Date: 28/11/2019

Addendum 01

The Pre – Bid Meeting was held on **20/11/2019** at **3.30 p.m.** in the **Board Room**, NITK Surathkal for the purchase of **"Type 1 Water Purification System" (Tender Notification No : NITK/CRF/T1WPS/04 Dated: 04/11/2019).** The following queries were discussed & the Reply/Clarification given to the prospective bidders.

Queries & Reply/Clarification

Sl. No.	NITK Tender Specifications	Questions asked by the vendor	Reply/Clarification	Changes to the Tender
1	**Point 1: Tender Sl. No. 3 a)** Pre-treatment cartridge with Poly Phosphate [anti-scaling compound], 0.5 micron filter and activated carbon, with Radio Frequency Identification tag [RFID] for easy traceability & to have water consumption data for one year from the date of cartridge installation. Should have Pump with unique temperature feedback mechanism. .	We have equivalent technology? Amend as RFID or Equivalent Technology for easy traceability	Request accepted.	Committee decided to modify it as "Pre-treatment cartridge with Poly Phosphate [anti-scaling compound], 0.5 micron filter and activated carbon, with **Radio Frequency Identification tag [RFID] or equivalent technology for easy traceability** & to have water consumption data for one year from the date of cartridge installation. Should have Pump with unique temperature feedback mechanism".

2	**Point 2: Tender Sl. No. 3 c)** **b)** Electro deionization module with auto regeneration by a weak electric current, eliminating the need for chemical regeneration or replacement of DI resin cartridges. EDI (Electro Deionization) module should not require softening pre-treatment. Should have carbon beads at cathode of the EDI module to prevent scaling of the module. Should have coaxial resistivity cell with a cell constant of 0.01cm^{-1}	Again, this specification also pertaining to one brand. Please amend as common Specification	Request accepted.	Committee decided to modify it as "Electro deionization module with auto regeneration by a weak electric current, eliminating the need for chemical regeneration or replacement of DI resin cartridges. EDI (Electro Deionization) **module should not require softening pre-treatment. Should have carbon beads or resin based technology** at cathode of the EDI module to prevent scaling of the module. Should have coaxial resistivity cell with a cell constant of 0.01cm^{-1}"
3	**Point 3: Tender Sl. No. 4)** Type II -Pure Water Specification **a) Production Flow Rate: 3 Liter/Hour** **b)** Conductivity: 0.2 us/cm to 0.066 us/cm [5-15 MΩ/cm Resistivity]	The Production flow rate of Type II water is too low. What is the consumption of Water during peak hours in your lab for both Type II and Type I Water ???	3 liter/hr or more.	Type II -Pure Water Specification **a) Production Flow Rate: 3 Liter/Hour or more**
4	**Point 4: Tender Sl. No. 5)** Bacteria: <0.005 CFU/mL	Why ?	This is the enough for our experimental need	No Change in specifications, As per the tender document

5	**Point 5: Tender Sl. No. 5)** **T**ype 1 Water Specification: It should able to deliver water with following quality. a) Resisitivity: >18.2Mohm.cm b) TOC: <2ppb c) Bacteria: <0.005 CFU/mL d) Adaptable to LCMS applications if required an upgradation. .	Need to discuss during Pre-Bid meeting	**T**ype 1 Water Specification: It should able to deliver water with following quality. a) Resisitivity: >18.2Mohm.cm b) TOC: <2ppb c) Bacteria: <0.005 CFU/mL d) Adaptable to LCMS applications if required an upgradation. (Optional)	**T**ype 1 Water Specification: It should able to deliver water with following quality. a) Resisitivity: >18.2Mohm.cm b) TOC: <2ppb c) Bacteria: <0.005 CFU/mL d) Adaptable to LCMS applications if required an upgradation. (Optional)
6	**Point 6: Tender Sl. No. 11 b)** Instrument should be wall mouinted or kep under the bench only. Should provide CE, CuL and Certificate of confirmity. System should be installed without any tubings or wires noticed.	What dose it mean? Without tube and wire any other source available ?	It is for aesthetic.	Instrument should be wall mouinted or kep under the bench only. Should provide CE, CuL and Certificate of confirmity. System should be installed without visibility of any tubings or wires in the lab. (It is for aesthetic)
7	**Point 7: Tender Sl. No. 12)** There 3 years comprehensive on-site warranty should be offered for entire offered configuration of type 1 Water purification system. Warranty starts after successful commissioning and installation of the equipment.	Why three years warranty for Type I system only? Why not for Type II system ?	3 years comprehensive on-site warranty should be offered for full configuration of type 1 Water purification system which includes both Type 1 and type 2 water system and any parts associated with its. Also, with all filtration and consumables. Warranty starts after successful commissioning and installation of the equipment.	3 years comprehensive on-site warranty should be offered for full configuration of type 1 Water purification system which includes both Type 1 and type 2 water system and any parts associated with its. Also, with all filtration

				and consumables. Warranty starts after successful commissioning and installation of the equipment.
8	**Point 8: Tender Sl. No. 8)** **Ultrapure water dispenser**: Due to space constraint in the lab, the dispenser should displace the main equipment in terms of usage a) Up to 4 dispensing unit should be used for each unit. This should allow water for several different applications to be accessed from the same system. b) Delivery unit should be atleast 5m away from the main unit. c) The dispensing unit should have all the information of water quality and instrument performance. d) Dispensing unit should have touch screen which can provide dispense report that can be archived in system history. e) Handle should have a rubber grip or a magnet so that users can handle it easily.	Need to discuss during Pre-Bid meeting	**Ultrapure water dispenser:** Point 8 a, b, e is removed.	Due to space constraint in the lab, the dispenser should displace the main equipment in terms of usage a) The dispensing unit should have all the information of water quality and instrument performance. b) Dispensing unit should have touch screen which can provide dispense report that can be archived in system history. **Point 8 (a), (b), and (e) in the original tender document are removed**.

9	**Point 9: Tender Sl. No. 8)** Due to space constraint in the lab, the dispenser should displace the main equipment in terms of usage	For space constraint ,why not integrated system? Why standalone system?	We need standalone type II and Type I water system, which can be used as a individual system for different application.	No Change

It is decided to extend the Bid submission date by following dates

Last date for request tender document : 27/12/2019, before 3.00 p. m.
Last date for Bid submission : 27/12/2019 before 4.00 p. m.
Bid opening date(tentative) : 30/12/2019 @ 3.00 p.m.

Sd/-
Buyer
Dr. M.R. Rahman

Sd/-
Chairman
Central Research Facility
NITK, Surathkal