



Mahatma Gandhi University, Kerala

Tender No: SCS/Re-tender/WP/2020

dated: 18.03.2020

NOTICE INVITING TENDER

The Registrar, Mahatma Gandhi University, Kottayam invites online bid (technical and financial bid) for Supply& Installation of the Scientific Equipment- **WATER PURIFICATION SYSTEM** from reputed firms. The period of the tender is 180 days from the date of tender.

1	Name of the scientific equipment	WATER PURIFICATION SYSTEM
2	Earnest money deposit (EMD)	12000/-
3	Tender submission fee	1800/- + GST
4	Period of supply and installation	Within 15 days
5	Mode of submission of Bid	Online
6	Tender Documents	Can be downloaded from the website www.etenders.kerala.gov.in
7	Last date and Time of submission of tender by online	25.03.2020 4 PM
8	Date and time of opening of technical bid	27.03.2020 10.30 AM

General tender documents and tender schedule can be downloaded in A4 plain size paper free of cost from the website www.etenders.kerala.gov.in.

Documents to be submitted along with bid through online

Sl.No	Through online
1	Scanned copy of valid registration certificate/dealership certificate
2	Scanned copy of duly filled e-payment form
3	Scanned copy of other certificates required, if any, for tender acceptance
4	Scanned Copy of duly filled preliminary Agreement in stamp paper of Rs.200/-
5	BOQ

Special Conditions

1. Onsite training has to be arranged by the vendor. Training should include operation, software applications, analysis, handling and maintenance of system.
2. List of your customers using the instrument with the above mentioned specifications should be given.
3. Laboratory floor space, electrical power requirements, earthing, room temperature/ humidity requirements etc. should be mentioned appropriately.
4. Complete set of service and operation manuals for diagnosis, trouble shooting, maintenance and electronic circuitry (soft copies).
5. The Delivery Schedule, Payment Terms & Warranty/Guarantee etc must be clearly indicated in the technical bid.
6. All the clearance of the consignment should be carried out by the bidder. Institute will provide all the necessary documents for the same. The consignment should be delivered to the laboratory by the bidder.
7. The quoted price in the BOQ should be inclusive of all taxes/freight/installation charges

The bids shall be opened at the date and time specified. Further details can be had from the office of **The Director, School of Chemical Sciences, Mahatma Gandhi University, Kottayam, Kerala-686560 Ph: 0481-2731036 Email: office.scs@gmail.com** on all working days during working hours. The bidders are advised to submit their bid well in advance to avoid any kind of network issues.

The undersigned reserves the right to reject any or all the tender without assigning any reason whatsoever.

Registrar



Mahatma Gandhi University, Kerala

Supply & Installation of the Scientific Equipment- **WATER PURIFICATION SYSTEM**

Sl.No	Qty.		Particulars
	1 No	Filteration	Local sand filters & carbon filter to connect with water purification prefiltration of 1 micron & 5 micron
		Product water	Ultrapure Water (Type 1) Flow Rate (L/min): 1 L/Minute Resistivity : 18.2 Meg Ohm.cm (@ 25 degree C) TOC :<10 ppb Bacteria :<1cfu/mL Pyrogen :<0.001Eu/mL RNase :<0.01 ng /mL Particulates > 0.22u : <1 P/m
		Installation and Familiarization	Installation and training to users should be given at our laboratory by a trained Application engineer.
		Warranty	Minimum 3 Years warranty for complete instrument
2	1 No		Technical/Analytical/Manpower support for 3 years - A viable plan for the technical/manpower support for a period of 3 years must be quoted.
3	1 unit		UPS - Necessary UPS with tubular batteries (Branded)

WATER PURIFICATION SYSTEM-Technical specifications

Water purification system –Pure(type2-EDI) and Ultra pure (type1)

- 1) Should Provide local Sand filters & carbon filter .
- 2) That need to connect with water purification prefiltration unit of 1 micron & 5 micron.
- 3) Feed water should accept upto 2000 microsiemens conductivity.
- 4) Type 2 grade water- 1 number (Separate)
- 5) Type 1 (Ultrapure water)- 1 number (Separate) . It can able to take type 1 system separate & install in different place.

Detail Specification of Type 1 & Type 2 system

- 1) Should provide separate water system to produce type 2 and ultrapure water is mandatorily.
- 2) The system should produce 5ltr/hr type 2 grade water.
- 3) Conductivity meter present before and after RO to measure the performance of the system.
- 4) Mixed bed ion Electro deionisation module with auto regeneration by a weak electric current.
- 5) Carbon beads at cathode of the EDI module to prevent scaling of the module.
- 6) There should be one cartridge followed by RO and then EDI module. Apart from this if type 2 system comes with extra any other cartridges in water purification system, that vendor should mandatorily quote 12 numbers of that particular cartridge along with the main quote.
- 7) Quoted Model Customer details in Kerala should furnish
- 8) Detailed graphical flow chart has to mentioned in product catalogue.
- 9) 50Litre PE tank should quote.

Type 2Product Water Specifications

Resitivity :> 5 Meg Ohm.cm (typically 10-15)

TOC :<30 ppb

Water Recovery : 15-18%

Ultra Pure(Type1)water purification system-product quality

- 1) Feed water should be type 2 gradewater.
- 2) It Should have Conductivity meter..
- 3) Pharmaceutical grade, final filter with 0.22 micron membrane filter in stack disc configuration.

Product Water Specifications

Ultrapure Water (Type 1) Flow Rate (L/min): 1 L/Minute
Resistivity : 18.2 Meg Ohm.cm (@ 25 degree C)

TOC	:<10 ppb
Bacteria	:<1cfu/mL
Pyrogen	:<0.001Eu/mL
RNase	:<0.01 ng /mL
Particulates > 0.22u	: <1 P/m