

**Ref: IITDH/MMD/BSBE/2018-19/18**

**Dated: 25.02.2019**

To,  
The prospective bidder/s

**Subject:** Tender/Enquiry for purchase of Water Purification System –reg.

Sir,

The Indian Institute of Technology, Dharwad proposes to procure Ultra-Pure Water Purification System and in this regard, you are requested to send your quotation in respect of same. The description of item required and term & conditions are as below: -

S. No.	Item	Qty.	Specifications of the item required	Unit Price (in Rs.)*
1	Ultra-Pure Water Purification System	01 (One)	➤ As per details provided in Annexure-1	

**\*GST extra as per applicable rates.**

The bidding firm is required to furnish complete details as per Annexure-2.

The last date for submitting quotation is **04.03.2019 (Monday) till 10:30 AM.**

The quotations will be opened on **04.03.2019 (Monday) at 11:00 AM** in Meeting Room, Admin Block, IIT Dharwad (in presence of the bidders interested to attend the opening of quotations).

**Terms & Conditions for the quotation to be followed: -**

- Price:** The total quoted price should **only be Unit price** (GST extra as applicable). Unit price should be inclusive of basic price, packing and forwarding charges, if any and to deliver & install the goods at IIT Dharwad to the satisfaction. Supplier shall be responsible for safe delivery of materials up to destination.
- Price bid and Evaluation criteria:** The supplier should quote the rate strictly as per the specifications given above. The quote given for other specification will be rejected. The L-1 bidder shall be decided on the basis of the unit price excluding GST.



- Bidders having GST Registration Certificate are required to indicate their GST Registration number and shall have to enclose a self-certified copy of GST Registration Certificate.
  - If bidder has opted for composition scheme under GST ACT 2017, they have to declare themselves as "Composition Scheme" in the bid and indicate their Registration number in the Price Bid. Bidder shall have to enclose a certificate in original from a practicing Chartered Accountant / Cost & Management Accountant / Company Secretary confirming that Bidder is eligible to opt the scheme and has fulfilled all the conditions as mentioned in notification in this regard. In addition, bidder has to enclose the self-attested GST Registration Certificate in the commercial bid.
  - If the Bidder is unregistered i.e. exempted from GST registration, they have to declare themselves as "GST Unregistered Bidders" in the bid and shall have to enclose GST Exemption documents i.e. certificate in original from Practicing Chartered Accountant / Cost & Management Accountant / Company Secretary that Bidder is fulfilling all the conditions prescribed in GST Act, 2017 to make him exempt from registration.
3. **Offer validity:** The validity of Quotation is 90 days from the last date of submission.
  4. **Delivery Period:** The delivery period shall be within 3 weeks from the issue of Purchase Order.
  5. **Payment terms:** No advance payment will be made. The payment will be made through electronic transfer after successful Delivery and installation of items at IIT Dharwad.
  6. **Mode of Payment:** The bank details (Name of the Bank, Account No., Branch & IFSC Code) should be enclosed along with the bid for the refund of EMD or release of payment.
  7. **TAXES AND DUTIES:** The Tax Invoice raised by the supplier must be in compliance of relevant GST acts, rules & notifications made there under and should bear the IIT Dharwad GST Registration no. **29AAAGI0111B1Z8**. The rate and amount of CGST, SGST, IGST and GST (Compensation to state) cess, related to supply of goods shall be shown separately in tax invoice for each item of supply. In case the bidder has opted for composition levy, the Bill of

supply shall be raised by him in compliance of relevant GST Acts, rules & notifications made there-under.

8. Statutory variation: If there is any statutory change in CGST & SGST or IGST within contractual delivery period, the same shall be admissible and will be paid at actual based on the documentary evidence. However, no upward revision in the same beyond original delivery period shall be admissible.
9. The envelope containing the quotations shall be properly sealed. Envelope stapled shall not be accepted. Further, the envelope shall be super scribed as "Quotation for supply of Water Purification System" addressed to "**The Assistant Registrar (MMD), Indian Institute of Technology, Dharwad, Near High Court, Belur Industrial Area, Dharwad, Karnataka-580011.**"
10. Quotations received after the due date and time i.e. **04.03.2019 till 10:30 AM** will be out rightly rejected. Quotations received through e-mail or open envelope shall also be rejected.
11. The IIT Dharwad reserves the right to accept in part or in full any quote(s) or reject any one or more quote(s) without assigning any reason. The IIT Dharwad also reserves the right to postpone the date of receipt and opening of tenders or to cancel the tenders without assigning any reason whatsoever.
12. The Quantity requirement indicated for above items is subject to upward or downward revision. However, depending upon the requirements, the actual quantity shall be intimated at PO stage. The firm quoting the rates for this item must also note that IIT Dharwad may place a repeat order subject to quantity mentioned above (at same rates, terms & conditions) during a period of six months from the date of issue of initial purchase order.
13. It is also required by the firms to submit the catalogue / details and picture of the model quoted in the price bid. It shall be the sole prerogative of IIT Dharwad to accept or reject any particular item.
14. Please read all instructions before submitting the quotation.

