



Office : 2453969
University : 2435248 } Extension :
: 2435259 } 2617, 2618

Post Graduate Department of Chemistry

University of Jammu

Baba Saheb Ambedkar Road, Jammu - 180 006

No. PGD/Chem/ 19/1016

Dated 13-11-2019

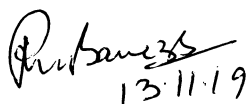
e-NIT

Sealed e-NITs (technical & financial bids) are invited from reputed manufacturers/authorized dealers/distributors/sole selling agents for the supply, installation and commissioning of the following equipments:

1. TENSIO METER (FORCE)
2. GLOVE BOX.

For further details, please visit <https://jktenders.gov.in>

The complete tender document should be submitted only online through <https://jktenders.gov.in>


13.11.19

Prof. R.K. Bamezai
Head of the Department



**POST GRADUATE DEPARTMENT OF CHEMISTRY,
UNIVERSITY OF JAMMU, JAMMU.**

NO.: PGD/CHEM/19/985

DATED: 05.11.2019

**NOTICE INVITING TENDERS FOR THE PURCHASE OF
TENSIO METER (FORCE)**

Offers (rates and terms & conditions) alongwith detailed literature and specifications are invited from manufacturers/authorized distributors/dealers etc. for supply of following instrument with terms and conditions mentioned below:

**TECHNICAL SPECIFICATIONS FOR TENSIO METER
(FORCE)**

PC based fully automatic Force Tensiometer with the application of measuring Surface/Interfacial tension, Critical micelle concentration, Dynamic contact angle, Sedimentation, Density, Powder Wettability, and Adhesion Force Measurement.

S.No.	Specifications	
1.	Surface Tension Measurement Range	1 – 2000 mN/m or better
2.	Method of Measurement	Pt- Ir Ring & Pt Plate
3.	Surface Tension Resolution	0.01 mN/m
4.	Contact Angle Measurement Range	0 – 180°
5.	Contact Angle Resolution	0.01° or better
6.	Density Measurement Range	0 – 2 g/cm ³ or better
7.	Density Resolution	0.0001 g/cm ³ or better
8.	Balance Capacity for Load	200 g or better
9.	Balance Resolution	0.01 mg or better
10.	Calibration/adjustment	Automatic with internal weights
11.	Force Resolution	0.1 μN or better
12.	Sample Stage	Motorized
13.	Sample Stage Speed	0.01 – 500 mm/min
14.	Stage Positioning Resolution	0.01 μm
15.	Sample Stage Travel Distance	80mm or better
16.	Tempe Range of Vessel Bath	-10°C to 100°C or better, Accuracy: +/- 0.1°C or better
17.	Bath Size	<5L
18.	Movement of Table	Electrically driven.
19.	Other important features	(i) Illuminated Sample Platform (ii) Must have adjustable feets (iii) Wind shield for protection from wind during



**POST GRADUATE DEPARTMENT OF CHEMISTRY,
UNIVERSITY OF JAMMU, JAMMU.**

		measurements (iv) Integrated key board with control of stage movement & magnetic Stirrer.
20.	Power Supply	230V +/- 10%, 50Hz
21.	Software modules	(i) Surface & Interfacial Tension module for ring, plate & Rod methods (ii) Contact Angle module for Dynamic Contact Angle and surface free energy determination on plate, powders, pigments etc. (iii) Provision for Surfactants characteristics module for CMC measurements & Density Module & Adhesion Force. (iv) The software module must have a large database for surface/Interfacial tension and their disperse & polar components for reference liquids.
22.	Standard Accessories which should be quoted along with main unit: (i) Thermostatic Jacket – 1 no. (ii) Glass vessels – 10 nos. (iii) Platinum Wilhelmy Plate – 1no. (iv) Pt- Rod- 1 no. (v) Built in Magnetic Stirrer-1 no. (vi) Refrigerated water bath -10°C to 100°C – 1 no.	

