

## **Re-tender/02/Water-Bath/EMF/16-17 dated 18.10.2016**

Quotation should be submitted to Officer-in-Charge, Electron Microscope Facility, Room No. 12, Convergence Block, Basement 1 (-1), Electron Microscope Facility, AIIMS, New Delhi – 110029 on or before 05.11.2016 – 12.30 p.m.

### **Item No. 2 ; Qty required - 01 ; Approximate Cost – Rs.0.00 lakhs**

#### **Technical Specification of Refrigerated Circulating Water Bath Incubator**

1. System should have working temperature range of -25°C to 120 °C or better
2. Should have temperature stability at least  $\pm 0.05^\circ\text{C}$
3. Should have heater capacity at least 2000W
4. Temperature control should be with PID controller
5. Should be switches off automatically in case of high temperature or low liquid level alarm.
6. Should have high cooling capacity at following temperature:
  - a. at 0C to 20°C: Cooling Capacity at least 500 Watts;
  - b. at -20°C : Cooling Capacity at least 200 Watts
7. Should have circulating pump capacity with maximum flow rate at least 10 liter/min or better. Should have fast ramping rate (40 minutes to reach from 20°C to -15°C)
8. Should have powerful circulation pump to ensure temp uniformity in both internal and external circulation. Connection with evaporator or viscometer should be possible
9. Certification as per DIN/ISO/CE. Certificate to be attached.
10. There should be option to connect the water bath with external system simultaneously with internal application
11. Should have bath opening dimensions (cm) at least 20 (W), 15 (L) and 20 ( D)
12. The venting grill /grid or cover of compressor should be easily removable for dust cleaning.
13. The venting system should be from front to back direction and not in side venting. This feature will enable us to place the water bath where sensitive instruments are placed on the side, and enable an uninterrupted front -back venting.
14. Drain port for easy removal of fluid for regular cleaning.
15. System should have low line liquid level protection and also for high /low temperatures (Short circuit breaker, over heat protector, sensor abnormality, overload protector)
16. Should have adjustable high temperature high cut off; audible alarm feature
17. Should have rust free/ stainless Steel construction
18. Water drain for easy cleaning of the inner tank
19. Should have CFC Free refrigeration gas and proper insulation for temp uniformity in chamber
20. Should have volume at least 10L
21. Should be provided with a stand to incubate 1.5ml eppendroff tubes

#### **Specification for waterbath Incubator**

22. Should have high-quality water baths with microprocessor technology with PID temperature control and a temperature stability of  $\pm 0.2^\circ\text{C}$ .
23. Should have provided with overall splash-water protection and have a keypad for temperature settings and with temperature indication (LED) for easy operation.
24. Should have dry-running protection as well as optical and acoustical warnings, and switch-off functions,
25. Should have seamless, splash-proof keypads and mains switch
26. Should have Drain screw for conveniently emptying the bath
27. Should provide lift-up bath cover of high quality
28. Should have removable bottom plate for easy cleaning
29. Should have working temperature range from 22-90C
30. Should have bath opening W x L x D at least 35x 25x 12 CM
31. Should have water filling capacity at least 12 liter

### **Terms and Condition**

32. Should be completely complying the point no 18.1 and 18.6 at page no. 16 of the AIIMS tender documents.
33. The system should be certified from European CE / UL / ISO 9001 for quality assurance.
34. Standard instrument comprehensive warranty for 2 years + 3 years comprehensive maintenance contract (CMC).
35. Equipment and power supply connector should be compatible with Indian power supply system
36. Performance Certificate from at least 3 users preferably from Government sector, should be provided.

**We confirm that specifications are broad based and not suited for any one particular brand.**

### **General Terms and conditions**

- The make of the article offered should invariably be quoted. Quotation should be typed. All overwriting and erased entries should be deleted from the quotations. The rates should be valid for atleast **three months**.
- VAT/Sales tax or any other kind of tax(es) must be separately mentioned against each item. In case no sales tax is chargeable, prices must be quoted as NET.
- Installation. The firm should install the equipment on the site free of cost.
- The firm must supply the item within 30 days after confirmation of order.
- The successful bidder may be asked to submit the performance bank guarantee of 10% of the order value valid upto warranty period.
- The payment will be made electronically viz. RTGS/NEFT after receipt and successful installation of an equipment. Please provide the details viz. 1) Name of beneficiary 2) Account Number 3) Name and address of bank 4) IFCS code of the bank/branch.
- The quantity can be increased or decreased depending upon the actual requirement.
- The Head/Officer-in-Charge of the Department reserve the right to cancel/reject full or any part of the rate enquiry which generally do not fulfill the conditions stipulated in the rate enquiry.
- No extra transportation charges will be given to the firm.
- The firm must supply the items within the date mentioned on the supply order.

