****

 **TENDER DOCUMENT**

 **FOR**

 **PROCUREMENT OF EQUIPMENTS**

|  |  |
| --- | --- |
| **DATE OF ISSUE** | **10-07-2015** |
| **PRE BID CONFERENCE** | **22.07.2015** **22.07.2015** **22.07.2015**  | **10:00 hrs****12:00 hrs****15:00 hrs** | **(item no. 1of Annxexure-I)****(item no. 2 of Annxexure-I)****(item no.3 of Annxexure-I)** |
| **LAST DATE OF SUBMISSION** | **07-08-2015 up to 12.30 P.M.** |
| **DATE OF OPENING OF TECHNICAL BIDS** | **07-08-2015 at 15.00 P.M.** |
| **PLACE OF SUBMISSION OF TENDER** | **Birbal Sahni Institute of Palaeobotany, 53, University Road, Lucknow – 226007 (UP) India** |

**BIRBAL SAHNI INSTITUTE OF PALAEOBOTANY**

**53, UNIVERSITY ROAD,**

**LUCKNOW – 226007 (UP) INDIA**

**Tel: 91-522-2742903, Fax: 91-522-2740098**

 **Website: www.bsip.res.in**

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 **INTRODUCTION**

1. Birbal Sahni Institute of Palaeobotany,53, University Road, Lucknow (UP) is an autonomous institution under the Department of Science & Technology, Govt. of India. The Institute is pursuing research in Palaeobotany and allied subjects including Geochemistry and dating.

1. BSIP, Lucknow invites “Sealed bids” under **Two-Bid system** from (i) either manufacturer or (ii) an authorised agent forthe equipment/item ful-filling the criteria laid down in Technical Bid format for the supply of equipments.

Tenders should be sealed, superscribed **with**

**“Tender No. BSIP/TENDER/STORES & PURCHASE/2015-2016/**

 **and submitted only at the following office:**

**DIRECTOR**

**BIRBAL SAHNI INSTITUTE OF PALAEOBOTANY**

**53, UNIVERSITY ROAD,**

**LUCKNOW - 226007**

and should be submitted on or before the closing date i.e. **07.08.2015 at 12:30 hrs.**, if delivered personally and if the quotes are sent bypost/courier, the tender must reach **BSIP,** **LUCKNOW** at the address given above before closing time and closing date**.**

BSIP is not responsible for delays of any nature including postal and force majeure. Tenders received after the due date will not be acceptedunder any circumstances

The schedule of opening of quotes is as follows and at the following

venue:

|  |  |  |
| --- | --- | --- |
|  |  **Date** |  **Time** |
| **Technical part Opening in** | **07.08-2015** |  **15:00 hrs** |
| **the presence of intending** |  |  |
| **Tenderers at BSIP,** **LUCKNOW** |  |  |

**BIRBAL SAHNI INSTITUTE OF PALAEOBOTANY**

**53, UNIVERSITY ROAD,**

**LUCKNOW – 226007 (UP) INDIA**

**Tel: 91-522-2742903, Fax: 91-522-2740098**

 **Website: www.bsip.res.in**

**Tender No.BSIP/TENDER/STORES & PURCHASE SECTION/2015-16/**

**Tender Notice**

Director, Birbal Sahni Institute of Palaeobotany, Lucknow- 226 007( India) invites tenders ( Parts-I Technical Bid, Part-II Commercial Bid) in separate sealed covers from (i) either manufacturer or (ii) an authorized agent for the equipment/item under two bid system.

**Supply of Equipments and Accessories**

**AT**

**BIRBAL SAHNI INSTITUTE OF PALAEOBOTANY, LUCKNOW**

**53, University Road, Lucknow -226 007**

Tender documents can be downloaded from Institute web site <http://www.bsip.res.in>. The bidder has to submit the tender document fee of Rs.1,000/- ( Rs. One Thousand only) in the form of DD drawn in favour of Director, BSIP, Lucknow payable at Lucknow(UP) with Technical Bid-Part I.

**Date of Issue of Tender Document : 10.07.2015**

**Pre-Bid Meeting (item No1 of Annexure I) : 22.07.2015 at 10.00 hrs**

**Pre-Bid Meeting (item No2 of Annexure I) : 22.07.2015 at 12.00 hrs**

**Pre-Bid Meeting (item No3of Annexure I) : 22.07.2015 at 15.00 hrs**

**Last Date of receipt of Tender : 07.08.2015 upto 12:30 hrs.**

**Opening of Tenders ( Technical Bid only) : 07.08.2015 at 15:00 hrs.**

**Venue of Pre-Bid Meeting - BIRBAL SAHNI INSTITUTE OF PALAEOBOTANY, 53, UNIVERSITY ROAD, LUCKNOW-226 007.**

The Institute reserves the right to reject any or all tenders without assigning any reason therefore.

Registrar

Birbal Sahni Institute of Palaeobotany

**BIRBAL SAHNI INSTITUTE OF PALAEOBOTANY**

**53, UNIVERSITY ROAD,**

**LUCKNOW - 226007**

**Tel: 91-522-2742903, Fax: 91-522-2740098**

**E-mail: registrar@bsip.res.in**

**Website:** [**www.bsip.res.in**](http://www.bsip.res.in)

**DETAILS OF TENDER AND TENDER NOTICE**

Tender in sealed cover is invited by Director, BSIP from manufacturers or authorized agents **for the supply of equipments /accessories for the** **use of the INSTITUTE.** Details of the equipment, number of units, their specifications, aregiven in **Annexure I** of this the tender document.

 The tender document can be downloaded from the websites of BSIP at [**www.bsip.res.in**](http://www.bsip.res.in) One tender document is adequate even if bids are submitted for more than one item. Tender documents are available: From **10.07.2015 at** **11.00 am to 07.08.2015 at 12.30 am**.LAST DATE FOR SUBMISSION OF DULYFILLED UP SEALED TENDER AT BSIP, LUCKNOW is **07.08.2015 upto 12.30** **am.**

A pre-bid meeting would be held at BSIP, LUCKNOW at 10:00 hrs, 12:00 hrs & 15:00 hrs on 22.07.2015,. Maximum of 03 authorized representatives of each bidder will be allowed to attend the Pre-Bid meeting. The date of Opening the Technical Bid opening will be on same day i.e **07.08.2015** **at 3:00PM.** BSIP, LUCKNOW reserves the right to accept or reject any or all the bids either in full or any part at its discretion without assigning any reason thereof.

Address for Communication: **BIRBAL SAHNI INSTITUTE OF PALAEOBOTANY, 53,UNIVERSITY ROAD, LUCKNOW – 226 007, Tel.: 91-522-2742903 Fax 91-522-2740098.**

\*\*\*\*\*\*\*\*\*\*\*\*

**TERMS AND CONDITIONS – GENERAL**

1. Tender documents shall be issued by BSIP at LUCKNOW to manufacturers / authorized agents.

**The Tender Document fee of Rs 1000/- (non-refundable) should be separately enclosed with the technical part and be submitted on or before the closing date.**

