



उष्णकटिबंधीय वन अनुसंधान संस्थान

**TROPICAL FOREST RESEARCH INSTITUTE**  
**Indian Council of Forestry Research & Education**  
(An autonomous Council under the Ministry of Environment & Forests, Govt. of India)

P.O. – R.F.R.C., Mandla Road, Jabalpur – 482 021.

# **TENDER FOR SCIENTIFIC EQUIPMENTS**

Tender No.15- 8/12--13/Pur.

Dated of the issue: / /2013

## **ENCLOSURES**

1. Tender Notice
2. Tender Form
3. Specifications for Scientific Equipments
4. Conditions of Tendering for supply & Scientific equipments of material

Tender document S.No.....issued to M/s.....

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.....  
.....

Cost of Tender documents Rs.....received in cash/vide D.D./ Bankers  
Cheque No.....dated.....drawan on

.....

Signature and seal of the issuing Officer



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**TENDER NOTICE FOR PROCUREMENT OF  
SCIENTIFIC EQUIPMENT**

Advertisement No. 15-8 /12-13/TFRI/JBP.....

Sealed tenders are invited from reputed firms for the supply of

1. SUPPLY OF WIDE BAND FILTER FLUROMETER
2. SUPPLY OF PILODYN TYPE 6J FOREST
3. SUPPLY OF DIGITAL PLANT CANOPY IMAGER
4. SUPPLY OF POTTER SPRAY TOWER

**Tender Fee** : 250.00 (Non Refundable )

Cash/DD/Banker's Cheque in Favour of

Director, Tropical Forest Research Institute, Jabalpur

**Issue of Tender starts from** : 10.00 AM 02 /02/2013  
**Issue of Tender ends on** : 1.00 PM 11 /02/2013  
**Last date of submission of tender** : 1.00 PM 11/02/2013  
**Opening of tender** : 3.15 PM 11 /02/2013

Note: Tender document is also available on our website <http://tfri.icfre.gov.in>

Director  
Tropical Forest Research Institute  
Jabalpur

To,

The Director  
Tropical Forest Research Institute  
P.O. R.F.R.C., Mandla Road  
**Jabalpur-482021, M.P.**

Sub: Tender for Scientific equipments

Ref: Your Advertisement Published In the Danik Bhaskar/Hindustan Times  
on.....

The undersigned hereby tenders and offers (subject to

Institute's conditions of tendering ) to the Tropical Forest Research Institute, Jabalpur to supply the Scientific equipments as described in the enclosures with details of specifications in good condition.

It is certified that the specifications of Scientific equipments and all other conditions wherever described in the tender document, have been replied in full, giving clear details. The decision given by the institute in this regard will be final. It is also understood that the tenderer ( in case of interpretation) will have no right to furnish any technical or commercial clarification after opening of the tender.

Date.....

Tenderer's signature with date

Name of the Tenderer

Address

**SUBMIT THE FORM DULY FILLED IN SEALED COVER MENTIONING DATE OF OPENING OF THE TENDER**

# TENDER FORM

1. **Name and full address of the tenderer with** .....

**telephone/fax number (if any)** .....

.....

2. (a) **If the tenderer is an authorized dealer of a** .....

**company give detailed information of authorization** .....

**(Dealer certificate should be enclosed)** .....

(b) **Sales tax/Commercial tax Registration** .....

© **If registered as Contractor/Supplier of specific** .....

**equipment with any Central/State Govt. department**

**give details**

(d) **Income tax clearance certificate (copy to**

**be enclosed)** .....

(e) **Whether registered with**

- (i) **D.G.S. & D**
- (ii) **Small Scale Industries Corporation**
- (iii) **National Small Scale Industries Corp.,**  
**Etc. If any, copy of the same should be**

**Submitted to claim exemption from EMD**

3. **Validity Period (not less than 120 days)**

4. **Delivery Period to be specifically mentioned.**

5. **Whether Proprietary Item? If yes, enclose the certificate**

YES	NO
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6. **Details of offer**

