

UNIVERSITY OF MUMBAI



UNIVERSITY OF MUMBAI TENDER NOTICE

Separate sealed Tenders for purchase of following item is invited, for and on behalf of University of Mumbai by the Head, Department of Physics, University of Mumbai, so as to reach him in his office latest by 4.00 p.m. on **Wednesday, 10th March, 2021**.

1. 2L Autoclave Reactor

Blank forms containing terms and conditions of supply and technical specifications are available at the office of the Head, Department of Physics, University of Mumbai, on all working days between 11.00 a.m. to 4.00 p.m. from Thursday, **25th February, 2021** to Tuesday, **9th March, 2021** except 2nd and 4th Saturday, Sunday & public holidays on payment of ` 500.00 (Five hundred only) in cash OR the same can be downloaded from our website <http://mu.ac.in/tenders.html> and submitted along with a DD of ` 500.00 (Five hundred only) in favour of 'Finance and Accounts Officer, University of Mumbai'. The tenders duly complete in all respects, along with the necessary documents should be submitted to the Head, Department of Physics, University of Mumbai, latest by 4.00 p.m. on **Wednesday, 10th March, 2021**.

The tenders so received, shall be opened on **Friday, 12th March, 2021** in the office of the Head, Department of Physics, University of Mumbai, Lokmanya Tilak Bhavan, Vidyanaagari, Santacruz (E), Mumbai, 400 098, in presence of representatives of the suppliers. Right to reject any or all tenders, without assigning any reason thereof, is reserved by the University of Mumbai.

Sd/-
Registrar
University of Mumbai
Mumbai-400 032.

REF. NO. UDPMU/ 2033 / 2021

Date: 18/02/2021

To

Separate sealed Tenders for purchase of following items is invited, for and on behalf of University of Mumbai by the Head, Department of Physics, University of Mumbai, so as to reach him in his office latest by 4.00 p.m. on **Wednesday, 10th March, 2021**.

1. 2L Autoclave Reactor

Blank forms containing terms and conditions of supply and technical specifications are available at the office of the Head, Department of Physics, University of Mumbai, on all working days between 11.00 a.m. to 4.00 p.m. from **Tuesday 25th February, 2021 to Tuesday, 9th March, 2021**, except 2nd and 4th Saturday, Sunday & public holidays on payment of ` 500.00 (Five hundred only) in cash OR the same can be downloaded from our website <http://mu.ac.in/tenders.html> and submitted along with a DD of ` 500.00 (Five hundred only) in favour of 'Finance and Accounts Officer, University of Mumbai'. The tenders duly complete in all respects, along with the necessary documents should be submitted to the Head, Department of Physics, University of Mumbai, latest by 4.00 p.m. on **Wednesday, 10th March, 2021**.

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Prof. & Head,
Department of Physics,
University of Mumbai.

Department of Physics
University of Mumbai
Lokmanya Tilak Bhavan, Vidyanagari
Santacruz (E), Mumbai - 400 098
Phone: 2652 6250
Fax: 2653 3051

Tender Document
Thursday 25th February, 2021
Part A - Terms and conditions
Part B - Specifications
Price Rs. 500.00 (non refundable)

Important Dates

Sale of Tender forms	:	25 th February, 2021 to Tuesday, 9 th March, 2021 (All working days from 11.00 a.m. to 4.00 p.m.)
Last Date for receiving sealed tenders	:	Wednesday, 10 th March, 2021 up to 4:00 p.m.
Date of Opening of tenders	:	Friday, 12 th March, 2021 at 11.30 a.m.

