

TEA RESEARCH ASSOCIATION

Tender No. TRA-Tocklai/24-25/T-244 Dated 01.07.2024

Sealed tenders in two parts (Technical bid & financial bid) are invited by the Director, Tea Research Association from reputed manufacturers / authorized dealers / importers for supply of Instrument / Equipments under **NTRF funded Project** at Tocklai Tea Research Institute, Jorhat - 785008, Assam. Both the bid documents are to be put in sealed envelopes separately super scribing the words "Technical Bid " & "Financial Bid" which are to be put together in the sealed envelope super scribing the Tender No. The details of instruments/equipments are shown as 'Annexure – A' enclosed herewith.

Last date of issue/receipt of tenders: 19.07.2024 up to 5.00 p.m.

Terms and Conditions:

- 1) The tenderer should submit the following documents along with the tender:
 - a) Dealership certificate/authorization certificate
 - b) List of users
 - c) Up-to-date sales tax/GST /income tax clearance certificate
- 2) Earnest Money 2% (refundable) of the quoted amount is to be deposited by the tenderer in the form of Bank draft/Bankers certificate in favour of "Tea Research Association" payable at Jorhat.
- 3) Tender Document Cost (non refundable) of Rs.1,000/- is to be deposited in the form of separate Bank Draft in favour of "Tea Research Association "payable at Jorhat.
- 4) Tenders must accompany with the product catalogues/ specification.
- 5) Tenderers must quote the warranty period of the product.
- 6) Tenderers must quote the year-wise rate for CMC or AMC separately for a further period of 5 years beyond the warranty period.
- 7) Instruments / Equipments are to be delivered/installed FOR/CIP at Tocklai Tea Research Institute, Jorhat 785008, Assam.

TRA reserves the right to accept or reject the bids without assigning any reason thereof. The tender document can be obtained from the office of the undersigned during working days from Monday to Friday (8-30 am to 5.00 pm) or **may be down loaded from the website** –<u>www.tocklai.org</u>.

Tender should be accompanied by Tender Document Cost of Rs.1,000/- and Earnest Money 2% of the quoted amount, failing which the tender will be rejected. The drafts for EMD and Tender Document Cost should be enclosed with "Financial Bid" only. All tenders should be sent to the following address:

The Director, Tea Research Association Tocklai Tea Research Institute, Cinnamara, Jorhat-785 008, Assam.

<u>Annexure – A</u>

SPECIFICATIONS OF EQUIPMENT AND INSTRUMENT

Sl.	Items	Unit	EQUIPMENT AND INSTRUMENT Specifications
No.	Items	No.	Specifications
1.	Centrifuge	01	1. Speed: 15000 RPM / 22388 g RCF.
			2. Microprocessor based system which can
			detects rotor automatically and sets maximum
			RCF on its own.
			3. Stainless steel corrosion free easy to clean
			round edged rotor chamber.
			4. Large backlit LCD Digital display with
			brushless DC motor.
			5. Speed setting: 500-15000 RPM.
			6. Max capacity: 4*100ml.
			7. Time setting: 30 secs to 999 mins & infinite mode.
			8. Lid Lock Safety & Imbalance detection
			feature with auto-cut off safety: YES.
			9. Adjustable Ramp & Brake: Yes (selection from 1 to 9).
			10. Built-in condensation drain.
			11. 9 acceleration mode and 9 deceleration
			modes for highly sensitive samples.
			12. 99 user programs with 4 lines programming in each.
			13. One touch RPM/RCF conversion & short
			spin operation option on the keyboard. 14. Select from 15 optional swing out and fixed
			angle rotors.
			15. Intuitive interface with last run memory feature.
			16. Lid-lock safety feature opens the lid automatically after every run.
			17. Space saving design (L*W*H): 705*585*330 mm.
			18. Power: 230 V.
			19. Adequate voltage stabilizer to run the machine must be provided.
			20. Rotors required (Fixed angle): 4*100ml=
			01unit & 6*50ml= 01unit.
			21. Warranty must be 01 years from installation
			date.
			22. ISO 9001, CE of the quoted machine should
			be provided. 23. User list of minimum 15 installations of the
			quoted machine must be submitted with user
			name, email id, contact number, organization
			name, Department.
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2 Millipore Water Purification System	01	 24. Service & Installation should be directly from the manufacturer's engineer should be based at Assam, provide contact details. 25. OEM authorization must be provided in case of supplier or channel partner is bidding on behalf of OEM. Part 1 Pre Filter Before Main Unit High Quality Pre Filter before Main Unit to counter the feed water contamination. Must be manufactured by same equipment manufacturer as of pure & ultra pure water system. No third party pre filtration will be accepted. Prefilter with Low pressure switch cuts off system which can able to take care high TDS up to 5000 ppm and high SDI up to 50 having 5 Micron and 1 Micron with DC diaphragm pump to boost water pressure from 0 to minimum 2.5 bar at approximately 120 L/Hr with noise levels of Less than 50 Db.
		Two separate models should be there for Type- I and TYPE III systems Part 2: <u>Main Unit Lab Grade Water purification</u> <u>System (Type III)</u> Feed water acceptance capability for main unit should be: Conductivity: < 2000 μS/cm Fouling Index (SDI): up to 5 TOC< 2000 ppb LSI< 0.3
		 Product Water and main unit should meet or exceed Type III water quality Pure water production rate > 40 Ltrs/Hr or more. Organics and particulates rejection > 99% or better RO recovery loop should be available. Rinsing valve should be available. Twist and lock mechanism for all the cartridges, so that user itself can replace it. Transparent mobile water tank of minimum capacity of 3 ltrs or more. Water filling should not take more than 5-6 min to fill the tank full. Holder on tank for easy mobility. Part 3: Ultra-Pure Water (Type I) should meet or exceed the below mentioned parameters: Typical Water Delivery Flow Rate by an

