

GOVERNMENT OF ARUNACHAL PRADESH OFFICE OF THE DIRECTOR TOMO RIBA INSTITUTE OF HEALTH & MEDICAL SCIENCES NAHARLAGUN-791110

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No. TRIHMS/VRDL/Procurement/2023/429 - 433

Dated Naharlagun, 18th January, 2024

OUOTATION NOTICE

Short/limited quotations from experienced & reputed firms/suppliers are hereby invited for supply of the following Viral Research & Diagnostic Laboratory (VRDL) equipments for Tomo Riba institute of Health & Medical Sciences:

SI	Name of the Equipment	Quantity	Ceiling Price as per DHR
No.		1	25,000
1)	Water Bath	1	
2)	-20° C Freezer	1	2,00,000
3)	ELISA Plate Washer	1	2,50,000
4)	ELISA Plate Reader	1	3,00,000
5)	Micropipette (Serology)	6	1,50,000
	(1-20 μl x 2, 10-200 μl x 2, 50-1000 μl x 1,		
	Multichannel 50-300µl x 1)		
6)	Pan electronic weighing balance	1	50,000
7)	Microwave Oven (For agarose gels)	1	10,000
8)	Fridge (sample, receiving, temporary, storage)	1	20,000
9)	Micropipette(Molecular)	8	3,50,000
	$(2 \times 0.5 \ \mu l - 10 \ \mu l, 3 \times 10 - 200 \ \mu l, 2 \times 50 - 1000 \ \mu l,$		
	1 x 5-100 µl)		
10)	Desktop computer with printer (dedicated VRDL	2	1,40,000
10)	Data entry, inventory, email, etc.)		
11)	Gel Electrophoresis & documentation unit	1	10,00,000
11)		TOTAL	24,95,000

Suppliers are requested to submit their quotation as per the specifications attaching the current trading license, GST registration certificate and other credentials in a sealed envelope addressed to Director TRIHMS on or before 10th February, 2024 by 1600 hours.

The quotation will be open and verified by a competent board on 11th February, 2024 at 1100 hours. The authority reserves the right to accept/reject any or all quotation without showing any reason thereof.

Sd/-Dr. Moji Jini Director, TRIHMS

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Copy to:

- 1. The Director, TRIHMS.
- 2. The F&AO, TRIHMS.
- 3. The BME & Incharge Website, TRIHMS.
- 4. Notice Board.
- 5. Office copy.

Dated Naharlagun, 24th January, 2024

Dr. Yompe Kamki
Co-PI, VRDL-TRIHMS
Co-Principal investigator
VRDL-TRIHMS
NIE Lab Code No. VRDL-2023-00031

Arunachal Pradesh

Annexure 1.

Technical Specification

Water Bath

- 1. Stainless steel SS304 chamber interior.
- 2. Capacity: 12-16 litres.
- The temperature should be controlled by the microprocessor based digital temperature controller with LED display along with provision for manual temperature control and thermometer reading.

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- 4. Buton to set nominal value at 0.1 °C. Temperature range 5°C above ambient room temperature to 100°C; external WXDXH approx. 500x250x300mm.
- 5. Bath (inner chamber) capacity approx. 20 litres, Temperature accuracy -/+ 0.1 °C.
- 6. The body of the equipment should be made up of material which is rust free from both inside and outside. The inner part of the equipment should be made of stainless steel and outer part f the material should be coated with powder paint finish.
- 7. Leak proof drainage system to clean the inner chamber.
- 8. The equipment should be ISO 13489 and CE (confirmite European) and /or US (FDA) certified.
- 9. Warranty: Three (3) years warranty and subsequent annual maintenance contract to be provided.

-20 °C Freezer

- 1. General: Vertical type with twin door and adjustable shelves.
- 2. Capacity:380 to 450 litres.
- 3. Temperature: -20 °C, Accuracy -/+ 1 °C. Must be able to perform at ambient temperature upto 40 °C, user friendly, non CFC refrigerant.
- 4. Body is mounted on a sturdy angle iron frame and is mounted on castor wheels.
- 5. Temperature range: tolerance limit -8 °C to -20 °C.
- 6. Power supply: 230 -/+10 volts; 50 Hz.

7. Voltage stabilizer: Voltage regulator of appropriate rating to be included to cope with 160-260 V.

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- 8. Microprocessor control, digital display with battery back up and alarm should be there.
- 9. The equipment should be ISO 13489 and CE (confirmite European) and /or US (FDA) certified.

