

**Tropical Forest Research Institute
(Indian Council of Forestry Research & Education)**

Post- RFRC, Mandla Road, Jabalpur– 482 021, Madhya Pradesh India

Phone: 0761-2840483; Fax: 01761-2840484

Website: <http://tfri.icfre.gov.in>

TWO BID TENDER FOR SCIENTIFIC EQUIPMENTS

Tender No.15-4/13-14/Tender-II/Sci.Equip.(A)/Pur/TFRI/JBP/4868 Dated of the issue: 14/03/2014

BIDDING DOCUMENT Chapter-1 Instructions to Bidders

DUE DATE FOR SUBMISSION OF TECHNICAL & FINANCIAL BIDS: 07/04/2014 At 2.30 P.M

DUE DATE FOR OPENING OF TECHNICAL BIDS : 07 /04/ 2014 At 3.30 P.M.

OPENING DATE FOR FINANCIAL BIDS : 21 /04/2014 At 3.30 P.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)

Tender document Sl.No.-----issued to M/S-----
-----Cost of Tender documents Rs.----- received in
cash/vide D.D./Bankers Cheque No.----- dated ----- drawn on -----

Signature and seal of the issuing Officer

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TENDER No. 15-4/13-14/Tender-II/Sci.Equip.(A)/Pur/TFRI/JBP/

(1) BIDDING DOCUMENT Chapter-1 Instructions to Bidders

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

Sl.	Name of equipment	Tender No.	EMD
1.	GAS CHROMATOGRAPHY MASS SPECTROMETRY SYSTEM	Tender No. 15-4/13-14/Tender-II/Sci.Equip.(A)/Pur/TFRI/JBP/	1,75,000/-
2.	INDUCTIVITY COUPLED PLASMA EMISSION SPECTROMETER		2,25,000/-

The details of the above items and other Terms and Conditions, etc. are available in the tender documents, obtainable from the Director, Tropical Forest Research Institute, Jabalpur-482 021, on payment of Rs.250.00 (Non Refundable)Cash/DD/Banker's Cheque Favour of Director, Tropical Forest Research Institute, Jabalpur **from 18/03/2014 to 04/04/2014** during working hrs.only. The Tenders (both technical and financial bids) should reach this office on or before **07/04/2014 up to 2.30 PM.**, out of which the technical bids will be opened on the **same day at 3.30 PM.** in the conference Hall ground floor main building in the presence of the tenderers or their authorized representatives, if any. The financial bids will be opened on **21 /04/2014 at 3.00 PM** in the conference Hall ground floor main building, TFRI Main Building. Any or all tenders can be rejected by the Director, TFRI without assigning any reason. The tender forms and specifications are also available at web site <http://tfri.icfre.gov.in/>. The tender form downloaded from above web site must include Rs.250/- as tender fee along with the tenders submitted.

DIRECTOR

TROPICAL FOREST RESEARCH INSTITUTE JABALPUR

To,

M/s

(2)

Chapter-2: Conditions of Contract

Terms and Conditions

(a)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 of firm.
- c. Proof of Sales Tax Registration,
- d. PAN.
- e. EMD will be as follows (liable to be forfeited if wrong information is furnished)
- f.

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g. Tender fee

h. 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”.

(2b)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.

(2C) FINANCIAL PROPOSAL

The financial proposal must be submitted in the format as per the price schedule (chapter 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. Prices must be quoted F.O.R., T.F.R.I. Jabalpur in Indian Rupees.(INR) only. The bid shall be inclusive of all duties and levies except for excise duty/customs and sales tax at the prevailing concessional rates, applicable against declaration of form 13. In case of imported equipment, if the bidder is the authorized dealer/distributor of foreign company and wants the order to be placed upon the parent company through the bidding firm for custom purposes, the same should be clearly mentioned in the bid along with an authorization from the parent company to this extent. TFRI would in any case be liable to pay to the Indian bidder only to the extent of the bid amount in Indian Rupees or its equivalent foreign currency as per official exchange rate prevailing as on the date of bid opening i.e.10/12/2013. TFRI would not be liable for increase or any variation in foreign exchange rate and differences if any, should be borne by the bidder. However the payment would be effected only after satisfactory commissioning of the equipment in TFRI Jabalpur and no request for any advance payment would be entertained.

