

LIMITED TENDER

For purchase of Testing Instrument Under the "Eco Laboratory"



Tender Number	WRA/TENDER/ECO-O2 /2024-2025
Total Nos. of Testing Instrument	05
Last date of submission of Limited Tender	28.11.2024 (3.00 p.m.)
Tender Opening at WRA	04.12.2024 (11.00 a.m.)

WOOL RESEARCH ASSOCIATION (WRA)
P.O. Sandoz Baug Kolshet Road,
Thane - 400 607, Maharashtra.
Phone: (022) 25314294, Mob: 91-9892910834
E-mail: ecolab@wraindia.com, wra@wraindia.com.
Website: www.wraindia.com

APPENDIX - TF

Sr. No.	Particulars	Remarks
1.	Validity of Tenders	180 days from the date of opening of tender.
2.	Address, date and time of submission of the tender documents.	Wool Research Association Kolshet Road, P.O. Sandoz Baug, Thane (W) - 400607 Last date of submission of tender at WRA: 28/11/2024 (3.00 pm)
3.	Supply of the Testing instrument etc	Within 3 months from the date of placement of order or advance paid, failing which order may be cancelled, unless the period is extended by WRA, in writing, in exceptional circumstances.
4.	Installation and commissioning of the Testing instrument	Within 2 weeks after the delivery of the ordered item at WRA, installation and commissioning should be carried satisfactorily by the supplier. In case, installation/ commissioning is delayed by the supplier, 2% per day of the cost of Testing instrument will be charged unless relaxation in this regard accorded by WRA, in writing, in exceptional circumstances.
5.	Period of warranty of Testing instrument	3 Years warranty (Companies standard warranty plus additional two years) from the date of commissioning of the Testing instrument.
6.	Performance guarantee of Testing instrument	3 Years performance guarantee from the date of commissioning of the Testing instrument (as per Annexure II).
7.	Submission of the details schedule for delivery	Within 21 days from the date of the acceptance of the order placed

SEAL AND SIGNATURE OF TENDERER

TERMS AND CONDITIONS

1. Training at site

Training at site: Hands on training at the time of installation and commissioning of testing instrument inside the WRA, Thane premises.

2. Payment

- A. The price quoted should be exclusive of duty, ST, installation etc., which should be shown separately in the quote, if applicable. Freight and Insurance charges are to be indicated separately the same will, be paid at actual against supporting documents produced. Packing, forwarding and other charges as applicable are to be indicated separately.
- B. In case of Imported Items, 100% Payment shall be made through irrevocable Letter of Credit. LC money will be released by our bank only after inspection and successful installation and commissioning of testing instrument at consignee's address, within a period of 2 weeks after delivery of the Testing instrument. The firm on whom order will be placed or his local supplier/agent will be responsible for installation, commissioning, demonstration of satisfactory performance of the Testing instrument and imparting training to the technical personnel of WRA. However, involvement of the respective principals will be preferable. An undertaking to this effect along with the bank guarantee form will be required from the supplier/agent to WRA.

3. Earnest Money Deposit

Tender must be accompanied by Earnest Money Deposit (EMD) as indicated in **Annexure-I** for item being supplied in the form of Demand Draft or Banker's cheque in favour of "Wool Research Association" Payable at Thane, EMD shall be paid in Indian currency only. In case or receipt of EMD in Indian currency from abroad, same shall be refunded in Indian currency only.

WRA will not be responsible for refunding the EMD in foreign currency. The EMD by the successful bidders shall be held back towards the security deposit and will be refunded after successful installation, trial and training. EMD should remain valid for a period of forty-five days beyond the quotation validity period. The EMD of the unsuccessful bidder will be returned at the earliest of the final bid after expiry of final bid validity, latest on or before the 30th day after the award of the contract.

4. Delivery

Delivery of the Testing instrument should be as per the commitment from the date of receipt of initial payment against acceptance of order in case of indigenous Testing instrument and should not be extended .

