INDIAN INSTITUTE OF TECHNOLOGY KANPUR

DEPARTMENT OF EARTH SCIENCE

Revised*

Enquiry No: ES/IS/2014-15/28 Date: 26.02.15

Subject: Quotation for supply of MERCK MILLIPORE MILLI-Q INTEGRAL-3 WATER PURIFICATION SYSTEM.

With reference to the subject mentioned above, you are invited to submit the quotation in a sealed cover in order to reach us by March 06, 2015 in the form of a hard copy to the address mentioned below. If you have any questions please contact Dr. I S Sen (phone no. 0512-2596440, email: isen@iitk.ac.in).

The prospective suppliers are required to send quotation in two separate sealed envelopes, as "**Technical Bid**" and "**Financial Bid**". The Technical Bid should contain detailed technical specification of the product being offered and should not mention any prices. The Financial Bid should include the detailed price quotation clearly including the cost of the equipment, taxes, service charges if any, shipping and handling charges. The two separate and sealed envelopes should be clearly marked appropriately as "Technical Bid" and "Financial Bid".

SPECIFICATIONS FOR WATER PURIFICATION SYSTEM:-

- 1. The tap water should pass through a prefilteration unit comprising of 5 & 1 micron filter & a booster pump.
- 2. Single water purification system shall deliver pure (Type II) & ultra pure water (type I) directly from tap water to eliminate the need of two different systems in the same laboratory.
- 3. Conductivity cell present before RO stage (cell constant 0.01/cm) to measure the RO feed conductivity.
- 4. The system shall be comprised of a single water purification unit containing reverse osmosis, electro-deionisation with carbon beads on cathode, uv irradiation (for both type 1 & Type II) ion-exchange and activated carbon technologies on cathode and polishing device.
- 5. To eliminate the need of deionization cartridges regular replacement, the water system will include an EDI (Electro De-Ionisation) module that does not require softening pre-treatment
- 6. The built-in TOC monitor (range 1ppb-999ppb) should be present.
- 7. The ultra pure water system will have a built-in UV lamp with emission at 185 and 254 nm wavelength.
- 8. The system should be able to take feed water up to 2000 microS/cm & free chlorine of 3 ppm.
- 9. A 30 liter reservoir should be provided.
- 10. The ultra pure water delivery should be from an independent dispenser displaying the water parameters like TOC, Resistivity, volume of water dispensed etc.
- 11. A foot paddle for water dispensing is mandatory

12. The system should produce water of the following quality:

Type II Type I

Resistivity: > 5 typically Resistivity: > 18.2 typically

TOC : < 30 ppb TOC : < 5 ppb Bacteria : < 1 cfu/ml.

Conductivity : < 0.055 uS/cm Flow Rate: up to 2 lit/min

Terms and Conditions:

- 1) Maximum education discount, if any should be offered.
- 2) Validity of quotation should be at least for 60 days.
- 3) Prices should be quoted on FOB (Free on Board) only (if imported).
- 4) Normal payment terms for the Institute will be applicable (90% on delivery of the items and the remaining 10% after satisfactory installation/inspection).
- 5) Quotation should carry proper certifications like agency certificate, proprietary certificate, etc.

Kindly write the inquiry number on the top of envelop.

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