

**INTER UNIVERSITY INSTRUMENTATION CENTRE
MAHATMA GANDHI UNIVERSITY**

**SHORT TENDER NOTICE FOR PURCHASE OF WATER PURIFICATION
SYSTEM**

TENDER NOTICE No: IUIC/MGU/T-1/2018

Date: 29.08.2018

Competitive tender in sealed cover for the supply of **WATER PURIFICATION SYSTEM** is invited from reputed firms and authorized dealers so as to reach the office of the undersigned not later than 2.00 pm on 13.09.2018. Technical bid of the tenders will be opened on 14.08.2018 at 10.30 pm in the presence of authorized representatives of tendered firms. The financial bid of the Tender will be opened on 14.08.2018 at 03.30 pm

Sl no	Scheduled Item	Specification	E.M.D (Rs.)	Tender Fees(Rs.)
1	Water Purification System (Type 1 Water)	<p>Water Purification system capable of independently Type I water.</p> <p>Tap water should be treated in a pre-treatment cartridge for efficient removal of particles, colloids, free chlorine and hardness</p> <p>All the cartridges used should have considerable life</p> <p>Should have electro deionization or other equivalent or superior technology for removal of ions</p> <p>The resin beads used should be of superior quality and should not degrade by exposure to harsh chemicals</p> <p>The Resin beads should be able to be continuously regenerated without affecting its quality</p> <p>The module should be able to continuously regenerate its beads used. Thereby effectively reducing operational cost</p> <p>The cartridges should be easily replaceable</p> <p>The replacement cartridges should not be very expensive</p>		

		<p>The Equipment should have a low maintenance cost</p> <p>The generated water should be treated with UV to destroy bacteria, before it is stored in the storage tank</p> <p>The storage tank should be capable of maintaining the purity of stored water</p> <p>A vent filter should be there for preventing airborne contamination.</p> <p>Biofilm formation should be prevented</p> <p>The water dispenser should be designed such that various small filters/cartridges can be connected for obtaining specific quality water for different research needs (Ultra pure water free of particulates, pyrogens, nucleases, VOCs, endocrine disruptors and organics for LC.</p> <p>Should be able to dispense pre assigned volume of water</p> <p>Production rate minimum 5L/h</p> <p>Should have calibrated meters for continuous monitoring and display of water quality parameter</p> <p>Should have customizable alert and alarms.</p> <p>Should have certificate of calibration from recognized international agencies</p> <p>Should have certificate of conformity from recognized international agencies</p> <p>Should meet internationally recognized safety norms</p> <p>Prompt services should be available</p> <p>A minimum warranty for one year.</p> <p>AMC terms & conditions beyond the warranty period to be specified</p> <p>Type I water with the following properties</p> <ul style="list-style-type: none"> o Resistivity ($M\Omega\text{-cm}$) = $18.2M\Omega\text{-cm @ } 25 \text{ deg C}$ 		
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		<ul style="list-style-type: none"> o Conductivity ($\mu\text{S/cm}$) < 0.055 $\mu\text{S/cm}$ o TOC $\leq 5\text{ppb}$ o Bacteria <10CFU/100mL o Pyrogens (endotoxins) <0.001EU/mL o RNases <1pg/mL o DNases <5pg/mL o Particulates(size>0.22μm) <1/mL o Sodium (ppb)< 1 o Chloride (ppb) < 1 o Total Silica (ppb) < 3 o Flow rate = 2L/min 		
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Sd/-

Hon. Director
Inter University Instrumentation Centre
M. G. University, Kottaym

NOTE:

(1) PLEASE SEE THE ANNEXURES I, ANNEXURE II, ANNEXURE III and ANNEXURE IV ATTACHED BELOW

(2) ALL THE DOCUMENTS RELATED TO THE TENDER CAN BE DOWNLOADED FROM THE UNIVERSITY WEBSITE- www.mgu.ac.in, in the section “Quotation/tender”.

ANNEXURE I

General Terms and Conditions

- ☐ The main envelop should be super scribed: “Tender for Water Purification System”
- ☐ The non refundable application fee of accompanied with tender for each item. The application fee must be as D.D. drawn in favour of Finance officer, M.G. University.
- ☐ Tenders must accompany a copy of the “General Terms and Conditions, Annexure I and Annexure II and III” section of this document, signed and stamped on each page indicating that they agree to these.
- ☐ Last date of submission of tender along with requisite fee, EMD and all documents is **13/09/2018** (not later than 2.00 pm). The DD for EMD or any other accepted document must be drawn in of favour of Hon. Director, Inter University Instrumentation Centre, M. G. University, Kottayam, Kerala payable at SBI Mahatma Gandhi University Campus Branch.
- ☐ All other charges including GST/CST, Excise Duty and other levies payable by C.I.P should be clearly indicated otherwise it will be presumed that the rates quoted are inclusive of all these charges and will not be paid.
- ☐ The Excise Duty component (with percentage) should be indicated, as the University is exempted from the payment of Custom/Excise Duty. Exemption will be availed by providing Custom/Excise Duty Exemption Certificate with order.
- ☐ The Delivery Schedule, Payment Terms & Warranty/Guarantee etc must be clearly indicated in the technical bid. The charges for extended warranty and/or Annual Maintenance Contract after the expiry of offered warranty period should also be specified in the financial bid.
- ☐ The manufacturers’ printed literature/catalogue/drawing/user’s list in respect of range of product being quoted should also be submitted with the offer.
- ☐ Our Institute is registered with the Department of Scientific & Industrial Research (DSIR), so Excise duty exemption will be provided.

