

## Technical Specifications and Other Terms and Conditions

### Annexure A

#### Technical Specifications / Requirements

##### Water purification systems

Cabinet design water purification systems consisting of built-in pretreatment, reverse osmosis, Electrodeionization with carbon beads at cathode and eliminating the requirement of additional conditioning or softening Cartridge and to avoid scaling by lowering the pH at the electrode surface.

Conductivity cell before and after RO to measure the feed water quality and amount of Ionic Rejection. Ultraviolet light purification and complete control and monitoring.

##### Specification

Product flow rate : 5 L / Hr nominal flow rate.

Product water quality to storage tank : Water from the RO unit

Product water resistivity : > 5 MΩ·cm (typical 10 to 15 MΩ·cm)

Product water conductivity : 0.2 μS/cm (typical 0.067 to 0.1 μS/cm)

Product water total organic carbon : < 30 ppb

Silica rejection : > 99.9 %

##### Feed water Specification:-

Conductivity : 2000 μS/cm

Total Hard ness : 300ppm.

Total Chlorine : 3ppm

Fouling Index : 12

The first purification step with Progard® pretreatment packs which are designed to provide protection and maintain good performance of the reverse osmosis membranes in each of these systems.

**The pretreatment packs includes**

- a) Pre-filtration to remove particles.
- b) Activated carbon to remove chlorine,
- c) Anti-scaling agent to minimize the risk of scale formation.
- d) The Auto clean Pack option includes a built-in chlorine cleaning tablet that will automatically clean the reverse osmosis membrane when this new pack is installed.

Optional feed water booster pump available when feed water pressure and/or flow requirements cannot be maintained.

Total chlorine and fouling index: Pretreatment and system integrated pretreatment pack, wall-mountable external pretreatment pack and back washable carbon unit selected based on site feed water. Inlet solenoid valve located outside water system for installation direct to feed water

Supply line.

Water detector included to shut off inlet feed water in the event of a leak.

**Reverse osmosis membrane:** TFC membrane providing > 99 % removal of particles and Organics and 95 to 99 % of inorganics.

**Electrodeionization module:** Utilizes ion-exchange resin, ion-exchange membrane and activated carbon beads at cathode side to prevent scaling and long life to EDI module.

DC electric current to remove remaining inorganic contaminants passing through the reverse Osmosis membrane.

Electrodeionization module is a continuous deionization process that does not require periodic chemical regeneration of ion-exchange resins.

Water purification system provides complete automated control of water system operation and functions.

Water purification system provides complete quality monitoring of all water purification steps and pure water in the distribution loop.

**SPECIFICATIONS for the Ultra-pure water**

- Conductivity at 25 °C:.....< 100 µS/cm
- Total Organic Carbon (TOC):.....< 50 ppb
- Pressure range:..... maximum 6 bar
- Temperature:.....5°C – 35°C (41°F – 95°F)

