



**CENTRE FOR NANOSCIENCE &
NANOTECHNOLOGY**

(South Campus, Block-II, Sec-25)
PANJAB UNIVERSITY, CHANDIGARH-160014 (INDIA)

NSNT/ 2570 - 2575

Date: 19.07.2016

Tel. No: + 91-172-2541741

FAX No: +91-172-2783336

Speed post/Registered post

Dear Sir,

Please quote Technical and Financial bids (in two separate envelopes) for the supply of following items to the Principal Investigator, Centre for Nanoscience and Nanotechnology, Panjab University, Chandigarh as per specifications: -

Sr. No.	Generic Name- REFRIGERATED CIRCULATOR (Chiller) Quantity required: 1 (one) No
1.	<p><u>Specifications</u></p> <ul style="list-style-type: none">a. Temperature range: -10 to 100 °C.b. Bath capacity: Minimum of 5 litres or higher.c. Heater: 2000 watt or better.d. Flow Rate: Minimum of 12 lit /min or better.e. Temperature accuracy: ± 0.5 °C or better.f. Refrigerant: Preferably CFC free.g. Cooling Capacity @20 °C: 300 watt or better.h. Bath (Tank) Material: Superior quality Stainless Steel (SS)i. Outer Body: Mild steel (M. S.), appropriately powder coated and painted for corrosion resistance.j. Controller Unit: Microprocessor PID Controller and soft keys with touch key pad (should be user friendly).k. Display: Digital display/should show the real time bath/fluid temp during the entire run.l. Pumping: Inbuilt pump with the minimum pressure of 300 mbar for fluid circulation, entire unit should be compact in size and space saving (preferably not exceed the maximum dimension of 25 cm x 45 cm x 65 cm).m. Alarm: Alarm for any sensor break down and low fluid level.n. Circulation of fluid: Should provide appropriate external

	<p>circulation kit or set to customer satisfaction.</p> <p>o. Supply voltage: Up to 240 V/ 50 Hz or As per Indian standard, single phase.</p> <p>p. Warranty: Minimum 2 years</p>
2	<p align="center">Generic Name - Ultrasonic Bath/Cleaner</p> <p align="center">Quantity required: 1 (one) No</p>
	<p align="center">Specifications</p> <p>a. Tank capacity (working): 8 (\pm 1) Litres (with drainage outlet),</p> <p>b. Power: 200 W or better and preferably <i>CE</i> compliant,</p> <p>c. Main panel (user interface): Water proof PCB with soft keys with touch pad, digital display for timer and temperature. Should be user friendly with clear view,</p> <p>d. Heating: Ambient to 80 °C with digital control and real time display, 200 W or better (preferably a separate switch for heating),</p> <p>e. Ultrasonic frequency: In the range 33-45 KHz with degas function,</p> <p>f. Inner tank material: Superior quality stainless steel with appropriate drainage.</p> <p>g. Outer body: Stainless steel/corrosion resistance and durable body,</p> <p>h. Timer: 1-60 Min or better,</p> <p>i. Should provide stainless steel mesh baskets of variable sizes and depth to hold beakers etc. of different sizes for laboratory use,</p> <p>j. Power supply: Up to 240 V, 50 Hz AC/ Indian Standard,</p> <p>k. Warranty: Minimum 2 years</p>

The quotations must reach in sealed envelopes by **03.08.2016 at 5.00 p.m.** along with your other terms and conditions of supply, if any.

LAST DATE OF RECEIPT OF QUOTATIONS: 03.08.2016 AT 5.00 P.M.

***OPENING OF QUOTATIONS: 05.08.2016 AT 3.30 P.M.**

(*If it is a holiday, next working day will be considered)

Note: - The quotation must reach by hand/registered post/speed post on or before **03.08.2016 by 5.00 p.m.** at the following address.

The Principal Investigator,
Centre for Nanoscience and Nanotechnology, Panjab University,
Science Block- II, Sector-25, University South Campus, Chandigarh-160014.