**Separate Tender documents should be required for each item along with separate Tender fee.**

1. Modifications, if any, made in the above documents will be done by addenda / corrigenda, copies of which will be sent in duplicate to each bidder before the due date of the tender. One copy should be signed, sealed and submitted along with the technical bids. The bidder shall not make any additions / deletions to or amend the text of the documents except in so far as may be necessary to comply with any addenda / corrigenda issued. **The bidders shall use only tender documents as issued for** **submitting his bid and shall comply with various terms and conditions**.
2. All pages of tender documents shall be signed by the person authorized to file the tender.
3. The full name of the person authorized to file the tender, designation, current and main office address, Phone No., Fax No. & E-mail address shall be indicated in the tender.
4. Tenders sent through E-mail, Fax and Telex will not be entertained.
5. The tender should be filled in and submitted in English. All accompanying literature and correspondence shall also be in English.
6. No claim for costs, charges, expenses incurred by the bidder in connection with preparation of tender submission and for subsequent clarifications of their tender shall be accepted.
7. BSIP will not be responsible for any typographical errors/ambiguity/ additions /omissions committed by the bidder while filling up of the tender.
8. **Earnest Money Deposit :**
9. Tender must be accompanied by Earnest Money Deposit (EMD) as indicated in Annexure-I for each item being supplied in the form of DD/BG in favour of BSIP, payable at LUCKNOW. EMD shall be paid in **Indian currency only**. In case of receipt of EMD in Indian currency from abroad, same shall be refunded in Indian currency only. BSIP will not be responsible for refunding the EMD in foreign currency.
10. The bids are to be submitted in two sealed envelopes. Technical Bid (Envelope I) shall contain Earnest Money Deposit (EMD), prequalification documents, tender conditions and contract form duly signed by authorized person or persons as a token of acceptance of terms and conditions of supply and work qualification as per **Annexure VI**. Financial Bid (Envelope II) shall contain price schedule of quantity.
11. The EMD deposit by the successful bidders shall be held back towards the security deposit and will be refunded after six month of successful installation of the equipment/machine at site.

 **4.** The EMD of the unsuccessful bidder will be returned within one month from the

 date of opening of the technical bids

**Important : EMD should be kept in the technical part only. If the EMD is not found in the technical part, then the quote will be rejected outright. No Clarifications shall be taken by BSIP.**

10. **The** **E.M.D. is payable by all categories of tenderers and no**

 **exemption from E.M.D. is permissible. Quotes without**

 **E.M.D. shall be treated as invalid/ rejected.**

**EMD submitted in the form of Fixed Deposits will not be accepted.**

11.Technical Compliance statement for the tendered item is a pre-

 requisite for evaluation. Therefore the same must be submitted

 with the technical part. **Any falsification / suppression of facts**

 **in the** **compliance statement would lead to the rejection of**

 **the quote, along with forfeiture of the E.M.D**. Corresponding

 to each technicalspecification in the compliance statement,

 relevant serial no. / page no. / line no. etc., in the data sheet

 should be indicated. Incomplete compliance statement may

 lead to rejection of the quote.

12.The bidder shall be deemed to have full knowledge of documents and no

 extra charges consequent on any misunderstanding or otherwise shall be

 allowed.

13.Any question regarding the tender document and discrepancies shall be directed to

 the Tender Issuing Authority in writing minimum 3 days prior to the due date of

 submission of tender. The Tender Issuing Authority will issue all clarifications,

 interpretations, meanings and specific directions, if any, in duplicate in writing to

 all the bidders. **One copy of these shall be returned** **duly signed and seal**

 **affixed along with the bids**.

14.The bidder shall be deemed to have satisfied himself before tendering as to the

 correctness and sufficiency of his tender and about the rates quoted by him and cover

 all his obligations under the tender.

15. Bids submitted by manufacturers and authorized agents only shall be considered.

15(A). **Authority of signing**

If the tender is submitted by an individual, it shall be signed by him.

If the tender is submitted by a proprietary firm, it shall be signed by the proprietor.

If the tender is submitted by a partnership firm, it shall be signed by all the partners of the firm or by a partner holding the power of attorney for the firm for signing the tender, in which case, a certified copy of power of attorney shall accompany the technical bid.

If the tender is submitted by a limited company or a corporation, it shall be signed by a duly authorized person or the person holding the power of attorney for signing the tender, in which case a certified copy of the power of attorney shall accompany the technical bid.

1. **Price & currency bid**

The tender shall be filled in English with a neat hand / type and all the figures and words shall be legible.

The rates shall be written both in words and in figures. The bidder shall also show the amount of each item, the total of each section and the grand total of the whole tender.

Correction, if any, shall be made by crossing out, initialing with date and rewriting. In case of conflict between the figures and words in the rates, the latter shall prevail.

The tenders shall be verified by the bidder for accuracy in the arithmetical calculations, prior to submission.

1. **Technical details shall contain**
* Original Tender document **duly signed** by the authorised person on all pages.
* Compliance to technical specifications of the equipment/item for which bids are submitted – Authorized person to indicate the **compliance of technical** **specifications in the respective pages** of the tender document and sign thesame.
* **Compliance to the terms and conditions** of the tender document - Authorizedperson to specify, “**all the above terms and conditions will be complied with**” and signed in respective pages of the tender documents, where “terms and conditions” are given.
* Adherence to the stipulated **delivery schedule** of the equipment/item –

Authorized person to specify “delivery schedule given above will be complied with” and signed in respective pages of the tender documents, where “delivery schedule of each of the items” is as given in **Annexure III**.

* **Proof that the bidder** is (i) either manufacturer or (ii) an authorized agent forthe equipment/item for which the bid is submitted.
* List of organizations in India and abroad, along with Contact Person, address, Tel. No., Fax No. etc., to which **similar make/model** of the equipment were supplied.
* Compliance that the bidder has manufactured or supplied the equipment during the past 2 years and **performance report from at least 2 such users** for the past 2 years.
* Covering letter, in the letter head of the bidder stating:
	1. That the minimum **warranty period of one year.**
	2. That the bid **conforms to the terms and conditions** of the tender
	3. Confirmation about the **supply of Certified Reference** **Materials/Samples** for checking the performance of the testingequipments, wherever applicable.
	4. Confirmation that the quoted rates are valid till 31-03-2016.
	5. The details regarding the service centers, stocking of spares etc.,
* Addenda / corrigenda /clarification issued by BSIP before due date of tender, duly signed by the authorized person.
* Descriptive leaflet/brochure giving the technical details of the equipments.
* A letter indicating assumptions, criterion, technical alternative etc., if any. However, the alternatives suggested by the bidder would not be taken as the basis for technical/commercial evaluation of the bids.
* The probable life expectancy of the equipments under normal conditions of operation should be stated wherever applicable.
* Details of pre-installation requirements including space, size of the table required, power point ampere, etc.
* Power of attorney authorizing the person who has filed the tender, if applicable.
* A copy of the certificate for the calibration of the similar makes and model equipment for which bid is submitted from an accredited calibration laboratory or National Physical Laboratory, wherever applicable.
1. **Commercial details shall contains**
2. Total cost of the main equipment and accessories (imported/indigenous), required for the functioning of the equipment, including the test control system, printer, packing & forwarding etc., duly filled and signed **in the format** **prescribed in the tender document** at **Annexure - II.** No money other thanthe total indicated above will be payable on any account.
3. Annual Preventive Maintenance charges for the next 3 years, after the expiry of the warranty period, in the format prescribed in the tender document at

**Annexure - II.**

1. The pre installation requirement should be mentioned in the bid.
2. **Validity of the tender**

Rates quoted by the bidder shall be valid up to 120 days after opening of commercial bid

The Bidder shall not withdraw or revise or alter any conditions, rate(s) quoted within this stated period, unless he is called upon to do so on mutual agreement/negotiations.

1. **Opening of tender**

The tender shall be opened by a Committee constituted by the Director, BSIP at LUCKNOW at the time, date and venue as given in the “Tender Notice”.

1. **Agreement**

The successful bidder shall sign an Undertaking on letter head as per the format prescribed in **Annexure-V** before releasing of the Purchase order by BSIP. A copy of The Purchase order once received should be returned as a token of acceptance of the terms and conditions of the Purchase Order.

1. **Criterion for rejection**

BSIP reserves the right to accept or reject any tender or reject all tenders without giving any reasons whatsoever for their decision.

