BIDHAN CHANDRA KRISHI VISWAVIDYALAYA

FACULTY OF HORTICULTURE

P.O. Krishiviswavidyalaya, Mohanpur-741252, West Bengal

TeleFax: (03473) 222659

From : **Prof. J. K. Hore**

In-charge, Central Instrumentation Cell

Mobile-09477473506 / 07059749065

E-mail: *jkhore31@rediffmail.com*

No. BCKV/CIC/03 **Date: 13-03-2020**

TENDER NOTIFICATION NO.
2020_BCKV_279254_1,
2020_BCKV_279255_1,
2020_BCKV_279256_1

The In-Charge, Central Instrumentation Cell, BCKV and Dean, Faculty of Horticulture invites online quotations (E-Tender) from competent and bonafide vendors/ parties/distributors/dealers agents/manufactures having registration having registration of GST for supply of following items to the Faculty of Horticulture, BCKV, Mohanpur, Nadia-741252 as per specifications appended below.

E-Tenders published for the items in Tender ID No.

i. **2020_BCKV_275906_1**
ii. **2020_BCKV_275907_1**
iii. **2020_BCKV_275908_1**

dated 28.03.2020 are cancelled

TERMS & CONDITION :

Submission of quotation ;

The Last date of submission of quotation is Monday 23rd March, 2020 upto 2.00 pm

Preparation of bids :

The tender should be submitted under two bids system i.e. Technical bid and Financial bid, with a Validity for a period of 6(six) months.

Technical bids will be evaluated by the Indenter and other expert members of the office and the financial bids will be opened of those bidders who qualified in technical bids.

Price : The price of items, including imported ones, should be quoted in INR and net per unit (including taxes and duties, etc.). However, University will provide valid DSIR and authorization certificate to the clearing agent, if required.

Quoted rates must be for DESTINATION (including packing, insurance and delivery charges up to the laboratory at Faculty of Horticulture, Mohanpur,Nadia-742152 with satisfactory installation and demonstration. The bidders must stipulate the delivery period of the same. Payment will be made after satisfactorily performance of the items.

Important safety standards :

The instrument must confirm to International EMC and Safety standards.

Warranty :

The vendor should clearly spell out their warranty policy which should be applicable from the date of installation. Manufacturer must have their own dedicated Service Centre available in India and details of Service Centre must be made available.

Supporting documents :

- Bid papers should accompany authorization certificate from original manufacturer, trade license, GST registration, proprietary certificate (if any) and professional tax challan etc.

- Photocopy (Self-attested) of the original supporting document in favour of the specification – claim for each item must have to be submitted separately, if available.
- User list along with certificate from reputed users also need to be submitted. **The Viswavidyalaya reserves the right to accept or reject any tender without showing reason whatsoever.**

EMD : Venders are required to pay the amount of Rs. 10000/- (Rupees ten thousand) only for Sl. No. 1 (one) and Rs. 5000/- (Rupees five thousand) only each for Sl. No. 2 (two) and 3 (Three) EMD in draft. Scan copy of the requisite draft must be uploaded as the supporting document for each item during submission of e-tender. **Original Bank draft need not be submitted with tender. Without EMD quotation will not be considered for technical or financial comparison**. Draft must be in favour of **'Bidhan Chandra Krishi Viswavidyalaya'** payable at Kalyani (IFSC : SBIN0001082). However, bidders are requested not to send the original DRAFT during tendering process.

Sl. No.	Name of the Item/Brief Description of the Good	Specification	Qty
1.	**Technical Specification for FT-IR Spectrometer with accessories**	• Must have a scan range of 8300-350m^{-1} • Should have High-Linearity Room temperature Mid-Infrared detector (RT-MIT) • Should have rotary Michelson interferometer for fast scanning, self-compensating for dynamic alignment changes due to a tilt and shear. • Long-life sealed and desiccated optical unit incorporating special design for extended desiccant life, Vibration isolated base-plate. • The source should be long-life source with hot-spot stabilization, user replaceable. • The system should have a Typical desiccant lifetime of 5 years at 25^{0}C temperature and 90% relative humidity. • A real-time atmospheric vapour correction (AVC) utility must be available. This should not require the collection of reference or calibration spectra. • The system should at least have a signal to noise ratio of 9,300:1 peak-peak, 5 seconds and 32,000:1peak-peak, 1 minute. • The system should have a spectral resolution of 0.5 cm^{-1} • Wavelength accuracy at least 0.1 cm^{-1} at 3000 cm^{-1} is essential. • Wavelength precision of at least 0.01 cm^{-1} at 3000 cm^{-1} • Along with the main instrument, accessories like 1) Demountable Cell Mount, 2) KBr rectangular Windows (Pack of 2), 3) Assorted Rectangular Spacers, 4) KBr Die set, 5) Potassium Bromide Pellet Holder, 6) Press, 7) IR grade KBr Powder (100g) and 8) Adjustable Adaptor should be offered directly from the manufacturer of the FTIR system. • Instrument should be provided with UPS, PC for operation. • Standard warranty of 1 year should be given along with the instrument. • The instrument must use USB, wireless and TCP/IP interface allows direct connection with LAN Instruments should have facility to be configured with wireless router communication. **Software :** • The software should have feature to enable the user real time update of spectral information plus results to	01 (One)