S.N.	Name of Item	Specification with	Unit Price	Taxes & Duties	Other charges if	Total unit cost (for
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		<b>make</b>		<b>(mention)</b>	<b>any (mention)</b>	<b>TFRI, Jabalpur )</b>

**Signature of Tenderer**

- 7. Accessories if any (To be mentioned clearly)**
- 8. Guarantee/Warrantee of the item**
- 9. Enclosures**

- (i) **EMD**
- (ii) **Catalogus**
- (iii) **Registration Certificate**
- (iv) **Income Tax Clearance Certificate**
- (v) **Sales Tax / Professional Tax Certificate**
- (vi) **Octroi etc. if paid (proof required)**

**10. Any other relevant information.....**

**Signature of the Tenderer with stamp**

## SPECIFICATION

### I. SUPPLY OF WIDE BAND FILTER FLUOROMETER

**EMD –RS.27,500/-**

<b>Description and specification of the items</b>
<p><b>WIDE BAND FILTER FLUOROMETER</b> <b>Excitation Wavelength :</b> 254-750nm <b>Emission Wavelength :</b> 185-870nm <b>Lamp(s) :</b> Quartz- Halogen and mercury or full spectrum Xe pulse lamp single source <b>Dimensions :</b> 15x103/5x61/5 in. (38x27x16cm) <b>Linearity:</b> 1.00% <b>Sensitivity:</b> 25pg/ml dsDNA with Pico Green, reagent in 2 ml assay volume; 30ppt QSO4; 20ppt FITC; 30pg/μl ATP luminescence <b>Concentration (range) :</b> 0.00-9999.99 (ppt, ppm, ppb, μg/dl, μg/ml, pg/ml, ng/μl).</p> <ul style="list-style-type: none"><li>• Easy to use software for sample concentrations based on linear regression analysis of standard curve data.</li><li>• RC-232-C interface wide band model.</li><li>• Automatic gain adjustment.</li><li>• Automatic optimization of linear range maximizes working concentration range.</li><li>• Store up to nine multipoint (2 to 9 points) standard curve in memory.</li><li>• Help guide to aid operator to select correct filter for application and diagnostics/status menu to troubleshoot performance.</li><li>• Offer both flexibility and value for studies that require UV excitation and full range emission detection.</li><li>• Feature both quartz-halogen and mercury lamp or full spectrum Xe pulse lamp single source.</li><li>• Red sensitive PMT measures emission from 190 to 870 nm.</li><li>• Should well suited for laboratory performing assays in UV and near-infrared.</li><li>• Should include A large, versatile sample compartment to accommodate wide variety of cells and cuvetts including 12.5x12.5x45mm square cuvetts, 12x75mm round tubes and flow cell option.</li><li>• Integrated software for instrument control, data collection, quality control and auto-analysis for sample files for base calling and fragment sizing, allowing for real-time data quality evaluation.</li><li>• The instrument must have a guaranteed signal-to –noise specification of &gt;500:1 for the Raman Band of water-excitation at 500 nm, 1sec signal averaging time.</li></ul> <p><b>Instrument must include:</b></p> <ol style="list-style-type: none"><li>1. Suppliers should ensure consistent availability of consumables for the general applications and compatible with the unit a period of at least 5 years. Terms and conditions for supply of consumables over a 5 year period should be stated and adhered to.</li><li>2. System installation and operator training performed by a vendor service engineer.</li></ol>

3. The suppliers/bidders should indicate number of years warranty/guarantee.
4. branded UPS and batteries appropriate for the unit.
5. The minimum response time for any technical and application support needs to be ensured not to exceed 48h.
6. The final approved cost for the supply of the instrument will be released only after satisfactory commissioning of the equipment.
7. Accessories: The system should be provided with one no. of Latest Branded PC (Core i7 processor,4GB RAM, 500GB Hard disc, 2GB Graphics card, 23" LED monitor and Windows 7 ultimate operating system compatible with the unit.