Tenders are liable to be rejected in which any of the prescribed particulars / information is either missing or incomplete in any respect and/or if the prescribed conditions are not fulfilled.

Tenders which are found to be technically non - responsive shall be rejected and their commercial details shall not be considered.

Canvassing in connection with tender is strictly prohibited and tender submitted by bidder who resorts to canvassing will be liable to rejection.

Tenders containing specific conditions of the bidder other than the terms and conditions given in the tender document and not acceptable to BSIP are liable to be rejected.

If the validity of the tender is not up to **31-03-2016**; the tender will be rejected.

If the tender document duly signed by the authorized person on all pages is not submitted, the tender will be rejected.

BSIP caters to wide range of customers / stakeholders including the manufacturers/exporters. Hence, Purchase Committee may at its discretion give preferences to more popular brands of equipments, which give results that, are widely accepted internationally by buyers abroad and the decision of the Committee will be final.

Before submission of the tender, the prospective bidders are expected to examine technical specifications of the equipments required, terms and conditions, etc., given in this tender document. Failure to furnish all information required in the tender document may result in the rejection of the bid.

BSIP reserves the right to cancel items, from the list of requirement of equipments without assigning any reason thereof.

 **TERMS AND CONDITIONS- SPECIAL**

1. Cost details are to be filled up in the prescribed format as given at **Annexure** **–** **II** for all the equipments as applicable to imported /indigenous indicatingtherein total CIF charges.
2. All accessories, start up kit required for installation & commissioning the main equipments are to be specified and quoted
3. The terms of payment in case of imported equipments shall be:

**100% irrevocable Letter of Credit (L/C) in favour of the**

 **principal supplier**

* + 1. 90**%** will be paid against delivery of the equipment in good condition.
		2. 10**%** remaining amount will be paid after successful commissioning of the equipment, demonstration of satisfactory performance and imparting training to the technical personnel of the laboratory concerned.
1. The terms of payment in case of indigenous equipments shall be:
	* 1. 90**%** of the ex-works price of the equipments will be paid against invoice and delivery of the equipment in good condition.
		2. 10**%** remaining amount plus packing, freight and insurance charges will be paid after successful commissioning of the equipment, demonstration of satisfactory performance and imparting training to the technical personnel of the laboratory concerned.
2. For indigenous items, the bidder should take responsibility for delivering the equipments inside the premises of the respective BSIP at Lucknow and its Associate partners as mentioned in the Purchase Order.
3. The suppliers of the equipment should provide adequate training for at least 2 technical personnel of the laboratory per equipment including trouble shooting etc., and making them confident of operating the equipment independently.
4. The bidder shall adhere to the delivery period of the equipment/item as committed by him as indicated in **Annexure III** of the tender document, whichever is earlier. Penalty for non-execution of the order within the delivery period shall be 1% of the cost of the equipment/item for every week of delay.
5. The delivery installation & commissioning period of the equipments as agreed to should not be extended; under normal conditions. Suitable penalty for non-execution of the order may be enforced to the extent of 1% of the cost of equipment for every week extended. In case of the delay beyond scheduled period due to some unforeseen reason, written permission is required from the Director, Birbal Sahni Institute of Palaeobotany, Lucknow with proper justification to avoid penalty.
6. The bidder shall give warranty for at least one year in respect of items quoted.
7. During the warranty period, regular servicing/maintenance should be undertaken free of charge, including replacement of defective parts/travel cost, etc. Subsequently, servicing/maintenance should be undertaken by the authorized agency of the manufacturer / supplier as per the annual maintenance contract conditions.
8. Operation manuals, calibration procedures and other instruction manuals should be provided along with each of the equipment.
9. The bidder shall also mention the probable life expectancy of the equipments under normal conditions of operation should be stated wherever applicable
10. Terms for service contract (comprehensive or non-comprehensive) after the expiry of warranty period are to be included.
11. The Test Control Systems like computer and printer, compatible to the main equipment, are to be supplied indigenously with latest configuration and licensed operating system.
12. If the equipment/item is not manufactured by the bidder, authorization of the manufacturer to the bidder for marketing and servicing the equipments in India should be enclosed along with the technical bid of the tender. In the absence of such authorization, the tender will not be considered at all.
13. In case of short supply or wrong supply of equipments, its parts or accessories or supply of items in damaged conditions, it is the responsibility of the bidder to arrange for the supply of the required items in working condition as per the purchase order, within a reasonable time. Any additional expenditure, whatsoever, for the above will be borne by the bidder only.
14. The specifications given in this document are the minimum requirement. The bidders are free to offer equipments with better features also. However, the evaluation shall be based on the features mentioned in the tender document. If different model are quoted, the cost details may be given in separate sheet
15. Orders for the supply of items, once placed with successful bidder is non transferable and no sub-contracting is permitted. BSIP, Lucknow reserves the right to cancel the order in such event.
16. Any non-fulfillment of the stipulation given above will make the bid invalid.
17. The full payment will be released to the bidders only after completion of satisfactory performance check of the equipment.
18. In case of computer related equipment, the bidders have to quote for indigenous computer only instead of imported computers, if any.
19. The bids shall first be evaluated for their “technical responsiveness” which shall inter-alia include,
	1. Proof that the bidder is (i) either manufacturer or (ii) an authorized agent for the equipment/item for which the bid is submitted,
	2. Compliance to technical specifications of the equipments for which the bid is submitted,
	3. Adherence to the warranty period,
	4. Documents in support of compliance to the calibration of the equipment and its traceability to national/international standards of measurement and proven performance through proficiency testing, wherever such requirement is specified,
	5. Necessary documentary proof that the bidder has manufactured or supplied the equipment during the past 2 years along with the list of such customers and performance report of the equipment from at least 2 such customers/users for the past 2 years,
	6. Details regarding the service centers, stocking of spares etc.
	7. Confirmation about the supply of Certified Reference Materials/Samples for checking the performance of the testing equipments, wherever applicable.
	8. Compliance to all other relevant and critical terms and conditions of the tender.
	9. Validity of the tender upto **31-03-2016.**
	10. **If any of the above mentioned parameters are not fulfilled, the bid will be considered as technically non-responsive.**
20. The commercial details of those bidders who are technically responsive only shall be evaluated based on the following criterion :
	* 1. Total price of the equipment as CIP / CIF for imported items.
		2. Total price of the indigenous items should include delivery charges up to the location at BSIP, Lucknow, India.
		3. AMC charges for three years after the expiry of the warranty period.

**Annexure I**

**DETAILS OF ANNEXURE**

**List of equipments to be procured**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item No. | Particular of Items | Qty.  | EMD in DD/ BG/ BC | Performance Security |
|  | TOC/ TN Analyser | 1 | 5% | 6% |
|  | Wavelength Dispersive X-ray Fluorescence Spectrometer (WD-XRF) | 1 | 5% | 6% |
|  | Micro FTR | 1 | 5% | 6% |

**COMPLIANCE STATEMENT TO SPECIFICATIONS OF EQUIPMENTS**

(Compliance with specification column is to be filled up by the bidder stating “YES/NO” as the case may be)