5. The Pre-installation

Requirements including space, nature of civil work, power point, power Requirement etc. are to be mentioned clearly in the tender document.

1. Bid for the testing instrument should be submitted in an envelope super scribed with the name of the item at the top, NAME, ADDRESS OF THE BIDDER AND DATE OF SUBMISSION.

The sealed envelopes shall be marked in the name of “**Director, Wool Research Association Thane –400607.**”

2. The list of organizations (with full addresses, telephone / fax no., e-mail addresses etc.) in India and abroad to which the testing instrument were supplied is to be provided in the bid for our reference. Preference will be given if the supplies are made to internationally reputed test house both in India and other countries particularly for the bided equipment (evidence of such supplies to reputed test houses may be enclosed.)
3. Validity of the tender should be 180 days from the date of opening of tender. The tender may be rejected if the validity is not given accordingly.
4. The supplier should take responsibility for delivering, installing and commissioning of the Testing instrument inside the premises of WRA, Thane at designated site.
5. Annual Servicing / Maintenance charges for the next two years after the expiry of warranty period should be indicated separately in the tender.
6. Late / delayed tender offers will not be considered at all.
7. Any non-fulfilment of the stipulation given above will make the bid invalid.
8. If the tenders received are not sealed properly, they will not be considered at all.
9. Wool Research Association (WRA), Thane reserves the right to accept or reject any or all the bids without assigning any reason thereof.
10. The local supplier shall be entirely responsible for all taxes, duties, and license fees etc., incurred until delivery of the contracted goods (to the purchaser) up to place of delivery.
11. The Delivery, installation & commissioning period of the testing instrument as agreed should not be extended under normal conditions. Suitable penalty for non-execution of the order may be enforced refer Appendix -TF.
12. The testing instrument & accessories should be delivered, installed and commissioned at the address specified in the order. Service / operation /instruction/ calibration manuals (in English) tool kit and gauges must also be supplied along with the Instruments and accessories.
13. During the guarantee /warranty period, servicing /maintenance should be undertaken regularly subsequently Servicing/maintenance should be undertaken by the manufacturer or authorized agency of the manufacturer.

14. Warranty and performance guarantee as described in the Specification/ Appendix TF should **be given in respect of instruments and accessories supplied. Terms for service contract after the expiry of said warranty period are to be quoted separately.**
15. The manufacturer /supplier may indicate the Status of the Manufactured Product /or of the performed services as regards to ISO quality system.
16. List of servicing centres in India has to be indicated with detailed address, telephone no. /fax no. / e-mail address etc.
17. All pre-installation requisites such as Cables, plugs etc. should be provided by the supplier along with the testing instrument. WRA, Thane concerned will provide adequate space, electricity & water, as the case may be, for the successful installation and commissioning of the testing instrument.
18. The Capacity statement of equipment, plant and past performance details should be provided.
19. In case of Imported Items, please quote Free On-Board value (at nearest foreign Airport / Sea port) & also CIF Value at Sahara International Airport, Mumbai or JNPT Nava Seva Seaport, MUMBAI (whatever applicable). Please specify the freight charges & Insurance Charges separately. Also specify the packing dimension, Nos. of Box/Cartoon & gross weight of each Box/Cartoon. Please specify the name of the port & country, from where the goods will be dispatched.

NOTE: The bidder has to specifically state that the clauses one to all as above have been read and understood and agree to comply all the above-mentioned clauses individual

Annexure I

Technical Specifications of the Testing Instruments

(Including EMD)

Sr. No.	Instruments	EMD to be paid (Rs.)	Page Nos
1	Analytical Balance-5 digit	6,000.00	6-7
2	COD Digester and Analyzer	6,000.00	8-11
3	Rotary Vacuum Evaporator	30,000.00	12-14
4	UV-Vis Spectrophotometer	12,000.00	15-16
5	Microwave Digester	50,000.00	17-18

1. Analytical Balance 5 Digits

Analytical Balance 5 Digits with following specifications:

Sr. No.	Requirement	Specification
Features		
1	Display	• Touch screen with graphical user interface optimized for users in pharmaceutical & testing laboratories
2	Calibration	• Internal calibration isoCAL, External calibration
3	Special built-in lab applications	• Mixing, Components, Statistics, Conversion
4	Standard built-in application	• Weighing, Density, Percentage, Check weighing, Peak Hold, Counting, Unstable Conditions
5	Protection	• Chemical resistant finish of the housing • Password protection preferred
6	Interface	• Direct data transfer to Microsoft® Windows programs. Programmable interval for data output
7	Levelling	• Glass level indicator with air bubble for centering
8	Door Mechanism	• Easy door mechanism with a wheel at the top for dust free operation
9	Data Transfer	• Direct data transfer to Microsoft® Windows programs
10	UPS	• Supplier to provide detail requirements

Technical Specification		
1	Weighing Capacity	• 60 g
2	Readability	• 0.01 mg
3	Repeatability	• 0.01 mg
4	Linearity	• 0.1 mg
5	Typical stabilization time	• 4 Sec
6	Weighing pan size	• 80 mm
7	Accuracy class in accordance with OIML R111-1	• E2
8	Weighing chamber height	• 218 mm
9	IP protection class	• IP43

2. COD DIGESTOR & COD ANALYSER

TECHNICAL SPECIFICATIONS FOR COD DIGESTOR

COD Digester with following specifications:

Sr. No	Requirement	Specification
1	Display	LCD display for temperature and time, desired and actual values for heating time and temperature continually shown in the LCD display
2	Heater	On/off display (the LED blinks red during the heating phase and is permanently on during the digestion phase), contact guard on the surface of the heating-block
3	Holes	12 for cell tests of 16 mm-Simultaneous Digestion of 12 samples at same time
4	Temperature selection	Room temperature $-170^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$
5	Stability and Controlling accuracy	$\pm 1^{\circ}\text{C} \pm 1$ digit
6	Cut off	Automatic
7	Timer	0 - 180 min freely selectable
8	Heating time	8 temperature heating-time programmes for simplest possible operation: 148 °C (20 min or 120 min), 150 °C (120 min), 120 °C (30 min, 60 min or 120 min), 100 °C (30 + 60 min), as well as eight freely selectable programmes, automatic power switch-off at the end of the heating time
9	Mains version/Power	115 V~ / 230 V~, 50 Hz / 60 Hz convertible
10	Weight	Less than 4.00 kg
11	Warranty	Three Years Warranty (Standard Company warranty plus two years) from the date of installation or supply.
12	AMC	AMC charges including (PM Kit) calibration of two years after completion of three years' warranty shall be provided. (Should Provide Quote Separately)
13	UPS	Supplier to provide detail requirements
14	Consumables	Vendor should provide additional 12 Cell of 16 mm cuvette
15	User List	Vendor should have a minimum install base of 50 units in India for COD Digester along with three Installation and performance certificate
16	Demonstration Training	Should provide instrument operation and application training. Instrument model should be strictly complying with the tender specification during demonstration of the instrument

17	Training & Application Support	Training at site: Hands on training at the time of installation and commissioning of the machinery inside the WRA, Thane premises. Vendor should provide Standard operating procedure (SOP) for the operation of machines.
----	--------------------------------	--

TECHNICAL SPECIFICATIONS FOR COD ANALYSER

COD Analyser with following specifications:

Sr. No	Requirement	Specification
1	Measuring technology	Spectrophotometer with reference beam technology
2	Wavelength range	190 – 1,100 nm
3	Lamp type	Xenon flash lamp
4	Measuring modes	- Concentration, absorbance, transmission, multi wavelengths, spectra and kinetics in absorbance and transmission mode - Inbuilt method specific blank values. So blank measurements are not needed.
5	Spectral bandwidth	4 nm
6	Wavelength resolution	1 nm (scan 0.1 nm)
7	Wavelength reproducibility	± 0.2 nm
8	Wavelength accuracy	± 1 nm
9	Stray light	≤ 0.1% transmission at 340 nm; ≤ 1% transmission at 198 nm
10	Photometric range	± 3.3 Abs
11	Absorbance resolution	0.001 Abs
12	Absorbance reproducibility	± 0.003 absorbance at 1 absorbance between 200 nm and 900 nm
13	Absorbance accuracy	- at 300 – 900 nm 1 absorbance: ± 0.005 absorbance 2 absorbance: ± 0.005 absorbance 2.5 absorbance: ± 0.008 absorbance
14	Scan	- Limits freely selectable within the wavelength range Increment: 0.1/1/5 nm - Scan speed: up to 750 nm/min (depending on the increment)
15	Smart Screen Display	Display p-cap glass touch screen

16	Live ID barcode	- Automatic 2-D barcode reading system for all cell and reagent tests. Barcode contains lot, expiry, and calibration data. Data stored with each measurement - Instrument can read bar-coded information to load inbuilt programs automatically.
17	Cell size	16 mm round, 10, 20, 50 and 100 mm rectangular cells with automatic recognition
18	Minimum filling volumes	16-mm round cells: 4 ml 10-mm rectangular cells (Standard): 2 ml / (Semimicro): 1 ml 20-mm rectangular cells (Standard): 4 ml / (Semimicro): 2 ml 50-mm rectangular cells (Standard): 8 ml
19	Cell holder	Removable for easy cleaning
20	Methods	Programmed methods of all cell and reagent tests, additional user-defined methods: 99 concentration mode, 20 kinetic mode, 20 wavelength scans
21	Ambient light protection	Measurement with open shaft possible
22	Analytical Quality control/Validation	Individual settings for all methods in Modes for Spectrophotometer validation using NIST Traceable colored solution, UV-VIS standards, Concentration as well as spiking mixes, multi-radical standards, cross in-built program for checking of volumetric pipettes
23	Monitoring functions	Instrument-supported pipette check and sample matrix check
24	Ad hoc measurement	Direct access to absorbance/transmission, kinetic and spectrum measurement
25	Software and method update	Free updates on our website via internet and USB stick
26	Communication interfaces	USB: Multiple USB-A (for printer, USB memory devices, keyboard or bar code reader), USB-mini-B , Ethernet, LAN connection, scope for future upgradation LIMS connectivity
27	Data storage	Minimum 6,000 single measured values, concentration, absorbance/% transmission and multi wavelengths, 500 measurement result records of spectra, kinetics, Analytical Quality Assurance programs data and storage of validation data
28	Protection class	IP 31 for optics and electronics

29	Power supply	Power supply with 4 cables (1.2 m long) fitting
30	Power requirements	100 V – 230 V, 50 – 60 Hz
31	Temperature	Operation: 10 – 35 °C; storage: -20 °C to +60 °C for 24 hours
32	Allowable relative humidity	Operation: 20 – 80% RH, storage in ambient relative humidity of 20% to 95%
33	Weight	Less than 7.00 kg
34	Warranty	Three Years Warranty (Standard Company warranty plus two years) from the date of installation or supply.
35	AMC	AMC charges including (PM Kit) calibration of two years after completion of three years' warranty shall be provided. (Supplier should Quote Separately)
36	EMC	Directive 2014/30/EU, EN IEC 61326-1:2021, IEC 61326-1:2020
37	UPS	Supplier to provide detail requirements
38	Consumables	COD Cell Test- p/k 25 (16mm cuvette pre-filled with chemical) re-usable along with Bulk Pack 170 Plus Test for ranges 4-40 ppm, 10-150 ppm and 25-1,500 ppm for minimum 500 samples each
39	User List	Vendor should have a minimum install base of 50 units in India for COD Analyser along with three Installation and performance certificate
40	Demonstration Training	Should provide instrument operation and application training. Instrument model should be strictly complying with the tender specification during demonstration of the instrument
41	Training & Application Support	Training at site: Hands on training at the time of installation and commissioning of the machinery inside the WRA, Thane premises. Vendor should provide Standard operating procedure (SOP) for the operation of machines.