Other requirements for delivery and complete installation

- ☐ Delivery at Inter University Instrumentation Centre, Mahatma Gandhi University, Kottayam
- ☐ All other requirements for satisfactory installation of Software.
- ☐ It will be the responsibility of the supplier to deliver the ordered materials at the respective laboratory of Inter University Instrumentation Centre, Mahatma Gandhi University, Kottayam.
- ☐ All required materials for satisfactory installation are to be provided by the supplier at their own cost.

ANNEXURE II:

TENDER FORM PART-I (TECHNICAL BID)

PART-I (TECHNICAL BID) OF TENDER NO:

Last date for receipt:

Due date for opening Part –I (TECHNICAL BID):

Tenderer's Offer No:

Date:

From,

M/s.

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To,

The Hon.Director, IUIC
Inter University Instrumentation Centre,
M. G. University,
Kottayam, Kerala,India

Dear Sir,

I/We have gone through the tendering conditions pertaining to the Tender and General Terms and Conditions of Contract and other requirement for delivery and complete Installation and Special Conditions of Contract contained herein with this tender document. I/we hereby agree to supply the stores conforming to the tender specifications incorporated in ANNEXURE I of the tender document and also agree to abide by your General Conditions of all Contracts and Special Conditions of Contract contained in the ANNEXURE I of the Tender document.

You will be at liberty to accept any or more of the items of stores offered by us and I/we shall be bound to supply you the stores as may be specified in the Purchase Order/Contract. I/We hereby agree to keep the price valid for your acceptance for a period of 30 days from the date of opening of Part-II (Financial bid) of the tender

I/We are also enclosing herewith all the leaflets catalogue etc. pertaining to the stores offered.

Yours faithfully

Stamp and Signature of the Tenderer

ANNEXURE III

TENDER FORM PART-II (FINANCIAL BID)

PART-II (FINANCIAL BID) OF TENDER NO:

Last date for receipt:

Due date for opening Part –II (FINANCIAL BID):

Tenderer's Offer No:

Date:

From,

M/s.

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To,

The Hon. Director, IUIC
Inter University Instrumentation Centre,
M. G. University,
Kottayam, Kerala, India

Dear Sir,

In response to your invitation and as per your tendering and contracting conditions, the prices applicable for the scope of supply contained in ANNEXURE-I (TECHNICAL BID) of our tender are indicated in the format at annexure "A" to this tender.

We hereby agree to keep the price valid for your acceptance for a period of 30 days from the date of actual opening of Part-II (FINANCIAL BID) of the tender.

Yours faithfully,

Stamp and Signature of the Tenderer

ANNEXURE IV

Detailed Technical Specification

- ☐ Water Purification system capable of independently Type I water.
- ☐ Tap water should be treated in a pre-treatment cartridge for efficient removal of particles, colloids, free chlorine and hardness
- ☐ Reverse osmosis step should be water conservative and should ensure constant flow rate and optimal water quality
- ☐ All the cartridges used should have considerable life
- ☐ Should have electro deionisation or other equivalent or superior technology for removal of ions
- ☐ The resin beads used should be of superior quality and should not degrade by exposure to harsh chemicals
- ☐ The Resin beads should be able to be continuously regenerated without affecting its quality
- ☐ The module should be able to continuously regenerate its beads used. Thereby effectively reducing operational cost
- ☐ The cartridges should be easily replaceable
- ☐ The replacement cartridges should not be very expensive
- ☐ The Equipment should have a low maintenance cost
- ☐ The generated water should be treated with UV to destroy bacteria, before it is stored in the storage tank
- ☐ The storage tank should be capable of maintaining the purity of stored water
- ☐ A vent filter should be there for preventing airborne contamination.
- ☐ Biofilm formation should be prevented
- ☐ The water dispenser should be designed such that various small filters/cartridges can be connected for obtaining specific quality water for different research needs (Ultra pure water free of particulates, pyrogens, nucleases, VOCs, endocrine disruptors and organics for LC.
- ☐ Should be able to dispense pre assigned volume of water
- ☐ Production rate minimum 3L/h
- ☐ Should have calibrated meters for continuous monitoring and display of water quality parameter
- ☐ Should have customisable alert and alarms.
- ☐ Should have certificate of calibration from recognized international agencies
- ☐ Should have certificate of conformity from recognized international agencies
- ☐ Should meet internationally recognized safety norms
- ☐ Prompt services should be available
- ☐ A minimum warranty for one year.
- ☐ AMC terms & conditions beyond the warranty period to be specified

(3) Type I water with the following properties

- Resistivity ($M\Omega\cdot\text{cm}$) = $18.2M\Omega\cdot\text{cm}$ @ 25 deg C
- Conductivity ($\mu\text{S}/\text{cm}$) < $0.055\mu\text{S}/\text{cm}$
- TOC $\leq 5\text{ppb}$
- Bacteria < $10\text{CFU}/100\text{mL}$
- Pyrogens (endotoxins) < $0.001\text{EU}/\text{mL}$
- RNases < $1\text{pg}/\text{mL}$
- DNases < $5\text{pg}/\text{mL}$
- Particulates(size> $0.22\mu\text{m}$) < $1/\text{mL}$
- Sodium (ppb) < 1
- Chloride (ppb) < 1
- Total Silica (ppb) < 3
- Flow rate = $2\text{L}/\text{min}$