ELISA Plate Washer(Automatic)

- 1. General: Auto strip washer for all 96 well plates 1x 8 / 1x12 Strips.
 - a. Dispensable volume 25-300 μl. Soaking time 1-600 seconds.
 - b. Aerosol shield for user safety.
- 2. Voltage Supply: 230 -/+ 10 V, 50 Hz.
- 3. Accessories: 8/12 channel manifold, all tubing sets, wash/rinse waste bottles, maintenance kit, vacuum filter,
- 4. Adjustable for different micro plate geometrics, the washer should be capable to wash U, V and flat types of microtitre wells.

ELISA Plate Reader

- 1. Should be fully automatic, able to support all plate formats U bottom, V bottom and flat bottom 96-well micro plates.
- 2. It should be PC based system.
- 3. Optical systems: LED lamp/ UV Xenon flash lamp.
- 4. Detection: Absorbance based.
- 5. Reading Time: <15 Seconds for 96-wells.
- 6. Wavelength range: 340nm to 750nm or more.
- 7. Wave length selection should be double monochromatic with 1nm increment
- 8. System should have capability to do qualitative, quantitative, kinetics with any formulae including validation, transformation, and factors and floating cut off.
- 9. Absorbance Range: 0-4 OD
- 10. Resolution: 0.001 Abs.

12. Repeatability: 0.5% + -0.005 OD

13. System should perform self-check before every measurement.

14. Power requirements: 220V-50/60Hz

15. PC Requirements (All in one PC): Intel core i7 processor, 4 GB RAM, 2 GB graphic, 1 TB hard disc, Full HD LED monitor 17", DVD writer, Wi-Fi, Wireless key board and mouse, 64 bit and latest version of Microsoft Window, with MS office licensed, Laser Printer (>20pages/min.) >5000pages/refilling of cartridge.

16. Inbuilt shaking mode.

17. PC Software packages (windows ® compatible) for on board data analysis.

Micropipette

- 1. Micropipette: single channel volume
 - a) 0.5-10 μ1
 - b) 1-20 μl
 - c) 5-100 µl
 - d) 10-200 μ1
 - e) 50-1000 μ1
 - f) 100-1000 μ1

Multichannel volume

- a) 50-300 μl
- 2. Suitable for all brands of tips.
- 3. Light weight and ergonomic design for user comfort.
- 4. Made of high grade plastics with a durable tiptone made up of PVDF plastic.
- It should offer accuracy and precision as per standards for micropipettes ISO 8655 and ISO 17025.
- 6. Easy in laboratory recalibration with tip ejector mechanism.
- 7. Made of corrosion proof material with fully autoclavable at 121°C.

Pan electronic weighing balance

- 1. Electronic analytical balance which is fast, accurate, reliable and easy to operate.
- 2. Draft shield chamber with sliding door on both sides.
- 3. Digital LCD/LED display.
- 4. Readout should have atleast 4 decimal places.
- 5. Readability: 0.01 mg
- 6. Minimum weighing capacity: 0.01g
- 7. Maximum weighing capacity: 100 gms
- 8. Operating temperature 10 $^{\circ}$ C to 50 $^{\circ}$ C
- 9. Electrical Requirement : 230 V/50-60 Hz (supplied with AC Adapter)
- 10. Tare/Zero function, Calibration facility should be there.
- 11. Instruction manual and spare fuses (2 Nos) to be provided.
- 12. Should be CE (Conformite European)/US (FDA) and ISO13489 certified.

Lab Refrigerator

- 1. Capacity(as per requirement) 230 -/+ 10 litres, single door.
- 2. CFC free refrigerant gas(Not frost free) with temperature range of 2-8 °C.
- 3. Preferably roller mounted with adjustable shelves.
- 4. Battery backup upto 1 hour.
- 5. Durable rust free resistant exterior and unbreakable interior.
- 6. Control panel with temperature alarm, on/off switch and digital thermometer, power on indicator.
- 7. Interior lighting with door lock system
- 8. Should have all the accessories required for the functioning of the equipment.
- 9. 1 year warranty on refrigerator and 10 years on compressor.
- 10. 12 hours cooling retention during power cuts with advanced moisture control.

Microwave Oven

- 1. Capacity: >28L
- 2. Convection: Can be used for reheating & defrosting
- 3. Turntable Size: >318 mm
- 4. Warranty: 1 year on Product & 5 years on Megnetron & 10 years on Ceramic Cavity
- 5. Cavity (WxHxD) 358.0 x 235.5 x 327.0 mm Outside (WxHxD) 517.0 x 310.0 x 474.8 mm
- 6. Control: Touch Key Pad (Membrane), sensitive to touch and easy to clean.

