



Indian Institute of Technology Kanpur

Environmental Engineering and Management

Department of Civil Engineering

Professor Vinod Tare

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Enquiry No- **CE/EEM/2013/ NC/ UWPS /2**

Dated: August 12, 2013

Last Date: **August 24, 2013**

Sub: Call for quotation for **“Ultrapure water purification system”**

Sealed Quotation(s) are invited (in Indian rupees) for the purchase of Ultrapure Water Purification system.

1 No. (One) quantity.

It must fulfill following technical details -

1. It should deliver pure (Type-1) and Ultrapure (Type- 2) water directly from tap water.
2. It should be comprise of single water purification unit containing-
 - (i) Reverse osmosis
 - (ii) Electro- deionization
 - (iii) UV – irradiation for both pure (Type-1) and Ultrapure (Type- 2) water.
 - (iv) Ion Exchange
 - (v) Activated carbon technologies and polishing device
3. It include Electro- deionization (EDI) module
4. Water purification and water delivery function should be separated.
5. Internal water purification cartridge should have built -in RFID tag.
6. It should have built –in resistivity and TOC monitor with calibrations according to international norms and standard.
7. Conductivity meter – precise and adhere to USP 30 test requirement.

8. The built-in TOC monitor should be able to pass the USP suitability test for TOC analysis (range 1ppb-999ppb), and Passes USP <643> suitability test.
9. The system should have built -in UV-lamp with emission at 185 and 254 nm wavelengths.
10. The system should be able to take feed-water upto 2000 microS/cm.
11. 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
Flow rate	: 3 lt/hr	Bacteria	: < 0.1cfu/ml
		Pyrogens	: <0.001EU/ml
		Flow Rate	: upto 2 lit/min

12. A Reservoir of 30 liters, manufactured by Blow- molding process with PE material should be provided.
13. A Pre-filtration kit with 5 micron filter & a booster pump should be provided.
14. The ultrapure water delivery should be from an independent dispenser displaying the water parameters like TOC, Resistivity, volume of water dispensed etc.

Send sealed quotation(s) to the following address by 4.00 pm of August 24, 2013.

Dr. Vinod Tare
 Environmental Engineering Laboratory (WL-116),
 Department of Civil Engineering
 IIT Kanpur

Thanking You
 Sincerely,

(Vinod Tare)