**Specification for TOC/TN Analyzer**

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Instrument /accessory Component description** | **Specifications** |
|  | TOC/TN analyzer. The system should include TOC analyzer for solid and liquid samples, with NDIR detector and Pt catalyst, with halide scrubber and moisture traps, TN analyzing unit based on chemiluminiscence, auto sampling unit and the system should be upgradable to solid sample analyses. The instrument should simultaneously and/or stand alone measure TOC and TN in sediment samples (marine, lake and terrestrial) and water samples *.*PC controlled with software |
| 1 | TOC analyzer unitMeasured parameters | NDIR detector based analyzer, PC controlled, High temperature oxidation, aqueous samples |
| IC: Reproducibility: ± 1.5%.Measuring range 0-3000 ppm.Detection limit: ± 5 ppb. TC & NPOC: Reproducibility: ± 1.5%.Measuring range 0-3000 ppm.Detection limit: ± 50 ppb. Multiple units (ppm, µg/L)\* |
| 2 | TN analyzer unitMeasured parameters | Chemiluminiscence based detector; with provision for simultaneous TN measurements |
| TN: Reproducibility: ± 3%.Measuring range 0-3000 ppm.Detection limit: ± 25 ppb.  |
| 3 | Working temperature range | 10 – 35°C  |
| 4 | Sample analyses time | < 7 mins. |
| 5 | Sample injection and maximum injection volume | Automatic; < 500 µL |
| 6 | Acidification for IC removal | Automatic (including sparging) |
| 7 | Sample dilution and dilution accuracy | Automatic dilution range 2x to 50x (± 5%) |
| 8 | Data processing | Linearization, peak detection, calibration, area calculation, SD and CV calculation, automatic reanalyses of samples depending upon dilution requirement |
| 9 | Instrument Controls | Aspiration, measurement, injection, volume setting, Turning on/off of carrier gas, self diagnostics, warning for abnormalities, leakage check, timer for restarting from running conditions, Automatic blank checks and correction, Multipoint calibration, Baseline autocorrection, Automatic power shut down after furnace cooling. |
| 10 | Additional essential features | High-salt sample combustion tube kit, Halogen scrubber, gas sample injection kit, POC measuring kit with sparger.  |
| 11 | Automatic Sample Injection (ASI) unit | Vial capacity: 20-30ml; 40 ml and moreVial capacity: 90 and 65With vial septumWith magnetic stirrer, With Sparging unit 1000 Glass vials with septum |
| 12 | Solid sample module | Direct TOC and IC measurements of solid samples, suitable for catalytic high temperature (900°C) and pre-acidification with low temperature (200°C) methods, Range: 0.1 to 30 ppm (TC); 0.1 to 20 ppm (IC); easy switchover from liquid sample mode to solid sample mode without additional hardwares post-installation. |
| 13 | Spares | Combustion tubes, Halogen scrubber |
| 14 | PC, printer with Software  | PC: Pentium 4 or higher, 1.8 GHz or more processor, with at least 1 GB RAM, 500 GB HDD, CD/DVD read-write combo, Windows 2007 and above OS, USB ports.Printer: Black and White laser printer, 16 ppm or more, 1200 s 600 dpi output, 150 MHz processor, 8MB or more memory, USB 2.0, 150-sheet multi-purpose tray  |
| 15 | Gas accessories  | Gas cylinders, universal gas regulators for carrier gas; Gas filters for air and oxygen, gas tubing with/without sleeve. |
| 16 | Warranty | Supplier should provide warranty after successful installation of the system.The supplier should also quote for annual maintenance contract on a regular basis after the warranty period.  |
| 17 | Installation and training | The entire system should be installed and commissioned at BSIP, Lucknow. Any additional requirements should be mentioned. After successful installation of the system and its peripherals, selected scientific and technical personnel from BSIP, Lucknow should be provided with hands-on and in-depth training on the operation, maintenance and application of the instrument by factory engineer(s).  |

**Item No. 2.Specification for WD-XRF: Wavelength Dispersive X-ray Fluorescence Spectrometer**

**General:**

Latest model, fully automated computer controlled high performance sequential WDXRF. It should give accurate, high precision, qualitative and quantitative analysis of major, minor and trace elements in natural as well as synthesized material. The spectrometer should be capable to analyze elements from Be to U in loose and pressed powder pellets, fused beads and liquid having elemental concentration range from ppm (parts per million) to percentage level. The instrument should run on electrical supply compatible with India standards. The offer should be with all essential ancillary accessories, software and manuals and meet all the **safety protection (electrical, electronic and radiation) as per Indian and international norms with specified certification. All indigenous items service provider should be located at Lucknow or nearby area will be preferred.**

The WDXRF should have following specifications and configuration.

1. **Generator:**
2. The Power rating of generator should be 4kW or more.
3. The maximum voltage and current capacity should be 60kV and 150mA or better.
4. The kV and mA setting should be computer controlled having digital display minimum increments 1kV, 1mA. The shifting interlocks should be provided against malfunction.
5. Stability ± 0.005% or less (both current and voltage) at ±10% input deviation.
6. There should be provision to select the option that the generator should automatically come to standby mode when there is no measurement/analysis (optional).
7. **X-ray Tube:**
8. The rating of x-ray tube should be 4kW or more, Rhodium Anode with end window. The tube should have ceramic insulation.
9. The tube window should be of beryllium and the thickness of the beryllium should be appropriate for better intensity of x-ray.
10. The guarantee of x-ray tube filament should be mentioned along with the intensity and life.
11. It should have auto breeding facility, monitoring of tube life, generator flashes, water flow, temperature and other status.
12. **Optics**
13. The x-ray beam path should be selectable: vacuum, helium or air.
14. There should be at least 4 primary beam filters to reduce specific tube line interference and improve peak to background ratios. One filter should be a beam stop filter.
15. There should be at least three primary collimators (with a choice from ultra high resolution to coarse resolution).
16. Collimator masks as per the sample holder size should be provided.
17. **Spectrometer:**
18. The spectrometer should be microprocessor controlled and should equipped with minimum eight to ten positions crystal changer.
19. Appropriate and compatible vacuum assembly should be provided for vacuum system of spectrometer as per range and scope of specifications.
20. Standard crystal set should be included such as LiF200, LiF220, PE002 (PET), GE to cover F through U and multilayered synthetic crystal for analyzing lower atomic number elements from Mg downwards.
21. Vendor should also quote any other latest synthetic analyzing crystal with high reflectivity (optional)
22. **Goniometer:**
23. The goniometer should be of high precision, microprocessor controlled. It should be gearless with direct optical position sensor or its equivalent with θ-2θ independent driving.
24. Angular accuracy must be at least 0.0025° for θ-2θ or better, angular reproducibility must be equal or better than 0.0001° for θ-2θ or better. For quick analysis slewing speed should be mentioned.
25. The total angular range for flow detector and scintillation counter detector should be mentioned separately. The step scan range that is with minimum step and maximum step should be given. The Goniometer design shall be such that it shall attain high speed, accuracy and reliability. The procedure should be explained with supporting documents.
26. **Detector:**
27. WDXRF must have scintillation and flow proportional counter covering the entire elemental range that is from Be to U with better detection limit and resolution. The detector should be capable of rating singly or in tandem mode.
28. Detector with fast scanning speed and linearity up to 3000 Kcps should be supplied. Flow detector should have maximum count rate of 3000 Kcps.
29. Scintillation detector should have a maximum count rate of 1500 Kcps. Dynamic correction for pulse shift correction and automatic dead time corrections should be incorporated.
30. **Sample Handling and Presentation**
31. Sample holder and mask must be quoted as per the sample size.
32. Sample holders 20 Nos. for pressed pellets samples, 10 Nos. for fused glass bead and 10 Nos. for liquid samples of assorted size should be quoted.
33. In case of sample holders, minimum and maximum diameter of holders and maximum sample thickness is to be specified. However, the diameter of pellet/fused bead should be in tandem to equipment design.
34. Vendor should quote expandable auto sample changer which can accommodate at least 40 samples or more having compatible tray size and it should work with a mechanism of x-y transfer manually or programmable for automatic selection. The X-ray path should be under vacuum or He. Sample spinner r.p.m should be 0.5 rev./sec or better.
35. Provision for dust collection system should be there and it must be easily accessible to the user for cleaning.
36. **Software:** Thesoftware should be user friendly having following features-
37. Spectrometer software should be Windows based latest version capable of doing background correction, line overlap correction, ratio calculation, calibration curve, recalibration program, auto PHD measurement, qualitative analysis, matrix correction, should have capability to qualitative and quantitative analysis, limit checks, statistical evaluation, calculation of concentration function, data storage with data retrieval connecting files.
38. For data handling, extensive analytical software package is to be included. Qualitative and quantitative data processing and Standard less operation facility for quantitative analysis of unknown samples is to be included also.
39. For different groups of elements Calibration program is required.
40. Theoretical alpha generation program should be inbuilt in the software.
41. **Qualitative analysis:** Automatic peak identification, Smoothing, background subtraction. Besides, for maximum speed, different instrument conditions should be selectable in one scan. It should be capable of recording both digital and graphical continuous and step scan. Selection should be possible of linear root and log scales for count rates as a function of 2θ, wavelength, energy and atomic number.
42. **Quantitative analysis:** Higher order Matrix Corrections with a choice of calibration models is to be included. Also the fundamental parameters must be included in the analytical software package.
43. For major and trace elements analysis of geological samples, the software must include parameters for accurate background correction, low level spectral impurity corrections, integrated spectral overlap corrections, inter element matrix effect corrections using mass absorption coefficients, background correction for fixed channels and smart element selection etc. For accurate calibration and validation necessary standards must be supplied with the software. However, few standards will be provided by us having preferred matrices for calibration of the equipment. The price of the software may be quoted separately.
44. The Standard less software should be capable of handling wide variety of samples and by using fundamental parameter calculations. It should be capable of of doing line overlap corrections, thin film corrections and should also have capacity to analyze from the data derived from the scan and or channels.
45. The software should include comprehensive diagnostic software to diagnose all the parts of the instrument. Hardware and software for remote diagnostics should be built in. The remote facility should access the XRF directly, to facilitate servicing if fault occurs.
46. The licensed copy of the XRF software must be provided in CD-ROM with all necessary operation manuals/flow charts, equipment manuals, service manuals, important published quality research papers should be supplied free of cost. Anu updates in software shall be supplied free of cost for 5 years from the date of purchase of the instrument.
47. **Accessories/Local procurement**
48. Vendor should provide branded latest configuration computer system along with keyboard, mouse, 22" LED color monitor and Branded Color laser Printer and UPS. License operating windows software should be installed and original CD should be supplied along with computer. It should be compatible for software and other program loading.
49. Water chiller should be of reputed manufacturer. The exhaust venting and ducting should be done by the vendor only. The water flow rate, pressure and temperature must fulfill the XRF requirement. For trouble free chiller operation, spares needed to be quoted separately.
50. High pressure seamless gas cylinder of 47 ltr w/c filled with He Gas grade-1 with regulator and connector should be included.
51. High pressure seamless gas cylinder of 47 ltr w/c filled with P-10 grade-1 with regulator and connector should be included.
52. If the air compressor is required, it should be of reputed make and compatible with the XRF. It should provide instrument grade, dry and preferably oil free compressed air.
53. For Pressed Pellet preparation, a suitable machine of reputed make is also included.
54. For XRF an UPS of having at least one hour backup along with maintenance free batteries of reputed make should also be included in the offer.
55. For liquid sample analysis, the required kit along with He gas purging unit, necessary hardware and software and all other accessories required in it should be quoted separately.
56. **Spare items**