Head, Department of Physics
(Seal & sign)

Department of Physics
University of Mumbai
Lokmanya Tilak Bhavan, Vidyanagari
Santacruz (E), Mumbai - 400 098
Phone: 2652 6250
Fax: 2653 3051

Tender Document
Date: Thursday 25th February, 2021

Part A -Terms and Conditions of Supply

1. 2L Autoclave Reactor

Part A -Terms and Conditions

1. The last date and time for the acceptance of the Tender is **Wednesday, 10th March, 2021 up to 4:00 p.m.**
2. The tenderers shall submit the following documents along with their tenders.
 - a. Income tax clearance certificate, from the Income Tax officer concerned, certifying that the tenderer has cleared all the Income Tax dues.
 - b. Suppliers should state whether they are a Propriety Firm, Partnership Firm or a Private / Public Limited Company and furnish a profile of the firm / company. They should also clearly mention whether they are manufacturers, authorized dealers or retail suppliers.
 - c. The names of the organizations and the offices to which similar supplies have been made.
 - d. **Earnest Money Deposit in the form of Demand Draft in favour of 'Finance and Accounts Officer, University of Mumbai, on any Scheduled / Nationalized Bank payable at Mumbai.**
 - e. GST Registration No.
 - f. Technical specifications offered by the Supplier, Proprietary Certificate (if any).
 - g. **Vendor must submit Compliance statement in tabular form comparing each specification of the quoted item with that given in the Tender Document part B.**
3. The rates should be mentioned in the Schedule attached with the tender paper. Each page of the tender shall be signed in full and stamped with the seal by supplier. The supplier must clearly state in what capacity he or she is signing the tender.
4. The tenderers shall submit the tender in two envelopes. The first envelope (Technical Bid) shall contain all the documents referred to in Para 2 above and shall be 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 envelopes then should be put together and shall be sealed in an envelope, and shall be submitted to the University by the prescribed time and date. The Technical Bid shall be opened first to ensure that the tenderers 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.
5. **The amount of Earnest Money Deposit shall be 5% of the cost of supply subject to a maximum of Rs. 5,000.00 (Rs. Five thousand only).** The Earnest Money Deposit should be in the form of Bank Draft drawn on a nationalized / scheduled bank (payable at Mumbai) in favour of the **'Finance and Accounts Officer, University of Mumbai'**, and must be enclosed with the Technical Bid.
6. Tenders not accompanied by the requisite amount of Earnest Money Deposit shall be rejected.
7. The amount of Security Deposit / Performance Guarantee shall be 5% of the cost. In case of successful tenderers the amount of Earnest Money Deposit shall be converted into Security Deposit / Performance Guarantee and shall be refunded after the warranty period is over.

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 for 120 days after the last date of submission of tender.
- 10. The tender shall be opened by the Head, Department of Physics in his office Friday, 12th March, 2021 at 11.30 a.m. The tenderers or their authorized representatives shall be allowed to be present at the time of opening of the tenders.**
11. In case of imported items / equipments the rates should be quoted in the light of exemptions enjoyed by educational institutions. The University is exempted from payment of Customs/Excise duty, Octroi; and the necessary certificates / forms can be issued by the University.
12. Technical specifications of the instrument/equipment are given in the Annexure of these papers (Part B).
13. The delivery time of instrument / equipment should be clearly mentioned in the tender. No extension shall be granted to the contractors / suppliers for the period of delivery mentioned in the tender, 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 such supplier.
15. The goods, article, material supplied by the contractor shall be accepted after inspection by an officer authorized by the competent authority. No article / material which do not conform to the specifications laid down in the terms and conditions or damaged in transit or otherwise, shall be accepted.
16. The bills of the suppliers shall be paid by the University after all the article/ material/ instrument / equipment have been received, inspected as above.
17. The warranty period shall be at least for one year from the date of installation.
18. Supplier should give free service at least for three years after the warranty is over.
19. Service Support should be from Factory trained Engineers; specifying the no. of Engineers with their names, mobile numbers, base location, Response time, etc.
20. A list of spares/consumables required for hassle free functioning of the instrument for at least two years should be quoted additionally.
21. Undertaking from the manufacturer that parts will be made available at least for next ten years even after discontinuation of the supplied model is necessary.
22. Supplier should have at least five orders from Institutions / Laboratories in the past three years (copies of the PO to be attached).

