नागालैण्ड विश्वविद्यालय
NAGALAND UNIVERSITY
(संसद द्वारा पारित अधिनियम 1989, क्रमांक 35 के अंतर्गत स्थापित केंद्रीय विश्वविद्यालय)
(A Central University established by an Act of Parliament No.35 of 1989)
मुख्यालय : लुमामी, जिला : जुन्हेबोटो (नागालैण्ड), पिनकोड – 798627
Hqrs : Lumami, Dist. Zunheboto (Nagaland), Pin Code – 798627
वेबसाइट / Website : www.nagalanduniversity.ac.in

NO.NU/ ADM/CA-Equipment/SAS/23 Dated: 01/03/2024

TENDER NOTICE

Sealed tenders are invited for supply of Equipment to Nagaland University, SAS, Medziphema campus (CIC). Interested authorised dealers/firms can download the tender details from the University website: *nagalanduniversity.ac.in* and submit their quotations along with tender fee of Rs.1000/- (non-refundable) through SBI collect/DD in favour of Nagaland University.

The tender documents are to be sealed in an envelope and super scribed on the cover "**Quotation for supply of equipment to CIC, Medziphema**" addressed to the undersigned and submit during office hours on or before 08th March. 2024. No tender shall be accepted beyond this date and time.

Yanrenthung 01/03/24
(Yanrenthung Ezung)
Registrar i/c

NO.NU/ ADM/CA-Equipment/SAS/23 – 6763 Dated: 01/03/2024

Copy to:-

1. The Pro-Vice Chancellor NU, SAS, Medziphema campus for information.
2. The Finance Officer, NU. Lumami for information.
3. The System Administrator, NU, Lumami, with a request to upload in the University website.
4. The PA to Registrar i/c, NU, for information.
5. The Editor, Nagaland Post, Dimapur, with a request for publication in the next issue (size 6cm x 8cm). Bills in triplicate should be submitted for payment. It's a One time publication.
6. Office copy.

Yanrenthung
Registrar i/c 01/03/24

LIST OF EQUIPMENT WITH SPECIFICATIONS
FOR
CIC, SAS, NU, MEDZIPHEMA CAMPUS

1. Fluorescence spectrophotometer: 1 No.

Specification: Wavelength range: 250-700 nm; Sensitivity: S/N≥150; Wavelength accuracy: ±1nm at spectral bandwidth of 10nm; Unparalleled detection Limit: With 150 Watts Xenon lamp, it offer higher signal to noise ratio, which provide better capabilities for trace sample measurement; Highly reliable optical performance: The 1200 lines/mm Czerny Turner Diffraction; Grating for the highest sensitivity, accuracy and reproducibility; Easy software Interface: Data Collection and Analysis software offers a comprehensive solution for data collection and analysis such as scan, time drive, and ratio Data Collection directly from the applications menu. Outstanding durability and reliability; drastically reduced photobleaching of samples: Unlike conventional light sources, the improved Xenon lamp minimizes photobleaching of samples, which maintains the integrity of the sample; hence delivers accurate and uncompromised results. RS232 interface; Eight stage adjustable sensitivity, real time display of fluorescence reading with concentration printout; Standard Accessories: Power cord, fuse, 10mm quartz fluorescence cuvette; Wavelength Repeatability: ≤1 nm; Spectral Bandwidth: 10 nm; Light Source: LED; Excitation Optical Filter: Interference optional filter of central wavelength at 365nm, optional central wavelength of 365nm, 405nm, 470nm, 515nm; Excitation Wavelength Range: 200-600 nm; Emission Wavelength Range: 200-650 nm; Linearity: ≤±3.0%; Monochromator: Czerny Tuner Diffraction Grating; Gross Dimension (W/D/H); 450x420x280 mm. Installation & Demonstration