All essential spare parts/items and tools including electronic boards for stock are required for ten years with detailed part numbers and quantity for smooth functioning of equipment and may be quoted separately.

1. **Consumables**

A set of consumables with all details and quantity, needed for 5 years should be quoted separately.

1. **Pre-installation, Installation and Commissioning of equipment**
2. Pre-installation requirements such as power supply, space, water supply, gas supply etc with complete instructions to be provided as soon as possible after the purchase order issued.
3. Vendor should ensure the complete installation and commissioning of the equipment at our institute site. All expenses towards this are to be borne by the supplier.
4. **Training**
5. At least two weeks on-site training over the equipments should be imparted to few scientists/personnel of BSIP, Lucknow free of cost.
6. Training for the application, maintenance and operation after the installation of XRF for two persons in the factory/company application centre abroad including their complete travel, lodging, and living expenses should be borne by the vendor, however, finalization of dates to be agreed at least 2-3 months in advance.
7. **Warranty**

Two (2) years comprehensive warranty from the date of installation of the equipment must be provided. The warranty period for the X-ray tube must also be quoted separately.

1. CAMC/AMC is to be submitted along with price bid in the slab of one year, two years, three years and five years along with terms and condition.

**Declarations/documents sought from the manufacturer/vendor**

1. The vendor should provide user list wherein the quoted WDXRF model is supplied in India, their complete contact details including mobile numbers and email ids of the concerned persons is to be furnished. The vendor should also make arrangements to demonstrate us the complete working of the equipment being offered at one of the user’s site.
2. Technical specification compliance statement, point-wise, must be provided directly by the manufacturer. Brochure in printed form should also be attached.
3. Dealership/authorization certificate from the manufacturer must be attached.
4. Overall warranty of equipment including its different parts/items such as X-ray tube, generator, detector etc and other indigenous items such as chiller, compressor, computer with peripherals etc should be provided by the vendor. All expenses in relation to spare parts required for trouble free operation of the equipment should be borne by the supplier during the warranty period. Similarly, all charges related to visits of Indian/foreign representatives for maintenance and trouble shooting, during the warranty period, should also be borne by the supplier only.
5. Firm are to ensure for availability of spares parts for at least 10 years after expiry of warranty period
6. **IF ANY ITEM, WHICH IS INADVERTENTLY NOT INCLUDED IN THE SPECIFICATIONS MENTIONED ABOVE, HOWEVER, IT IS REQUIRED FOR SMOOTH FUNCTIONING AND OPTIMUM UTILIZATION OF THE EQUIPMENT MUST BE QUOTED WITH PROPER JUSTIFICATION.**

**Item No. 03 Specification for FTIR Imaging System**

**General**

High performance high resolution FTIR system should be fully external PC controlled through Windows based software. The instrument should run on 220-230V, 50 Hz main power supply line. The offer should be with all essential ancillary accessories, software and manuals and meet all the safety protection (electrical, electronic and radiation) as per Indian and international norms with specified certification. The instrument should comply with solid, liquid & gas analysis. Suitable accessories for solid, liquid & gas analysis should be available with the vendor. All indigenous items service provider should be located at Lucknow or nearby area only.

1. Imaging mode spectral range
	1. FPA 4000-900 cm-1, with 128\*128MCT format.
	2. Single point detector MCT 7500-650 cm-1 or better
2. Analysis Area: 300x300 µm or more
3. Accessories for Microscope: Micro Attenuated Total Reflectance (Micro ATR) objective, Polarizing mode.

Optional item: Grazing angle mode objective.

1. Spatial resolution: at least 5 micron or better
2. Viewing by both built-in Microscope LCD or binocular
3. Source apertures positions in FTIR : 8 positions or more
4. XY movement for sample accuracy: ± 1 µm or better
5. Temperature controlled sample stage (temperature range: ambient to 600). Temperature controlled sample stage (temperature range: -190 to 600) should be quoted as an optional accessory
6. Live IR image overlapped with 3D view of IR spectra should be possible
7. All software for data acquisition and image possessing for post run image analysis should be provided
8. Spectral range for spectrometer: 7900 cm-1 to 375 cm-1
9. Spectral resolution of spectrometer: 0.2 cm-1 or better
10. Wave number accuracy: Better than 0.01 cm-1 @ 2000 cm-1
11. Interferometer: Dynamically/Permanently aligned high speed with gold coated/ aluminium coated or highly reflecting optics and free from external vibrations and stress.
12. Provision for purging in the spectrometer must be available
13. External Beam Options to couple IR Microscope should be available
14. Library for organic chemicals, organic compounds should be provided
15. Warranty for 2 years from date of installation
16. Post warranty AMC for a period of 5 years should be quoted
17. Subsequent to installation onsite training at BSIP, Lucknow should be provided
18. Liquid demountable cell, Spacers, Press, Window, Magnetic film holder, KBr Powder, Pallet holder, Mortar Pestle etc should be supplied along with the instrument.

