

INDIAN INSTITUTE OF TECHNOLOGY DELHI HAUZ KHAS NEW DELHI

Date: 13th August, 2012

Notice Inviting Quotation

Quotations are invited for the purchase of a **Ultrapure water purification system** for the Kusuma School of Biological Sciences. Interested suppliers are required to submit their quotations as per the specifications given below. The sealed Quotations are to be submitted in two separate envelopes;

**A - for Technical Quote (Specifications) &
B - for Financial Quote
(For details see Annexure I)**

Both these envelopes should be enclosed in an outer envelope, which should also be sealed and addressed, clearly mentioning on top right corner of the envelope "**Quotation for Ultrapure water purification system**" due on **4th September, 2012**.

The quotations should reach the office of **Dr. Manidipa Banerjee, Room No. 308, Kusuma School of Biological Sciences, by 5 PM on 4th September, 2012**.

Institute reserves the right to accept or reject any of the offers without assigning any reasons.

Technical Specifications

1. The water purification system should deliver RNase/DNase free, pure (Type II) as well as ultrapure (type I) water directly from tap water, to eliminate the need of two different systems in the same laboratory.

2. The desired water quality for Type I and Type II water are as detailed below:

	Type I	Type II
Resistivity	~ 18.2 M Ω /cm ²	> 5 M Ω /cm ²
Total organic carbon content (TOC)	< 5 ppb (parts per billion)	< 30 ppb
Flow rate	Upto 2 lit/min	3 lit/hour
Bacteria	< 0.1 cfu/ml	-
Endotoxins	< 0.001 Eu/ml	-

3. The system should be comprised of a single water purification unit incorporating reverse osmosis, electro-deionisation, UV irradiation (for both type 1 & Type II) water, ion-exchange and activated carbon technologies. Polishing device should also be included.

4. To eliminate the need for regular replacement of deionization cartridges, the water system should include an electrodeionization module that does not require softening pre-treatment.

5. The purification and delivery functions of the water purification system should be in separate units. The quality of water in quantitative amounts should be displayed on the independent dispenser.

6.To avoid maintenance errors and to improve traceability, the internal primary consumable water purification cartridges should have a built-in radio-frequency identification.

7.The built-in resistivity and TOC monitors of the ultrapure water system should be calibrated according to international norms and standards.

8.The built-in TOC monitor should have an independent UV lamp & should be able to measure within 1-999 parts per billion.

9.The system should have a dual wavelength, built-in UV lamp.

10. The system should be able to take feed water with conductivity up to 2000 μ S/cm & free chlorine up to 3 parts per million.

11. A reservoir of 50 liter capacity, along with a pre-filtration kit, with a 5.0 and a 1.0 micron filter, and a booster pump should be supplied with the system.

14. A comprehensive warranty of 3 years should be quoted with the system. Supply of consumables for five years should be guaranteed.

15. A separate quotation for replacement cartridges, appropriate sanitization reagents and replacement UV lamps, sufficient for five years of satisfactory performance of the equipment, should be provided.

Annexure I

Envelope A: Technical Quote: The following details are to be enclosed (*Mention clearly on this envelope – **Technical Quote***)

1. Technical brochures mentioning all details with complete address of the principals.
2. A compliance chart based on the specifications as per the NIQ.
3. Any optional equipment / accessory/ spares advised to be included separately.
4. All installation requirements should be clearly stated.
5. Details of similar equipment supplied to IIT Delhi specifying the Department/ centre / lab to which the equipment was supplied. Also mention if the equipment is being maintained by your organization.
6. Address of the technical office, in India, with telephone and FAX numbers. Kindly clarify the type of support available in India.
7. If quote is for imported equipment, sole agency-ship certificate on the letterhead of the principal company, if quotation is from an Indian agent.
8. Proprietary item certificate from the principals, if applicable.
9. The agent should be registered for import with the Ministry of Finance / Commerce.

Envelope B: Financial Quote: The following details are to be enclosed/ ensured. (*Mention*

*clearly on this envelope – **Financial Quote**)*

1. The quotations for the equipment in foreign exchange, if it is to be imported. The cost of spares and optional equipment to be quoted separately. The cost should be based on FOB pricing. If equipment is indigenous, the quote should be in INR and all taxes applicable should be mentioned clearly.
2. Institute makes payment after delivery and successful installation. In case the payment terms are different, it should be mentioned clearly. If equipment is to be imported, the address of the company in whose name the LC is to be opened should be stated.
3. The Comprehensive Three Years Warranty.
4. The details of the AMC after the warranty period.
5. Cost for Installation at site, if needed, to be provided.
6. Validity of the quote should be 90 days.
7. The delivery period to be clearly specified.