

UNIVERSITY OF MUMBAI



UNIVERSITY DEPARTMENT OF LIFE SCIENCES
Vidyanagari, Santacruz (E), Mumbai 400 098, India
Tel: (022) 26528822; Fax: (022) 26528822 ; Email: bagdeu@yahoo.com

TENDER DOCUMENT FOR EQUIPMENTS

Part A - Terms and Conditions

Part B - Specifications

Note:

Price: Rs. 500/- (non-refundable) can be submitted as (a) cash at the time of collection of Tender Documents OR (b) Demand Draft at the time of submission of Tender Document/s at the University Department of Life Sciences, University of Mumbai, Vidyanagari, Santacruz (E), Mumbai 400098.

The Demand Draft should be drawn in favour of "Finance and Accounts Officer, University of Mumbai", payable at Fort, Mumbai.

Important Dates:

Last date of Sale of Tender Document	January 29, 2012, from 11.00 to 16.00 hrs
Last Date of Receiving sealed Bids	January 30, 2012, at 15.00 hrs
Date of Opening of Bids if minimum three Vendors have participated	February 01, 2012, 16.00 hrs

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TENDER DOCUMENT FOR EQUIPMENTS

PART A - TERMS AND CONDITIONS

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GENERAL INFORMATION

Sealed Tender bids for the said Item for University Department of Life Sciences University of Mumbai are invited for and on behalf of University of Mumbai by Professor & Head – University Department of Life Sciences, so as reach in his Office (on the address mentioned in the Header of this Document) latest by 15.00 hrs on January 30, 2011.

Tender Document containing terms and conditions and technical specifications are available on the Website of University of Mumbai (<http://www.mu.ac.in>), AND also in the Office of University Department of Life Sciences, University of Mumbai, Vidyanagari, Santacruz (E), Mumbai 400098, on all working days between 11.00 and 16.00 hrs from January 15, 2012 till 12.00 hrs of January 29, 2012. Terms and conditions as well as technical specifications can also be downloaded from the Website which is <http://www.mu.ac.in>. The tender bids duly complete in all respects, along with the necessary documents should be submitted to Professor & Head, University Department of Life Sciences, University of Mumbai, Vidyanagari, Santacruz (E), Mumbai 400098 before 15.00 hrs on January 30, 2011.

The Technical Bids so received, shall be opened on February 01, 2012, at 16.00 hrs in the Office of Professor & Head, University Department of Life Sciences, University of Mumbai, Vidyanagari, Santacruz (E), Mumbai 400098 in presence of the representatives of the Suppliers. The Financial bids of the Tenderers shall be opened on the same day/ or on the following day. The names of shortlisted Tenderers shall be announced on the website after scrutinizing the Technical bids and evaluating their suitability to meet the University requirements. Right to reject any or all Tenders, without assigning any reason thereof is reserved by the University of Mumbai.

Sd/-
PROFESSOR & HEAD
UNIVERSITY DEPT. OF LIFE SCIENCES
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Terms and Conditions of Supply:

1. The last date and time for the acceptance of the bids is **on January 30, 2012 at 15.00 hrs.**
2. Suppliers shall submit the following documents along with their quotations:
 - Income- Tax clearance certificate from the Income-Tax Officer concerned, certifying that the tenderer has cleared all the Income-Tax dues.
 - Suppliers should be either manufacturer or authorized dealer of the said equipment and should submit the proof for the same. Also, the suppliers should state whether they are a Proprietary Firm, Partnership Firm or a Private/Public Limited Company and furnish the proof of the same.
 - The names of the organizations and laboratories to which similar equipment have supplied.
 - Earnest Money Deposit in the form of a Demand Draft drawn in favour of **“Finance and Accounts officer, University of Mumbai”** on any Scheduled/ Nationalized Bank, payable at Mumbai. The amount of Earnest Money Deposit shall be Rs. 50,000/-.
 - VAT Registration No.
 - Technical specifications offered by the Supplier.
 - Technical compliance table
 - Proprietary certificate, if any
3. The rates should be mentioned in the **Schedule** attached with the Tender Document. Each page of the tender shall be signed in full and stamped with the seal by the supplier. The supplier must clearly state in what capacity he or she is signing the Tender.
4. The supplier shall submit the tender in two envelopes. The first envelope (Technical Bid) shall contain all the documents referred to in **para (point no.) two above** and sealed. The second envelope (Commercial Bid) shall contain the **Schedule**, in which the supplier shall register the rates of supply. The second envelope shall also, likewise, be sealed. Both the envelope then should be put together, and shall be sealed in an envelope, and shall prescribed time and date. The Technical Bid shall be opened first to ensure that supplier have submitted all the requisite documents. If the Technical Bids are not in order or are deficient in some respect, the commercial bids in respect of such tenders shall not be opened. The date and time of opening the financial bids shall be announced one day after

Ref. No.: UDLSc Tender (LSc/1303 of 2012)

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Date: January 10, 2012

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opening all the Technical bids.