**Software**

1. Must be able to obtain differential spectra (Subtraction of one spectral pattern from the other) of two spectra recoded under identical conditions.
2. The controlling software must run the fully validated under windows 2007 or higher version
3. A mathematical spectral comparison routine must be available
4. The ability to restrict access to the software via password controlled login screen is essential.
5. Supervisors should be able to customize the interface for operators.
6. A simple wizard mode of operation for data collection and processing is desirable.
7. An advanced macro programming language allowing data collection, processing, printing and storing to a database is required.
8. Beer’s Law, PLS and PCR quantitative packages must offered.
9. A peak and\or trough find algorithm with user defined thresholds must be available
10. A single click automatic data-tune utility is required.
11. All processes performed on spectral data must be stored in an audit trail.
12. The ability to search a commercial library and report similar spectra found is essential. A library of 10000 general chemicals to be included with the offer.
13. The user must be able to create custom search libraries.
14. Spectra must be able to be saved in the following formats:
* J-CAMP
* ASCII
* Interferogram
* Data Manager
* PE Grams
1. Spectrum names of over 50 characters are desirable.
2. A user defined auto naming convention is desirable.

**Graphics**

1. The ability to add peak labelling, text labels and bitmaps to the graph is essential.
2. The graph must allow the customisation of fonts and colors on axes, the background, gridlines and the title.
3. The curve display should allow zooming, pan, autoscale, autorange, vertical and horizontal cursor tools, selection at specific wavenumber and cropping and zooming, .
4. When using the vertical or horizontal cursor, readout data should be available for all curves.
5. The graph should have color-coded legends to allow easy identification of individual spectra.
6. The graphical display should allow immediate wavelength and ordinate readout with the mouse cursor.
7. A quick print facility of the current graph must be available.
8. The ability to save frequently used graph views should be present.

**Scanning**

1. Graph must be able to be manipulated whilst data is being collected
2. Ordinate modes must include
* A
* %R
* %T
* K-M
* Log(1/R)
* Energy

3. The ability to display a large number of curves in a single graph, overlap mode is essential.

4. Background spectra should be collected automatically whilst the instrument is idle.

**Processing**

1. All processing functions should be fully integrated into the software.
2. The ability to automate processing via a Macro language or recording utility is essential.
3. The ability to blank spectral areas is essential.
4. Batch processing of data is essential.
5. Spectral processing functions must include; 1st-4th derivative with a variable filter; smooth (savitsky-Golay, moving average and triangular); difference; normalization; A, %T, %R. KM, LOG (1/R) ordinates modes. Cm-1, nm and micron abscissa modes. =, -,\*,/, difference, baseline correction, smooth, deconvolution, normalize, abex, interpolate, blank, Kramers-Kroing, ATR correction, peak table, peak height and peak area.

**Instrument Performance Verification (IPV):**

1. The IPV status and when the last test was performed must be available to put on all reports
2. Tests must include;
* Wavelength accuracy
* Ordinate accuracy
* Single to noise
* ASTM protocols
1. Results from all IPV tests should be stored automatically by the system.
2. It is desirable that tests are performed automatically at intervals defined by the customer.
3. The IPV tests must report certified values, observed values and tolerances
4. The software must allow the IPV tolerances to be defined by the customer
5. The optics must coated with a moisture repellent material.

**Other specifications**

1. Library for organic chemicals and organic compounds/polymers must be provided with having min 10000 spectras
2. Warranty for two years from date of installation
3. Subsequent to installation onsite training (at BSIP, Lucknow) for our staff by an
4. application specialist

**The supplier must provide the Following information**

**Specifications for spectrometer**

1. IR Source:
2. IR lamp life:
3. IR Source (optional):
4. Detector:
5. Detector (optional):
6. Detector array size:
7. Detector cool time:
8. Spectral resolution:
9. Wave number accuracy:
10. Wave number precision:
11. Photometric accuracy:
12. Signal to noise:
13. Signal to noise typical:
14. Interferometer:
15. Aperture ratio:
16. Scan speed for standard 16 cm-1 scan resolution:
17. A/D Converter:
18. Aperture wheel:
19. Flexibility and automation option:
20. Optic bench:
21. Optics bench size:
22. Sample compartment size:
23. IR Grazing angle objective:
24. Operation mode: Any additional?
25. Crystal tip size:
26. Crystal size for ATR mode:
27. Crystal material:
28. Data collection time for 160X160 micron area: -----------@ wavenumber, @ spectral
29. resolution……….cm-1
30. Quantitative software

**Specifications for Microscope**

1. Sample stage size:
2. Motorized stage:
3. Stage movement step value:
4. Auto-focus option:

if yes what is minimum step size:

1. Sample observation: Binocular or LCD display or both
2. Stage movement accuracy:
3. Image magnification:
4. Wavelength range for imaging:
5. Image collection time:
6. Image size:
7. S/N value for imaging device:
8. Sample and crystal contact: pressure indicator monitored or visually monitored

**Other information**

1. Warranty period:
2. Warranty coverage:
3. Free service period:
4. Annual maintenance charge under AMC after free servicing period:
5. Computer attached to the instrument (specification in details):
6. UPS for safe operation (specification in details):
7. Printer (specification in details):

**Annexure II**

**FORMAT FOR COST DETAILS**

**(Cost particulars should be given in this format Equipment wise/ accessories wise separately)**

**Note: All the cost particulars should be furnished either in Indian Rupees or Foreign Currency. If more than one model of the Equipment is quoted, use separate sheets**

**Part 1: Cost details of imported equipments/instruments**

**Name of the Equipment:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No.** | **Cost Details for foreign components** |  |  | **Cost with** |
|  |  |  |  |  | **currency** |
| i) | Total CIP / CIF Cost (with full detailed break- up) |  |  |  |
|  |  BSIP, Lucknow |  |  |  |
| ii) |  | AMC details: - |  | 1st  | Year: |
|  |  | AMC rate/per year (comprehensive/non- |  | 2nd Year: |
|  |  | comprehensive) for the next 3 years, after the |  | 3rd  | Year: |
|  |  | expiry of warranty period including the accessories |  |  |  |
|  |  | (Two preventive and one breakdown visits) |  |  |  |
|  |  |  |  |  |  |
|  |  | Total |  |  |  |
|  |  |  |  |  |
| **Delivery schedule of the equipment:-** |  | **\_\_\_\_\_\_months** |
|  |  |  |  |  |  |
| **Part 2: Cost details of Indigenous equipments/instruments** |  |  |
|  |  |  |  |  |
| **Name of the Equipment:** |  |  |
|  |  |  |  |  |  |
| **S.No.** |  | **Cost Details of indigenous items** |  |  | **Cost in Rs.** |
| i) |  | Total Cost (with detailed break-up) |  |  |  |
| ii) |  | AMC details (including the accessories):- |  | 1st | Year: |
|  |  | (a) AMC rate comprehensive/non- |  | 2nd Year: |
|  |  | comprehensive cost for the next 3 years, after |  | 3rd | Year: |
|  |  | the expiry of warranty period |  |  |  |
|  |  |  |  |  |  |
|  |  | Total |  |  |  |
|  |  |  |  |
| **Delivery schedule of the equipment:-** |  | **\_\_\_\_\_\_months** |
|  |  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
|  |  | **Annexure III** |
|  | **DELIVERY SCHEDULE OF EQUIPMENT** |
|  |  |  |  |
| **Sr.** | **Equipment** | **Delivery Schedule from the date of** |  |
| **No** |  | **acceptance of Purchase Order –** |  |
|  |  | **maximum** |  |
|  |  |  |  |
| 1. | Indigenous equipments |   |  |
|  |  |   |  |
|  |  |  |  |
| 2. | Imported equipments |   |  |
|  |  |   |  |
|  |  |  |  |