2. Portable O_2/CO_2 Analyser: 1 No.

Specification: Oxygen Channel- Oxygen Sensor Type: Proprietary Electrochemical; Oxygen Range: 0 to 100%; Oxygen Sensitivity: 0.1% O2; Oxygen Minimum Detection Limit: 0.1% O2; Oxygen Calibration Controls: SPAN adjustment, zero adjustment; O2 Resolution: 0.1% O2; Carbon Dioxide Channel- Carbon Dioxide Sensor Type: Solid-state Infrared; Measurement Ranges: 0-100%; CO2 Minimum Detection Limit: 0.1% ; CO2 Calibration Controls: Potentiometer SPAN adjustment for CO2 and zero adjustment; General- Sample Pump: Miniature diaphragm type with ~5cc/sec flow; Pump Timing: 2-12 second adjustable pump time; Sampling Port: Double reinforced sample probe (~12in. length); Exhaust port: Vents to air; Power Supply: rechargeable batteries; auto shut-off after 45 minutes idle. Installation & Demonstration

3. Fourier Transform Infrared (FTIR) Spectrophotometer with accessories: 1 No.

Specification: Fully PC controlled and compact FTIR system with ZnSe beam splitter. The system should be immune to moisture. Interferometer should have permanently aligned and optics with capability to withstand high humidity. Enclosure: Sealed and desiccated; Spectrometer interface: USB-2 Compact system, weight preferably less than <6 kgs, Spectral range: 5100–600 cm^{-1} better, Spectral resolution: < 2 cm^{-1}; Wave number accuracy: 0.05 cm^{-1} measured with NIST 1921; Wave number reproducibility: 0.005 cm^{-1} measured with NIST 1921 System should have transmission facility with the system. Sample tray should have following options like gold and polystyrene reflectance standards, 3 sample cups and 10 mm sample cup size. System should have software with following features like multi-language

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software guides users through every step of operation, while color coding alerts make it easy to see whether samples meet specification with versatility to handle both qualitative library matching and quantitative analysis. The software also provides a feedback mechanism to advise when the accessory requires cleaning, ensuring smooth functioning of the system. The offer should include 5 years warranty on Laser Source and Interferometer. Software: Windows based PC software, qualitative and quantitative analysis. Power: 110 – 240 V AC, 60/50 Hz. Other accessories: 15-ton Hydraulic Press, 5 KVA online UPS and electrical fittings for the site. Installation & Demonstration

4. Gradient PCR with essential accessories: 1 No.

Specifications: Block format: 96-well, 0.2 mL isothermal block; Max. Block ramp rate: 3.0°C/sec; Max. Sample ramp rate: 2.2°C/sec; Temperature accuracy ±0.25°C (35–99.9°C); Temperature range 0–100.0°C; Temperature uniformity <0.5°C (30 sec after reaching 95°C); Dimensions (H x W x D): 20 x 19 x 39 cm (7.9 x 7.5 x 15.4 in.); PCR volume range 10–100 µL; Instrument memory: 2,000 MB onboard memory (capacity for >1,000 protocols); USB port for additional external storage; Display interface 5-inch color TFT LCD; Power 100–240 V, 50–60 Hz, max. 500 W; VeriFlex Blocks: 3 temperature zones, 20°C range (10°C zone-to-zone); Data connectivity: Cloud or mobile via Ethernet or WiFi.
Installation & Demonstration

5. Electrophoresis system and accessories: 1 complete set

Submarine Electrophoresis Unit: Specification: Designed for very fast separations of DNA restriction fragments in agarose gels. Includes buffer chamber, safety lid with cables, UV transparent tray and one each of 1.5 mm thick 8 and 15 well combs. Electrodes are easy to remove, simplifying cleaning. Color-coded electrodes for correct positioning of the lid on the base. Tabs on the base permit easy removal of the lid, reducing buffer spillage, and also prevent incorrect lid positioning. Clear plastic construction for easy sample visualization. UV-transparent gel trays. Gel-casting gates to cast your own gels right in the cell, or optional caster. Sample throughput: 10-15. Base buffer volume: 300ml.

