

Two Bid Tender Document

Purchase of Equipment for FRI



**Forest Research Institute
P.O. New Forest
Dehradun-248006**

2009-10

Sl.No.-----

**PURCHASE SECTION
FOREST RESEARCH INSTITUTE
P.O. New Forest,
DEHRADUN-248006**

TENDER NO: X-75/09-10 /Purchase dated

**DUE DATE FOR PRE-BID CONFERENCE: Feb. 19, 2010 at 11:00 Hrs, venue
Purchase office, FRI (Main Building)**

**DUE DATE FOR SUBMISSION OF TECHNICAL & FINANCIAL BIDS: March, 02,
2010 at 10.00 A.M.**

DUE DATE FOR OPENING OF TECHNICAL BIDS: March, 02, 2010 at 11.00 A.M.

OPENING DATE FOR FINANCIAL BIDS: March 08, 2010 at 11.00 A.M.

CONTENT OF TENDER PAPER

THIS PAPER INCLUDES THE FOLLOWING DOCUMENTS:-

1. Tender Notice (Chapter I)
2. Terms & conditions (Chapter -II)
3. Description of the items, specification (Chapter III)
4. Schedule of Price(Chapter IV)
5. Agreement (Chapter V)
6. Format for Bank Guarantee (Chapter VI)

Issued to M/S

**(PIAR CHAND)
Purchase Officer**

Purchase Section
Forest Research Institute,
ICFRE, P.O. New Forest, Dehradun-248006
BIDDING DOCUMENT

Chapter-1 Instructions to Bidders

Sealed Tenders are invited from the reputed firms for the purchase of following items for this Institute:-

Sl. No.	Tender No.	Name of the Equipments	Earnest Money
1.	N0.X-75/09-10/Purchase	1. BOD Analyser	5000.00
		2. Thermal Cyclor	10000.00
		3. Izod impact tester (Digital)	10000.00
		4. Automatic Genetic Analyzer (DNA Sequencer)	1, 00,000.00

The details of the above items and other Terms and Conditions, etc. are available in the tender documents, obtainable from the Purchase Officer, Forest Research Institute, Dehradun-248006, on payment of **Rs.225.00 (Rs.275.00, if tender is required by Speed post)** (including **12.5%** Utranchal Trade Tax), by **CROSSED DEMAND DRAFT** in favour of the **Accounts Officer, FRI. Pre-bid Conference** for finalization of technical specifications has been arranged at the Institute premises on **Feb 19, 2010 at 11:00 Hrs.** The Tenders (both technical and financial bids) should reach this office on or before **March 02, 2010 up to 10.00 A.M.**, out of which the **technical bids** will be opened on the same day at **11.00 A.M.** in the presence of the tenderers or their authorized representatives, if any. Any or all tenders can be rejected by the Director, FRI without assigning any reason. The tender forms and specifications are also available at web site <http://fri.icfre.gov.in/>. The tender form downloaded from above web sites must include Rs.225/- as tender fee along with the tenders submitted.

Purchase Officer
Forest Research Institute

To
M/s

Chapter-2: Conditions of Contract

Terms and Conditions

Pre-bid conference: A pre-bid conference has been arranged with the users for finalization of technical specifications of the equipment. Bidders are requested to take part in the Pre-bid conference at scheduled date and time. The modified specifications, if any, after Pre-bid conference will be available at the websites and also can be obtained from the office of Purchase officer. After Pre-bid conference no changes will be accepted in the desired specifications. If no party attends the Pre-bid conference then listed specifications will be considered as final.

The proposals must consist of three separate sealed envelopes as follows:

The **First envelope** must enclose following documents and must be marked in bold letter as “QUALIFYING DOCUMENTS & EMD”

- a. A brief description of the organization and an outline of recent experience in assignments of a similar nature.
- b. Proof of registration with Directorate of Industries or equivalent,
- c. Proof of Sales Tax Registration,
- d. PAN.
- e. EMD will be as follows (liable to be forfeited if wrong information is furnished)

Name of the Equipments	Earnest Money
1. BOD Analyser	5000.00
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- f. The bidding firm must possess an experience of at least five (05) years, in the field of supply, support and maintenance of the equipment. (Enclose copies of the supportive documents OR supply orders).

The **Second envelope** must enclose the Technical proposal and must be marked in bold letter as “TECHNICAL PROPOSAL”.

The **Third envelope** must enclose the Financial proposal and must be marked in bold letter as “FINANCIAL PROPOSAL”.

TECHNICAL PROPOSAL

During the preparation of technical proposal, in addition to technical details of the equipment along with **original catalogue and other literature**, the tenderer must give particular attention to the following:

- i) Users list and supportive documents from the users for the satisfactory performance and after sales service.

