

BIDHAN CHANDRA KRISHI VISWAVIDYALAYA
College of Agriculture, Susunia, Chhatna, Bankura
(Extended campus of BCKV)

Ref: COAS/RKVY/T-9/23-24

Date: 29.09.2023

Notice E-Tender

The Principal Investigator project entitle "Development of Soil, Plant and Water Testing Laboratory for Sustaining Soil Health and Agricultural Productivity in the Red & Laterite Zone of West Bengal" **College of Agriculture, Susunia, Chhatna, Bankura(Extended campus of BCKV)**are invited Sealed quotations from the bona fide suppliers/ vendors for supplying the different Instruments as per pacifications stated below within eighteen (18)days of publication. Please mention terms & condition clearly against each item, if any, for supplying the Instruments.

i) Price: The price of instruments including the imported ones should be quoted in each unit (including taxes and duties etc). However,quoted rates must be FOR DESTINATION including packing, insurance and delivery charges up to **College of Agriculture, Susunia, Chhatna, Bankura(Extended campus of BCKV)**West Bengal with satisfactory of good condition.

ii) EMD: Vendors are required to pay the Demand draft amounting Rs. 10000/- (Rupees ten thousand) only (xerox copy) as specified along with their quotations. Without EMD quotations will not be considered for technical comparison. Demand Draft must be in favour of "**Bidhan Chandra Krishi Viswavidyalaya**" payable at Kalyani (IFSC: SBIN0001082). Supporting document regarding exemption of demand draft must be submitted.

iii) Supporting Documents:

- a) Bid papers should accompany authorization certificate from original manufacturer, trade license, GST registration etc.
- b) Photocopy (Self attested) of the original supporting document in favour of the specification – claim for each item must have to be submitted separately.
- c) User list along with certificate from reputed users also need to be submitted.

Price bid of the vendors will be compared only if technical specificity as appended against each item is fulfilled. The Viswavidyalaya reserves the right to accept or reject any tender without showing reason.

N.B: Please read the carefully terms and conditions of items.

Chairman, CTC, BCKV

Susanta
29.9.23

1. ATOMIC ABSORPTION SPECTROPHOTOMETER

Specifications	
Monochromator	Should have Littrow or better design with motorized drive for automatic wavelength selection and peaking. Mirror free fiber optics light transmission for maximum light throughput and best detection limit preferred
Wavelength Range	190 – 900 nm
Diffraction grating	1800 lines/mm blazed at 236 nm and 597 nm is preferred Reciprocal Linear Dispersion: 1.6 nm/mm or better
Background Correction	Should have built-in continuum source double-beam background correction using high-intensity deuterium arc lamp.
Spectral Bandwidths	User selectable automatic slit widths of 0.2, 0.7 and 2.0 nm at their optimized slit height.
Detector	Wide-range segmented solid-state detector is preferred
Lamp Turret	Minimum 4-lamp turret
Multielement/Single element Lamp Requirement	Ca,Cu,Fe,Mg,Si,Zn,Co,Cr,Cu,Fe,Mn,Ni,K,Na, As, Pb
Gas Controls	Should have fully computer-controlled with oxidant and fuel monitoring. Keyboard-activated remote ignition system with air-acetylene. Acetylene flow should be automatically adjusted prior to the oxidant change when switching to or from nitrous oxide-acetylene operation.
Safety Functions	Interlocks to prevent ignition in absence of proper burner head, the nebulizer/end cap, or the burner drain system preferred.
Sample Introduction System	Modular sample introduction system consisting of the quick-change spray chamber, burner head and nebulizer units. Alignment of the flame in the light beam is fully automatic, using a motorized burner mount for vertical and horizontal burner adjustment and automatic software-controlled self-optimization of the burner position. The optimization of the operating flame condition is also fully automatic and software controlled.
Local Items to be quoted	(A) Suitable exhaust hood (B) UHP grade Acetylene gas filled cylinder (C) Double stage gas regulator for Acetylene gas cylinder (D) Online UPS of suitable capacity with 30mins back-up
Warranty	One Year
Installation/Demonstration	Free of Cost

Local Supplies

- The vendor should quote for the complete system including the following items:
- Oxygen gas should be used as combustion gas & Helium gas as a carrier gas.
- 1 no Oxygen gas cylinder with purity of 99.99% along with a regulator.
- 1 no Helium gas cylinder with purity of 99.99% along with a regulator.
- Windows 10 Pro, i3 processor with 4GB RAM and 500GB SSD, With 21" Monitor, with keyboard and mouse.

Training and Demonstrations

- Onsite free of cost installation and training by the manufacturer or its Indian agent.
- Operative and service manual to be supplied
- Detailed service & operation manual should be provided.

Necessary Documents

- Catalogue in the original.
- All technical specifications should be printed on the manufacturer's catalogue/ datasheet.
- Vendor should submit a list of a minimum of 10 users of the quoted model from government institutions/universities in India.
- The vendor should submit at least one 10-year-old PO copy of the quoted instrument from any government institute/university in India.
- The vendor should submit at least 5 PO copies along with an installation report of the installed instrument from any government institutions in India.
- The OEM/vendor should have a trained service engineer. A relevant training certificate from OEM is to be attached as evidence.
- The vendor/OEM must have service support in India along with service engineer based in West Bengal to provide after sales service of the instrument.

3. UV-VISIBLE SPECTROPHOTOMETER

Specification

- Optical Design: -Double Beam
- Spectral Bandwidth: -2 nm
- Light Source :-(Typical Lifetime) Xenon Flash Lamp (3 years guaranteed)
- Detectors: -Dual Silicon Photodiodes
- Wavelength Range: - 190–1100 nm
- Wavelength Accuracy: - ± 0.5 nm
- Wavelength Repeatability: - $< \pm 0.2$ nm
- Scan Speed:-Slow, medium and fast (up to 1600 nm/min)
- Photometric Linear Range -2A to +3.5A
- Photometric Accuracy: $\pm 0.002A$ at 0.5A, $\pm 0.004 A$ at 1.0 A, $\pm 0.008A$ at 2.0A
- Photometric Repeatability :- $\pm 0.001A$ at 1A
- Photometric Noise :- $< 0.00020A$ at 0.0 A; $< 0.00030 A$ at 1.0 A; < 0.00040 at 2.0 A
- Photometric Drift :- $< 0.0005 A/hr$
- Stray Light :- $< 1.0\%T$ 198 nm (KCl), $< 0.05\%T$ at 220 nm (NaI), $< 0.03\%T$ at 340 nm (NaNO₂)
- Baseline flatness: - $\pm 0.002A$
- 8-position cell changer
- Peltier thermostatted cell holder (20–60 °C)
- Display 7-inch color touchscreen, tiltable, high definition, 800 × 1280 pixels