

Tender No. TRA-Tocklai/24-25/T-243 Dated 22.05.2024

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:12.06.2024 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 —www.tocklai.org.

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.

Annexure – A

SPECIFICATIONS OF EQUIPMENT AND INSTRUMENT

Sl. No.	Items	Unit	Specifications
		No.	
1.	Biosafety Class-II, A2 cabinet	01	 The cabinet should be advanced microprocessor control, which supervises the operation of all cabinet functions. Total accumulated operating hours of the unit, the total UV work hours and the filter running time, estimated residual lifetime of the HEPA filter. The model offered should be at least 4 meter
			wide in dimension. 3. The cabinet should have energy-efficient electronically controlled DC blower motor.
			 The motor must able to automatically adjust the airflow speed without the use of a damper to ensure continuous safe working conditions.
			5. Cabinet must use a pressure sensor (rather than an anemometer) to detect pressure drop across the supply filter.
			 Clear visual and audible alarms are emitted from the device if the downflow, inflow, or other parameters like blower failure, Incorrect window position are not at rational settings and the operator is at risk of exposure to biohazardous materials.
			7. The cabinet noise level must be less than <63 dB(A)
			8. The cabinet must automatically reduce the fan/blower motor speed to 30% when the front window sash is in the closed position to ensure reduced energy consumption when the cabinet is not in use.
			9. Programmable UV light enables <i>timed</i> sterilization to run to be preset before work commences. UV light must be programmable to allow for specific exposure times from 0 to 24 hours.
			10. The Bio Safety Cabinet should include LED light with a power of >120 fc with Brightness level adjustment
			11. The Cabinet should have provision to fit taps for Vacuum, Water, and Non-combustible gas.12. The Biosafety Cabinet should be NSF certified
			with a listing on the NSF website. 13. The Biosafety cabinet should incorporate a HEPA filter of utmost high efficient class with