Pr

**POST GRADUATE DEPARTMENT OF CHEMISTRY,
UNIVERSITY OF JAMMU, JAMMU.**

Terms and Conditions:

1. Tenders addressed to, “Head of the Department, Department of Chemistry, Baba Saheb Ambekar Road, New University Campus, University of Jammu, Jammu 180 006”, should be submitted online only (<https://www.jktenders.gov.in>).
2. Delivery of goods should be FOR Department of Chemistry, University of Jammu, Jammu.
3. General Sale tax/custom duty/excise/entry tax or any other tax, if any, should be clearly mentioned. Rates should be inclusive of custom clearance, insurance etc. It may kindly be noted that University of Jammu will not bear any cost/expenditure arising out of loss during transportation etc. Cost of equipment should include transportation charges and insurance charges upto FOR destination. University of Jammu is exempted from Custom Duty under DSIR registration. DSIR certificate shall be provided by the University of Jammu.
4. Firm shall be required to submit the End of Life of product. It shall be responsibility of the supplying firm/manufacturing firm to collect condemned instruments/its salvage whenever it is declared unserviceable/obsolete/end of life/beyond economic repair etc. Firm shall be required to submit EPR authorization issued by CPCB.
5. Firm shall be required to submit complete information/brochure/catalogue along with the offer.
6. Firm should submit an authorization certificate from principal firm for sale and service.
7. Concession to educational institutions, if any, should be clearly mentioned.
8. Products conforming to particular standards (ISO, ISI etc.) should be clearly mentioned.
9. In case any item is your proprietary product or if you are sole manufacturer/distributor of requisite item, a certificate to this effect should be enclosed.
10. It is at discretion of the competent authority to reject one/all tenders/part of tender without assigning any reason, thereof.
11. In case seller fails to complete in full, all deliveries of product in accordance with supply order; the seller shall be responsible for the liquidity damages. Thereafter the buyer, will have right to terminate supply order in the case of such delay beyond period mentioned by seller in the offer and buyer will have total discretion to buy product from the market/other supplier at the lowest rate.
12. An undertaking should be submitted by your concern that rates quoted in this offer are lowest/at par with rates quoted to other Govt./Semi-Govt. institution in the country and your concern/firm has not sold your product to any other organization in India at lowest price than the price quoted in this offer.
13. A user list of the institutions/organizations where the quoted equipment has been installed and working successfully must be provided.
14. Debarment of the bidding firms shall be governed by Rule No. 151 of GFR 2017; Ministry of Finance, GOI, as mentioned below:
 - (i) A bidder shall be debarred if he has been convicted of an offence—



**POST GRADUATE DEPARTMENT OF CHEMISTRY,
UNIVERSITY OF JAMMU, JAMMU.**

- (a) under the Prevention of Corruption Act, 1988; or
 - (b) the Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.
 - (ii) A bidder debarred under sub-section (i) or any successor of the bidder shall not be eligible to participate in a procurement process of any procuring entity for a period not exceeding three years commencing from the date of debarment. Department of Commerce (DGS&D) will maintain such list which will also be displayed on the website of DGS&D as well as Central Public Procurement Portal.
 - (iii) A procuring entity may debar a bidder or any of its successors, from participating in any procurement process undertaken by it, for a period not exceeding two years, if it determines that the bidder has breached the code of integrity. The Ministry/Department will maintain such list which will also be displayed on their website.
 - (iv) The bidder shall not be debarred unless such bidder has been given a reasonable opportunity to represent against such debarment
15. All the pages of soft copy of the offer should be endorsed along with the stamp/seal of the firm.
 16. It may kindly be noted that in case a firm quotes NIL charges/consideration, the bid shall be treated as unresponsive and will not be considered.
 17. Firm shall be required to submit the EMD/Bid security amounting to Rs. 30000/- in the form of bank guarantee/DD/CDR from any of the commercial banks which should remain valid for the period of forty five (45) days from beyond the final date validity period.
 18. Firms which are exempted to submit the EMD/Bid security shall be required to submit certificate issued by the concerned Ministry/Department.
 19. Successful bidders shall be required to submit performance security amounting to 10% of the quoted price pledged to the Head, Department of Chemistry, University of Jammu, Jammu in the form of bank guarantee from any of the commercial banks which should remain valid for sixty (60) days beyond the date of completion of all contractual obligations of the suppliers including warranty obligations.
 20. Financial bids of only technically qualified tenderers shall be opened. 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.
 21. Item must be quoted alongwith the warranty as specified in technical specifications.
 22. Technical specifications of the required instruments/equipments/articles are given above.



