – 1 No.
- viii) Automatic Gas Sampling Valve for Column Switching- 1 Nos.
- ix) Gas Sampling Valve (Manual) – 1 No.
- x) UPS (Online with Pure Sine wave output) for GC system – 1 No.
- xi) Extra TCD Filament- 1 set
- xii) PC (i5, Branded ) with Laserjet Printer -1 set.

**Signature with Seal**



**Financial Bid as per technical specification with 1 year of warranty**

Sr. No.	Item Name	Qty	Rate per Unit	Tax Percentage (%)	Total Cost (inclusive of taxes)
01	Gas Detection Unit With Digital Interface (Gas Chromatograph) and Accessories	01			

**Signature with Seal**

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**UNIVERSITY OF ALLAHABAD**

(A Central University)

**Supplier Profile Form**

1. Firm's Name : \_\_\_\_\_ \*
2. GST No. : \_\_\_\_\_
3. Owner's Name : \_\_\_\_\_
4. Aadhar No. of Owner : \_\_\_\_\_
5. Full Postal Address : 1. (Head Office) \_\_\_\_\_  
\_\_\_\_\_ PIN \_\_\_\_\_  
2. (Local Office) \_\_\_\_\_  
\_\_\_\_\_ PIN \_\_\_\_\_
6. E-mail address : \_\_\_\_\_
7. Website address : \_\_\_\_\_
7. Contact Person's Name: \_\_\_\_\_
8. Contact No. : Phone No. \_\_\_\_\_ Mobile No \_\_\_\_\_  
: E-mail: \_\_\_\_\_  
: City: \_\_\_\_\_ State: \_\_\_\_\_
9. PAN NO. : \_\_\_\_\_
10. Shop and Establishment Act Registration No : \_\_\_\_\_
11. Manufacturer or Supplier : \_\_\_\_\_  
(In case of supplier please enclose authorization of your Principal)
12. EMD Details:
  - a. Amount (in Rs.) -: \_\_\_\_\_
  - b. DD/BG no. and Date -: \_\_\_\_\_
  - c. Drawn on Bank -: \_\_\_\_\_
  - d. Valid up to (date)-: \_\_\_\_\_
13. Work Experience of past 3 years in PSU/Central/State/ Central or State Funded organization

S.N.	Year of work	Name of the organization	Tender Amount (in Rs.)	Experience Certificate Attached (document no.)
	2022			
	2021			
	2020			

Note: (i) Supplier must print GST No. on their Letter Head / Bill / Quotations

(ii) Enclose Xerox copy of the required documents (GST, PAN, work experience, etc)

Signature with Seal

Mandate Form for Payment-2019

Public Fund Management System(PFMS) Facility for receiving Payments

**Details of Account Holder/Firm:**

1.	Firm/Contractor/Agency	
2.	Name of Account Holder	
3.	Complete Contact Address	
4.	Telephone Number	
5.	E-mail	

**Bank Accounts Details:**

1.	Name of the Bank viz. SBI/PNB	
2.	Branch Name with Complete Address	
3.	Telephone Number and E-mail of Bank Branch	
4.	Whether the Branch is computerized?	
5.	Whether the Branch is RTGS enabled? If yes, then what is the Branch's IFSC Code?	
6.	Is the Branch also NEFT enabled	
7.	Type of Bank Account (SB/Current/Cash Credit)	
8.	MICR Code of Bank	
9.	Complete Bank Account Number	
10.	Repeat Bank Account Number	

Date:

Signature of Customer

I hereby certify that all the details mentioned above are true to my knowledge and belief.

Bank Stamp

Signature of Branch Manager

Name .....

Mobile No .....

E-mail .....