**Product Water Quality with Suitable pretreated water feed, Ultrapure (Type 1) water:**

Typical Water Delivery Flow Rate from Q-POD® (L/min) 0.5 to 2

Ultrapure Water Resistivity (MΩ.cm at 25°C) ..... 18.2

Microorganisms (cfu/mL) – with Millipak or Biopak end filter < 0.01

Particulates < 0.22 μm (/mL) – with Millipak or Biopak end filter < 1

Pyrogen Levels (EU/mL) – with Biopak end filter..... < 0.001

RNase Level (pg/mL) – with Biopak end filter ..... < 1

DNase Level (pg/mL) – with Biopak end filter ..... < 5

TOC (ppb) ..... ≤ 5

1. The water system has a built-in UV lamp with emission at 185 nm and 254 nm wavelength. The lamp will operate for 2 years without replacement in order to reduce operating costs and the maintenance procedures.
2. 2 Polishing cartridges of mixed bed resins.
3. The system will have a choice of 6 point-of-use final filters on the water dispenser to support different applications.
4. The water Point-of-Delivery can be installed on a wall-mounted support for full flexibility of installation. The wall mounted configuration where the HMI and the Point of Delivery are fixed on the wall to a distance up to 3 meters. POD dispensing experience should be the same whatever the installation of the WPS.
5. At the Point-of-Delivery, basic information on water quality or any alert / alarm information should be shared.
6. During the installation, the water Point-of-Delivery can be easily installed at four different places so that it adjusts to the lab configuration: top right, bottom right, top left or bottom left.
7. 7” touchscreen with bright color LCD display compatible with gloves and wet or dry hands. The screen is either fixed on the system or can be wall mounted.
8. The performance parameters should be checked at each step on the water flow schematics to ensure the quality-expected water
9. Only one single inline photo-oxidation UV lamp allows both to reduce organics in ultrapure water and to measure TOC level.
10. Inline TOC indicator is being measure at the point of use and displayed on the touchscreen after each dispense.
11. The water purification system is able to report the resistivity and conductivity in both temperature compensated and non-temperature compensated formats. The resistivity meters are able to be verified and calibrated on-site.
12. The system can be connected to the local network via an Ethernet port and has a USB key port.

13. Water dispensing reports record all dispensing parameters (water quality and volume, date and time). Dispensing reports can be stored without time limit.
14. The volumetric water dispensing to deliver a specific water volume, from 100mL to 25L automatically (with 100 mL incremental). A quick volumetric dispensing is also accessible from a pre-set menu of customizable water volumes.
15. A foot pedal can be connected to allow hands-free dispensing across several dispensing modes.
16. Lab Close mode to saves energy and reduces wear of system components. The system automatically resumes hourly recirculation 24 hours prior to resuming lab activity, ensuring the system is ready for use.
17. Check and dispense LEDs should be embedded on the support of the Point-of-Delivery, the key information is at the point of dispensing.

#### Eligibility Criteria:

1. The bidder should provide a minimum of 05 years comprehensive onsite Warranty.
2. The bidder should have supplied a minimum of 3 similar equipment to any IITs/NITs/Govt Educational Institutions or any reputed organization.
3. The successful bidder should complete the delivery and installation within 30 days timeframe.

#### **For any technical query related to enquiry you may to contact**

**Prof. [Saptarshi Majumdar](mailto:saptarshi@che.iith.ac.in), Dept. of Chemical Engg, Email: [saptarshi@che.iith.ac.in](mailto:saptarshi@che.iith.ac.in)**

For Commercial query

Mr. M Venkatesh - Senior Assistant Registrar, Email : [ar.purchase@iith.ac.in](mailto:ar.purchase@iith.ac.in)

Mr. K Ramesh Kumar - Assistant Registrar Email : [ar.stores@iith.ac.in](mailto:ar.stores@iith.ac.in)

Ms. D Chanchala Devi- Joint Registrar, Email : [hos.snp@iith.ac.in](mailto:hos.snp@iith.ac.in)

With CC: [office.stores@iith.ac.in](mailto:office.stores@iith.ac.in)

## TERMS AND CONDITIONS

1. **Warranty & Maintenance contract:** The supplier shall warranty equipment/material, system components for a minimum period of three years following satisfactory installation and commissioning. The defects, if any, during the guarantee/warranty period are to be rectified free of charge by arranging free replacement wherever necessary. All expenditure including government levies on account of the replacement are to be borne by the supplier/agent.
2. **Payment terms:** 100% payment will be released after supply, installation of the material and training to the satisfaction of the User/IITH and submission of the delivery details and invoice through GeM Portal.
3. **Delivery period:** Software / Material should be delivered and installed within 30 days from the date of issue of purchase order. The offered delivery period shall have to be strictly adhered to in case an order is placed.
4. **Installation & Testing:** The installation shall be completed within a week from the date of intimation regarding the arrival of the equipment in the Institute. The installed system shall be performance tested at our premises in accordance with the manufacturer's/supplier's recommendation/specifications. Tests shall demonstrate the proper operation of the instrument and all components.
5. The Technical Committee will examine all the Technical aspects of the bids received. Further, the Technical Committee may seek additional information from the existing users at IIT Hyd or from other Institutes, these feedbacks will be considered for technical evaluation, the bidders will also be called for technical presentations if it is required so.
6. Kindly furnish your PAN & GST Number etc. in your quotation for our records.
7. Institute reserves the right to cancel the bidding process at any stage.
8. **Requirement of registration:** Vide Ministry of Finance OM No. 6/18/2019-PPD dated 23rd July 2020.

