

**Two Bid Tender Document**

**Purchase of Scientific Equipment for FRI**



**Forest Research Institute**

**P.O. New Forest**

**Dehradun-248006**

Sl.No.-----

**Forest Research Institute**

**(Indian Council of Forestry Research & Education)**

Post- New Forest, Dehra Dun – 248006, Uttarakhand, India

Phone: 0135-2224205; Fax: 0135-2756865

Website: <http://fri.icfre.gov.in> Email: [po\\_fri@icfre.org](mailto:po_fri@icfre.org)

**TENDER NO: X- 17/14-15/Purchase**

<b>DUE DATE FOR PRE-BID CONFERENCE</b>	<b>: September 25<sup>th</sup>, 2014 at 10:00 A.M. Purchase office, (Main Building), FRI.</b>
<b>DUE DATE FOR SUBMISSION OF TECHNICAL &amp; FINANCIAL BIDS:</b>	<b>October 15<sup>th</sup>, 2014 At 10.00 A.M.</b>
<b>DUE DATE FOR OPENING OF TECHNICAL BIDS</b>	<b>: October 15<sup>th</sup>, 2014 At 10.30 A.M.</b>
<b>OPENING DATE FOR FINANCIAL BIDS</b>	<b>: October 28<sup>th</sup>, 2014 At 11.00 A.M.</b>

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**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)
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(DR. P.K.PANDE)  
Purchase Officer

Forest Research Institute  
(Indian Council of Forestry Research & Education)  
Post- New Forest, Dehra Dun – 248006 Uttarakhand, India

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**TENDER No. X- 17/14-15/Purchase**

**BIDDING DOCUMENT Chapter-1 Instructions to Bidders**

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

Sl. No.	Name of equipments	Last date of tender submission
1.	Automatic Meteorological/Weather station with data logger	15 <sup>th</sup> October, 2014,, At 10 .00 AM
2.	Automatic water level recorder	
3.	Digital water velocity meter	
4.	Genset (15 KVA)	

The details of the above items and other Terms and Conditions, etc. are available in the tender Documents. The tender forms and specifications are available at web site <http://fri.icfre.gov.in> .

**(DR.P.K.PANDE )**  
**PURCHASE OFFICER**

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)**

Sl. No	Name of equipments	EMD
1.	Automatic Meteorological/Weather station with	6,800
2.	Automatic water level recorder	6,000
3.	Digital water velocity meter	2,000
4.	Genset (15 KVA)	7,520

- f. **Tender fee :-The tender form downloaded from above web sites must include Rs.227/- ( including 13.5% Uttarakhand Trade Tax ) by crossed Demand Draft in favour of Director, FRI as tender fee alongwith the tenders submitted.**
- g. 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.

## **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. Dehradun.

## **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.

## 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)	After sales Service /spares availability	15
<b>Total</b>		<b>100</b>

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  $S = St \times T\% + Sf \times F\%$ .

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 of Chapter 2 (EMD)** as Earnest Money, payable to the **Director, Forest Research Institute, Dehradun**, which will be refunded, without interest, 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.

**(DR. P.K.PANDE)**  
**PURCHASE OFFICER**

**CHAPTER III (Description of the items and specifications)**

**TENTATIVE SPECIFICATION FOR PRE BID CONFERENCE**

**1. Automatic Meteorological/Weather Station with data logger:-**

- The broad scope of supply is to deliver Meteorological/ Weather Station. The System will constitute of Data Logger and Meteorological Sensors
- Full-featured meteorological/ weather stations should be able to measure data for Temperature (air and soil both), Soil moisture, Relative Humidity (RH), Rain, Wind (speed and direction) and Solar Radiation.
- It should provide accurate, real-time meteorological/weather information directly from forest patch.
- Monitor record and analyze over a dozen important growing conditions.
- It should be able to measure at various intervals from 1 to 60 minutes.
- It should provide or log data in fail-safe condition and non-volatile memory.
- Should be able to hold holds at least for 180 days with a 30 minute interval.
- Data logger should have LCD Display to check current and daily high/low readings without a PC.
- Should have 12-month battery power source.
- Should have facility to communicate via wireless, cellular, shuttle, or direct connect.

Sensors required and its specifications

Sensors	Range	Accuracy
Wind Speed	0. 2 to 150 mph (0.3 to 241 km/h)	±2 mph (±3 km/h), ±5%
Wind Direction	1 <sup>0</sup>	±4 <sup>0</sup>
Air Temperature	-10 <sup>0</sup> to 100 <sup>0</sup> C	±0.6 <sup>0</sup> C
Soil Temperature	5 <sup>0</sup> to 60 <sup>0</sup> C	±0.6 <sup>0</sup> C
Soil Moisture	0% VWC to saturation	±3%
Relative Humidity	10% to 100% @10 <sup>0</sup> to 50 <sup>0</sup> C	±3%
Solar Radiation	0 to1500 W/m2	±5%
Rainfall	0.5 mm	±2%
Dew point	-50 <sup>0</sup> C to 60 <sup>0</sup> C	±2 <sup>0</sup> C
Quantum PAR sensor	PAR Measurement	
CO <sub>2</sub> sensor	CO <sub>2</sub> measurement	
External sensor ports	Minimum at least 4 Ports	
The system to be able to calculate Evapotranspiration internally by software or data logger.		



Quantum PAR sensor and CO<sub>2</sub> sensor compatible to ports of same data logger.

- Software should be provided to extract data from data logger.
- Accessories compatible to the instrument
- Training or demonstration to be provided at experimental site by the provider on the operation and maintenance of the station.
- Data availability to the full satisfaction.
- The supplier should be able to tackle any instrumental related problems within 5 days.
- On site comprehensive warranty for two years.
- User manual for the station will also be provided by the firm which will include the setup/program details, calibration constants, wiring diagram of the concerned sensors, and any other station specific details.
- The Meteorological/ Weather station should have Battery of 12V which has to be charge through the Solar Panel.

