Department of Biochemical Engineering and Biotechnology

September 4, 2012

Specifications for Chilled Water Circulator

Working temperature range: -20 to 40° C
Temperature control PID or equivalent

Temperature stability + 0.5° C

Cooling capacity $\overline{7000}$ Watt at 20° C

5100 Watt at 0° C 3000 Watt at -10° C 1550 Watt at - 20° C

Pump Flow Rate 60 LPM Pressure 6000 mbar

Display LED Display Resolution 0.1° C

Filling volume 39 to 47 Liters

Refrigerant R 404a

Desirable features -

Large Bright LED display
Front removable venting grid
Integrated stainless steel bath tanks
Splash proof key pad
Permissible temperature limit in return line +80° C
Equipped with pressure indicator
Adjustable bypass for pump pressure
Low liquid level protection with optical and audible alarm signal

Terms and Conditions -

1. Please submit the TECHNICAL and FINANCIAL bids in separate sealed envelopes. Mark the two envelopes clearly as "Technical Bid" and "Financial Bid". Both the sealed envelopes should be sent in a single sealed envelope, clearly marked as "Quotations for Purchase of Chilled Water Circulator due on 26-09-12". The quote should reach the following address on or before 26-09-12, up to 5 PM.

Prof. A. K. Srivastava Department of Biochemical Engineering and Biotechnology Indian Institute of Technology Delhi Hauz Khas, New Delhi-110016

- 2. Please quote F.O.B. & CIF New Delhi prices separately.
- 3. Technical bid should contain **compliance chart** based on specifications as per NIQ, but must not contain any commercial information

- 4. The quotations should be in the currency of the country of origin and should be valid for at least three months.
- 5. Please attach all the technical literature and a list of similar installations done in India.
- 6. The warranty on the equipment should be clearly specified.
- 7. Payment should be through irrevocable letter of credit.
- 8. If the quote is being submitted by the representative of the Principals/manufacturer themselves, a valid Agency ship/Dealership Certificate authorizing the agent to quote to IIT Delhi on behalf of the Principals should be enclosed.
- 9. Complete set of manuals for the operation of equipment should be given.
- 10. Clearly specify the installation requirements—such as space, power, frequency, environment (Temperature and humidity) etc.
- 11. The institute reserves the right to accept or reject any / all the quotations without assigning any reasons thereof.