3. ROTARY VACUUM EVAPORATOR

Rotary Vacuum Evaporator with following specifications:

Sr. No	Requirement	Specification
1	Rotavapor	• V-condenser with Cooling capacity 1500cm/hour • Plastic glass coated Condenser assembly with Drive Unit • Display for Rotation speed, lift position and heating bath temperature (set and actual value) displayed on the Heating Bath. Allows user to monitor all parameters at a glance. • Motor lift with 20-280 RPM • Immersion Angle 10 - 50° (Adjustable) • Flask Sizes Uses from 50ml....5000 ml Capacity • Manually adjustable via button within a range of 100 mm prevents glass breakage and damage to bath pan • Multifunctional Combi-Clip for evaporating flask fixation and removal, as well as vapor duct release Allows one handed flask removal • 1-liter evaporating flask NS 29/32- and 1-liter receiving flask • Protection Class IP21 • CE Certified & ISO 9001 • Lift height indication Position is digitally indicated on display of heating bath and allows reproducibility of parameter for future applications
2	Heating Bath	• Digital Display heating bath temperature range of 20°C- 220 °C • Digital temperature display allows adjusting set temperature and indicates actual temperature • Power cut off when actual temperature exceeds set temperature or by rapid temperature increase • Protection Class IP21 • CE Certified • Heating Power 1250W

3	Vacuum Controller	• Eco friendly pump to save energy like pressure and electricity • 4.3-inch LCD display with touch button for operation by navigation knob and function keys. • Measurement Range 1400 – 0 mbar • Audible signal is sounded after termination of distillation • Controls Rotavapor pump from remote • Clockwise and anti-clockwise rotation for drying purpose • Displays all operating parameters - Indicates set and actual values of heating bath and coolant temperature, rotation, speed and lift position • Hysteresis – Automatic or 1 – 200mbar • Control Range – Ambient pressure - 0mbar • Wide range of operating modes - Manual, timer, - Solvent library • Protection Class IP21 • CE / CSA / ISO9001 Certified • Woulff Bottle for trap
4	Vacuum Pump	• Speed controlled more than 90% solvent recovery chemical resistant PTFE diaphragm DC vacuum pump • Essential needs in vacuum generation optimally suited to work with the Rotavapor. • Final vacuum: 5 mbar (± 2 mbar) • Suction capacity: 1.8 m³/h. • Transparent front panel to observe the membrane for highest distillation efficiency. • Standard supply of silencer and 2 m of vacuum tubing. • CE Certified. • Speed-controlled operation. • Protection Class IP20 • CE / CSA / ISO9001 Certified • Rotavapor and vacuum pump should be supplied from single OEM or authorized vendor.

		• Temperature and vacuum control should be start in a single click from interface • Inclusive of necessary Tubing, power cables and manuals are required for smooth functioning of the above system. This system works with 230V, 50Hz power supply.
5	Recirculation Chiller	• Working Temperature range -20 to +25 °C as above. • Temperature accuracy: 0.1 °C • Cooling capacity at 20 °C 350 W • Bath Volume: 5 Liters. • Pump Pressure: 300 mbar • Flow Rate: 17 Liter/min.
6	Warranty	• Three Years Warranty (Standard Company warranty plus two years) from the date of installation or supply.
7	AMC	• Compressive AMC charges including (PM Kit) calibration of two years after completion of three years warranty shall be provided. (Supplier should provide Quote Separately)
8	UPS	• Supplier to provide detail requirements
9	Consumables	• Vacuum Seals -3 Nos. • PM Kit for Vacuum Pump -1 Nos.
10	User List	• Vendor should have a minimum install base of 50 units in India for Rotary Vacuum Evaporator along with three Installation and performance certificate
11	Demonstration Training	• Should provide instrument operation and application training. Instrument model should be strictly complying with the tender specification during demonstration of the instrument
12	Training & Application Support	• Training at site: Hands on training at the time of installation and commissioning of the machinery inside the WRA, Thane premises. Vendor should provide Standard operating procedure (SOP)for the operation of machines.