#### **OPTIONAL**

- Optional for soil heat flux plate compatible to the data logger for connection.

#### **ISO certificate of the manufacturer:**

Bibliography of published papers should be submitted with the quotation. Enclose copies of orders without price during last two years. Original Printed Brochure should be enclosed with the quotation.

The bidders should be competent enough to supply the AMS/AWS and must have all kinds of registrations under appropriate authorities. They should also produce enough documents to prove their good track records in the field of manufacturing and supply of similar equipments.

## **2. Automatic water level recorder:-**

- The broad scope of supply is to deliver Digital Water Level Stage Recorder. It will be easily installed inside a 2-4" diameter PVC or MS pipe/Stilling well and is also suitable for stream gauging.
- The System will constitute of a data logger capable to record the variation in water level at user's selectable time interval with date and time stamp.
- It should provide/consists of a pressure sensor for measuring the water level, a temperature sensor, a non-volatile memory to store the measurements and a battery.
- It should be an autonomous data-logger that can be programmed by the user, for instance the sample interval.
- It determines the height of a water column by measuring the water pressure with the built-in pressure sensor.
- The water level logger software compatible with Microsoft's windows 2003 and above.

- It should have 5 years or above battery power source or it should be easily replaceable

### Specifications

Parameters	Range
Resolution	Approx. 2 mm or less
Accuracy	0.1% or better
Temp. Measurement	Yes
Memory	More than 30,000 readings
Sampling Rate	0.5 sec - 99 hours
Battery Life	5 years or easily replaceable

- It should have Weather proof housing.
- Software should be provided to extract data from data logger.
- Accessories compatible to the instrument
- Training or demonstration to be provided at experimental site by the provider on the operation and maintenance of the station.
- The supplier should be able to tackle any instrumental related problems within 5 days.
- On site comprehensive warranty for oneyear.
- User manual for the station will also be provided by the firm which will include the setup/program details, calibration constants, wiring diagram of the concerned sensors, and any other station specific details.

### ISO certificate of the manufacturer:

Bibliography of published papers should be submitted with the quotation. Enclose copies of orders without price during last two years. Original Printed Brochure should be enclosed with the quotation.

The bidders should be competent enough to supply the AWS and must have all kinds of registrations under appropriate authorities. They should also produce enough documents to prove their good track records in the field of manufacturing and supply of similar equipment.

### **3.Digital water velocity meter:-**

- The broad scope of supply is to deliver Digital Water Flow/Velocity Meter. It should be highly accurate water velocity instruments for measuring flows in open channels and partially filled pipes.
- It should provide expandable probe handle that ends in a digital readout display.

- It should be able to unit incorporates true velocity averaging for the most accurate flow measurements.
- It should be ideal for measuring flows in streams, rivers, canals, storm water, wastewater, and industrial process waters.
- Data logger should have LCD screen displays average in ft/sec or m/sec, minimum, and maximum water velocity readings.
- It should be able to hold holds Up to 30 sets of data points can be stored in the computer and these data points can be reviewed on the LCD for later analysis.

**Specifications**

Range	0.3-19.9 fps (0.1-6.1 mps) or better
Accuracy	0.1 fps
Display	LCD, Glare and UV Protected
Datalogger	30 sets, MIN, MAX, and AVG
Features	Timer, Low battery warning
Sensor Type	Protected Turbo-Prop propeller with magnetic pickup.
Expandable Length	3.7 to 6 ft (1.1 to 1.8 m)
Battery life	5 year or above
Operating Temperature	-4° to 158° F (-20° to 70° C)
Carrying Case	The Flow Probe should have a carrying case.

- It should be highly accurate easy flow monitoring
- The flow meter should lightweight, rugged, and reliable with telescoping handle with staff gauge
- Padded carrying case for easy storage
- CE Certified
- Training or demonstration to be provided at experimental site by the provider on the operation and maintenance of the station.
- The supplier should be able to tackle any instrumental related problems within 5 days.
- On site comprehensive warranty for two years.
- User manual for the station will also be provided by the firm which will include the setup/program details, calibration constants, wiring diagram of the concerned sensors, and any other station specific details.

**ISO certificate of the manufacturer:**

Bibliography of published papers should be submitted with the quotation. Enclose copies of orders without price during last two years. Original Printed Brochure should be enclosed with the quotation.

The bidders should be competent enough to supply the Digital water velocity meter and must have all kinds of registrations under appropriate authorities. They should also produce enough documents to prove their good track records in the field of manufacturing and supply of similar equipment.

#### **4. GENSET ( 15 KVA) :-**

<b>S.No.</b>	<b>Particulars</b>
<b>1.</b>	15 KVA silent DG set, Single Phase, 50Hz, 1500 RPM, Air Cooled Engine with AMF Control Panel, Fuel tank, Residential silencer.
<b>2.</b>	Making Suitable Foundation for DG set
<b>3.</b>	Earthing G.I Complete with strip
<b>4.</b>	UG cable Heavy duty Aluminium Armoured 1100V, 2x16 Sqmm holding excavation and protection covering(Send and brick)
<b>5.</b>	Necessary laying and sub main 6 Sqmm cooper conductor 2x6+1x6 sqmm including floor cutting as required
<b>6.</b>	Supply ICSP 32 Amp main switch
<b>7.</b>	Unloading, Testing and Commissioning of DG set at site
<b>8.</b>	Warranty two year from the date of Installation

#### **Chapter-4: Price Schedule**

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

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

**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 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