(2d) 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 initialled by the person or persons signing the proposal. Your completed proposal must be delivered on or before the stated time and date.

(2e)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.

(2f)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) After sales Service /spares availability	15
Total	100

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

(2g) Financial Proposal

The evaluation committee will determine if the financial proposals are complete and without computational errors. The lowest financial proposals (F_m) will be given a financial score (S_f) 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 (S_t) and financial (S_f) 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%

Tender OTSG-ICFRE/13-14/rkd/doc/05

General Terms & Conditions

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

1. Please note that TFRI, Jabalpur 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 of Chapter 2 (EMD)** as Earnest Money, payable to the Director, Tropical Forest Research Institute, Jabalpur, which will be refunded, without interest, if the offer is not accepted. In case the offer is accepted but not honoured 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. To the successful bidder, the EMD will be released only after satisfactory installation of the equipments and submission of performance bank guarantee.
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.
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 @ 10% 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 including that of warranty, is liable to result in forfeiture of Performance Bank Guarantee.

14. Any or all tenders can be rejected by the Director, TFRI without assigning any reason. It cannot be challenged in any court.

15. Disputes, if any, will be under the jurisdiction of Jabalpur Court, M.P., India.

DIRECTOR
TFRI, JABALPUR

(3) Chapter-3: Description of the items, specification I

(I) SUPPLY OF GAS CHROMATOGRAPHY-MASS SPECTROMETRY System (Gc-Ms)

Description and specification of the items

OVEN:

- ❖ Temperature range : Above ambient to 450⁰C with user selectable or better
- ❖ Ramp rate : Up to 45⁰ C/ min. or better
- ❖ Oven Cool Down : 250⁰ C to 50⁰ C within 5 minutes or better
- ❖ Ramps : minimum of 3 ramps or more
- ❖ Pneumatics Programmable Electronic control.

INJECTOR PORT: 2 No.

1. Programmable Temperature Inlet

- ❖ Electronic Flow Control (EFC)/ Pressure Pneumatic Control (PPC)/Automatic Pressure Control.
- ❖ Maximum temperature: 450⁰ C or better.
- ❖ Capable of Injecting Large-volume injection.

2. Split/Split less Capillary Inlet Port

- ❖ Split ratio up to 7500:1 to avoid column overload.
- ❖ Electronic septum purge flow control to eliminate "ghost" peaks.

DETECTOR FID : 1 No.

- ❖ Temperature range : up to 450⁰ C in 1⁰ C increments or better.
- ❖ Min. detectable Quantity : < 3 x 10⁻¹² g C/sec or better
- ❖ Electronic Flow Control (EFC)/ Electronic Pneumatic Control (EPC)

❖ **Linearity : 10^6 or better.**

MASS SPECTROMETER:

LAN based quadrupole MS system with Non-coated inert source conforming to international safety standards, designed and manufactured under a quality system registered to ISO 9001.

- 1 Mass range : 2-1050 amu or better
- 2 Scan speed : 11,000 amu/sec or better
- 3 Ion source temp: up to 350°C for better sensitivity for active compounds and it should be programmable. Transfer line temp - 100-350° C
- 4 Quadrupole temp: 150 – 190⁰ C. Quadrupole should be heated to keep quadrupole clean for a longer period.
- 5 EI scan sensitivity : more than 800:1 S/N for 1 pg OFN or better System should have one turbo molecular pump with for making the vaccum.
- 6 Simultaneous SIM and SCAN mode

CHROMATOGRAPHIC DATA SOFTWARE:

Single point control of GC-MSD system and its modules, customizable reports, GLP features should also have software for data acquisition, control, chromatographic data evaluation, reporting sequencing. License copy of Software should be supplied along with pre-loaded on PC and GCMS system. Software should be capable of deconvoluting, coeluting peaks.

LIBRARIES:

NIST Latest Version with License, Wiley Library with original CD and documents should be quoted. Suitable database for the identification of fatty oils, essential oils constituents, mycotoxins and pesticides and RT Library/ Database. (User customizable library & automatically searching of multiple libraries).

COLUMN:

For the analysis of Fatty oils, Essential oils, Mycotoxins, Pesticide residue with all accessories required for installation with instruments.