_		
		minimum efficiency of 99.995% at 0.3 μm
		particle size.
		14. The cabinet should be provided with a fixed
		/adjustable Height Stand, UV Light and one
		set of detachable arms rests, and one / two
		electrical outlets.
		15. The Drain Pan of the BSC should be made of
		Stainless Steel. The drain pan should not be
		painted, or powder coated.
		16. Port provision for clean and safe routing for
		vacuum tubing and cables through the side of
		the BSC for improved organization and work
		efficiency
		17. There should be UV protected sliding front
		sash.
		18. The cabinet should be offered with following
		accessories: atleast 2 nos. UV lamps, Cabinet
		should include Rear cover kits for flat and
		smooth enabling easy cleaning for clean room
		suitability
		19. Preference will be given to manufacture with
		good nos. (details to be submitted) of
		Installation in North East and service person
		based in North East (details with Name,
		mobile no and location to be submitted).
2	CO2 Incubator	1. Should have at least 150 L or more of internal
		capacity.
		2. User friendly control panel with large LED
		displays for Tomporature and CO2 data
		displays for Temperature and CO2 data
		3. Direct heating temperature control system
		Direct heating temperature control system providing superior uniformity and quicker
		 Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity
		 Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity parameters
		 3. Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity parameters 4. Independent overtemperature protection
		 Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity parameters
		 3. Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity parameters 4. Independent overtemperature protection with independent temperature sensor
		 3. Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity parameters 4. Independent overtemperature protection with independent temperature sensor 5. Unique Auto-Start function facilitating
		 Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity parameters Independent overtemperature protection with independent temperature sensor Unique Auto-Start function facilitating Interior must be built of corrosion resistant material ideally withcopperbuilt-up. Should have separate single inner glass door
		 Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity parameters Independent overtemperature protection with independent temperature sensor Unique Auto-Start function facilitating Interior must be built of corrosion resistant material ideally withcopperbuilt-up. Should have separate single inner glass door for monitoring of samples without disturbing
		 Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity parameters Independent overtemperature protection with independent temperature sensor Unique Auto-Start function facilitating Interior must be built of corrosion resistant material ideally withcopperbuilt-up. Should have separate single inner glass door for monitoring of samples without disturbing conditions of the chamber
		 Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity parameters Independent overtemperature protection with independent temperature sensor Unique Auto-Start function facilitating Interior must be built of corrosion resistant material ideally withcopperbuilt-up. Should have separate single inner glass door for monitoring of samples without disturbing conditions of the chamber System should be supplied with double stage
		 Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity parameters Independent overtemperature protection with independent temperature sensor Unique Auto-Start function facilitating Interior must be built of corrosion resistant material ideally withcopperbuilt-up. Should have separate single inner glass door for monitoring of samples without disturbing conditions of the chamber System should be supplied with double stage Co2 Regulator and 31 kg Co2 Cylinder.
		 Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity parameters Independent overtemperature protection with independent temperature sensor Unique Auto-Start function facilitating Interior must be built of corrosion resistant material ideally withcopperbuilt-up. Should have separate single inner glass door for monitoring of samples without disturbing conditions of the chamber System should be supplied with double stage Co2 Regulator and 31 kg Co2 Cylinder. A CO2 resistant shaker compatible with the
		 Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity parameters Independent overtemperature protection with independent temperature sensor Unique Auto-Start function facilitating Interior must be built of corrosion resistant material ideally withcopperbuilt-up. Should have separate single inner glass door for monitoring of samples without disturbing conditions of the chamber System should be supplied with double stage Co2 Regulator and 31 kg Co2 Cylinder. A CO2 resistant shaker compatible with the system must be supplied
		 Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity parameters Independent overtemperature protection with independent temperature sensor Unique Auto-Start function facilitating Interior must be built of corrosion resistant material ideally withcopperbuilt-up. Should have separate single inner glass door for monitoring of samples without disturbing conditions of the chamber System should be supplied with double stage Co2 Regulator and 31 kg Co2 Cylinder. A CO2 resistant shaker compatible with the system must be supplied The shaker must haveexternal control box
		 Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity parameters Independent overtemperature protection with independent temperature sensor Unique Auto-Start function facilitating Interior must be built of corrosion resistant material ideally withcopperbuilt-up. Should have separate single inner glass door for monitoring of samples without disturbing conditions of the chamber System should be supplied with double stage Co2 Regulator and 31 kg Co2 Cylinder. A CO2 resistant shaker compatible with the system must be supplied
		 Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity parameters Independent overtemperature protection with independent temperature sensor Unique Auto-Start function facilitating Interior must be built of corrosion resistant material ideally withcopperbuilt-up. Should have separate single inner glass door for monitoring of samples without disturbing conditions of the chamber System should be supplied with double stage Co2 Regulator and 31 kg Co2 Cylinder. A CO2 resistant shaker compatible with the system must be supplied The shaker must haveexternal control box with LED display for easy adjustments without
		 Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity parameters Independent overtemperature protection with independent temperature sensor Unique Auto-Start function facilitating Interior must be built of corrosion resistant material ideally withcopperbuilt-up. Should have separate single inner glass door for monitoring of samples without disturbing conditions of the chamber System should be supplied with double stage Co2 Regulator and 31 kg Co2 Cylinder. A CO2 resistant shaker compatible with the system must be supplied The shaker must haveexternal control box with LED display for easy adjustments without the need to open the chamber door. The LED display must have timer and Speed range of 30-300 rpm with 19 mm orbital
		 Direct heating temperature control system providing superior uniformity and quicker response for temperature and humidity parameters Independent overtemperature protection with independent temperature sensor Unique Auto-Start function facilitating Interior must be built of corrosion resistant material ideally withcopperbuilt-up. Should have separate single inner glass door for monitoring of samples without disturbing conditions of the chamber System should be supplied with double stage Co2 Regulator and 31 kg Co2 Cylinder. A CO2 resistant shaker compatible with the system must be supplied The shaker must haveexternal control box with LED display for easy adjustments without the need to open the chamber door. The LED display must have timer and Speed

with flask clamp kit of 2 no. of 100 mL flask clamp, 4 no. of 250 mL flask clamp, 4 no. of 500 mL flask clamp, 2 no. of 1 L flask clamp and 2 no. of 2 L flask clamp. 13. Warranty period of 1 year from the date of installation. 14. Should be supplied a suitable voltage stabilizer preferably Fuji electric or Servo make. 15. Preference will be given to manufacturers
stabilizer preferably Fuji electric or Servo
15. Preference will be given to manufacturers with good nos. (details to be submitted) of Installation in North East and service person based in North East (details with Name, mobile no and location to be submitted).