- ii) Information about suitably trained technical staff along with well established service network must be furnished.
- iii) On hand training proposal for the staff of the Institute at site.
- iv) All specifications should be certified and guaranteed for genuineness and that the model of the equipment is not going to be obsolete in near future (supportive documents from the Principal to be enclosed).
- v) Availability of spares/parts for next five years to be ensured (supportive documents from the Principal to be enclosed).
- vi) In absence of original catalogue and other literature the tender would be considered as invalid.

SUBMISSION OF PROPOSAL

Financial and Technical Proposals and an envelope containing the qualifying documents and EMD should be sealed in three separate envelopes and then sealed in a counter envelope. The proposals should be clearly distinguished by writing on the cover "Qualifying Documents", "Financial Proposal" and "Technical Proposal". The outer envelope must be clearly marked "DO NOT OPEN EXCEPT IN PRESENCE OF THE EVALUATION COMMITTEE" and "TENDER FOR EQUIPMENT".

The proposal must contain no interlineations or overwriting except as necessary to correct errors made by the concerned themselves, in which cases such corrections must be initialed by the person or persons signing the proposal. Your completed proposal must be delivered on or before the stated time and date.

PROPOSAL EVALUATION

A three-stage procedure will be adopted in evaluating the proposals

- (i) Checking of qualifying documents. This will be the first envelope, which shall be checked, and disqualification amongst these documents will lead to rejection of the proposal *in toto*,
- (ii) A technical evaluation of the qualified firm on the basis of the qualifying documents will be carried out prior to opening the financial proposal,
- (iii) A financial evaluation. Firms will be ranked using a combined technical / financial score as indicated below.

Technical Proposal

The evaluation committee appointed by the client will carry out its evaluation applying the evaluation criteria and point system as specified below. Each responsive proposal will be attributed a technical score (St.).

The points given to technical evaluation criteria are

- i) Firms relevant experience (including similar jobs in hand) 15

ii)	Technical specifications of the equipment	70
iii)	Service life/spares availability	15
Total		100

The technical proposal should score at least 70 points out of 100 to be considered for financial evaluation.

Financial Proposal

The evaluation committee will determine if the financial proposals are complete and without computational errors. The lowest financial proposals (Fm) will be given a financial score (Sf) of 100 points. The financial scores of other proposals will be computed as follows $S_f = 100 \times F_m / F$ (Where F is amount of financial proposal).

Proposal will finally be ranked according to their combined technical (St) and financial (Sf) scores using the formula $S = S_t \times T\% + S_f \times F\%$.

The weight (T%) given to the Technical Proposal is 60%

The weight (F%) given to the Financial Proposal is 40%

General Terms & Conditions

The offer will be subject to the following terms and conditions: -

1. Please note that FRI, Dehra Dun has Custom Duty Exemption and Excise Duty Exemption Certificate. This may be kept in consideration while quoting the rates.
2. The stores are required to be delivered in full and within 90 days after acceptance of the offer.
3. The offer should be firm and open for acceptance till 120 days from the stipulated date of opening. Price escalation will not be allowed.
4. Full details of business terms and conditions, e.g. packing and forwarding, delivery period, VAT/Sales Tax/Trade Tax (whether provincial or Central), other Taxes/Charges, if any, the validity period of quotation, discount, free delivery, packing or any other information relevant to the items may please be indicated clearly.
5. Full specifications, details and information regarding the articles to be supplied, such as make, size, etc. along with **original catalogue**, etc. to be furnished with the offer. The list of users of goods of similar or same nature in the country should also be enclosed. The offer would not be considered fit if these details are not provided.
6. Normal terms of payment will be 100% payment within 30 days after receipt and acceptance of goods in satisfactory working condition after installation. Other terms of payment should be clearly spelt in the offer.
7. The tender should accompany a DEMAND DRAFT/FDR of **value as specified in Clause e of Chapter 2 (EMD)** as Earnest Money, payable to the Accounts Officer, Forest Research Institute, Dehradun, which will be refunded, if the offer is not accepted. In case the offer is accepted but not honored by the tendered; the Earnest Money will be forfeited. The Earnest Money will also be forfeited, if wrong information is given in the tender to influence the tender cost.
8. The Tenderer should also specify regarding Dealership/Proprietary item and copy of the latest certificates from the principal should be produced with the tender.
9. Freight, forwarding charges, if any, should be mentioned in the offer. In case of import being done by this institute, the FOB prices should be mentioned.