5. Tender bids not accompanied by the requisite amount of Earnest Money Deposit are liable to be rejected. **The DD of Earnest Money should be enclosed along with the Technical Bid Document.**
6. The Earnest Money Deposit paid by the supplier shall be forfeited, if the supplier fails to pay the necessary security deposit in the event of his tender being accepted.
7. The amount of Security Deposit/Performance Guarantee shall be 05 % of the cost. In case of successful Tenderer, the amount of Earnest Money Deposit shall be converted in Security Deposit/ Performance Guarantee. The difference between EMD and proposed amount of Security Deposit/Performance Guarantee (will be paid by the successful Tenderer, and) shall be refunded after the warranty period is over. The Security Deposit/Performance Guarantee can be paid in the form of a Bank Guarantee from a scheduled bank.
8. Supplier should read carefully all the instructions and terms and conditions, etc before registering rates in prescribed schedule of the tender. Taxes and duties etc., should be shown separately.
9. The offers made by the suppliers shall be open for acceptance within 120 days after the last date of submission of tender.
10. **The Technical Documents shall be opened by the Nominee of Hon'ble Vice Chancellor** along with Professor and Head, University Department of Life Sciences, University of Mumbai, **at 16.00 hrs on February 01, 2012, OR on the following day**, for those bids for which minimum three Vendors have participated.
11. In case of imported items/equipments, the rates should be quoted in the light of exemptions enjoyed by educational institutions. University is exempted from the payment of Octroi and the necessary certificate/form can be issued by the University. The customs duty applicable to the University of Mumbai is maximum 5% of the invoice.
12. Technical specifications of the instruments/equipments/articles are given in **Annexure** to these papers (Part B).

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13. The delivery, installation & operational training of the instruments/equipment should be completed within 3 months from placing of the order, in case of the imported equipment and within 15 days if the instrument/equipment is made in India. No extension shall be granted to the contractors/suppliers for the period of delivery, under any circumstances.
14. If the supplier fails to deliver the article as per the delivery schedule, the University of Mumbai shall be free to procure the balance/undelivered supply, at the risk and cost of the supplier, from other such suppliers.
15. The goods, articles, materials supplied by the supplier shall be accepted after inspection by an officer authorized by the competent authority. No articles/materials which do not conform to the specifications laid down in the terms and conditions or damaged in transit accepted
16. The bills of the suppliers shall be paid by the University after all the materials /articles/equipments have been received, inspected as above.
17. **Vendor must submit Compliance statement in tabular form comparing each specification of the quoted item with that given in the Tender Document part B. The Vendor also must supply a soft copy of the Table only in Microsoft in word 2003 format.**
18. **If the equipment is imported and requires PC, printer other peripherals, they can be bought from India and should be of International quality. The monitor should LCD/TFT screen. The printer should be LaserJet printer. The processor should be Intel Core2 Duo. Specifications for this would be provided separately, if required. The amount quoted for the items bought in India, installation; servicing etc. can be in Indian Rupees and the imported items can be quoted in foreign currency.**
19. **The warranty period shall be for three years.**
20. **The equipment shall be installed within the available laboratory space/s at the location (either Mumbai depending on the requirement).**
21. As the suppliers shall be responsible for the supply and installation (wherever

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necessary) of equipment at Mumbai the cost towards insurance until installation of respective items (instruments/ hardware/ software/ items) in the appropriate location, shall be borne by suppliers.

22. In the event of any breach of the terms and conditions of the supply, the University of Mumbai may terminate the contract placed with the supplier and forfeit the security deposit or the supplier.