		provide faster feedback of information data status. • A single software platform to incorporate all of the functions required for infrared analyses instrument control data manipulation and analysis and flexible report utilities. • Password-protected user login fuction Access to methods, menu, toolbar and toolbox functions can be controlled. • Software processing should include extensive suite of spectral processing functions with simple user interface, examples include 1st-4th derivative with a variable filter, smooth, difference, normalization. A, %T, LOG, ordinate modes, cm-1, nm and micron abscissa modes, +,-,*,/, baseline correction, interpolate, peak find. Custom arithmetic, processing chains, and automatic data tune feature.	
2.	Plant Canopy Analyzer with optical Semor and Control Unit	• Operating Temperature Range 0°C to 50 °C. Five silicon detectors arranged in concentric rings. • Wavelength Range: 320-490 nm. • Radiation Rejection: >99% from 490-650 nm; >99.9% above 650 nm. • Angular Coverage: Ring 1: 0.0-12.3°; Ring 2: 16.7-28.6°; Ring 3: 32.4-43.4°; Ring 4: 47.3-58.1°; Ring 5: 62.3-74.1°. • Lens Coating: MgF2 for improved transmission at oblique angles (external and internal lenses). Suitable for light scattering correction, filters for transmited and reflected light. • With carrying case, battery and necessary accessories like interface cables, USB etc.	01 (One)
3.	Soil-Plant Digestion and Kjeldahl Distillation System with fume scrubber	The analyzer should be fully automatic / semiautomatic system consisting of a digestion unit, a scrubber unit, and a distillation unit. **1. Digestion unit**: Automated with integrated programmable control, with electrically heated (230 ± 10 Volts, 50 Hz AC) 20 number of metal blocks capable of providing a temperature range from 100°C - 440°C With ±10°C repeatability with inbuilt temperature controller with digital display and LED display along-with manual temperature adjustment facility; hould have leak proof integrated condensers (fumes carriers) made up of glass, fixed on a movable panel along with adopter for outlet to the scrubber unit; proper digestion exhausts system. 2. **Scrubber unit** : Should be an oil free centrifugal suction type, with manual vacuum adjustment facility; Corrosion and impact resistant provided with condensate and acid fumes collection vessels; Should operate on 230 ± 10 Volts, 50 Hz, AC power supply 3. **Distillation unit**: Fully programmable distillation unit including sample dilution, alkali and receiver addition, distillation and tube draining facility; made-up of standard quality borosilicate glass; possess a steam generator made-up of borosilicate glass along with heater and have **3 step manual control facility** i.e. standby, water inlet and distillation; inbuilt bellows pump for accurate reagent (alkali / acid) dispensing; ventilation valve; timer for 5 - 15 minutes; steam inlet tube made up of PTFE quick clamping device for digestion tube with adaptor; operate on 230 ± 10	01 (One)

		Volts, 50 Hz, AC power supply. Complete unit should be provided with one set of digestion tubes along-with the servicing, operating and maintenance manuals. Should have self adjusting cooling water control facility and safe feature for safe distillation and upgradeable whenever required. **Accessories:** 2 set of digestion tubes, Digestion tube stand, Spillage tray for the condensers, Tube removing device **Spares**: Spares and accessories for its 2 years of continuous use.	

For any further clarifications, contact can be made with Prof. Jitesh Kumar Hore (Mob : 9477473506) Prof. Prasanta Kr. Patra (9007578684) and Prof. Somnath Bhattacharyya (Mob : 8697126377).

13/3/2020

J. K. Hore
In-Charge, Central Instrumentation Cell,
BCKV, Mohanpur