## II. SUPPLY OF PILODYN TYPE 6J FOREST

**EMD –RS.6,000/-**

<b>Description and specification of the items</b>
<p><b>PILODYN TYPE 6J FOREST</b>            Pilodyn with striker pin            Loading rod            Hexagonal wrench for changing striker pin            Square locking pin            Shipping container  <b>Striking force-6J</b>  <b>Penetration depth-0-40mm</b>  <b>Striker pin size- 2.0 or 2.5x60.2mm; 2.0 or 2.5 x 80.2 mm</b>  <b>Dimensions- 50x420mm</b>  <b>Terms</b>            The final approved cost for the supply of the instrument will be released only after satisfactory commissioning of the equipment.            The supplier/bidder should indicate number of years warranty/guarantee.            Suppliers should ensure consistent availability of consumables for the general applications and compatible with the unit a period of at least 3 years.</p>

## III. SUPPLY OF DIGITAL PLANT CANOPY IMAGER

**EMD –RS.25,000/-**

<b>Description and specification of the items</b>
<p><b>DIGITAL PLANT CANOPY IMAGER</b></p> <ul style="list-style-type: none"> <li>• For non destructive measurement of canopy density, leaf area index(LAI), PAR, Solar beam transmission, coefficient.</li> <li>• Instrument should work on the principle of image capture.</li> <li>• The instrument should be supplied with laptop or palmtop computer to view the image.</li> <li>• The instrument should have in-built digital camera and should have 0.5 second measuring time and 150<sup>0</sup> fisheye lens angle.</li> </ul>

## IV. SUPPLY OF POTTER SPRAY TOWER

**EMD –RS.35,000/-**



### **Description and specification of the items**

Suitable for studying the biological effects of chemicals both when applied as a direct spray on the organisms or as a residual film. It includes quickly detachable atomizers, pneumatically operated spray table and all air controls mounted on attached instrument panels. A 0-2 kg/cm<sup>2</sup> pressure gauge is fitted as standard equipment.

### **Construction and Equipment Details**

**Frame:** Manufactured from extruded Aluminium Alloy section in pleasing self colour finish of light and durable construction.

**Spray Table:** Precision made Aluminium Alloy spinning with high finish internally and matt external surfaces, positioned centrally by three screws mounted on the intermediate platform.

**Nozzles:** Units supplied in pairs as standard equipment for Intermediate and Final spraying. Manufactured to close tolerance giving an accurate spray formation, with stainless steel jet and pick-up tube. Fully adjustable assembly for level and centralising over the spray tube.

**Spray Table:** Adjustable for height within the piston of the air cylinder and fitted with eccentrics to the test platform for positioning the specimen dish beneath the spray tube.

**Air Pressure:** Constant supply of 1.5 - 2 kg/cm<sup>2</sup> through the input connection controlled by an on/off switch and exhaust valve. Fine adjustment is made by a sensitive needle valve on the left hand side of the instrument giving direct reading on the pressure gauge, or manometer. This pressure operates the air jack and nozzle head simultaneously, along with portable Air Compressor complete with couplings and pressure valves.

**Manometer:** Provision is to be available at the rear of the instrument to accommodate the use of a manometer if required. Level Four screwed feet in the base of the instrument provides easy levelling in conjunction with the spirit level on the intermediate platform.

### **General Specification**

Height x width x depth: 122 x 36 x 36 cm (48 x 14 x 14 inches)

Diameter of Spray Tube: Top Flange: 15.7 cm; Bottom Flange: 11.9 cm

Max. diameter of specimen dish on table: 11 cm

Max. working pressure: 2 kg/cm<sup>2</sup>

Capacity of reservoir: 24 ml

Shipping weights: Nett: 21 kg; Gross: 32 kg

Volume Metric: 52 kg.

## **CONDITION OF TENDERING FOR SUPPLY OF EQUIPMENTS**

**1. The tender documents, complete in all respects along with the enclosures should**

be submitted under sealed cover in person at the receipt counter of institute by putting inside tender box or should be sent by Speed post , registered post only (Not By Courier Services) so as to reach the office before the specified date and time. Tenders received after the specified date and time will not be considered and will be filed. The institute will no be responsible for postal delay.