4. UV-VIS SPECTROPHOTOMETER

UV-Vis Spectrophotometer with following specifications:

Sr. No	Requirement	Specification
1	UV-Vis Spectrophotometer	• True double beam design with reference and sample holders as standard. • The spectrophotometer must be able to operate as a stand-alone instrument and also able to operate using a PC. • Data obtained on the stand-alone system can be transferred via USB memory to be read directly on a PC using MS spreadsheet
2	Wavelength range	• 190 to 1100nm
3	Spectral bandwidth	• 1nm or smaller
4	Wavelength display	• 0.1nm increments
5	Wavelength setting	• 0.1nm increments
6	Wavelength accuracy	• ± 0.05 nm at D2 peak 656.1 nm, ± 0.3 nm for entire range
7	Wavelength repeatability	• ± 0.025 nm for entire range
8	Wavelength slew rate	• Approx. 29,000 nm/min
9	Wavelength scanning speed	• 3,000 to 2nm/min
10	Stray light	• Less than 0.004% at 220nm (NaI) and 340nm (NaNO₂), Less than 0.15% at 198nm (KCl)
11	Photometric system	• Double beam optics type
12	Photometric range	• From -4 Abs to 4Abs Transmittance range: from 0% to 400%T
13	Photometric accuracy	• ± 0.0015 Abs (0.5Abs)/ ± 0.002 Abs (1.0 Abs)/ ± 0.004 Abs (2.0 Abs)
14	Photometric repeatability	• Less than ± 0.00002 Abs (at 0.5 Abs) and ± 0.00003 (at 1.0Abs)/ Less than ± 0.00007 Abs (at 2.0 Abs)

15	Baseline stability	Less than +/- 0.0002 Abs/hr. at 700nm (one hour after light source turned ON)
16	Baseline flatness	Within +/- 0.0003 Abs (190 ~ 1100nm , one hour after light source turned ON)
17	Noise level	Less than 0.00001 Abs RMS value
18	Light source	Halogen lamp and deuterium lamp/ (with built in light source automatic position adjustment)
19	Monochromator	Constructed of Lo-Ray-Light grade blazed holographic grating in aberration-corrected Czerny-Turner mounting
20	Detector	Silicone photodiode
21	Computer & Printer	- Compatible Branded PC with Licensed Windows 10 Professional, English 64-bit version, 1 TB hard drive, RAM 8 GB DDR3, LAN port with Monitor and Suitable LaserJet Printer - Built-in for USB Interface
22	Warranty	Three Years Warranty (Standard Company warranty plus two years) from the date of installation or supply.
23	UPS	Supplier to provide detail requirements
24	AMC	AMC charges including (PM KIT) calibration of two years after completion of three years' warranty shall be provided. (Should Provide Quote Separately)
25	Consumables	- Vendor should provide additional one pair of 10mm quartz cuvettes - Vendor should provide one pair of 40mm quartz cuvettes along with the holder - One additional Deuterium lamp and One additional Halogen/Tungsten lamp
26	User List	Vendor should have a minimum install base of 50 units in India for UV-Vis Spectrophotometer along with three Installation and performance certificate
27	Demonstration Training	Should provide instrument operation and application training. Instrument model should be strictly complying with the tender specification during demonstration of the instrument
28	Training & Application Support	Training at site: Hands on training at the time of installation and commissioning of the machinery inside the WRA, Thane premises. Vendor should provide Standard operating procedure (SOP) for the operation of machines.