**Annexure IV**

**FORMAT TO BE FILLED UP AND SUBMITTED**

**IN THE LETTER HEAD OF THE BIDDER**

**To,**

**DIRECTOR**

**BIRBAL SAHNI INSTITUTE OF PALAEOBOTANY**

**53, UNIVERSITY ROAD,**

**LUCKNOW – 226007**

**Sub:** **Supply of equipments to BSIP at Lucknow.**

Dear Sir,

1. Having examined the conditions of Tender and Specifications of the equipments, we, the undersigned, offer to supply instruments /equipment as mentioned in the **Annexure I** as per the quantity and specifications given in the tender along with standard spares/accessories as specified.
2. **The original tender document duly signed on all pages is enclosed.**
3. We agree to abide by this tender for the period from the opening date fixed for receiving the same and it shall remain binding upon us for a mutually extended period agreed in writing by us.
4. If our tender is accepted, we undertake to supply the instruments/equipments and install the same in the BSIP premises as mentioned in the tender within the specified periods mentioned in **Annexure III** from receipt of the order from the BSIP, Lucknow in writing.
5. We agree to supply consumable spare parts and replacement of the broken/damaged/non-compatible parts during the guarantee / warrantee period, free of charge, as per the terms & conditions.
6. The probable life expectancy of the Equipments under normal conditions of operation should be stated wherever applicable.
7. We agree to train the personnel of laboratories free of charge, as per the terms and conditions.
8. If our tender is accepted we will, obtain and arrange:
	1. To sign an Undertaking on Rs. 100/- Stamp paper as per the format prescribed in **Annexure V** before releasing of the Purchase order by BSIP.
	2. Any other statutory obligation, if any, prior to commencement of supply of equipments.
9. We agree for the validity of our tender upto **31-03-2016.**
10. We have used only tender documents as issued for submitting his bid and shall comply with various terms and conditions.
11. Unless and until a formal Agreement/order is prepared and issued, this tender together with your written acceptance thereof, shall constitute a binding contract between us and BSIP.
12. We understand that you are not bound to accept the lowest or any tender you may receive.
13. We agree to make a presentation of the products to be supplied by us, before the Committee if needed on a mutually convenient date.

**Authorized Signatory**

**Signature dated**

**Designation / Capacity**

**Name**

**Annexure V**

**Tender Reference No.: BSIP/TENDER/STORES & PURCHASE/2015-2016/ Dated \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**UNDERTAKING / DECLARATION**

**To,**

**DIRECTOR**

**BIRBAL SAHNI INSTITUTE OF PALAEOBOTANY**

**53, UNIVERSITY ROAD,**

**LUCKNOW – 226007**

Dear Sir,

1. We, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Bidder‟s Name & Address) undertake to supply the item \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Name of equipments) as per the detailed specification of Tender and honour the terms and conditions of the tender document.
2. We undertake to supply the equipment within the stipulated period of time and accept the penalty clause imposed by BSIP as per the terms and conditions of the Tender.
3. We undertake that during the warranty period, regular servicing/maintenance will be carried out as per the Warranty Clause.
4. We undertake to provide adequate training (normal operation, trouble shooting) to two technical personnel of the laboratory on the supplied equipment and making them confident of operating the equipment independently.
5. We agree that the full payment will be released to us only after completion of satisfactory installation, trial and training on the said equipments.

Dated at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ this \_\_\_\_\_\_\_\_\_\_\_ day of \_\_\_\_\_\_\_\_\_\_ 2015.

**Authorised Signatory**

**Signature**

**Name:**

**Designation:**

**Name & Address of the Company:**

**Seal of the Company:**

(To be submitted by the bidder on ` 100 stamp paper)

**Annexure VI**

**Technical part & Commercial part of the tender**

|  |  |
| --- | --- |
| **SL.No.** | **Technical part should contain** |
| 1. | Tender document Fee of Rs.1000.00, towards the Tender document. |
|  |  |
| 2. | **EMD of 5 % of the Total quoted price** |
|  |  |
| 3. | Technical quote giving the compliance details of execution of the |
|  | work as per the requirement. Compliance to the Detailed scope of |
|  | work  |
| 4. | Makes & Models of the standard items. |
| 5. | Technical Compliance  |
| 6. | Commercial Compliance  |
| 7. | Blanked Commercial Part  |
| 8. | Scope of Warranty  |
| 9. | Cliental list  |
|  10. | Acceptance for submission of Bank Guarantee for 10% of the PO  |
|  | value for a period of one year from the date of acceptance of the |
|  | item from BSIP, in the event the PO is placed. |
|  11. | Documents related to Eligibility criteria of this document. |
|  |  |

The commercial part should contain information on price quoted for equipment upto BSIP designated place, payment terms, delivery period, warranty/guarantee period and other relevant information as per below.

|  |  |  |
| --- | --- | --- |
| ***SL.NO.*** |  | **Commercial part should contain** |
| 1. |  | Commercial quote containing the price information of the |
|  |  | make & model quoted in the technical part exactly as per |
|  |  | Bill of Materials. : |
|  |  | 1. Supply of Equipments and Accessories as per enclose

 specification on total TURNKEY BASIS. |
|  |  |
|  |  |  **b.** The rates to be quoted as per Annexure - II |
| 2. |  | Payment terms – Acceptance as per our Terms & Conditions - Special |
| 3. |  | Delivery schedule – Supply, installation and training to be mentioned |

 **BANK GUARANTEE & PERFORMANCE BANK GUARANTEE**

**THIS BANK GUARANTEE TOWARDS THE E.M.D SHOULD BE TYPED OUT ON RS.50/- NON-JUDICIAL STAMP PAPER GIVING FULL POSTAL ADDRESS OF THE BANK.**

**Guarantee No** **:**

**Amount** **:**

**Guarantee Cover From:** **To :**

**Last Date for**

**Lodgment of Claim** **:**

The BIRBAL SAHNI INSTITUTE OF PALAEOBOTANY, 53 UNIVERSITY ROAD, LUCKNOW - 226007 having floated a Tender for (Tender for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) with Tender no. hereinafter

|  |  |
| --- | --- |
| referred to as the tender, and M/s | (name and address of the supplier) |
| having the intention of | participating in the | above mentioned, we, the |
| (banker's name | and |  | address) | hereby irrevocably undertake | and |
| guarantee to you that | in | the event of the award of the Contract to the |
| tenderer and subject to the | failure | of the Tenderer to perform any of | the |
| following clauses, | we undertake to fully compensate the Beneficiary to a |
| maximum | amount | of | Rs. | \_\_\_\_\_\_\_\_\_\_\_\_\_(Rupees |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (in words) as and when the same | is |
| claimed from us in writing during the validity | of the contract as per the |
| terms and conditions of the tender contract. |  |  |

1. If the tenderer fails to accept the contract with the terms and conditions of the contract.
2. If after the acceptance of the contract, the Tenderer fails to carry out the services in accordance with the terms and conditions of the contract.
3. If the tenderer withdraws the tender during the validity period.
4. If the tenderer fails to complete their services in accordance with the terms and conditions of the contract or if there is any unexcused delay on the tenderer’s part which may warrant forfeiture of E.M.D. amount and or imposition of liquidated damages and or closure/termination of the contract for default.

