

**Open Tender Notification for the procurement of "High Speed Refrigerated Centrifuge"
at the Biochemistry Department, Indian Institute of Science, Bangalore**

(Last date of submission of tenders: 9th May, 2023)

(TENDER FROM DOMESTIC VENDORS)

Dear Sir/Madam,

April 18, 2023

Sub: High Speed Refrigerated Centrifuge

This is a domestic tender notification meant for the purchase of a " High Speed Refrigerated Centrifuge" towards the purpose of high speed cell and protein pelleting at centrifugal speed and different volumes. Your quotation should clearly indicate the terms and conditions of the quotation, delivery schedule, entry tax, payment terms, warranty coverage etc. The quotation should be submitted in two parts: **Part I (Technical Bid) and Part II (Commercial Bid) and both should be submitted in separate sealed envelopes. The Technical bid should be exactly the same as the Commercial bid except that prices must not be shown in the technical bid. The Technical bid should have an item-wise compliance report of all specifications indicated below. **The last day for submitting the bid is 9th May, 2023 from the date of tender notification.** The offer should be valid for a period of at least 90 days from the last date of submission of quotes.**

- 1. Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor.**
- 2. The quotations should be on FOR-IISc Bangalore basis in INR only.**

The bid should address the following technical specifications for the : High Speed Refrigerated Centrifuge, accessories (rotors, adaptors, etc.), 10kVa stabilizer and controlling software (if applicable):

1. The High speed centrifuge should run at maximum speed of 22,000 rpm or more
2. The High speed centrifuge should run at maximum 55,200 x g or more
3. The High speed centrifuge should have a speed rotation tolerance of ± 100 rpm of set speed
4. The High speed centrifuge should have maximum nominal capacity of 6 litre
5. The High speed centrifuge should have the temperature set range from -20°C to $+40^{\circ}\text{C}$ with 1°C increments and temperature Accuracy of $\pm 3^{\circ}\text{C}$
6. The High speed centrifuge should have a Timer: 1 sec to 99 mins and 59 sec (with 1 min increments) with HOLD function
7. The High speed centrifuge should have an Induction motor as a drive System.

8. The High speed centrifuge should have dual over speed detection
9. The High speed centrifuge should have non-contact imbalance sensor to detect any imbalance in the system to activate the imbalance alarm and stops rotation immediately when detected
10. The High speed centrifuge should have features like programmed start/ stop function, Large 5.7 inch colour LCD touch screen, RPM/ RCF mode, Run Scheduling and USB data communications
11. The High speed centrifuge should have a refrigerator with inverter-controlled hermetic rotary compressor with R410A refrigerant
12. The High speed centrifuge should have an in-built condensate drain to prevent water accumulation
13. The High speed centrifuge should have automatic standby function for energy saving
14. The High speed centrifuge should have automatic rotor and rotor cover detection for user and sample safety
15. The High speed centrifuge should have Acceleration/ Deceleration Profile: 9/9 or more
16. The High speed centrifuge should have programmability of registering up to 30 programs with step run in the system.
17. The High speed centrifuge should have option for setting User administration access level to register up to 40 Users and user lockout function
18. The High speed centrifuge should be able to accept Fixed Angle and Swinging Bucket Rotors.
19. The High speed centrifuge should have option to browse available rotors, their specifications and accessories
20. The High speed centrifuge should support automatic rotor locking by self-locking rotors system, without any need for a tool or push the button to lock/unlock the rotors.
21. The High speed centrifuge should have USB ports to support options for data communication and operating log management
22. The High speed centrifuge should have Power: 210-240 VAC, 50/60 Hz, 30 A.
23. The High speed centrifuge should have less noise level of 64 dB(A) or less for stress free work environment
24. The High speed centrifuge should have small dimension of 700 (W) x 760 (D) x 915 (H) to occupy only less lab space / floor area
25. The High speed centrifuge should have Safety and Standards Certification: CE
26. The High speed centrifuge should have Product Safety: EN61010-1 and EN 61010-2-020
Electromagnetic Compatibility: EN 61326-1
27. System should have emergency lid release preferably in front side (in case of power failure)
28. Features in the quotations should be substantiated with proper company catalogue.
29. Optional rotor should be quoted along with main offer Fixed angle rotor for 1.5litre x 4
30. Suitable 10kVa stabilizer should be quoted.

Rotor & Accessories

- 1) Fixed angle Rotor for 50ml tubes
Maximum Rotor Capacity: 50 mL x 8
Maximum Rotor Speed: 20,000 rpm
Maximum Rotor g-Force: 48,000 x g

K Factor – 424
Weight – 6.8 Kg
Rotor angle - 34°

2) Fixed angle Rotor for 250ml tubes
Maximum Rotor Capacity: 250 mL x 4
Maximum Rotor Speed: 14,000 rpm
Maximum Rotor g-Force: 30,240 x g
K Factor – 823
Weight – 16.8 Kg
Rotor angle - 35°

3) Fixed Angle Rotor for 30ml tubes
Maximum Rotor Capacity: 30 mL x 6
Maximum Rotor Speed: 21,000 rpm
Maximum Rotor g-Force: 50,000 x g
K Factor – 487
Weight – 5.4 Kg
Rotor angle - 40°
Rotor can be sterilized by autoclave at 121°C for 20 minutes.
System should be quoted with 2 years of comprehensive warranty and annual maintenance contract.

Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor.

The quotations should be on FOR-IISc Bangalore basis in INR only.

Important: Please note that the : High Speed Refrigerated Centrifuge should match all technical specifications and item- wise compliance must be listed in a detailed document in the technical bid

The sealed tender documents should be addressed to The Chair, Department of Biochemistry, Indian Institute of Science, Bangalore 560 012. Last date for receiving queries is 4th May. 2023 from the date of tender notification.

Thank you,

Sincerely

The Chair
Department of Biochemistry,
Indian Institute of Science
Bangalore - 560 012.