

BIDHAN CHANDRA KRISHI VISWAVIDYALAYA

Regional Research Station (Red & Laterite Zone)

P.O. Jhargram, Dist. West Bengal, Pin. – 721507

Prof. (Dr.) Chandan Bhattacharya

PI, RKVY Project, RRS, Jhargram



Mob.- 9474716406

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Notice Inviting E-Tender

The Principal Investigator, RKVY project “Infrastructural support for establishment of laboratory for testing soil and water quality” (Project Code: SCH12068) at RRS, BCKV, Jhargram, West Bengal is inviting **e-tender** from competent and bonafide vendors/parties/distributors/dealers/agents/manufacturers having registration of GST for supply of following items to the RRS, BCKV, Jhargram within **9th March, 2018** as per specifications appended below.

i) Preparation of bids: The tender should be submitted under two bid system (i.e. technical and financial bid) with validity for a period of 6 (Six) months.

ii) Submission of e-tender: The tender shall be submitted online within **9th March, 2018**. Technical quotations may also be uploaded through online.

iii) Opening of the e-tender: The technical bid will be opened by the Central Purchase Committee, BCKV, duly consigned for this purpose and PI & Co-PIs will evaluate the technical bids. After evaluating/scrutinizing, the financial offer/bid of technically qualified vendors' will be opened.

iv) Price: The price of all the equipments and items, including the imported ones, should be quoted in net per unit (including taxes and duties, etc). However, university will provide valid DSIR and authorization certificate to the clearing agent, if required. Quotation must include essential accessories (as mentioned for each equipment) from branded company, in Indian currency only, even if the main equipment is quoted in foreign currency. Without essential accessories tender will be considered as incomplete. Quoted rates must be FOR DESTINATION (including packing, insurance and delivery charges up to laboratory at RRS, BCKV, Jhargram, West Bengal) with satisfactory installation and demonstration.

v) EMD: Vendors are required to pay the requisite amount of Rs.20000 (Rupees twenty thousand) only as EMD in demand draft. Scanned copy of the requisite draft must be uploaded as supporting document during submission of e-tender. Without EMD quotations will not be considered for technical or financial comparison. Draft must be in favour of “Bidhan Chandra Krishi Viswavidyalaya” payable at Kalyani (IFSC: SBIN0001082). **EMD exemption certificate (if any) must be uploaded.**

vi) Supporting document

a) Bid papers should accompany authorization certificate

from original manufacturer, trade license, GST registration,

etc.

b) Scanned copy (self-attested) of the original supporting document in favour of the specification–claim for each item must have to be uploaded separately.

c) User list along with certificate from reputed users also need to be uploaded for each item.

d) Scanned copy of supporting document to assured after sale service in Eastern India and availability of spare parts need to be uploaded.

e) 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.

Prof. (Dr.) Chandan Bhattacharya

PI, RKVY Project, RRS, Jhargram

Mobile: +919474716406

e-mail: bhattacharya.c.bckv@gmail.com

List with specifications of the instruments for the soil testing laboratory at RRS, B.C.K.V., Jhargram

Sl No	Name of the Item/ Equipment/Instrument	Detail Specifications	Qty
1	Temperature controlled centrifuge	<p>Bench Top Rotor Type: Fixed angle Capacity: 50 ml X 6 Digital Speed Indicator and Timer Maximum Speed \geq 13000 RPM Temperature range: -5°C to 40°C Should have imbalance detection system Should have pre-cooling system Digital countdown timer 0-99 min & Continuous run Programs: 99 System with auto lock facility, with safety for over speed / imbalance / temperature Limit / door detector; Two years warranty Power Supply 220-240V 50 Hz</p>	1(One)
2	Ultra-pure water purification system (Type-I and II)	<p>Prefiltration System: Three stage pretreatment system with 10, 5 & 1 micron spun filters 10” with activated carbon with prefilter 5 μm and hardness stabilizer to remove particles, free chlorine and hardness formers to protect the RO-membrane. Feed Water Conductivity up to 1500 micro Siemens</p> <p>Output Water Quality should be :</p> <p>Flow Rate : 5Ltrs./Hr. @ 25°C Dispensing Rate : 1.0 L / min. Type 1 Water Quality : $18.2\text{ M}\Omega\text{- cm @ }25^{\circ}\text{C}$ Type 2 Water Quality : $10 - 15\text{ M}\Omega\text{- cm @ }25^{\circ}\text{C}$ TOC : 1-5 ppb Bacteria : $< 1\text{ CFU/ml}$ Endotoxin : $<0.005\text{ EU/ml}$ pH : Effectively Neutral RNase : $<0.003\text{ ng/mL}$ DNase : $<0.4\text{ pg/}\mu\text{L}$</p> <p>It should have dual wavelength UV (185/254 nm) lamp</p> <p>Feed –water: Potable tap water</p> <p>Display: TOC TEMPERATURE, conductivity, volume dispensing, alarm and tank water level indicator.</p> <p>Consumable: Should supply with additional 6 pre-filter set other than the one which included with main system. Must Quote separately for consumables (cartridges, filters</p>	1(One)