- a. Any bidder from a country sharing a land border with India will be eligible to bid in this tender only if the bidder is registered with the Department for Promotion of Industry and Internal Trade (DPIIT).
- b. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- c. "Bidder from a country which shares a land border with India" for the purpose of this Order means:
  - i. An entity incorporated, established or registered in such a country; or
  - ii. A subsidiary of an entity incorporated, established or registered in such a country; or
  - iii. An entity substantially controlled through entities incorporated, established or registered in such a country; or
  - iv. An entity whose beneficial owner is situated in such a country; or
  - v. An Indian (or other) agent of such an entity; or
  - vi. A natural person who is a citizen of such a country; or
  - vii. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- ii. For details about registration procedures please visit the above mentioned OM. Mandatory documentary evidence regarding the bidder's registration with DPIIT is to be submitted along with the tender, failing which the tender shall be liable for rejection. Bidders are also requested to submit the Model Certificates **as per Annexure** for this tender as mentioned in the Ministry of Finance OM No. 6/18/2019-PPD dated 23rd July 2020.

## 9. Public Procurement (Preference to Make in India), Order 2017:

- i. IIT Hyd shall compare all substantially responsive bids to determine the lowest valued bid. This Institute is following and abide with the Public Procurement (Preference to Make in India), Order 2017, DIPP, MoCI Order No. P-45021/2/2017-B.E.II dated 15th June 2017 and its subsequent amendments. Accordingly preference will be given to the Make in India products while evaluating the bids, however, it is the sole responsibility of the bidder(s) to specify the product quoted by them is

of Make in India product along with respective documentary evidence as stipulated in the aforesaid order in the technical bid itself.

- ii. As per the above order and its subsequent amendments “Local Content” means the amount of value added in India which shall be value of the item procured (excluding net domestic indirect taxes) minus the value of the imported content in the item (including all the custom duties) as a proportion of the total value, in percent. Accordingly the suppliers will be classified in following categories.
  1. Class I local Supplier – has local content minimum 50%
  2. Class II local Supplier – has local content minimum 20%

- b. **Verification of Local Content** : The Class I Local Supplier /Class II Local Supplier at the time of bidding shall be required to indicate the percentage of local content and provide self-certification as per **Annexure** that the items offered meet the local content requirement. The details of the location(s) at which the local value addition is made also needs to be specified.

**The bidders can be debarred for a period up to two years as , per Rule 151(iii) of GFR 2017, in case of false declaration.**

#### **Complaint Redressal Mechanism:**

In case any complaint received by the procuring agency or the concerned Ministry/Department against the claim of a bidder regarding local content/domestic value addition in a product, the same shall be referred to competent authority at IITH or the relevant Ministry .

The bidder against whom the complaint is received shall be required to furnish the necessary documentation in support of the domestic value addition claimed in the product to authority. If no information is furnished by the bidder, such laboratories may take further necessary action, to establish the bonafides of the claim

A complaint fee of Rs. 2 lakh or 1% of the value of the domestically manufactured products being procured (subject to a maximum of Rs.5 lakh), whichever is higher, to be paid by Demand Draft to be deposited with Procuring Institute. In case, the complaint is found to be incorrect, the complaint fee shall be forfeited. In case, the complaint is upheld and found to be substantially correct, deposited fee of the complainant would be refunded without any interest.

