

PONDICHERRY UNIVERSITY DEPARTMENT OF CHEMISTRY

R. V. Nagar, Puducherry – 605 014, India

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Sealed quotations are invited for the purchase of <u>rotary evaporator with chiller</u>, <u>two diaphragm pumps</u>, <u>melting point apparatus</u>, <u>and direct drive vacuum pump</u>. The quotations duly signed and sealed should be submitted to the address below. The quotation should be sent by normal/speed post / registered post or by courier. The price quoted should include all the costs such as delivery, installation, testing, etc., and also inclusive of all taxes. Warranty terms should be explicitly specified in your quotation. The technical specifications are given below. **Last date for receiving the quotations is on or before December 12, 2011 at 4.00 PM**. Please adhere to the terms and conditions

S. No.	Equipment and Specifications		
1	Rotary evaporator with recirculating chiller and diaphragm pump:		
	a.	a. Specifications for Rotary Evaporator: 1 No.	
	1.	Vertical condenser plastic glass assembly	
	2.	Rotation speed: 20 to 280 rpm.	
	3.		
	4.	Automatic lifting of the evaporation flask during a power failure	
	5.	Heating bath (20 °C to 180 °C) with graphic display screen.	
	6.	Heating bath should be adjustable	
	7.	Warranty period : Min	nimum 3 years
	b.	Specifications for Recirculating Chiller: 1 No.	
	1.	Recirculating chiller for use with one rotary evaporator	
	2.	Capable to work in ambient temperature (20 to 40 °C)	
	3.	Working temperature range	: -20 °C to +40 °C
	4.	Temperature stability	: ± 0.5 °C
	5.	Temp. control	: PID
	6.	Filling volumes	: max. 5 lit.
	7.	Pressure	: 1 bar
	8.	Flow rate	: 15 LPM
	9.	Display	: LED display
	10.	Display Resolution	: 0.1° C
		Working voltage	: 230V/50Hz
		Warranty period	: Minimum 3 years

c. Specifications for diaphragm pump: 2 Nos. Two stage chemical resistant PTFE diaphragm Vacuum Pump 2. Pump Head : PTFE 3. Diaphragm : PTFE Coated 4. Delivery : 20 - 40 lit/min.5. Ultimate Vacuum : 2-10 mbar 6. AC Input : 230 V / 50 Hz / 1.5A 7. Operating Temperature $: + 5 \text{ to } +40 \,^{\circ}\text{C}$ 8. Vacuum control :Monometer with needle valve 9. Vacuum pump should be resistant towards solvent and acid vapors 10. Warranty period : Minimum 3 years 2 **Melting Point Apparatus: 1 No. Specifications** 1. Temp range : Ambient to 400 °C 2. Resolution : 0.1 °C 3. Temp accuracy Ambient to 200 °C : 0.1, 0.2, 0.5, 1, 2, 5 or 20 °C per minute (linear increase) 4. Heat-up time 50 to 350 °C : < 10 minutes 5. Cool down time 350 to 50 °C : <10 minutes 6. Display : 4-digit LED 1/2"H 7. Reproducibility : ±0.1 °C 8. Capillary capacity : Minimum 3 tubes simultaneously. 9. AC Input : 230 V / 50 Hz / 1.5A 10. Warranty period : Minimum 2 years 3 **Direct Drive Vacuum Pump - 2 Nos.** 1. Double Stage 2. Forced Oil Lubrication System 3. Integral Oil Anti-suck back device 4. Thermal Overload Safety Device $: 20 - 25 \text{ m}^3/\text{h} \text{ and } 30 - 35 \text{ m}^3/\text{h}$ 5. Pumping speed $\le 1 \times 10^{-3} \text{ mbar}$ 6. Ultimate Vacuum 7. Oil capacity : 2-3 Ltr : Single Phase or Three Phase 8. Motor Power Warranty period : Minimum 1 year

SCHEDULE OF TERMS & CONDITIONS

- 1. Tenders are invited in a sealed cover for the supply of **individual equipments** having specifications given above.
- 2. Tender document/quotation must be submitted in sealed cover super-scribing thereon