**POST GRADUATE DEPARTMENT OF CHEMISTRY,
UNIVERSITY OF JAMMU, JAMMU.**

NO.: PGD/CHEM/19/1003

DATED: 07.11.2019

**NOTICE INVITING TENDERS FOR THE PURCHASE OF
GLOVE BOX**

Offers (rates and terms & conditions) alongwith detailed literature and specifications are invited from manufacturers/authorized distributors/dealers etc. for supply of following instrument with terms and conditions mentioned below:

TECHNICAL SPECIFICATIONS FOR GLOVE BOX

S.No	Components	Specification
1.	Glove Box:	Inner Box Dimensions (mm): 900 × 1200 x 750 [H × L× W] or higher. All Three side welded, SS 304, Leak Rate ≤0.05 vol.%/h (ISO 10648-2). Stainless steel 304. Inside surface brushed finish, scratch & chemical resistant. Thickness 3mm. Front mounted LED Light with PLC Controlled ON/OFF facility.
2.	Box Operating Pressure:	Automatically adjustable -5 mbar to +5 mbar or better. Automatic pressure relief valve along with Foot pedal for Box Pressure control.
3.	Front View Window:	Toughened Glass safety window Chemical& scratch resistance should not deform under pressure. Thickness :8mm
4.	Shelves:	Minimum Two adjustable storage shelves (SS Material)
5.	Feed Through (Leak Proof):	4 standard feed throughs (DN 40) on back wall sealed by blank KF- caps Including One Electrical feed through
6.	Filters:	Inlet/Outlet 0.3-micron HEPA filters
7.	Main Antechamber:	Cylindrical (Stainless steel). Minimum Dia 370-400 mm, Length Minimum 600mm. Doors Anodized Aluminum thickness 10mm. Inside Brushed Finish, spindle lock. Welded onto side panel. sliding tray(SS). Manual/Automatic Evacuation/Refills Cycles.
8.	Mini Antechamber	Cylindrical (Stainless steel) with hinged doors. Dia minimum 150mm, Length Minimum 300mm welded onto side panel. Sliding form- fitting tray(SS). Manual Evacuation/ Refills Cycles with 3-way ball valve
9.	Glove ports:	2ports, Anodized Aluminum Alloy, Dia. minimum 200mm. O-ring sealed against the gloves
10.	Gloves :	2 gloves. Material: Butyl gloves, Thickness: minimum 0.4mm
11.	Vacuum pump:	Rotary vane Vacuum pump or better, Oil re-circulation.

**POST GRADUATE DEPARTMENT OF CHEMISTRY,
UNIVERSITY OF JAMMU, JAMMU.**

		Vacuum: 10 CFM or better. The pump ON/OFF should be controllable via the touch panel.
12.	Programmatic Logic Control:	Controllable with independent and fully integrated PLC, Details of PLC and functioning should be provided. Graphical display of the box pressure, O ₂ and moisture levels should be available, in color, in the touch panel interface
13.	Moisture Sensors:	Advance Ceramic sensor/Hyper Thin Film Sensor, Dew Point Range: -100 °C to + 20 °Accuracy: +/-3°C or better, Repeatability - +/-0.5 °C, Measuring range: 0-3000 ppm or higher with calibration certificate National/International
14.	Oxygen Sensors:	Fuel cell O ₂ analyzer, Range -0-10000 ppm (Auto range), Accuracy: +/-2% of range, Resolution: +/-0.1% of range with calibration certificate National/International
15.	Purification Unit Regeneration:	Automatic PLC controlled with Ar/H ₂ Gas mixture, details to be provided.
16.	Purification Unit:	Glove box & Purifier from single manufacturer. Capable of purity <1 ppm H ₂ O and O ₂ by Circulation. removable capacity O ₂ Minimum 30L, H ₂ O Minimum 1000-1300 gms or more. Purifier material: Cu Catalyst, Molecular Sieves, independent solvent absorption unit Activated Carbon Solvent trap (3.5 Kg or more), integrated with a gas circulation blower.
17.	Blower:	Circulation Blower Minimum 45 m ³ /hr. or Higher, Control by Manual/Automatic ON/OFF facility.
18.	Purge:	Automatic Purge Valve with 200 ltrs/min or higher Purge capacity
19.	Tubing & Fittings	Stainless steel.
20.	Stand:	Stand attached to Glove box, height 900-920 mm, with castors& adjustable leg support for easy moving
21.	Power:	240 ± 10 V, 50/60 Hz, details of receptacle/socket to be provided
22.	Warranty:	Three year
23.	Filled Gas Cylinders:	02 nos. with regulators
24.	Gloves:	01 pair
25.	O-ring for mini and main chamber:	01 each
26.	Weighing Balance:	Weighing balance should be quoted max. weight range 200g with the resolution of 1mg upto 3 places after the decimal