**Sd/-**  
**(ANIL DHANKHAR)**  
**ASSISTANT REGISTRAR (MMD)**  
**IIT DHARWAD**

## Annexure-1

### Technical Specifications of the product required

**Name of the item/Equipment:** - Ultra-Pure Water Purification System

Sl. No.	Requirements	Description
1.	<b>General</b>	Compact, sleek water purification system capable of independently dispensing both Ultra-Pure Type I for cell culture and molecular biology applications and Type III water for rinsing and washing purpose.
2.	<b>Initial cleaning unit</b>	<ul style="list-style-type: none"> <li>▪ Tap water should be treated in a pre-treatment cartridge having 1 pre-filter for efficient removal of suspended particles and dissolved solids coming from tap water and should be able to soften the tap water.</li> <li>▪ Considerably for feeding to pre-treatment unit. The unit should have equipped with automatic low/high pressure cut off and function quietly.</li> </ul>
3.	<b>Pre-treatment Unit:</b>	<ul style="list-style-type: none"> <li>▪ Inbuilt pre-treatment unit should contain anti-scaling compound, activated carbon and 0.5 <math>\mu</math> filter. High flux Thin film composite polyamide RO membrane with 94-99% ionic rejection with conductivity measurements before and after the membrane to ensure the performance of RO.</li> <li>▪ Recirculation loop with capillary tube and diaphragm valve.</li> <li>▪ Automated RO recovery loop to reduce feed water consumption. Mixed bed ion exchange resin filled electro deionization module with auto regeneration by a weak electric current, eliminating the need for chemical regeneration or replacement of DI resin cartridges.</li> </ul>
4.	<b>Water feed</b>	<ul style="list-style-type: none"> <li>▪ The feed water acceptance should be up to 2000 <math>\mu</math> Siemens conductivity, Fouling Index (SDI) up to 12, Total Chlorine content up to 3 ppm and TOC content up to 2000 ppb.</li> <li>▪ The unit should also have automatic low/high pressure cut off. Coaxial resistivity cell with a flow through design and a cell constant of 0.01cm<sup>-1</sup> and should display both compensated and non-compensated temperature accurate within <math>\pm 0.1^\circ\text{C}</math>. UV lamp 254 nm to remove germicidal effect before entering the tank.</li> </ul>
5.	<b>Electrode ionization</b>	<ul style="list-style-type: none"> <li>▪ Should have electro-deionization or other equivalent or superior technology for removal of ions. Reverse osmosis Permeate divert valve which will divert low quality water to the drain automatically.</li> </ul>
6.	<b>Reverse osmosis</b>	<ul style="list-style-type: none"> <li>▪ Integrated and should be water conservative and should also ensure constant flow rate and optimal water quality.</li> </ul>



7.	<b>Storage Tank</b>	A 50 ltr. reservoir for Type-III water and should be protected from external air borne contaminants, Sensor rod float switch, programmed to have high and low level cut-off based on water level in the tank when attached with the pre-treatment unit.
8.	<b>Online TOC Monitor</b>	System should have online TOC monitor with measurement range of 1 - 999 ppb
9.	<b>Delivery Unit</b>	System should have remote dispenser with rocker arm for dispensing pure & ultrapure water. The dispenser should have flexibility of dispensing water at-least 23 mtr. away from machine. Flow rate of pure & ultrapure water through dispenser should be 2 L/min. Digital displaying monitor (should provide resistivity, TOC, level of water in reservoir, volume dispensed and other alarms).
10.	<b>Quality of Water</b>	Should deliver Type I/Ultra -pure as per International specifications as follows: Resistivity: 18.2 M*cm; TOC (typical):< 5ppb; Bacteria:<1CFU/10ml; Endotoxin: <0.001 EU/ml; RNase: 20pg/ml; DNase:0.002ng/ml. Additionally, system should have an ability to deliver Type III water also.
11.	<b>Consumable</b>	<b><u>Must include the price for consumables (cartridges, filters etc.) for TWO YEARS for trouble free working.</u></b>
12.	<b>Electronic data acquisition</b>	System should contain inbuilt Data management system/ software with record keeping capabilities and a powerful search engine to retrieve data on water quality and system performance.
13.	<b>Document required</b>	Should submit list of minimum 5 similar water purification system installations in India including IITs, IISERs, and Reputed government institutes etc.
14.	<b>Warranty</b>	<u>TWO years guarantee plus warranty for at least another three years.</u>

**UltraPure (Type I) water:**

Ultrapure Water (Type 1) Flow Rate (L/min) :	0.05 to 2 (Programmable flow rate)
Ultrapure Water Resistivity (MΩ·cm at 25°C):	18.2
Microorganisms (cfu/mL)	: < 1
Particulates < 0.22 μm ( / mL)	: < 1
Pyrogen Levels (EU/mL)	: <0.001
RNase Level (ng/mL)	: < 0.01
DNase Level (pg/μL)	: < 4
TOC (ppb)	: < 5

**Type III water**

Ionic rejection	: > 97%
Organic rejection for MW > 200 Dalton	: > 99%
Particulates rejection	: > 99%
Production flow Rate	: (at least) 10L/h
Storage	: (at least) 50 L



**Annexure-2**

**Bidder Information**

1.	Name of the Bidder	
2.	Address of the Bidder	
3.	PAN No.	
4.	GSTN No.	
5.	State of GST Registration	
6.	E-mail	
7.	Contact Person's Name & Designation	
8.	Mobile No.	

**Signature of the bidder  
Stamp / Seal of the firm/Bidder**