5. MICROWAVE DIGESTOR

Microwave Digestor with following specifications:

Sr. No	Requirement	Specification
1	Applications	For acid digestion applications of samples like Feed, plant materials, soil, food, environmental, waste samples etc. For further analysis with AAS, ICP – OES or ICP – MS techniques.
2	Microwave Cavity	The cavity chamber must be made of corrosion resistant Stainless steel with multilayer fluoropolymer coating for physical protection as well as chemical resistance
3	Microwave Power	Delivered power: 1000 watts or more using 1 or 2 magnetrons for cavity size less than 20 liters and 1500 watts or more for cavity more than 20 liters.
4	Controller	In-built Color touch screen display of minimum 5.5 inches or more for real-time graphical representation of reaction parameters and display of internal temperature of every individual reaction.
5	Rotor	Suitable rotor to accommodate 12 or more high pressure vessels with rotor stability of 110 bar or more with continuous IR based temp. Measurement of all sample vessels. Number of vessels should be offered same as the capacity of the rotor.
6	Vessel	Vessel should be made up of PTFE- TFM . Vessel should have simple hand tightening closure and special tools like torque wrench are not acceptable due to low performance.
7	Vessel volume	45 ml or more with, for samples which requires less acid then same vessel should be able to digest sample with acid volume of 3ml or lesser
8	Max operating temperature	230 °C or more
9	Max operating pressure	45 bar or more
10	Sample weight	Vessel should be able to digest sample amount of 2g or more for application such as trace level analysis
11	Vessel safety	Closure of the vessel must be possible by hand and overpressure release mechanism of the vessel must be controlled by means of metal springs for precise opening pressure or offered vessels should have metal rupture disc for high pressure stability independent of the reaction

		temperature or sample weight. Venting with polymer/ plastic material springs not acceptable due to dependence on internal temperature and sample weight.
12	Temperature calibrator	A temperature calibrator for accurate temperature measurement must be supplied along with the instrument.
13	Cooling	Instrument should have built in exhaust for cooling the vessels inside the oven in less than 10 mins.
14	Micro sample facility	Instrument should be offered with 10 nos. of glass/quartz inserts for carrying out digestion with 1 ml acid and for micro samples. Or equivalent rotor to carry out digestion using inserts.
15	Warranty	Three Years Warranty (Standard Company warranty plus one year) from the date of installation or supply.
16	AMC	AMC charges including (PM Kit) calibration of two years after completion of three years' warranty shall be provided. (Supplier should Quote Separately)
17	Maximum hold times	Offered vessels should have minimum hold times from 60 min or more for difficult to digest samples
18	Pre-digestion vials	Instrument should be offer 12 or more PTFE/TFM vial for pre-digestion of samples.
19	Fuming Hood	Suitable fuming hood should be supplied along with the instrument for general purpose Capacity of 100m³/hr. (Supplier should Quote Separately)
20	Additional consumables	System should be supplied along with additional set of consumables for smooth operation of instrument during warranty period.
21	UPS	Supplier to provide detail requirements
22	Consumables	Screw Caps 6 nos, Seal 6 nos, Vessel Jacket 12 Nos, and other required Consumables
23	User List	Vendor should have a minimum install base of 50 units in India for Microwave Digester along with three Installation and performance certificate
24	Demonstration Training	Should provide instrument operation and application training. Instrument model should be strictly complying with the tender specification during demonstration of the instrument
25	Training & Application Support	Training at site: Hands on training at the time of installation and commissioning of the machinery inside the WRA, Thane premises in the including cost.

Annexure II

FORMAT OF BANK GUARANTEE OF 10% OF CONTRACT VALUE

(ON NON JUDICIAL STAMP PAPER OF RS.100/-)

Bank guarantee No.----- Date: -----This deed of guarantee made this----- day of----- 2024 (Two Thousand Twenty four only) (Name and address of the bank) herein after referred to as (The bank) which expression shall where successors and assignees of the Bank and the Wool Research Association (WRA) , Thane which expression shall unless repugnant to the context of the meaning thereof include it's legal representatives, successors and assignees.