10. The stores are required to be delivered to the consignee concerned and the consignee will do inspection and verification of the goods.
11. The tenderer should quote on their printed letter-head paper, indicating thereon Sales Tax/Trade Tax No., Registration No., Fax No., Telex No., Telephone No., E-mail, etc.
12. **Two year on site comprehensive WARRANTY** for all the items and works to be given OR (as specified in specifications)
13. **Performance Bank Guarantee:** The supplier will have to submit a PBG or Performance security in the form of Bank Guarantee or FDR @ 5% of total order value from a commercial bank in an acceptable form within 21 days of issue of supply order. Performance security should remain valid for a period of 24 months beyond the date of completion of all contractual obligations of the supplier including the warranty obligations. Failure to abide by the contractual obligation will liable to forfeit the Performance Bank Guarantee.
14. Any or all tenders can be rejected by the Director, FRI without assigning any reason. It cannot be challenged in any court.
15. Disputes, if any, will be under the jurisdiction of Dehradun Court, Uttranchal, India.

(PIAR CHAND)
PURCHASE OFFICER

CHAPTER III (Description of the items and specifications)

Final Specifications of the Equipments after Pre-bid Conference.

1 BOD Analyzer.

1. Equipment should be capable of placing at least six holders for absorbing agent like CO₂
2. Analysis of at least six samples can be done simultaneously.
3. It should be having at least one stirring base with at least six places and six B.O.D. bottles.
4. Six B.O.D. bottle to analyze all the six samples simultaneously.
5. Magnetic stirring bars.
6. Instrument must show all the B.O.D. readings directly

2 Thermal Cycler

Specification:-

1. Gradient Silver Block with peltier heating technology.
2. Sample capacity 96x0.2 ml PCR tubes or I micro test plate 8x129 (with SBS standard) skirted or semi skirted.
3. The heated lid should have a cushion to accommodate both flat & dome capped tubes, with Thermal Sample Protection which minimize sample evaporation.
4. The block temp should be maintained at 20° C till the start of the reaction to minimize non-specific amplification.
5. Lid temperature range 37-110° C, Temperature-control range 4° C to 99° C

Gradient temp range:1-24° C, Gradient possibility in all three steps of PCR, Gradient range 30-99° C.

6. Freely programmable temperature gradient over 12 rows
7. Regulation accuracy per well : $\pm 0.2^\circ$.
8. Block homogeneity : $20-72^\circ \text{ C} \pm 0.3^\circ \text{ C}$.
 $90^\circ \text{ C} \pm 0.4^\circ \text{ C}$.
9. Temp control mode: with block control and simulated tube control.
10. Ramping Rate: approx. 6° C/s (heating)
Aprox. 4° C/s (cooling)
11. Control panel should come with graphical programming Microsoft window like user administration.
 $\frac{1}{4}$ VGA color display.
More than 100 user-defined folders.
No. of programs >700 on device, option of extendable memory
USB ports should be there to attach mouse and/or memory stick
User password protection.
Max no. of cycles 99.
12. Software option for networking many machines with one computer.
13. Other features:

Optional self test of paltrier elements
System should be upgradeable to “Real Time PCR”
Auto-restart potion in the event of power failure up to 99 min.
Licensed & authorized PCR.

3 Izod Impact Tester (Digital)

Equipment: Impact Testing Machine

1. Type: Pendulum type
2. Pendulum Impact Energy (Joules)
 - For Izod Test: 170 Joules
 - For Charpy: 300 Joules
3. Controls:
 - Digital display and digital controls
 - Motorized latch system and electro-magnetic brake system for stopping pendulum oscillation with safety guard for entire machine
 - Provision for attachment of computer and printer for data recording
4. Minimum Scale graduation: 0.5 Joules
5. Standard Accessories:
 - Charpy striker
 - Izod striker
 - Charpy Izod support Block
 - Specimen setting gauges
6. Sizes of samples to be tested:
 - Material type: Timber
 - Sample size for Izod Impact (As per IS 1708 – 1986):
 - Sample cross section = 20mm X 20 mm
 - Sample length = 125mm
 - Striker should be as per sample requirement

 - Sample size for Charpy Test (As per IS 1708 – 1986):
 - Sample cross section = 12.5 X 12.5 mm
 - Sample length = 125mm
 - Striker should be as per sample requirement
7. Service Warranty: Three years at FRI Dehradun
8. Installation and commissioning at Forest Research Institute, Dehra Dun
9. **Optional Accessories:**
 - Gauge for checking distance of specimen notch from both ends for charpy and Izod test
 - Specimen’s clamps
 - Gauge for checking standard “U” and “V” notch on specimen
 - Gauge for checking depth below standard “U” and “V” notch on specimen
 - “U” and “V” notch milling cutter

- Provision for testing samples as per ISO 3348 – 1975E:
 - Sample size for Izod Impact test as per ISO 3348:
 - Sample cross section = 20mm X 20 mm
 - Sample length = 300 mm
 - Striker should be as per ISO 3348 requirement
- Suitable Branded compatible computer and printer with windows explorer and Izod impact machine operating software
- Suitable stabilizer matching with machine requirement

