

NOTICE INVITING TENDER
Ref No: DST/FIST/ENV/01/2015-16

Annexure-A

Department of Environmental Studies
Visva-Bharati, Santiniketan

Sealed tender in **two bids** system (**Technical & Financial**) are invited from the reputed Firms/Company/Manufacturer/Dealer/Agent dealing with sophisticated scientific equipments, by the HOD, Department of Environmental Studies (DES), Visva-Bharati, Santiniketan-731235 for supply of **HPLC/ Spectrophotometer/ Microwave digester/ Stereo-zoom microscope**. Before submitting tenders the interested bidder is requested to go through the terms and conditions of the tender documents (Annexure-A) and specifications (Annexure-B) carefully to avoid cancellation of the tender.

1. The firm having good profiles and high standard reputation in dealing with such sophisticated scientific equipments are only eligible to take part in tender. Vendors should submit tenders separately for each item. **The vendors which have submitted their bids against the earlier NIT (i.e.DST/FIST/ENV/01/2014-15 dated 21/02/2015) also need to submit the bids again. However, they are exempted from paying the EMD and tender fee.**
2. Technical bid should be enclosed with the following documents
 - i. Trade license, Manufacturing license, Import license (if applicable) and any other licenses required in the related field.
 - ii. Company Registration certificate, Partnership deed (in case of Partnership firm), Power of Attorney (if required), Dealership or Authorization certificate (in case of dealer/agent) from the manufacturer.
 - iii. PAN and clearance certificate of VAT, CST, Service Tax, P. Tax. etc.
 - iv. Credential for dealing with business of sophisticated scientific equipments for at least five years with list of clients to whom such equipments were supplied (Govt. Org. preferable) Annual turnover for at least Rs. 50 lakhs during last three consecutive years supported by the Audited Balance Sheet.
 - v. Name, Designation and contact no. of the qualified Engineer/s who will provide services to us against this supply.
 - vi. Detail of the company from which the Indigenous items (if required) will be procured and provide their information as per Sl. Nos i-iii.
3. EMD of Rs 40,000/- for HPLC and Rs 20,000/- each for Spectrophotometer/ Microwave digester/ Stereo-zoom microscope in the form of D/D drawn in favour of 'Accounts Officer, Visva-Bharati' payable at 'State Bank of India, Santiniketan Branch', must be enclosed with Technical bid. Tender will be considered CANCELLED without EMD. The EMD for the qualified vendor will be kept as Security Deposit and will be refunded after successful execution of work.

Annexure-A

4. Successful bidder will have to deposit Performance security @ 10% of the work value (INR) which will be refunded within one month of expiry of warranty period after satisfactory performance of the equipment within the warranty period. There will be no accrued interest for such deposit.
5. Price bid will be inclusive all charges like VAT/CST, Insurance, Custom Duty, Packing, installation etc. and FOB at the Dept. of Environmental Studies, Visva-Bharati, Santiniketan. Please note that DSIR certificate will be issued and all price components will have to be indicated separately. Price bid must contain in Annexure-C
6. In case of foreign origin equipment CIF at KOLKATA value and FOB at Santiniketan should be quoted. Please indicate clearly the Indian Agent commission separately which will be paid in INR after satisfactorily installation & commissioning and operation of the equipment. The indigenous components/accessories such as computer/printer should also be quoted in INR.
7. Acceptance process of the supplied equipment will be considered complete only after the successful installation and Commissioning of the equipment at Dept. of Environmental Studies, Visva-Bharati, Santiniketan
8. Please indicate cost for other ancillary items which may require for Pre-Installation and operation of the equipment separately. Otherwise any delay in installation and operation will be onus of the vendor and any cost in this effect will be borne by the vendor.
9. Please indicate charges separately for comprehensive AMC for four years after expiry of Warranty/Guaranty period.
10. LOWEST BIDDER will be evaluated on the basis of composite lowest offer for Basic equipment and other ancillary items (Cost for AMC will be considered later).
11. Financial Bids of only those bidders who qualify in the Technical bids will be considered.
12. Tender for only one model and at par with the specifications at Annexure-B will be considered as valid tender.
13. The rate offered by the bidder will be valid for at least **Six months** from the date of issue of work order or date of opening of L/C (in case of foreign purchase) whichever is later.
14. Please note that the exchange rate (in case of foreign purchase) in the financial bid otherwise exchange rate for the foreign currency on opening date of tender will be considered for evaluation of lowest bid.
15. The vendor will arrange for on-site training for operation of equipment at own cost.
16. Please indicate the tentative delivery schedule in the financial bid and in case of breach of delivery schedule for more than one month Liquidated damage @ 1% of the work value per week will be deducted from the Security deposit.