WHEREAS the Wool Research Association (WRA), has placed its Purchase Order bearing No.- -----dated-----on (name and address of the party) (here in after called 'the supplier' for the supply of ----- (name of the testing instrument).AND WHEREAS the Wool Research Association (WRA), Thane has agreed to pay to the supplier final 10% of the value of the equipment on submission of a Bank Guarantee of equal amount, which will be kept valid upto ----- being the period of 36 calendar months from the date of Bank Guarantee.

In consideration of the Wool Research Association (WRA) ,Thane having agreed to pay to the supplier Rs.----- Rupees ----- only)being the last 10% of the value of the equipment, we (name of the Bank) hereby undertake and guarantee to make repayment to the of the said 10% amount or any part thereof which does not become payable to the supplier by the **Wool Research Association (WRA) , Thane** in accordance with the subject to the terms and conditions of the said order within ----- days from the date of dispatch / from the date of receipt of the material at site. The Bank further undertakes not to revoke this guarantee during its currency except with the previous consent of the **Wool Research Association (WRA), Thane** in writing and this guarantee shall be a continuous and irrevocable guarantee up to a sum of Rs. ----- (Rupees----- only)

The Bank shall, not be discharged or released from this guarantee by any arrangement between the supplier and the **Wool Research Association (WRA) , Thane** with or without the consent of the Bank or any alterations in the obligation of the parties or by any indulgence, forbearance shown by the **Wool Research Association (WRA), Thane** to the supplier and the same shall not prejudice or restrict remedies against the Bank nor shall the same in any event be a ground of defence by the Bank against the **Wool Research Association (WRA), Thane**.

We (**name of the Bank**) do hereby undertake to pay an amount equal to 10% of the order value being the amount due and payable under this guarantee without any demur, merely on demand from the **Wool Research Association (WRA)** stating that the amount claimed is due to the **Wool Research Association (WRA)**. In case the **Wool Research Association (WRA)** puts forth a demand in writing on the Bank for the payment of the amount in full or in part against this Bank guarantee, the Bank shall considered that such demand by itself a conclusive evidence and proof that the supplier has failed in complying with the terms and conditions

stipulated by the **Wool Research Association (WRA)** in the purchase order and payment shall be made to the **Wool Research Association (WRA)** without raising any dispute regarding the reasons for any such lapse/failure on the part of the supplier.

This guarantee shall be in addition to and without prejudice to any other securities or remedies which the **Wool Research Association (WRA)** may have to hereinafter possess against the supplier and the **Wool Research Association (WRA)** shall be under no obligation to marshal in favour of the Bank any such securities or fund or assets that the **Director, WRA** may be entitled to receiving or have a claim upon and the **Wool Research Association (WRA)** at its absolute discretion may vary, exchange renew, modify or refuse to complete or enforce or assign any security or instrument.

The Bank agrees that the amount hereby guaranteed shall be due and payable to the **Wool Research Association (WRA)** on the Director, WRA serving with a notice requiring the payment of the amount and such notice shall be deemed to have been served on the bank either by actual delivery thereof to the Bank or by dispatch thereof to the Bank by Registered Post shall be deemed to have been duly served on the Bank notwithstanding that the notice may not in fact have been delivered to the Bank.

In order to give full effect to the provisions of this guarantee, the Bank hereby waives all inconsistent with the above provisions and which the Bank might otherwise as guarantor be entitled to claim and enforce.

NOTWITHSTANDING anything contained herein before, the liability under this guarantee is restricted to Rs. -----(Rupees-----only). The guarantee shall remain in force till the -----(Rupees only). and unless the guarantee is renewed or a claim is preferred against the Bank within three months from the said date all rights of the **Wool Research Association (WRA)** under the guarantee shall cease and Bank shall be released and discharged from all liability hereunder.

(SIGNATURE)

PLACE:

DATE: SEAL

NOTE: SUPPLIERS SHOULD ENSURE THAT SEAL OF THE SIGNATORY IS PUT BY BANKER, BEFORE SUBMISSION OF THE BANK GUARANTEES.