

Centre for Cellular and Molecular Platforms

Ref: C-CAMP/L-139/2021-22 (C)

September 24, 2021

ENQUIRY

Dear Sirs,

Please let us have your lowest quotation for the following:

Sl.No.	Item/s description	Qty.
1	Water Purification systems:	01
	Two stage water purification for system(two independent system) for Type 1 and Type	
	2	
	Should have DI Technology To Remove Ions As Contaminants from Type 2 water	
	Constant quality & continuous performance	
	Tank level sensors should be there	
	Provision to prevent back flow on Reverse Osmosis	
	Recirculation Loop from tank to DI is required for keeping the tank water clean and	
	fresh.	
in district	Hand dispensor from the Reservoir to draw Type 2 water. Specifications for Ultrapure (Type I) Water Purification	
	System	
	System should be stand-alone Type-II water purification system, suitable for	
	Biological research application.	
	System should be suitable to work with the water quality of up to 2000µS/cm	
	conductivity, Fouling Index (Silt Density Index) < 7, Total Chlorine < 3 ppm, PH: 4-	
	10, produce Ultrapure Water with 4 to 10MΩ.cm @25 °C resistivity	
	The system should have the production capacity of 40liter/hour	
	System should have Pre Filtration unit to counter the Iron content in water, particulate	
	load Pre-filtration: 10 Micron filter,5 Micron filter and 3 Micron filter.	
	System should have Pretreatment Cartridge with Activated Carbon and 0.5 Micron	,
	Filter.	
	System should have High Quality Thin film composite membrane RO which should	
	be capable of achieving 99% rejection of Ions and all dissolved organics.	-
	The system should have Recirculation Loop from tank to DI is required for keeping	
	the tank water clean and fresh.	
	System should have Cartridges with high recovery loop to reduce the wastage of feed	
	water to drain. Also it should have conductivity cell before and after RO to measure	
	performance of RO membrane.RO waste water recovery should be up to 50%. System should have the Electro De-ionization module (EDI Module), with mixed Bed	
	Ion Exchange Resin, so that Regeneration of the Resins happens on application of	
	Electric current.EDI (Electro Deionization) module should not require softening pre-	
	treatment.	
	System should have Auto diagnostic facility with Error NO and Alarm Code and real	
	time clock to log reports with date and time to ensure complete traceability.	
	System should have Automatic Cleaning, Rising, and Flush mode.	
	The system should have Auto testing facility to measure all the parameters like inlet	
	pressure, pressure on RO cartridge, DI Module, flush and rinsing etc	
	System should have suitable screen and user friendly GUI to check all parameters	
	related to purification, storage and distribution.	
	System should be able to check measuring value before and after each filtration stage	
	in order to measure performance of filtration unit.	

System should give an alert in order to plan inventory.

The system should have Hand dispensor from the tank to draw Type 2 water.

System should have storage capacity 100 liter with material of construction suitable to store Type II Water. Storage tank with level sensors should be controlled by water purification unit. Tank should have valve for drain and dispense.

The system should have the Vent filter which should change the colour for the timely replacement.

Type II water should pass through feed water specific cartridge for removal of trace contaminants.

System should have UV light treatment with wavelength of 185 and 254nm. The uv light should be inside the main system and type 2 water should pass through the uv lamp

System should have built in TOC indicator with the ability for self-calibration and check curve display.

System should have compatibility to place either on the bench, under the bench or on the wall.

The system should be installed by the trained Engineer and users training should be given on Application, operation and maintenance

System should operate at 230 V/50 Hz.

The system should be CE/ ISO certified.

The system should have the warranty for 5 years.

The system should be installed by the trained Engineer and should be trained on Application, operation and maintenance.

The product should be as per CE/IEC guideline and certificate from authorized body should be submitted. No self-declaration will be accepted.

Compliance to each of the above points should be separately indicated and evidence presence for each of them (Product brochures should be highlighted wherever required).

The service team should be stationed in Bangalore. Contact details of Engineer and office Address should be submitted with this offer.

The past performance/service support in NCBS/INSTEM/CCAMP should be satisfactory and the technical evaluation will be done accordingly.

<u>Specifications for Ultrapure (Type I) Water Purification</u> <u>System</u>

System should be stand-alone Type-I water purification system, suitable for Biological research application.

The system must accept Type II water as feed.

Type I water must be produced from a mixed bed of ion exchange resin & activated carbon cartridge to remove ionic and organic contaminants.

Type I water produced from the above step should pass through a safely housed, low-pressure mercury vapor UV lamp made of ultrapure quartz with dual wavelength (185/254nm) to ensure bacterial destruction and organic molecule oxidation.

Built-in Total Organic Carbon (TOC) indicator with 0.5mL quartz cell and UV lamp to accurately measure real-time TOC from 1-999ppb.

The system should have the havedispenser 3 meters away from main unit and should be upgradable to 3 dispenser.