Annexure-A

17. No price variation will be allowed beyond the original Scheduled delivery for defaults on the part of the supplier. It may be allowed in case of *force measure* or defaults by the University.
18. Technical bid will contain Annexure-B and declaration in Annexure-D along with Brochure/Catalogue/Pricelist and the manufacture's test certificate etc. and financial bid will contain Annexure-C only.
19. Original tender document should be neatly typed or printed and each page will be signed and duly stamped with official seal. In case of Authorized signatory, authorization from the competent authority should have to be submitted.
20. Any correction, deletion or Erasures, overwriting should have to be endorsed by the competent authority or signatory otherwise the tender will be liable to be cancelled.
21. Vague, incomplete, confusing or contradicting and conditional tender will be liable to be cancelled without any explanation.
22. The supplier will be liable to arrange post-sale service and supply of spares, maintenance after expiry of warranty/guaranty offered by the Manufacturer, for a period of **at least ten year** from the date of installation or the expiry of warranty period whichever is later.
23. The HOD reserves right to annul/issue any amendments in the tender document or part thereof at any time prior to but five days before the deadline of submission of the tender and such change will be deemed as integral part of the tender. This will be published through our web-site.
24. The decision of the Technical Committee/Tender Committee will be final and cannot be challenged in any Court of Law.
25. The HOD reserves right to cancel the work order issued to the successful vendor, fully or partially without assigning any reasons to the vendor and there will be no claim for any compensation to the affected vendor, if arises out of such cancellation.
26. Effort to personal influence of any nature to the Tender Committee's decision will result cancellation of the bid.
27. Notwithstanding anything contained in any clause of the tender document, the University reserves its right to annul the whole bidding process or to accept or reject all the bids at any time prior to finalization of contract without thereby incurring any liability to the affected bidder/s or any obligation to inform the affected bidder/s of the reason for action of the University.
28. The bidder should quote financial bid both in figure and words. Illegible bid will liable to be cancelled. The rate indicated in 'word' will be considered for evaluation of lowest bidder
29. A declaration of the bidder should have to be submitted in the format of the Annexure-D
30. Duly filled in tender will be sent through courier/speed post only. By hand/personal submission of tender will not be allowed. Fax/e-mail/conditional tender will not be

considered. No personal communication will be entertained and any information regarding the tender will be published in our web-site (www.visva-bharati.ac.in)

31. All disputes will be under the jurisdiction of Suri court at Birbhum district or by a Tribunal consisting of three persons- Two from the side of the University and One from the bidder, if agreed by the bidder to settle the dispute out of the court.
32. The filled up tender should be accompanied by a D/D for the amount Rs.1500/- drawn in favor of 'Accounts Officer, Visva-Bharati' payable at SBI, Santiniketan Branch. The form can be downloaded from the Visva-Bharati web-site. Tender submitted without D/D is liable to be cancelled. Separate D/D is to be enclosed for each item.
33. The bidder should submit self declaration to the effect that he is free from any encumbrance and has no case of legal conviction in any form.
34. The tenders should be sent in sealed covers superscribing as "Tender for supply of HPLC/ Spectrophotometer/ Microwave digester/ Stereo-zoom microscope" to HOD, Dept. of Environmental Studies, Visva-Bharati, Santiniketan, 731235. Inside, it should contain two sealed covers for Technical (Annexure-B and D) and Financial bid (Annexure-C) superscribing as "Technical bid for HPLC/ Spectrophotometer/ Microwave digester/ Stereo-zoom microscope" and "Financial bid for HPLC/ Spectrophotometer/ Microwave digester/ Stereo-zoom microscope" respectively.
35. The **last date of receiving tender is 16th July, 2015, 6:00 PM**. Late tender will not be accepted.
36. The Technical bids will be opened on **20th July, 2015** at Dept. of Environmental Studies, Visva-Bharati. Responsive vender or their representative may present on that date. The date of opening of financial bids will be informed on that day. No personal communication will be entertained.