23. The detailed operational training should be provided by the competent Engineers during the time of installation.
24. As the supplier shall be responsible for the supply and installation of the material at the Department of Physics, University of Mumbai; the cost towards loading/unloading, insurance, etc. shall be borne by the suppliers.
25. Without any purchase commitment, inspection/demonstration should be arranged at the cost of the supplier for the quoted material at two places in Mumbai.
26. 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 EMD/Security Deposit of the supplier.

SCHEDULE TO TENDER

Note:

1. 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.
2. No erasures or overwriting shall be allowed, unless they are authenticated under the full signature and seal of the tenderers.
3. The Rates shall be FOR, at destinations / godowns/ places indicated in the delivery.

Item No.	Description of goods with details of specifications	Number/Quantity	Price / Rate per Unit	Taxes, Duties etc.

Full Signature of Tenderer

(Seal of the Firm/Company)

Department of Physics
University of Mumbai
Lokmanya Tilak Bhavan, Vidyanagari
Santacruz (E), Mumbai - 400 098
Phone: 2652 6250
Fax: 2653 3051

Tender Document

Date: Thursday 25th February, 2021

Part B - Technical Specifications

Sr. No.	Specifications	Number/ quantity
1	Volume & MOC: 2L net filling capacity made from SS 316 solid bar stock (no welding) & with removable Teflon linear sliding in the autoclave vessel.	1 unit
2	Design Pressure: 100 bar (Max working pressure around 80% of the autoclave Vessel)	
3	Operating pressure: 100 kg/cm ² (1450 PSI)	
4	180 deg C for Teflon linear, which is removable / interchangeable. 350 deg C for SS Vessel	
5	Nozzles & fittings: i) External Fittings: Pressure gauge, vent valve, safety rupture disc (Inconel) (Certified by original manufacturer), gas inlet-valve & liquid sampling valve mounted on common dip tube. Solenoid valve at the inlet of cooling coil pipe for automatic cooling Note: All valve end connections shall be 1/4" BSPM. ii) Internal Fittings: Internal cooling coil/single tube in tube out type cooling pipe, thermowell (with RTD PT 100 temp. sensor) dip tube.	
6	Body & Head Sealing: PTEE Gasket with split clamp type quick opening system with clamp bolts. Body clamps shall be with clit/latches to prevent flying off of clamps in case of over pressure. (in place of spring loaded clutching).	
7	Shaft Sealing: Zero leakage Magnetic drive coupling (Maintenance free)	
8	Stirrer 4 bladed turbine stirrer	
9	Heating: External electrical ceramic band heater with Insulation & with high temperature steel cladding & cascade temperature ON / OFF heater temperature overshoot for safety of Linear / temp. overshoot. It shall have insulated heater plate to prevent thermal shock to operator.	
10	Control panel: SS control panel with Programmable P.I.D temperature controller with high temperature alarm system & motor speed controller mounted on it The panel shall be Screw less design with push lock enclosure, PVC cable tray For internal wiring, safe & rugged metal clad military grade lockable plug sockets for all the sensors, heaters & motors	
11	Main power supply: 1φ, 220 VAC ± 10%, 50Hz	
12	Mounting: Mounted on table top with polishing of complete Autoclave. Approximate overall dimension for table top model in mm (W x D x H) 275 x 230 x 780 mm	
13	Digital pressure indicator in bar & psi (Make: PPJ, Model: Neuro 100a/N100ac) with SS-316 Pr. Transmitter (Non FLP) & high pressure alarm in addition to analog pressure Gauge with high pressure safety heater cut off.	
14	Pressure relief valve of MOC SS-316 (Note: colling jacketed shall be provided before the valve for 350 deg Celsius).	
15	100 ml interchangeable vessel with solid shaft	
16	SS Pr. Regulator with self-venting for realizing the pressure, pressure gauge & 4m long flexible hose pipe with NRV for 0-140 bar O/P pressure for H ₂ gas & adaptor for N ₂ , O ₂ or air cylinder.	

