



**Dr. N. Radhakrishnan International Centre for  
Medical Innovation**

**MAHATMA GANDHI UNIVERSITY  
Priyadarsini Hills, Kottayam, Kerala, India -686560**



**Dr. Radhakrishnan E. K.**

**Director (Hon.)**

NRICMI/01/Tender/2024

Dated: 18.01.2024

**SHORT-TENDER NOTICE**

The Hon. Director, Dr N Radhakrishnan International Centre for Medical Innovation (NRICMI), invites sealed competitive Tenders from reputed firms for the purchase of the "Water Purification System" as per the specifications mentioned below. The sealed covers containing Tender details are to be superscribed "Tender for Water Purification System" and sent to The Director, Dr N Radhakrishnan International Centre for Medical Innovation (NRICMI), Room no 703, 6<sup>th</sup> Floor, Convergence Academia Complex, Mahatma Gandhi University, P.D Hills P.O, Kottayam- 686560. Submit two separate sealed covers for the two-bid tender, with one cover containing the financial bid and the other containing the technical bid.

Last Date of Receiving Tenders: 29.01.2024, Time: 3.00 pm

Opening date of Tenders: 30.01.24, Time: 10 am

**SPECIFICATIONS:**

The system should be quoted along with the external Pre-treatment and External RO to handle various applications like HPLC, Mass spectrometry, and Molecular biology.

The system should be a standalone single-stage system for Endotoxin and bacteria-free ultrapure water Type 1 and Type 2 directly from a potable water supply.

The system should be capable of providing ASTM Type I (18.2 Mega ohm resistivity) Water and have the UF cartridge or better technology to cater to biological applications with following or better specifications:

Ultra-Pure (Type I) water:

Resistivity.....18.2 Mega Ohms.cm @ 25 Degree C.

TOC ..... < 5 ppb

Bacteria ..... < 0.01 cfu /ml or better

Particulates ( .22 micron )..... < 1 /ml

RNase.....< 0.003 ng/ml or better

DNase.....< 0.4 pg/ml or better

Endotoxin.....0.001 EU/ml or better

Flow rate .....≥ 1 Ltr/Minute.

The system should be capable of providing ASTM Type II (1-10 Mega ohm resistivity) Water from potable tap water with the following or better specifications:

Ultra-Pure (Type II) water:

Resistivity..... > 1 Mega Ohms. cm @ 25 Degree C.

TOC ..... < 30 ppb

The system has feed water acceptance level of Conductivity up to 1500  $\mu$ S/cm or more, Fouling Index ( SDI) > 3 and Total Chlorine less than 0.1 ppm or better specifications.

The system should have a pretreatment kit with a 1  $\mu$ m filter, Harness Stabilizer and Carbon.

The system should have an RO Flow rate of 6Ltr/hour or more.

Type 1 water flow rate should be equal to or more than 1Ltr/Minute.

The Reverse Osmosis module is made up of thin film composite polyamide RO membrane with a rejection rate of 94 - 99% or better.

The system has feed water specific Purification pack before the UV lamp consisting of mixed bed ion exchange resin/ micro filter / activated carbon or better technology to ensure better purification and longer life of the cartridges.

The system should only have one main consumable apart from RO inside the unit to reduce the cost and space occupancy.

The system should not require more than 2 main cartridges to be changed every year

The system should have dual-wavelength 185/254 nm for UV-oxidation or better technology for reducing the content of microorganisms and their metabolites to ensure the quality of Type 1 water

The system should have an inbuilt reservoir of 6 ltr or more in volume.

Water should be recirculated through a high-purity cartridge to maintain purity.

The system should have a water pretreatment unit.

The system be compatible for onsite IQ/OQ(Onsite Validation)

Production rate of Purified Water @ 6 ltrs/hr or more

The system should be quoted with at least one set of all required consumables including RO.

The warranty should be for minimum of 3 years including complete coverage for the instrument, accessories, consumables and required cartridge changes and maintenance

**Note:**

All the accessories and spares for installation and demonstration should be supplied by the firm along with the instrument. The instrument should meet all the specifications given in the tender and minor variations will be examined by the technical committee before acceptance/rejection of the tender. Loading, unloading and transportation costs will be met by the bidder. The instrument should be supplied in the Research lab, Room 703, Dr N Radhakrishnan International Centre for Medical Innovation (NRICMI), Mahatma Gandhi University, P.D Hills P.O, Kottayam- 686560.

For more details contact Dr N Radhakrishnan International Centre for Medical Innovation (NRICMI), Mahatma Gandhi University, P.D Hills P.O, Kottayam on all working hours.

**Terms & Conditions:**

1. Tender form can be downloaded from the official website of Mahatma Gandhi University (<https://www.mgu.ac.in/uploads/2020/08/Tender-Form.pdf?x99264>) and the Tender form rate-0.2% of the quoted amount (Lowest amount = Rs. 400/- +GST, Maximum amount = Rs.1500/- +GST) can be paid by online in the University online payment system and challan should be attached along with the Tender.
2. The Tender Amount should be including all taxes.
3. Tenure of Tender should be three months.
4. A preliminary agreement in document paper of Rs. 200/- has to be submitted along with the tender.
5. Earnest Money Deposit (EMD) calculated @ 1% of (quoted amount) the Purchase assessment cost (PAC) should be paid by through the University's online payment ([www.mgu.ac.in](http://www.mgu.ac.in).online payment - miscellaneous) or Demand Draft in favour of The H O D, School of Biosciences and submitted along with the sealed tender.
6. An agreement must be submitted by the qualified bidder and should submit 5% of the PAC as the security deposit.
7. Tenders received after the last date and time should be rejected. The Registrar has the right to accept or reject the tender without any reason. If the tender opening day is a holiday it will open in the next office working day.
8. If not received the minimum number of tenders, the last date will be extended to the next 15 days.



9. If more tenders are received during the extended period, the first received tenders are also to be considered.

10. Final payment should be released only after the proper installation and satisfactory report from the Technical Officer, School of Biosciences.



Hon. Director,

NRICMI, MG University

**Dr. RADHAKRISHNAN E. K.**

Hon. Director

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