Dual Vertical Electrophoresis Unit: Specification: Should be used for two slabs gel 10x8cm. Includes buffer chamber, safety lid with cables. 10 glass plates, 2 ten well combs, 4 spacers of 1 mm thickness and dual gel caster. Color-coded electrodes for correct positioning of the lid on the base. Tabs on the base permit easy removal of the lid, reducing buffer spillage, and also prevent incorrect lid positioning. Clear plastic construction for easy sample visualization. Sample throughput: 10. Base buffer volume: 700ml.

Staining box: Specification: Used for staining and de-staining and handling of electrophoresis gels. Dimensions (l x b x h): 12.5 x 12.5 x 5 cm.

Gel Scoop: Specification: Made of UV transparent acrylic for easy transfer of electrophoresis gels between electrophoresis units. Easy to handle. Size: 7.5 x 10 cm.

Electrophoresis power-supply Unit: Specification: Output range: 10-300V, 75W; Type of output: Constant voltage. Output terminals: 4 pair recessed jacks in parallel. Timer: 1 min – 99hr 59 min. Pause/Resume function. Display: LED. Operating conditions: 0 - 40°C. Sudden load change detector. Overload/Short-circuit detector. Overvoltage protection. Fuse on both hot and neutral. Input power: 90-120 VACS, 50/60 Hz. Auto switching.
Installation & Demonstration

6. **Gel Doc system & accessories: 1 complete set**

Specifications: 9.1 MP cooled CCD camera: high sensitivity and dynamic range to help enable the detection of subtle differences in samples. Fluorescence channels: multiplex and capture up to four proteins in a single blot for more meaningful and representative experiments. Smart Exposure technology: provides rapid determination of optimal exposure time to help minimize the need to repeat exposures to acquire the desired signal. High Dynamic Range Imaging: Smart Range HDR combines optimized short and long exposures into a single HDR image to capture an extended linear dynamic range and providing high-quality non-saturated data for improved quantization. Simple interface: clear layout of functions and features combined with a 12.1-inch capacitive touch screen for a smooth imaging experience. Advanced automated features: automatic sample rotation, automatic zoom, and automatic focus help streamline image capture. Green LED-based transilluminator: effectively excite popular DNA dyes such as ethidium bromide and Invitrogen SYBR Green dyes with an alternative to UV-based transilluminators. Expanded imaging applications: capture and analyze visible, chemiluminescent or fluorescent stained colonies on single- or multi-well cell culture plates using the optimized imaging channels and onboard analysis workflows. Flexible connectivity: export captured images via ethernet connection, Wi-Fi (with optional accessory), USB, or directly to Connect cloud-based platform. Multiple image analysis options: perform densitometry, quantization, and normalization directly using the on-instrument software, or for more in-depth analysis (available in both desktop and cloud-based versions). Imaging Sample Blot, Preinstalled filter sets, Safe Imager Viewing Glasses, White Screen for stained SDS-PAGE gel analysis, iBright Imager Quick Start Guide. Resolution: 9.1 MP. Format Image formats: TIFF, JPG, PNG, PDF. For Use With Chemiluminescent Western Blot Imaging, DNA Gel Imaging, Fluorescent Western Blot Imaging, Protein Gel Imaging. Installation & Demonstration

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Rs 1000/- (Non refundable)

TENDER DOCUMENT FOR SUPPLY OF Equipment to Nagaland University, SAS, Medziphema campus.

Name of the firm :----------

Address :----------

Phone No :----------

Email ID :----------

Tender Bid

SL. NO	Item	Quantity	Rate	GST @ %	Amount (inclusive of GST)	Other charges (If any)	Total amount inclusive of all charges

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TERMS AND CONDITIONS

1. Tax should be clearly indicated.
2. The bidder must submit GST Certificate
3. Authorised dealer certificate should be enclosed.
4. The rate is **FOR** Nagaland University, SAS, Medziphema campus
5. EMD @ 2% of the value of item to be provided.
6. The University reserves the right to accept or reject the tender without assigning any reasons thereof and no representation will be accepted
7. Items not supplied and installed as per required specification will be replaced at the cost of the supplier.

TERM of PAYMENT.

100% Payment after the successful delivery and installation of the item.