Department of Environmental Studies
Visva-Bharati, Santiniketan
Technical Part

1. Name of the bidder :
2. Address with phone no. and E-mail :
3. Detail of Company/Agent/Partnership firm :
(In case of Agent/Partner-ship Firm, mention detail
of the company for which the bidder is representing
and submit the deed/agreement.)
4. Detail of the Earnest Money submit :
 - a. Amount :
 - b. D/D No and date of purchase :
 - c. Drawn on :
 - d. Payable at :
5. Whether all certificates indicating clearance of Govt.
dues or statutory documents have been submitted . Mention
the types of documents attached. :
6. Whether the price of each item have been Quoted in Annexure-C
as par the Scope of works at Annexure-B :
7. Address and contact no. of Service Engineers :
8. Detail of Clients list. :
9. Whether audited balance-sheets have been enclosed :

Signature with office seal

Date:

N.B. It is requested to attach separate sheet, if required

Department of Environmental Studies
Visva-Bharati, Santiniketan
Technical Part
Declaration of the Bidder

I/We hereby tender for engagement of manpower as specified in the memorandum given below, at the rate offered by me, in the tender schedule in accordance with the Tender Terms and conditions annexed hereto.

Memorandum

1. General Terms and conditions -Annexure-A
2. Specification of equipment -Annexure-B
to be supplied i.e. scope of work and AMC.
3. Format for Financial Bid - Annexure-C
4. Declaration of bidder - Annexure-D

Should this tender be accepted, I/We hereby agree to abide by and fulfill all the Terms and conditions of the contract/MOU and supply HPLC/ Spectrophotometer/ Microwave digester/ Stereo-zoom microscope as par the scope of work/ requirement indicated in the Annexure-B and in the default thereof, to pay to the University or its authorized body such sums of money as said in the contract/MOU.

The Terms and conditions of the contract/MOU have been clearly understood by me /us before submission of this tender.

The above tender with amount indicated for each item is hereby offered by me/us.

Dated_____ this day of _____year_____ at_____

Name

Address

Signature of witness

Signature of bidder

Department of Environmental Studies
Visva-Bharati, Santiniketan
Financial Part

In reference to the Tender notice dt..... for supply of the HPLC/ Spectrophotometer/ Microwave digester/ Stereo-zoom microscope as per the scope of work at Annexure-B, I/we hereby offer the Financial Bid as follows:-

1. Cost of Basic Equipment
(Inclusive of all taxes and cost as per Cl.4 of Annexure-A)
2. Cost of Indigenous items/other accessories
required for operation of Equipment.
 - A.
 - B.
 - C.
 - D.
3. A.M.C. (Comprehensive)

1. Name of the bidder
2. Address with phone no. and E-mail

Signature of bidder and Office seal
Date.