		etc.) for TWO YEAR for trouble free working. Warranty: For TWO years plus two years extended (total 4 years)	
3	CHNS analyzer	<p>Fully automated computer controlled element analyzer capable of rapid quantitative determination of elements viz. Carbon (C), Hydrogen (H), Nitrogen (N) and Sulfur (S) in wide array of organic matrices, soils, feed, plant samples etc. applications(Both Macro & Micro analysis with an option of Multi Valve Control) and it should allow to reduce helium gas consumption by switching from helium to nitrogen or argon gas, when the instrument is in Stand-By Mode. Option to add external software controlled functions for automated valve for gas sampling. The system should be up gradable to a FPD detector for trace sulfur analysis and options for coupling of Isotope Ratio Mass Spectrometer (IRMS) system.</p> <p>The instrument should have following features:</p> <ol style="list-style-type: none"> 1. Handle variety of sample types like solid, liquid, volatile and Gas samples 2. It should be Built-in helium and oxygen pressure reducers and gauges preventing air diffusion into the pneumatic circuit, Combustion/reduction furnaces with electronic temperature control offering full compliance with the most demanding safety regulations, Oxygen determination in the same furnace is used in pyrolysis condition, Electronic Flow Control (EFCt) of helium or argon carrier/reference gas and oxygen gas. 3. Measuring Range: 0.01% (100 ppm) - 100% for solid samples & 1-10 ppm (low level) for liquid samples (using TCD Detector). 4. Sample size: 0.01 mg to 100 mg or more 5. Furnaces: Maximum temperature of 1100 °C with at least 10-years warranty under standard operational conditions 6. Detector: Maintenance free Thermal Conductivity Detector (TCD) with at least 10-years warranty under standard operational conditions. 7. Analysis time: Less than 7 min for CHN and Less than 10 min for CHNS. 8. Auto sampler: Automatic loading of samples with 30 or more positions in a single tray 9. Software: Window based operating software controlling the instrument operations, recording data, performing calculations, diagnostic recording like leak testing and condition monitoring, and manage calibration procedures 10. Sample Analysis Kit :CHNS kits for 2000 samples analysis should be quoted 11. Gas requirements: Ultra high purity He and O₂ Gas cylinder for 3 each, Nitrogen/Argon Gas cylinder for 2 nos. And Regulator for one each (He, O₂ & N₂/Ar). 12. Gas Purification Panel with Filters for all the gases 	1(One)

13. Branded PC with Laser Jet Printer (B/W) – 01 Set

14. Branded 5 KVA on line UPS with 1 hrs Battery back-up– 01 Set

15. **Branded 2 Ton Split AC – 01 no.**

16. Consumables & Chemicals:

COPPER OXIDE -50 g, QUARTZ WOOL - 5 g, ELECTROLYTIC COPPER -80 g, VANADIUM PENTOXIDE - 1 g, Knurled Screws kit – 3, Universal Tin Containers (set of 100) – 01, Universal Tin Container mega box (set of 1000) – 01, Universal “soft” Silver Containers (set of 100) – 01, Forceps – 01, Spatula for Container Filling, Cleaning Device for Quartz Reactor – 01, Empty Quartz Reactor (set of 2) – 02 Nos.

17. Warranty: 3 Years and AMC for 2 years after 3 years warranty.

Weighing requirement: Semi microgram balance with 0.1 mg readability