Gel Electrophoresis

- 1. Ready to use Horizontal apparatus for nucleic acid and protein separations (duly fabricated to tolerate cleaning reagents used in RNA analysis) with gel gripping UVtransparent tray, male connectors mounted at an angle and uni-directional migration, gel size 10 (w) x 15 (l) cm, comb 1.5mm, PMMA, 15 wells 2 nos., comb stand 2 nos.
- DC Power Supply, range 300V, 400 mA, 120W, constant voltage or constant current mode with MOSFETS, auto crossover, four outputs, independent digital displays for mA & V with timer.
- 3. Gel casting chamber for tray 10 cm (w) and varying length up to 20 cm.
- 4. Ready to use, UV transilluminator with diffusing UV transparent window (15 l x 18 w
- cm), six UVA tubes, 6 W each, Hi-Lo intensity control and trapezoid hood fitted with binocular chroma filter eye piece.

Gel documentation unit

- 1. Camera: CCD: >/=5 megapixels, 12-16 bit
- 2. Lens: f/1.2, 8-48 mm, automatic zoom
- 3. Camera cooling system: Peltier based (cooling temperature: Absolute: -25 °C)
- 4. Darkroom: Wide front door with UV safety switch, gel viewer window, epi white light, side access doors, two-position emission filter tray
- 5. Filter position: 3 (Chemiluminescence, fluorescence 2)
- 6. Emission Filters: SYBR green/green fluorescent protein/ETBr (red- 570-640 nm)
- 7. Illumination modes Trans-UV, white and epi-white lights

- 8. Excitation source: 254nm UV lamp/302 nm UV lamp/365 UV lamp
- 9. Field of view: Min. 25x20 cm or more
- 10. Data transfer: fire wire/USB connectivity
- 11. Gel documentation system with UVA light source (4 tubes, 4W each) and hi-lo intensity control, 10 x 10 cm window, hood fitted with 18 MP DSLR Camera with filters and software for camera control.

8.

Desktop Computer

- Processor: 11th Gen Intel Core i5 9400 6 Core 9MB Cache, up to 4.1 GHz with Intel Turbo Boost Technology
- 2. RAM: 8 GB DDR 4 with expansion capacity 32 GB or above
- 3. SSD: 512 GB (M2 or SATA Primary)
- 4. HDD: 3.5" 2TB 7200 RPM SATA Hard Drive (Secondary)
- 5. OS: Windows 11 Pro 64 Bit OEM License
- 6. Other Software: Quick Heal Total Security 3 years license with media
- 7. Network Ports: Wifi + Gigabyte LAN Card
- 8. Other 10 Ports: USB3, HDMI, VGA, additional PCI and PCI x port on board.
- 9. Monitor: 24" HD LED with HDMI port same make as CPU
- 10. Optical Drive: DVD RW
- 1,1. I/O Device: USB Keyboard and Optical Mouse
- 12. Warranty: 3 Years Onsite, Parts and Labour from OEM with technical support helpline.

Printer

- 1. Print speed (Normal): Upto 43 ppm
- 2. Print quality black (best): 600 x 600 dpi, up to 4800 x 600 enhanced dpi
- 3. Print technology: Laser
- 4. Processor speed: 1500 Mhz
- 5. Memory: 256MB
- 6. Duplex printing: Automatic
- 7. 1st page out (ready): As fast as 5.8 seconds
- 8. Print languages: PCL 5, HP PCL 6, direct PDF, URF, PCLM, PWG
- 9. Display: 2 line LCD (text)

- 10. Connectivity, standard: Hi-speed USB 2.0 host, fast ethernet 10 base-T/100base-Tx, Gigabit Ethernet 1000Base-T
- 11. Network ready: Standard (built in gigabit ethernet)
- 12. Compatible operating systems: All Windows/DOS/Linux/Mac
- 13. Paper handling input, standard: 100-sheet multipurpose tray and 550-sheet main
- 14. Paper handling output, standard: 250-sheet face down output tray
- 15. Duty cycle (monthly, A4): up to 50000 pages
- 16. Media sizes supported: All
- 17. Minimum dimensions (WxDxH): 418 x 376 x 289 mm
- 18. Weight: 11.6 kg
- 19. Warranty: 3 years with spare parts