Department of Environmental Studies
Visva-Bharati, Santiniketan

Technical Part
Scope of Work

ITEM-1 HPLC system -Fully software controlled binary gradient analytical cum semi prep

01. Pump

- Gradient formation: High pressure binary mixing
- Solvent delivery unit should contain two individual pumps
- High precision dual plunger design
- Individual pump Flow rate range 0.001 - 5 mL/min or 10ml/min, in 0.001 mL/min increments.
- Max. Operating Pressure up to 40 MPa or better
- Flow precision $\leq 0.07\%$ RSD or ≤ 0.02 min RSD, whatever is greater; based on retention time at constant room temperature
- Flow accuracy $\pm 1\%$ or 10 $\mu\text{L}/\text{min}$, whatever is greater
- Pulsation- 0.03 MPa or better
- Standard delay volume configuration: 600 - 800 μL (includes 400 μL mixer),
- Should have built in self diagnostic and auto Purge function
- Automatic plunger rinsing kit
- Gradient mixing for analytical, semi-micro & semi-prep modes

02. Detectors

- must be capable of working in analytical and small scale preparative mode

A. Photodiode Array detector

- Light Source D2 or W lamps
- Wavelength accuracy- $\pm 1\text{nm}$, self-calibration with deuterium lines
- Wave length precision- $\pm 0.1\text{nm}$
- Noise $0.6 \times 10^{-5}\text{AU}$ or better
- Wavelength range :190~800 nm or 190-640 nm
- Drift : $0.5 \times 10^{-3}\text{Au/hr}$ or better
- Linearity $> 2.0\text{ AU}$ (5 %) at 265 nm
- Wavelength bunching Programmable, 1 - 400 nm, in steps of 1 nm
- Band width of 1.2 nm for high peak resolution
- Flow cell must be temperature controlled from ambient to 50°C
- Built in mercury lamp for wave length accuracy check

B. Fluorescence Detector

- Light source: Xenon lamp, normal mode (20 W), economy mode (5 W), lifetime 4000 hours.
- Performance: Single wavelength operation as well as Dual wavelength operation

- Spectral acquisition: Excitation or emission spectra, scan speed 28 ms per datapoint, e.g. 0.6 s per spectrum 200-400 nm, 10 nm step.
- Pulse frequency 296 Hz for signal mode, 74 Hz for economy mode
- Wavelength accuracy : + 0.2nm
- Wavelength reproducibility : + 0.2nm
- Sensitivity : 1200 or greater signal – to –noise ratio for Raman line of Water
- Cell volume, pressure : 8-12 μ L, 2Mpa (approx. 20kgf/cm²)
- Time programming : Excitation / Emission wavelength range, response switching, Wavelength scanning, auto zero etc

03. Manual Injector

- Rheodyne injector with mounting plate and 20ul, 100ul, 500uL loops -1 no each
- Micro Syringe 25ul, 100ul, 500uL - 1no each

04.Fraction Collector:

- Time-based and peak-detection based fractionation
- No of fractions ≥ 100
- Suitable Racks to be quoted for accommodating the vial capacities of 3.5mL Test Tube
- Test tube 3.5mL (250 pcs)

05. Software:

- Software under WINDOWS 2000 platform on 32 bit technology
- Digital acquisition & processing system should ensure speed & stability of data
- Single access point for system administration, data acquisition, post run analysis and long –term data management.
- Seamlessly integrated to enable data archiving for instrument to provide 21 CFR parts 11 compliance for electronic signatures and record security

06. Columns: C8 & C18 column 250 x 4.6 mm x 5 micron-1no.with Guard column

07. HPLC Start-up kit with 5 no's of solvent bottles

08. Reservoir tray

09. Branded **PC** with licensed software for HPLC, MS windows and office, Colour laser Printer & online UPS 2KVA with 30mins backup