2. In case the date of opening of the tenders/ receiving the tenders is declared a holiday, the tenders will be received/ opened on the next working day at the specified timing.
3. The tender shall be valid for a period of 120 days from the date of opening
4. The quoted prices shall inclusive of all duties and levies except for excise duty and sales tax at the prevailing concessional rates, applicable against declaration of from 13 Photo Copy of the last sales tax registration number/ certificate should be enclosed along with tender.
5. Full details of business terms and conditions e..g. packing and forwarding charges, delivery, validity period, guarantee of equipments, discount or any other information relevant to supply may also be given.
6. Tenderer should clearly mention the make/brand of the machine complete specification and other information regarding the articles to be supplied and enclosed printed literature and original catalogue/ operational manual.
7. The Director, Tropical Forest Research Institute, Jabalpur reserve the right to reject any or all tenders without assigning any reason. Director, Tropical Forest Research Institute, Jabalpur will have the full right to accept tender with higher rates without giving any reasons to tenderers and his decision will be final and acceptable to all.
8. The act of giving tender shall be deemed to be the unreserved acceptance of terms and conditions of this tender.
9. Conditional tenders are liable to be rejected.
10. The earnest money (as mentioned in the specification) will be deposited along with the tender in the form of Demand Draft/Banker's Cheque, in favour of Director Tropical Forest Research Institute, Jabalpur . The tenders will not be considered in the absence of required earnest money EMD in any other from like Bank guarantee, etc. will not be considered.
11. In case of successful tender, the amount of EMD shall be kept as security deposit which will be released after successful installation and demonstration of the supplied goods in satisfactory conditions and EMD shall be returned to unsuccessful tenderers.
12. The firms exempted from submission of EMD at the time of submission of the tender form ; if awarded the contract will have to submit a performance security equivalent to the EMD
13. The tenderer may be asked to demonstrate the equipment before the Director, TFRI or any other officials/ nominated by him for adjudging the suitability of the equipment in that case, the tenderer shall be final and binding.
14. Acceptance of the offer shall automatically carry with it a guarantee on suppliers part that every material supplied there under shall be fresh and free from defects and shall be consistent with the established and general accepted standards for the materials of type and in full conformity with the specifications. If it is found other wise when put into actual use, it shall be replaced by the supplier at his cost even after the payment of the bill has been made.
15. If the tenderer fails to comply with any of the above conditions or backs out from his/their tender or fails to supply within stipulated period to the satisfaction of

the Director, Tropical Forest Research Institute, Jabalpur or any official authorized by him in this respect or fails to execute the agreement, the EMD of tenderer shall be forfeited to the Institute. In addition to forfeiting the EMD, the Director shall be at liberty to obtain the material to the extent stated in tender notice from any other source. The excess expenditure if any, incurred by the Institute in making such purchase shall also be recoverable from the tenderer in full as per rules. If purchase is made at lower rates difference of cost shall not be payable to the tenderer. In addition, the institute may black list the tenderer for a period up to five years.

16. The successful tender shall hereafter be called the supplier.
17. The equipment are required to be delivered and installed in full within 30 days of the issue of the supply order.
18. After the expiry of the delivery period, the supply order shall be automatically canceled. The EMD /Performance Security deposited by the supplier shall be forfeited.
19. Delivery of the goods in good and sound condition at destination shall be the responsibility of the supplier. Any loss, breakage, leakage, theft, etc during transit or otherwise will be at the supplier's risk and cost.
20. The replacement on account of wrong or short supply and the suppliers inconsistent with the specification shall be done by the supplier, without extra cost.
21. The supplier should be in a position to supply any spare parts (accessories required at least for period of five years after the expiry of warranty period).
22. Payment will be made after receipt of items in good and satisfactory condition including their demonstration and satisfactory installation.
23. Disputes, if any are subject to JABALPUR jurisdiction only.