False declarations will be in breach of the Code of Integrity under Rule 175 (1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred

for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

**10. Note for MSME/NSIC/Start up Bidder :** If in the view of bidder, any exemption / relaxation is applicable to them from any of the eligibility requirements, under any Rules / Guidelines/ Directives of Government of India, bidder may submit their claim for the applicable exemption /relaxation, quoting the valid Rule/Guidelines/ Directives with a copy of such notification. In this case the bidder must submit necessary and sufficient documents along with the technical bid, in support of their claim. The relevant and valid certificates in support of claim of exemption must be submitted along with the Technical Bid.

**These exemptions /relaxation are meant for procurement of only goods produced and services rendered by MSEs. Traders/ distributors/ sole agent/ Works Contract are excluded from the purview of the policy.**

**This Bid is also governed by latest General terms and conditions as per GeM**



**FORMAT OF COMPLIANCE STATEMENT OF SPECIFICATIONS**

1	2	3	4	5	6
S. N.	Name of specifications/part / Accessories of tender enquiry  As per Annexure A of the Tender Document.	Specifications of quoted Model/ Item	Compliance  Whether "YES" Or "NO"	Deviation, if any, to be indicated in unambiguous terms	Whether the compliance / deviation is clearly mentioned in technical leaflet/ literature
1					
2					
3					
n					

**NOTE: The bidder should also submit the Brochure with technical details of the product supporting the compliance statement.**

**UNPRICED TECHNICAL BID**  
**(Bidder should provide the following details on Letter head)**

Quotation No :

Date:

Name of the Bidder \_\_\_\_\_

GeM bid No. \_\_\_\_\_

Sr.No	Item Description	Country of Origin	Make & Model	HSN Code	GST %	Qty
1						
2						
3						
n						

**Other Terms & Conditions**

1	Payment terms	:
2	Delivery Period from the date of Issue of PO	:
3	Warranty	:
4	Any other additional terms	:

MANUFACTURER'S AUTHORIZATION & WARRANTY SUPPORT DECLARATION

( ON OEMs Letter head)

Date:

Tender No / GeM bid no:

To  
The Director,  
Indian Institute of Technology Hyderabad,  
Kandi, Hyderabad – 502 284

We, \_\_\_\_\_ [name of Manufacturer], who are official manufacturers of [Insert type of goods manufactured] having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following goods, manufactured by us [insert name and or brief description of the goods], and to subsequently negotiate and sign the contract.

We hereby extend our full guarantee, warranty, availability of spare parts and AMC support in accordance with the Terms and Conditions of Contract with respect to the Goods offered by the above firm.

Authorized representative of the Manufacturer

Authorized representative Bidder

Signature:

Signature:

Name:

Name:

Address:

Address:

Mobile No:

Mobile No:

Email ID:

Email ID:

**ANNEXURE E**

**Declaration for Local Content (on OEM's Letter Head)**

**(To be given on Company Letter Head - For tender value below Rs.10 Crores)  
(To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value above Rs.10 Crores)**

Date: \_\_\_\_\_

To,  
The Director,  
Indian Institute of Technology Hyderabad,  
Kandi, Sangareddy 502284

Sub: Declaration of Local content

Tender Reference No: \_\_\_\_\_

Name of Tender / Work: - \_\_\_\_\_

1. Country of Origin of Goods being offered: \_\_\_\_\_

2. We hereby declare that items offered has \_\_\_% local content **(Please provide exact %)**.

3. Details of location at which local value addition will be made / made: (Complete address to be mentioned) \_\_\_\_\_

\_\_\_\_\_

*"Local Content"* means the amount of value added in India which shall, be the total value of the item being offered minus the value of the imported content in the item (including all customs duties) as a proportion of the total value, in percent.