The uv light should be inside the main system and type 1 water should pass through the uv lamp

Must prevent deterioration of water quality during non-use. Must be compatible to place the production unit on the bench, under the bench, or mounted on the wall. Point of delivery (POD) unit must be adjustable height and rotating arm-adjustable to any glassware, volumetric dispensing from 250 ml till 10Liter, and with display

monitor that shows real-time resistivity, TOC, level of water in reservoir, volume dispensed and other alarms.

POD, at the collection end, must have a 0.22-micron filter and options to accommodate UF cartridge.

POD must also be able to accommodate cartridges to remove volatile organics, very specific trace organics, and trace metals.

The system should have the Vent filter which should change the colour for the timely replacement.

The system should be installed by the trained Engineer and users training should be given on Application, operation and maintenance

System should operate at 230 V/50 Hz.

The system should be CE/ ISO certified.

The system should have the warranty for 5 years.

The system should be installed by the trained Engineer and should be trained on Application, operation and maintenance.

The product should be as per CE/IEC guideline and certificate from authorized body should be submitted. No self-declaration will be accepted.

Compliance to each of the above points should be separately indicated and evidence presence for each of them (Product brochures should be highlighted wherever required).

The service team should be stationed in Bangalore. Contact details of Engineer and office Address should be submitted with this offer.

The past performance/service support in NCBS/INSTEM/CCAMP should be satisfactory and the technical evaluation will be done accordingly.

Note:

The bids are liable to be rejected if the sealed envelope is not addressed to "THE HEAD-PURCHASE" with Tender Ref No. and Item Description and due date. The bids delivered in person shall be dropped in Purchase Section. If the bids are sent through courier or mail, it should reach by submission date and time and CCAMP/NCBS will not be responsible for the delay.

2. DUE DATE FOR SUBMISSION OF QUOTATION AGAINST THIS ENQUIRY IS 14/10/2021 BY 5.30PM.

- 3.OUOTATIONS RECEIVED AFTER THE DUE DATE SHALL BE REJECTED.
- 4. The validity of your quotation should be for 60 days from the due date.
- 5.All duties, taxes, surcharge and cess as currently applicable must be stated in your quotation, separately. Otherwise your quote is liable to be rejected.
- 6. Your quotation should indicate delivery period & warranty period.
- 7.Delivery to be made to our stores. Please indicate charges, if any extra. Transit Insurance should be done upto CCAMP Stores.
- 8.If you are unable to supply the quality, specifications or brand as mentioned in our enquiry, please state so and then offer alternative to quality/specifications.
- 9. Payment: within one month after delivery & acceptance/satisfactory installation.
- 10.Please ensure that the enquiry number and the due date is superscribed on the envelope failing which your quotation is liable to be rejected.
- 11. If the item is covered under DGS&D rate contract, please quote the rate as per the DGS&D rate contract with xerox copy of the DGS&D order.
- 12. Any dispute or differences that may arise between the parties shall be referred to the sole arbitration of the Centre Director or his nominees. The decision of the arbitrator shall be final and binding on the parties. The venue for arbitration shall be Bangalore. The provisions of the Arbitration and Conciliation Act, 1996 as amended from time to

time shall apply. The courts in Bangalore shall have exclusive jurisdiction to deal with any or all disputes between the parties

- 13.Since we are a research institution, we are exempted from paying Customs duty (Except advolerum duty of 5% + 2%Cess and 1% Cus Sec & High Edu. CESS vide Notification No.51/96 with latest amendments) and excise duty vide Notification No. 10/97 CENTRAL EXCISE dated 01-03-1997 for all scientific equipments, technical instruments, equipments (including computers), their accessories, spares, consumables and software. Hence, please offer your prices
- 14.If the item is covered under DGS&D rate contract, please quote the rate as per the DGS&D rate contract with xerox copy of the DGS&D order.
- 15. CCAMP is a public funded research institute and is entitled to concessionalrate of GST @ 5%for certain items supplied for research purpose vide notification no. 47/2017 and 45/2017 dated 14th Nov, 2017. The offer should be submitted after fully considering the above notification.
- 16. Liquidity Damages: If the equipment/ items as per specifications in our P.O. is not supplied (shipped) within the specified delivery schedule, then liquidated damages (not in terms of penalty) will be imposed automatically and shall be deducted from the bill at the rate of 0.5% per week subject to a maximum of 10% of the order value.

17. Income Tax at the applicable rates as per the Indian Income Tax Act 1961 will be deducted at source for the services availed / ordered. In case of service provider, the rate of tax deduction shall be at 2% as per Section 194C, and in case of fee for professional / technical services

Chetana S. R.

GKVK, Bellary Road, Bangalore 560 065. India Phone +91-80-23666344.Fax+91-80-23636662 chetana@ncbs.res.in . www.ccamp.res.in