4 AUTOMATIC GENETIC ANALYZER

SPECIFICATIONS

1. Eight capillary, fluorescence-based, capillary electrophoresis Genetic analysis system with all hardware and software needed to operate. The equipment should be up gradable to 16 or 24 capillary Genetic Analyzer.
2. The system must be fully automated from sample loading to polymer replacement, DNA separation, detection and data analysis, with pathways for upgradeability to meet future requirement.
3. The system must be optimized for de novo or comparative sequencing, fragment analysis applications including microsatellite analysis, Linkage study, Linkage Mapping panels. The system must be capable of Mutation/heterozygote Detection, AFLP, microsatellite LOH, SNP Validation and SNP screening.
4. Capillary Electrophoresis technology using uncoated/coated capillaries, optimized for its performance under medium or high throughput DNA sequencing, fragment analysis requirements and other applications.
5. The system should have choice of capillaries ranging from 20-80cms suitable for higher resolution power.
6. The system should have a choice of polymer for variety of applications with capability to use 'one polymer one array' for both sequencing and fragment analysis applications and seamless switchover between the runs on the same plate.
7. The system should be fully integrated with 96 well sample plate for a true walk-away automation.
8. The Detection Technology should be using Virtual Filters/Filter wheel and Peltier cooled CCD camera/PMP.
9. The instrument should be capable of detecting maximum Fluorescent dyes preferably with a Argon-ion laser /solid state diode laser and should readily accommodate new dyes sets and

applications as they become available without requiring changes in the hardware.

10. The instrument should have integrated Computer workstation for instrument control and data analysis: software for sample ID import, instrument control and data collection. Analysis software and algorithms to perform: Sequencing Analysis Software for basecalling, Software for fragment analysis, sizing validation and detection. All software should be upgradeable & compatible with hardware. The vendor should provide other related software needed for required applications of data analysis.

11. A Full compliment of chemistry kits, software's and accessories should be provided by the vendor. The system must come with complete set of consumables for at least 1000 sample analysis (500 sample fragment analysis + 500 sample sequencing) and on site comprehensive warranty with all sale –service support for two years and thereafter annual maintenance contract for next two years (2 year CMC + 2 year AMC)

12. Power Requirements: Voltage 200-220V or 230-240V +/- 10%, 50/60HZ +/- 10 %
Current: Maximum 15 amps Maximum Power Dissipation: 2000 watts (approximate) along with required online UPS for the equipment.

13. The supplier should have the facility for comprehensive training on the operation of the instrument, software and Applications Support in India. The supplier will provide training to three scientists of this institute at the training center of the company and will give two training on hardware and software applications to scientists/research scholars at the installation site of the equipment at his expense.

14. The instrument should be certified for forensic applications.

15. Automatic up gradation of all related software for 5 years.

(PIAR CHAND)
PURCHASE OFFICER

Chapter-4: Price Schedule

(To be utilized by the bidders for quoting their prices)

Item with detail specifications	Cost per unit	Taxes, if any	Total cost in figure and words

Name/Seal of the Tenderer

Chapter-5: Agreement

The Supplier _____ agrees to accept the terms and conditions of this bidding document in letter and spirit.

Name/Seal of the Tenderer

Chapter-6: Format for Bank Guarantee

To

Forest Research Institute
P.O. New Forest
Dehradun

Your Order No. _____ for the supply and delivery of _____ has been accepted by M/s _____.

In accordance with the terms of payment of the said order, we have agreed to pay the balance of 5% of the contract price of the supplier, furnishing you with an acceptable Performance Bank Guarantee for 5% of the total contract value, viz Rs. _____ for the due performance by the Supplier of all its contractual obligations and to be valid for a period of 24 months for the date of bank guarantee for this purpose you have agreed to accept our guarantee.

In consideration thereof, we hereby guarantee payment of and undertake to pay Rs. ___ and remit to you on demand and without demur the sum of Rs. _____ being 5% of the total value of the contract on receipt of your intimation that the Supplier has committed a breach of any of its contractual obligations.

This guarantee shall be valid for a period of 24 months from the date of Installation of the equipment in satisfactory condition or 27 months from the date of dispatch of the last lot of consignment whichever is earlier, and in any event shall expire on _____, you shall have the right to file/make your claim on us under the guarantee for a period of sixty days from the said date of expiry.

This guarantee shall not be revoked without your express consent and shall not be affected by your granting time or any other indulgence to the supplies or by any change in the constitution of the Bank or the supplies or for any other reason whatsoever.

Not with standing any thing, contained herein above our liability under this guarantee is restricted to Rs. _____ and this guarantee will remain in force up to and inclusive of _____ unless an action to enforce a claim under the guarantee is filed against us within sixty days from the date of expiry i.e. on _____ or before _____, all rights under the guarantee shall be forfeited and we shall be relieved and discharged from all liabilities there under.

Signatory Bank with Seal