*"\*False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law."*

**Yours Faithfully,  
(Signature of the Bidder/OEM, with Official Seal)**

ANNEXURE F

CERTIFICATE BY BIDDER- DPIIT REGISTRATION

“ I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, / if from such a county, has been registered with the Competent Authority (copy of the Registration Certificate enclosed) . I hereby certify that his bidder fulfils all requirements in this regard and is eligible to be considered.

Signature with Date and Stamp  
Of the Bidder

ANNEXURE G

DECLARATION REGARDING CLEAN TRACK/NO LEGAL ACTION

(to be provided on letter head of the firm)

I hereby certify that the above firm namely \_\_\_\_\_ is neither blacklisted by any Central/State Government/Public Undertaking/Institute nor any criminal case registered / pending against the firm or its owner / partners anywhere in India preceding three years from the date of publishing of tender.

I also certify that the above information is true and correct in any every respect and in any case at a later date it is found that any details provided above are incorrect, any contract given to the above firm may be summarily terminated and the firm blacklisted.

Date:

Authorized Signatory

Name:

Place:

Designation:

Contact No.:

ANNEXURE -H

BIDDER INFORMATION FORM

Company Name : \_\_\_\_\_

Registration Number : \_\_\_\_\_

Manufacturer /Distributor for the quoted product : \_\_\_\_\_

Registered Address : \_\_\_\_\_  
\_\_\_\_\_

Name of Partners /Director: \_\_\_\_\_  
\_\_\_\_\_

City : \_\_\_\_\_

Postal Code : \_\_\_\_\_

Company's Establishment Year : \_\_\_\_\_

Company's Nature of Business : \_\_\_\_\_

Company's Legal Status (tick on appropriate option )

- 1) Limited Company
- 2) Undertaking
- 3) Joint Venture
- 4) Partnership
- 5) Others ( In case of Others please specify)

Company Category

- 1) Micro Unit as per MSME
- 2) Small Unit as per MSME
- 3) Medium Unit as per MSME
- 4) Ancillary Unit
- 5) SSI
- 6) Others ( In case of Others please specify)

## CONTACT DETAILS

Contact Name: \_\_\_\_\_

Email Id : \_\_\_\_\_

Designation : \_\_\_\_\_

Phone No : ( \_\_\_\_\_ ) \_\_\_\_\_

Mobile No : \_\_\_\_\_

## BANK DETAILS

Name of Beneficiary : \_\_\_\_\_

A/c. No. CC/CD/SB/OD: \_\_\_\_\_

Name of Bank : \_\_\_\_\_

IFSC NO. (Bank) : \_\_\_\_\_

Branch Address and Branch Code: \_\_\_\_\_

\_\_\_\_\_

## Other Details

Vendor's PAN No. \_\_\_\_\_

Vendor's GST \_\_\_\_\_



ANNEXURE – I

PREVIOUS SUPPLY ORDER LIST FORMAT

Order placed by <i>{Full address of Purchaser}</i>	Order No. and Date	Description and quantity of ordered equipment	Value of order	Contact Person along with Telephone no., Fax no. and e-mail address.

Note: Technical Committee may seek additional information from the existing users at IIT Hyd or from other Institutes, these feedbacks will be considered for technical evaluation.

Signature and Seal of the Manufacturer/ bidder .....

Place:

Date:

ANNEXURE – J

ACCEPTANCE OF TENDER TERMS  
(To be given on Company Letter Head)

Date: DD/MM/YYYY

To,

The Director  
Indian Institute of Technology Hyderabad  
Kandi – 502 285.Telangana, India

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No/GeM Bid no: \_\_\_\_\_

Name of Tender / Work: -

Dear Sir,

1. I/ We have downloaded / obtained the tender document(s) for the above mentioned ‘Tender’ from the web site(s) namely \_\_\_\_\_ as per your advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents (including all documents like annexure(s), schedule(s), etc .), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organisation shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)