- A . 2DB- Wax or Equivalent 30M x 0.25mm x 0.25u
 - B. DB- 5 MS or Equivalent 30M x 0.25mm x 0.25u
 - C. DB- 1 MS or Equivalent 30M x 0.25mm x 0.25u
- Or Column for general applications: Capillary column 0.25/0.53 Id, 30m and 60m Length

PC & PRINTER: Branded PC (HP/Lenovo/Dell etc.) with monitor 21 inch, Suitable branded Laser Jet Printer with scanner and photocopier. CPU:2.8 or more GHZ: RAM:4 GB: Operating S/W: Windows XP:Hard Disk: 160 GB or Higher: DVD ROM with Writer: Yes: LAN: Ethernet IfF (100BASE-TX/10 BASE-T)

UPS: 7.5 KVA online UPS with minimum 2 hrs back up.

GAS CYLINDERS AND OTHER ACCESSORIES

Gas Cylinders with regulators for H₂, N₂, Air & He. Syringe, tubing, Gas purification panels and other accessories (viz, pipes, clips, nozzles, gauze etc.) should be quoted.

Standards as per application (Essential Oil, Fatty Oil, Mycotoxin, Amino acids) should be quoted.

AUTOSAMPLER:

- The headspace autosampler must come with PC software that controls the autosampler.
- The headspace autosampler must have electronic flow control.
- The headspace autosampler must have an automated leak check capability.
- The entire sample pathway must be able to achieve and maintain constant temperature up to 300°C.
- The headspace autosampler must have an integrated variable speed sample agitator.
- The headspace autosampler must have a 10 position platen heater.
- The platen heater must be able to achieve and maintain constant temperature up to 300°C +/- 0.1 °C.
- The platen heater must be able to accept 9, 12, and 22ml vials and be able to run them interchangeably in the same schedule.
- The headspace autosampler must have a 60 vial position autoloader.

BACK FLUSHING AND QUICK SWAP DEVICE:

Back flushing, Quick swap (or equivalent technology) to change the column without venting vacuum.

Note : -

1. Manufacturer Quoted by vendor should have own office in India and should have minimum 50 employee at the time of bidding for better after sales and service support.
2. Instrument should have option for up gradation in future.
3. Vendor should have sufficient capacity to give application support.
4. Vendor should quote break up of Individual Items.
5. Performance certificates required for the quoted model (atleast 10)
6. Minimum one week training on the instrument after successful installation.
7. List of users and satisfactory report of quoted model from reputed institute preferably Government institute/hospital.
8. Warranty shall remain valid for 36 months from the date of Installation/commissioning.

II . SUPPLY OF INDUCTIVITY COUPLED PLASMA EMISSION SPECTROMETER

SPECIFICATIONS

1. The instrument should be PC controlled simultaneous type with dual view for measurement of major as well as minor elements.
2. The instrument should be fully automated. Computer operated flow controls and regulators of all types, scanning, and detection.
3. The instrument should have fast and dynamic data acquisition system and concentric glass/quartz nebulizer with corrosion resistant cyclonic spray chamber.
4. Argon consumption should be below 20 lit./min.
5. The view height of plasma should be adjustable by computer control.
6. The instrument should switch between axial and radial view during the analysis of samples.
7. The instrument should have a PC controlled peristaltic pump with variable speed.
8. Plasma and gaseous flow should be software controlled.
9. The ICP should have CCD detector, which should be cooled to -30 to -45 degree Celcius.
- 10.The instrument should be supplied with Intel Core2 Duo latest computer having TFT monitor, laser printer, UPS with 30 minutes backup, preloaded with antivirus software.
- 11.The instrument should be supplied with Windows based software.
- 12.Accessories: 2 Argon gas cylinders with regulators.

**Chapter-4: Price Schedule
(To be utilized by the bidders for quoting their prices)**

Price Shedule

S.No	Name of Item	Specificati on with make	Unit Price	Taxes & Duties mention separately items wise	Other charges if any mention separately items wise	Total unit cost in figure & words in INR (FOR) TFRJ, Jabalpur
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Conditions if any in

**terms of clause (2c)
(financial proposal)
along with enclosures
specified therein.**

Dated Signature of the Tenderer
with seal

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

Tropical Forest Research Institute
P.O. R.F.R.C., Mandla Road,
Jabalpur.

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 10% 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 10% 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 anything, 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