

**Indian Institute of Technology (IIT) Delhi**  
**Department of Biochemical Engineering and Biotechnology**

The Purchase Committee for the purchase of Multipurpose refrigerated micro centrifuge from the Institute Grant (PLN03) met on 29-08-2012 at 11 AM in the Committee Room, DBEB to finalize the specifications for above item. The enclosed specifications were finalized and the Committee recommended that NIQ may be put on the Institute website for wider circulation.

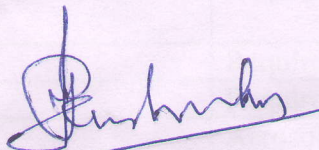
Members present:

Prof. G. P. Agarwal  
Prof. T. R. Sreekrishnan  
Dr. D. Sundar  
Dr. Atul Narang

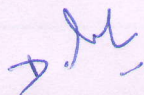
Professor, Dept. of Biochemical Engg. & Biotechnology  
~~Asst. Prof.~~, Dept. of Biochemical Engg. & Biotechnology  
Asst. Prof., Dept. of Biochemical Engg. & Biotechnology  
Assoc. Prof., Dept. of Biochemical Engg. & Biotechnology



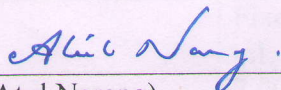
(G. P. Agarwal)



(T. R. Sreekrishnan)



(D. Sundar)



(Atul Narang)



**Indian Institute of Technology (IIT) Delhi**  
**Department of Biochemical Engineering and Biotechnology**  
**Hauz Khas, New Delhi – 110 016, India**

Sealed quotations are invited in US dollars (USD) from reputed companies or their authorized representatives for supply of **Multipurpose refrigerated micro centrifuge** conforming to the technical specifications (not inferior than those specified below) and prescribed terms and conditions given below. **The price should be on FOB basis.**

Interested parties are requested to submit their sealed quotations in an envelope containing the financial and technical bids in **separate** sealed envelopes. The NIQ should be addressed to **Dr. Atul Narang** and submitted to the Main Office (Room No. I-224) of the Department of Biochemical Engineering and Biotechnology, Indian Institute of Technology (IIT) Delhi, Hauz Khas, New Delhi – 110016 latest by **4 pm on September 18, 2012.**

Number of **Multipurpose refrigerated micro centrifuge** to be purchased – **ONE**



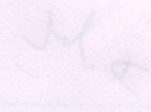
(T. R. Sreenivasan)



(Dr. Atul Narang)



(Atul Narang)



(D. Srinivas)



## A. SPECIFICATIONS

1.	Temperature range	≤-10 °C to ≥40 °C adjustable during operation
2.	“Fast cool” function	Required
3.	Standby mode for cooling and heating when not in operation	Required
4.	Temperature timer for pre-programming desired temperature	Required
5.	Maintain 4 °C at maximum speed with all rotors	Required
7.	Maximum relative centrifugal force	≥30,000 g
8.	Acceleration time to maximum speed at maximum load for all rotors	≤30 s with option for slow acceleration
9.	Deceleration time for standard 30 x 1.5 / 2.0mL rotor	≤30 s with option for slow deceleration
10.	Timed runs for at least	99 min
11.	Timer countdown when selected speed is reached	Required
12.	Compressor shutoff function after period of inactivity	Required
13.	Condensation drain in rotor chamber	Required
14.	Compliant with safety standards IEC 1010-2-020	Required
15.	Automatic imbalance detection	Required
16.	Automatic rotor detection	Required
17.	Rotors required at a minimum	Aerosol-tight fixed angle rotor accommodating ≥ 24 1.5/2.0 mL Eppendorf-type reaction tubes with a minimum of 20,000 g
		Fixed-angle rotor accommodating 6 x 15/50 mL Falcon-type tubes with a minimum of 7,000 g

## B. OTHER GENERAL TERMS

Warranty required	One year comprehensive on-site warranty (Parts and labour)
-------------------	--

## C. ADD-ON ITEMS (May be quoted separately)

Extended warranty	Two year extended comprehensive onsite warranty (Parts and labour)
-------------------	--



**Terms and conditions**

1. Manufacturers' specifications should be arranged **in the same order** as the specifications given above.
2. Letter from manufacturer specifically to quote for this tender is to be attached for authenticity of dealership/agency and dealer should be authorized service provider.
3. Vendor should get a fresh certificate directly from their product principal clearly mentioning about on-site comprehensive warranty for One year of the systems to be delivered.
4. Indicate if a special discount/rebate, wherever admissible, is being provided in view of the fact that the supplies are being purchased for educational purposes in a Public Institution of national importance.
5. Vendor should attach the relevant product brochure/leaflet for the model quoted.
6. Validity of the quotation should be at least three months.
7. Vendors will do the installation and demonstration of the machine at IIT Delhi premises without any extra cost.
8. Taxes, Terms and Conditions should be clearly mentioned.
9. In case the items are proprietary products of the company, a proprietary item certificate stating the same may be provided.
10. A compliance statement for the specifications should be attached.

**The Institute/Purchase Committee has the right to accept or reject any bid or all quotations without assigning any reasons whatsoever.**

Required	Required
Required	Required
Across-light fixed angle rotor accommodating $\geq 24 \times 1.5 \times 0.5$ ml. Eppendorf-type reaction tubes with a minimum of 20,000 g	Rotors required at a minimum
Fixed-angle rotor accommodating $\geq 15 \times 0$ ml. Falcon-type tubes with a minimum of 7,000 g	Automatic rotor detection
	Automatic imbalance detection

**B. OTHER GENERAL TERMS**

Warranty required: One year comprehensive on-site warranty (parts and labour)

**C. ADD-ON ITEMS (May be quoted separately)**

Extended warranty: Two year extended comprehensive on-site warranty (parts and labour)