10. Comprehensive WARRANTY for 2 YEARS from the date of Installation of the system.

ITEM -2 DOUBLE BEAM SPECTROPHOTOMETER

A. Description/ Specification of the Spectrophotometer

- Spectral resolution of 1nm over entire wavelength range of 1,100 to 190 nm
- True double beam optics with aberration corrected concave blazed holographic grating in Czerny – Turner mounting for high energy throughput and high quality monochromatic light
- Ultra low Photometric noise of <0.00005 to 0.00015 Abs
- Very low baseline drift of 0.0003 Abs/hour
- Wide Dynamic Photometric range of -4 to +4 Abs
- High Photometric Accuracy of + 0.002 Abs at 0.5 Abs
- High Photometric Repeatability of <+0.001 Abs at 0.5 Abs
- Baseline flatness less than + 0.0006 Abs. over the entire range of 190 to 1,100nm.
- Wavelength accuracy of + 0.1nm for D2 spectral line
- Wavelength reproducibility of + 0.1nm
- Accurate data acquisition through variable wavelength scanning speed of 3,000 nm/min to 10nm/min
- High intensity Tungsten Halogen and Deuterium lamp with automatic changeover
- Operational modes as standard Photometric, quantitative, Spectrum scan, Kinetics, DNA and Protein in standalone and PC mode
- Should have USB ports for high speed PC and printer connectivity, data storage and transfer through USB pen drive

B: Software function and applications:

- Calculation of correlation coefficient
- Concentration unit input
- Kinetic assay
- Spectrum and working curve printout
- Area Calculation,
- Automatic wavelength calibration
- Spectrum display
- Peak/valley detection/Tracing/Scale expansion/contraction/Smoothing
- Differentiation
- Fundamental arithmetic calculations between spectra
- Data saving
- Validation function
- Lamp ignition time

C: Branded PC with licensed software, MS windows and office, Colour laser Printer & online UPS 2KVA with 30mins backup for the spectrophotometer.

D: Thermo-stated water column cell.

ITEM 3 MICROWAVE DIGESTION SYSTEM

Installed Microwave power 1800 W or more.

The maximum microwave output power should be 1000W

System should be built in with high- power anti corrosion axial fan in forced air cooling system with **air exhaust volume of 3.1 m³/min.**

Reaction Vessels should be made up of **intensified TFM material and outer vessels should be made up of explosion proof aerospace composite fiber with Teflon coating** which should be **automatically cooled inside the cavity.**

Minimum of 316L stainless steel cavity coated with multilayer chemical resistant coating.

LCD should display reaction parameters and curve change in real time.

Electronic / mechanical dual-control door lock should be there

The vessel should be **resistant to any acid and alkali liquids and gases.**

Facility to store the program in the system and can be modify as per need time to time.

Rotor vessels – minimum of 10 or more

Volume – 100ml

Maximum sustained **pressure should be 10 MPa (100bar/1500psi) with +/- 0.1MPa accuracy.**

Highest sustainable temperature should be 300°C. With +/- 1 deg. C accuracy.

Rotor should have 360° rotation.

The rotor vessel **should have Anti-explosion mechanism in all vessels.**

The systems should have a protection shield around the reaction vessels to ensure safety even in the event of spontaneous chemical reaction.

The system should include UPS and Exhaust fan.

ITEM 4 STEREOZOOM MICROSCOPE

(RESEARCH GRADE WITH PHOTOGRAPHY SYSTEM)

Apochromatic stereo microscopy with telescopic lens design system

Minimum stereoscopic base of 24 mm or higher. Aperture 0.116

Zoom ratio 8:1 or better (zoom range should be variable between 1x to 8x).

Minimum of working distance should be 80 mm at maximum zoom with 1X objective

Wide field 10X eye pieces with object field diameter 23mm and depth of the field of 70 micron.

Minimum resolution of 340 lp/mm or higher (with 1X objective and 10X eyepieces)

Complete with transmitted light base for bright field & dark field with rack & pinion stand which should accommodate 6"x4" plate and allow full movement of the said plate on top of the transmitted light accessories.

There should be up-gradated for transmitted light polarization contrast facility.

150 watt cold light source illumination with goose neck fibre optic light guide for incident light as well as transmitted light application

System should be compatible and attachment of 3X nosepiece revolver for accommodating upto 3 different objectives at time.

Antistatic polymer microscope cover

Objectives

- 0.63x FWD 107 mm,
- 1.5x FWD 28 mm,
- 1.25x FWD 50mm

Microscopy camera

Suitable dedicated microscopy camera with 5.0 mega pixels or better resolution & system should have the slot for memory card to capture images without any need of computer

Imaging software for measurements, color adjustments and scaling.