We, the bank, abide by your Tender terms and conditions and we shall on demand and without demur, pay to you all and any sums upto a maximum of Rs. \_\_\_\_\_\_\_\_\_\_ (Rupees \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) being the E.M.D. furnished by the tenderer to you in the form of this bank guarantee.

We further agree that the Beneficiary shall be the sole judge as to whether the Tenderer has failed to perform as per the Tender terms and conditions duly specified by the Beneficiary.

We further hereby undertake to pay the amount due and payable under this guarantee without any demur merely on a demand in writing from the Beneficiary stating the amount claimed due by way of loss or damage. Any such demand made on the bank shall be conclusive and binding upon us as regards the amount. Lodgment of claim through Registered Post shall be conclusive evidence of claim made on us by the Beneficiary. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.\_\_\_\_\_\_\_\_\_(Rupees \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_). We further agree that the claim made on us shall be settled within a period of 30 days from the date of lodgment of claim by the beneficiary.

We agree that the guarantee herein contained shall remain in full force and effect for a period of 6 months (six months). Unless a demand is made on us in writing within one month from the date of expiry of six months, we shall be discharged from all liability under this guarantee.

We further agree that any change in the constitution of the bank or the tenderer shall not affect our liability under this guarantee.

We further agree that the Beneficiary shall have the fullest liberty without in any way affecting our liability under this guarantee alter any or all of the terms and conditions of the tender.

Notwithstanding anything contained herein before our liability under this guarantee is restricted to Rs.\_\_\_\_\_\_\_(Rupees\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_). This guarantee shall remain in force upto a maximum of six months (6 months). Unless a demand in writing is made on or before \_\_\_\_\_\_\_\_\_\_ (one month from the date of expiry of six months (date) all your rights under this guarantee shall be forfeited and we shall be relieved and discharged from all liabilities under this guarantee.

We lastly undertake not to revoke this guarantee during the penance of the above said tender/tender contract except with the prior consent of the beneficiary in writing.

This guarantee must be returned to us in original immediately on the expiry of the validity date.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sealed | with the | common seal of the bank on | this the............. | day |
| of.............. | 2012 |  |  |  |
| DATE : | For | BANKERS NAME |  |
| PLACE : | SEAL, ADDRESS |  |

**PERFORMANCE BANK GUARANTEE**

|  |  |  |
| --- | --- | --- |
| **GUARANTEE NO** | **:** |  |
| **AMOUNT** | **:** |  |
| **GUARANTEE COVER FROM** | **:** | **TO :** |
| **LAST DATE FOR** |  |  |
| **LODGEMENT OF CLAIM** |  | **:** |

In consideration of the BIRBAL SAHNI INSTITUTE OF PALAEOBOTANY, 53 UNIVERSITY ROAD, LUCKNOW - 226007, hereinafter referred to as the Purchaser having placed order(s):

|  |  |  |  |
| --- | --- | --- | --- |
| 1. | (Order no and | date) 2. | (Order no and date), with our constituents |
| M/s | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (name of your organization) hereinafter |
| referred to as the | contractor, | having their office at | (address of your |

organization) for the supply and installation of (give brief detail of the order placed) and our constituents having undertaken to guarantee the faithful performance of the contract during the warranty period as mentioned in the purchase order(s) referred above, we the (Banker's name and address), do hereby bind ourselves as their guarantors and undertake to be responsible

|  |  |
| --- | --- |
| to the purchasers and their successors and assigns for | payment of all or |
| any sums of money, losses, damage, costs, charges | and expenses, that |
| may become due or payable by the contractor, in the | faithful performance |

of his said obligations and covenants under the above contract stated

|  |  |  |
| --- | --- | --- |
| therein provided however that the | total | amount to be so recovered by the |
| purchaser from | us | shall | not | exceed | Rs. | \_\_\_\_ | (Rupees |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) amount of guarantee | to | be | mentioned) |
| payable under the said Purchase Order. | We,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | (name and | address | of the | bank) | do hereby |

unconditionally and irrevocably guarantee payment, without demur and without recourse to the purchaser of sums upto Rs. \_\_\_\_\_\_\_\_\_ (Rupees

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) amount of guarantee in Rs.\_\_\_\_\_\_\_\_\_\_\_ and words) on the purchasers first demand in writing making claim for payment to the purchaser by reason of failure on the part of the contractor to fulfill their obligations under the contract.

We hereby agree that lodgment of claim through registered post shall be conclusive evidence of lodgment of claim.

We further undertake to settle the claim within 30 days of lodgment of claim.

This guarantee shall not be revocable by notice or otherwise and is unconditional and without recourse and our liability as surety shall not be impaired or discharged, until the contractor has fulfilled all the obligations

under the contract and shall not be affected by any change in the constitution of the purchaser, Contractor or the bank.

Notwithstanding anything stated herein above our liability under this guarantee is restricted to Rs.\_\_\_\_\_\_\_\_\_\_\_ (Rupees

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ amount of guarantee) and shall remain in force till (last date of guarantee) unless a demand or claim under the guarantee is made on us in writing within one month of the above mentioned date, i.e., before (date one month from the last date of guarantee cover) all your rights under this guarantee shall be forfeited and we shall be relieved and discharged of all liability hereunder.

|  |  |
| --- | --- |
| Dated: | FOR |
| Place: | (Banker's name) |
|  | Address and common seal |

|  |  |
| --- | --- |
| **Sr.** | **Details of Requirement for Opening L/C.(for imported items only)** |
| **No.** |  |
| 1. | Foreign Supplier‟s Name and Complete address on whom L/C will be opened. |
| 2. | Foreign Banker‟s Name & Address |
| 3. | Foreign supplier's Bank Account No. |
| 4. | Port of shipment |
| 5. | Country of Origin |
| 6. | Period to keep L/C open– (Validity of L/C) |
| 7. | Period of negotiation will be 21 days |
| 8. | Delivery Schedule from the date of issuance of purchase order |

**Note:**

1. **Additional copies may be taken for each Equipment**
2. **Octroi, if paid , will be reimbursed separately at actuals**

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**CHECK LIST TO THE BIDDERS**

1. Get all the clarification regarding terms and conditions, specification etc during the pre bid meeting or by writing to the Director, BSIP, Lucknow prior to submission of bids.
2. The original tender document downloaded in full has to be submitted along with the technical details duly signed on all the pages.
3. Fill up the relevant compliance columns in the specifications given for the equipments quoted by stating „YES‟ or „NO‟. If any deviations are there in the specifications, the details may be given separately as Annexure.
4. A covering letter duly signed by the authorized person as per the specimen given at **Annexure IV** of the tender document.
5. Ensure that User certificates from atleast two users, on their letterhead stating that the performance of similar make and model supplied to them is satisfactorily, is enclosed
6. Descriptive leaflet / brochure of the equipment quoted are enclosed along with the technical details.
7. Copy of the certificate for the calibration of similar make and model of the equipment / instrument for which bid is submitted from an accredited calibration laboratory or NPL, if applicable, is enclosed.
8. The Technical and commercial details are to be submitted separately superscribing “Cover „A‟ – Technical details for equipment or Cover ‟B‟ – Commercial details for equipments. Both the details are to be put together in one envelope and sealed properly, superscribing the name of the equipments.
9. Proof regarding manufacturer / authorized agent, as the case may be, is enclosed.
10. Prior to submission of bids, bidders have to ensure that the equipment quoted by them is suitable for testing as per the national / international standard mentioned in the specification.
11. Cost details are to be given in the prescribed format only. If more than one model of equipment is quoted, separate sheet may be enclosed. may be given

**Note: If the bidder fails to furnish all the relevant document/ information as mentioned in the Tender Document, the Tender will be rejected.**

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