- MOST IMPORTANT -

1. The bidders are requested to attach the EMD as demand draft of 2 % of the total value of the quotation/proforma invoice in the name of 'The coordinator, Centre for Nanoscience and nanotechnology, Panjab University Chandigarh', without EMD financial bids will not be entertained.
2. Please quote technical and financial bids separately (in two separate envelopes) with EMD.
3. Panjab University, does not take responsibility for any postal delay in delivery of registered/speed post or lost in transit of quotation.
4. We have been exempted from paying central excise duty to vide govt. of India notification no. 10/97-central excise dated March 1, 1997 and is valid up to 31-8-2020.
5. The rate should be quoted both in words and figures in **financial bid only**.
6. Conditional and unsigned quotation will not be accepted.
7. The supply of consignment be commenced/made within 30 days of the issue of supply order.
8. All quoted rates should be for Panjab University and the firm should quote the rate of all taxes.
9. No payment will be made on proforma invoice.
10. The quotations shall not contain corrections, erasers, and overwriting.
11. The undersigned reserves the right to accept or reject **any quotation without assigning any reason**.
12. Special discount for the educational institution, University teaching department may be mentioned.
13. Quotation shall be opened on **05-08-2016 at 3.30 p.m.** and **you may depute your representative at the time of opening of quotation**.
14. The quotation (technical and financial bid with EMD) in a sealed envelope giving our/your reference no./date of quotation should be sent after affixing the required postage stamps. The quotation may be sent by speed post /registered post (as far as possible) / by hand.
15. The present rate of S.T. applicable on the articles should be clearly mentioned.
16. Earnest money/security deposit/any other sums of the tenderers lying with the University in connection with and other tender/case will not be considered against this tender.
17. Technical specifications are intended to be descriptive only and not restrictive. The bidder may substitute alternatives with identical standards, brand names and/or catalogue numbers in its bids, provided that it demonstrates to the purchaser's satisfaction.

18. The bidders shall provide a list of reputed institutions/universities/research laboratories in India where their equipment had been installed. The evidence should provide for minimum of 50 installations in India.

Mention clearly whether you meet the Technical Specifications (yes/no)

Sr. No.	Generic Name of Items	Specify Yes/No
REFRIGERATED CIRCULATOR (CHILLER)		
1.	<p style="text-align: center;"><u>Specifications</u></p> <ul style="list-style-type: none"> a. Temperature range: -10 to 100 °C. b. Bath capacity: Minimum of 5 litres or higher. c. Heater: 2000 watt or better. d. Flow Rate: Minimum of 12 lit /min or better. e. Temperature accuracy: ± 0.5 °C or better. f. Refrigerant: Preferably CFC free. g. Cooling Capacity @20 °C: 300 watt or better. h. Bath (Tank) Material: Superior quality Stainless Steel (SS) i. Outer Body: Mild steel (M. S.), appropriately powder coated and painted for corrosion resistance. j. Controller Unit: Microprocessor PID Controller and soft keys with touch key pad (should be user friendly). k. Display: Digital display/should show the real time bath/fluid temp during the entire run. l. Pumping: Inbuilt pump with the minimum pressure of 300 mbar for fluid circulation, entire unit should be compact in size and space saving (preferably not exceed the maximum dimension of 25 cm x 45 cm x 65 cm). m. Alarm: Alarm for any sensor break down and low fluid level. n. Circulation of fluid: Should provide appropriate external circulation kit or set to customer satisfaction. o. Supply voltage: Up to 240 V/ 50 Hz or As per Indian standard, single phase. p. Warranty: Minimum 2 years 	

2.	Generic Name - Ultrasonic Bath/Cleaner	
	<p style="text-align: center;">Specifications</p> <ul style="list-style-type: none"> a. Tank capacity (working): 8 (\pm 1) Litres (with drainage outlet), b. Power: 200 W or better and preferably <i>CE</i> compliant, c. Main panel (user interface): Water proof PCB with soft keys with touch pad, digital display for timer and temperature. Should be user friendly with clear view, d. Heating: Ambient to 80 °C with digital control and real time display, 200 W or better (preferably a separate switch for heating), e. Ultrasonic frequency: In the range 33-45 KHz with degas function, f. Inner tank material: Superior quality stainless steel with appropriate drainage. g. Outer body: Stainless steel/corrosion resistance and durable body, h. Timer: 1-60 Min or better, i. Should provide stainless steel mesh baskets of variable sizes and depth to hold beakers etc. of different sizes for laboratory use, j. Power supply: Up to 240 V, 50 Hz AC/ Indian Standard, k. Warranty: Minimum 2 years 	

Yours faithfully,



(Dr. Jadab Sharma)

Principal Investigator,

UGC SU-R/P, Centre for Nanoscience & Nanotechnology, Panjab University

Chandigarh