- bidder's name and name of the item. This is to be submitted to Dr. C. R. Ramanathan, Assistant Professor, Department of Chemistry, Pondicherry University, R. V. Nagar, Kalapet, Puducherry 605 014 or sent by the registered post / courier service addressed to Dr. C. R. Ramanathan, Assistant Professor, Department of Chemistry, Pondicherry University, R. V. Nagar, Kalapet, Puducherry 605 014, India on or before the tender bid closing time (see below).
- 3. The Tender documents must accompany an EMD of Rs. 2000/- by means of a Demand Draft, drawn in favor of the Finance Officer, Pondicherry University, Payable at Puducherry. The amount is refundable.
- 4. Last date and time for submission of tender: December 12th, 2011, 4:00 PM
- 5. Date & time of opening of tenders: December 16th, 2011, 11:00 AM
- 6. The firm must have the requisite domain expertise with regard to supply, installation and post-sale service of the items they are quoting.
- 7. All equipments must operate at 230V/50 Hz single phase and / or equivalent three phase electrical power.
- 8. The offer must be in English. The rates should be indicated both in figures and words. It is preferable that the price be quoted in Indian Rupees or in US Dollars.
- 9. The taxes / duties / discounts, if applicable, are to be explicitly and separately shown in the bid and **under no circumstances** these components shall be added to the basic price and shown as single price. All the components of taxes, if applicable, should be shown explicitly and separately.
- 10. The total cost should be quoted for FOB (ex-port, Chennai, India) as well as CIF-Puducherry, India.
- 11. The prices quoted shall remain firm until equipment is supplied to the Pondicherry University.
- 12. The validity of each quotation should be at least 120 days from closing date of the bid.
- 13. The offers will not be considered if received after the bid closing date and time.
- 14. The offers received through telex / telefax / e-mail will not be accepted by the university under any circumstances.
- 15. The university shall not be responsible for delay / loss or non-receipt of tenders by post / courier service.
- 16. No unsolicited correspondence shall be entertained after the submission of the offer.
- 17. If an order is placed with the firm, the purchase shall be governed by an agreement as per the University rules in force.
- 18. The University has been granted the benefit of exemption from the payment of the Central Excise Duty and Customs Duty by the Department of Scientific and Industrial Research (DSIR), India, vide their Notification No. 10/97 dt. 01-03-1997. Customs duties at Indian port, if any, will be to the account of the University.
- 19. The bidders are encouraged to quote for optional spare parts and accessories (for e.g. a thermo flask or a solvent trap).
- 20. Please give a recent customer list (within last five years) with contact details including email address.
- 21. If you have an authorized representative in India, you are requested to inform his technical ability to take care of the problems in the system, if developed later within the warranty and outside the warranty period. The responsibility of the Indian agent must be

- clearly specified.
- 22. The bidder from abroad shall obtain, if required, export permission from the appropriate authorities in his country or the country of origin for items to be shipped to India in case of items to be imported. The University shall provide necessary information if required for this purpose.
- 23. The bidder from within India shall obtain the requisite approval for Imports etc., if required.
- 24. Additional terms and conditions can be incorporated by the University, if necessary, in the purchase order to safe guard the interests of the University.
- 25. Tender is not transferable.
- 26. Pondicherry University reserves the right to accept / reject any offer in full or in part or accept any offer other than the lowest offer without assigning any reason thereof. Any offer containing incorrect and incomplete information shall be liable for rejection.
- 27. Warranty: The material covered under the purchase order, when installed, shall be warranted for the quality, workmanship, trouble free operation and performance for a period of at least 12 months from the date of putting the system into operation at the Pondicherry University. If any item covered under warranty fails, the same shall be replaced with free of cost including all the applicable charges including shipping cost both ways.
- 28. Payment terms: Normally a letter of Credit will be opened for 100% FOB price on receipt of order acknowledgement, however, 90% of the LC amount will be paid on proof of the shipment of the consignment with necessary documents to be detailed at the time of placing of the purchase order. Balance of 10% of the LC amount shall be made after satisfactory installation and commissioning and against submission of the Installation & Commissioning certificate, duly accepted by the purchaser. Other modes of payment may be considered if agreeable to both parties.
- 29. In case of any dispute in respect of the tender, all legal matters shall be instituted within the jurisdiction of the place where the purchaser ordinarily resides.
- 30. No agency commission will be paid to any authorized agent in India.
- 31. Liquidated damages: Timely supply of the ordered items, installation, commissioning (wherever is applicable) and training etc. is the essence of the contract. In case of failure to supply within the time specified in the Purchase order, a penalty/LD of 0.5% of the total value per week or a part thereof shall be levied subject to a maximum of 7.5% in respect of items which are not supplied. The decision of Pondicherry University shall be final in this regard.
- 32. For any clarification with respect to technical specifications, please contact **Dr. C. R.** Ramanathan, Department of Chemistry, Pondicherry University.