- directable bandart discussion from Dece bar
adjustable handset dispenser from Drop by drop to 1.6L/min.
 Ultrapure Water Resistivity (MΩ.cm at 25°C) : 18.2 or better
• Microorganismes/bacteria (cfu/L): < 1 or
 Particulates < 0.22 μm (/mL) : None
 Pyrogen Levels (EU/mL) : < 0.001 or better
 RNase Level (pg/mL) : < 1 or better
• DNase Level (pg/mL) :. < 5 or better
• Proteases : $< 0.15 \mu g/mL$
• TOC (ppb): ≤ 5 ppb
• Twist and lock mechanism for all the
cartridges, so that user itself can replace it.
• Automatic recirculation mechanism should be available.
• Transparent 3.5 liter or more switch water tank.
• Holder on tank for easy mobility should be available.
• Main machine foot print size should not exceed
9 inches X 12 inches to avoid unnecessary lab
space occupancy.
• The weight of the main machine should be
lower than or equal to 11-12 kgs for ease of
 maneuverability as per lab's water need. UV lamp- 185 nm and no need to replace this
lamp for life time of machine.
 Servo voltage stabilizer 1KVA
Certifications for Water System from OEM
should be submitted with the tender:
• CE, cUL, FCC.
• ISO® 9001-2015 and ISO® 14001-2015,and
ISO® 50001-2018
• ASTM® D 1193-06, ISO 3696, CLSI.
Mandatory Documents Requirement:
• Product brochure to support the technical
specifications must be submitted. All technical
details must be available on the OEM's official website.
Minimum 20 appreciation letter of water
purification system from any government
organization in India.
• User list of minimum 50 installations of similar
water systems of the quoted make must be
submitted with user name, email id, contact
number, organization name, Department.
• Service should be directly from the manufacturar's anginger should be based at
manufacturer's engineer should be based at Assam, provide contact details.
 OEM authorization must be provided in case of
supplier or channel partner is bidding on behalf
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			of OEM.
			• Warranty should be 1 year from date of
			installation.
3.	Fume Hood	01	• Overall dimension (mm) (W x D x H): 1500 x 700 x 2400
			• Inner dimension (mm) (W x D x H): 1200 x 600 x 1150
			• Application: Provide protection to the operator
			• Control panel: Separate switch for Fan &
			Fluorescent Light
			• Face Velocity: 80-120 FPM
			• Noise level: Less than 70 db
			• Illumination: 400 LUX (Fluorescent Light)
			• Ducting: PVC (Dia – 8 inches)
			• Motor: Heavy duty single phase
			• Nominal Voltage: 220-230 Volts, 50 Hz Single
			Phase
			• Accessories: Electric socket (5/15 amp) with
			MCB – 2 Nos.