**POST GRADUATE DEPARTMENT OF CHEMISTRY,
UNIVERSITY OF JAMMU, JAMMU.**

Terms and Conditions:

1. Tenders should be addressed to, “**Head of the Department, Department of Chemistry, Baba Saheb Ambdekar Road, New University Campus, University of Jammu, Jammu 180 006**”.
2. Delivery of goods should be FOR Department of Chemistry, University of Jammu, Jammu.
3. General Sale tax/custom duty/excise/entry tax or any other tax, if any, should be clearly mentioned. Rates should be inclusive of custom clearance, insurance etc. It may kindly be noted that University of Jammu will not bear any cost/expenditure arising out of loss during transportation etc. Cost of equipment should include transportation charges and insurance charges upto FOR destination. University of Jammu is exempted from Custom Duty under DSIR registration. DSIR certificate shall be provided by the University of Jammu.
4. Firm shall be required to submit the End of Life of product. It shall be responsibility of the supplying firm/manufacturing firm to collect condemned instruments/its salvage whenever it is declared unserviceable/obsolete/end of life/beyond economic repair etc. Firm shall be required to submit EPR authorization issued by CPCB.
5. Firm shall be required to submit complete information/brochure/catalogue along with the offer.
6. Firm should submit an authorization certificate from principal firm for sale and service.
7. Concession to educational institutions, if any, should be clearly mentioned.
8. Products conforming to particular standards (ISO, ISI etc.) should be clearly mentioned.
9. In case any item is your proprietary product or if you are sole manufacturer/distributor of requisite item, a certificate to this effect should be enclosed.
10. It is at discretion of the competent authority to reject one/all tenders/part of tender without assigning any reason, thereof.
11. In case seller fails to complete in full, all deliveries of product in accordance with supply order; the seller shall be responsible for the liquidity damages. Thereafter the buyer, will have right to terminate supply order in the case of such delay beyond period mentioned by seller in the offer and buyer will have total discretion to buy product from the market/other supplier at the lowest rate.
12. An undertaking should be submitted by your concern that rates quoted in this offer are lowest/at par with rates quoted to other Govt./Semi-Govt. institution in the country and your concern/firm has not sold your product to any other organization in India at lowest price than the price quoted in this offer.
13. A user list of the institutions/organizations where the quoted equipment has been installed and working successfully must be provided.
14. Debarment of the bidding firms shall be governed by Rule No. 151 of GFR 2017; Ministry of Finance, GOI, as mentioned below:
 - (i) A bidder shall be debarred if he has been convicted of an offence—
 - (a) under the Prevention of Corruption Act, 1988; or

**POST GRADUATE DEPARTMENT OF CHEMISTRY,
UNIVERSITY OF JAMMU, JAMMU.**

- (b) the Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.
- (ii) A bidder debarred under sub-section (i) or any successor of the bidder shall not be eligible to participate in a procurement process of any procuring entity for a period not exceeding three years commencing from the date of debarment. Department of Commerce (DGS&D) will maintain such list which will also be displayed on the website of DGS&D as well as Central Public Procurement Portal.
- (iii) A procuring entity may debar a bidder or any of its successors, from participating in any procurement process undertaken by it, for a period not exceeding two years, if it determines that the bidder has breached the code of integrity. The Ministry/Department will maintain such list which will also be displayed on their website.
- (iv) The bidder shall not be debarred unless such bidder has been given a reasonable opportunity to represent against such debarment
15. All the pages of soft copy of the offer should be endorsed along with the stamp/seal of the firm.
16. It may kindly be noted that in case a firm quotes NIL charges/consideration, the bid shall be treated as unresponsive and will not be considered.
17. Firm shall be required to submit the EMD/Bid security amounting to Rs. 34000/- in the form of bank guarantee/DD/CDR from any of the commercial banks which should remain valid for the period of forty five (45) days from beyond the final date validity period.
18. Firms which are exempted to submit the EMD/Bid security shall be required to submit certificate issued by the concerned Ministry/Department.
19. Successful bidders shall be required to submit performance security amounting to 10% of the quoted price pledged to the Head, Department of Chemistry, University of Jammu, Jammu in the form of bank guarantee from any of the commercial banks which should remain valid for sixty (60) days beyond the date of completion of all contractual obligations of the suppliers including warranty obligations.
20. Financial bids of only technically qualified tenderers shall be opened. 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.
21. Item must be quoted alongwith the warranty as specified in technical specifications.
22. Technical specifications of the required instruments/equipments/articles are given above.