23. **Proprietary Certificate, if any, should be included in the Technical Bid.**

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SCHEDULE TO TENDER

Note:

- (a) Tenderers are advised to read carefully the Terms and Conditions of supply and "the Instructions to the Tenderers" before recording the rates in this Schedule.
- (b) No erasures or overwriting shall be allowed, unless they are authenticated under the full signature and the seal of the tenderer.
- (c) The Rates shall be FOR, at destinations/godowns/places indicated in the delivery

ITEM NO	DESCRIPTION OF GOODS WITH DETAILS OF SPECIFICATIONS	NUMBER/Q UANTITY	PRICE/ RATE PER UNIT	TAXES	DUTIES	ANY OTHER DETAILS

Signature of the Tenderer

Seal of the Firm

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TENDER DOCUMENT FOR EQUIPMENTS

PART B - SPECIFICATIONS

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SPECIFICATIONS

GC QUADRUPOLE MASS SPECTROMETER

We intend to buy GC Quadrupole Mass Spectrometer with following technical specifications & System should have facility to introduce solid or liquid sample through the probe without any external controller, it should withstand high carrier flow rate more than 5 ml/min to be compatible with different types of Capillary columns.

Analyzer – MS Specifications:

1. **System should be compact** and offer **highest sensitivity with working mass range of 1150 Da or more**, with built in Full Scan, Selected Ion Monitoring (SIM) & Combination of both the modes.

GC-MS with Probe for Direct introduction of Solid/Liquid samples.

2. **Ionization modes:**

Electronic Ionization i.e. EI and Optional Positive and Negative Chemical Ionization (CI).

3. **Ion Source:**

Source temperature up to 300°C or more with quick change over for EI/CI mode and Auto aligned with dual Filament

4. **Mass Analyzer / Filters:**

It should be based on Quadrupole with pre and post filters, high ion transmission efficiency and Pre filter with facility for active ion beam focusing eliminates neutral noise and offers best sensitivity.

5. **Resolution:**

Should be user adjustable from 0.7 Da to 4Da with mass axis stability of ± 0.1 Da and fast scan rate of 13500Da/Sec or more. Resolution should be user adjustable with required selectable settings & minimum dwell time should be 1ms .

6. **Turbo molecular pump:**

Turbo molecular pump should be dual stage air cooled with 350 liters / sec or higher capacity for fast vacuum & easy & quick change over from EI to CI

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and should allow the system to withstand higher carrier gas flow rate of 20ml/min or higher.

7. Electron Energy:

10 to 120 Electron Volt (EV) users selectable or higher.

8. Detector :

Electron Multiplier with good negative ion sensitivity and No detector calibration.

9. Optionally Licensed Libraries to be quoted with (NIST, Wiley), User Customizable library & automatically searching of Multiple Libraries.

10. It should offer Auto tuning in all ionization modes & should remain tuned for longer time avoiding frequent tuning for better system performance.

10. Performance Specification with capillary injector should be as given below OR Better :

<i>Mode</i>	<i>Test</i>	<i>Specification</i> [†]
EI Full Scan	1 pg Octafluoronaphthalene (OFN) from m/z 50 to 300 for m/z 272	S/N \geq 500:1
PCI Full Scan [‡]	100 pg Benzophenone (BZP) from m/z 80 to 230 for m/z 183 or better	S/N \geq 500:1
NCI Full Scan [‡]	250 fg OFN from m/z 200 to 300 for m/z 272 Or better	S/N \geq 1000:1

GAS CHROMATOGRAPH SPECIFICATIONS:

1. Temperature range: Ambient +4°C to 450°C and should be upgradable to -100°C with liquid N₂.
2. Temperature programmed ramps: 22 ramps
3. Cool down rate should be less than 5 minute for GC oven Temperature of 400 – 50Degree C.
4. GC should have built in 10 or more method storage.
5. Optionally Auto Injector / Head Space to be offered.

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6. System should be capable to install up to 3 multiple injectors and 3 multiple detectors of User Choice irrespective of detector type.
7. GC should have provision of EPC / EFC/PPC for all the pneumatic parameters with Pressure Range of 150 psi for use of wide variety of Capillary columns.

Programmable Temperature Vaporizing Injector (PTV)

1. GC should be configured with PTV with Back flush option for Faster Analysis.
2. Temperature range: 100°C to 450°C with liquid N₂.
3. Temperature ramps: 22
4. Maximum Temperature range: 200°C / min.

Optional GC Features:

1. Injectors up to three of User Choice Split/Split less, PTV etc.
2. Detectors up to three detectors including the FID, ECD, FPD/PFPD, NPD and TCD .

Other indigenous items required for complete operation of GC MS are to be quoted separately.

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