

E-Tender

# Two Bid Tender Document

For  
Purchase of Total Organic Carbon Analyzer for Institute of Forest  
Productivity, Ranchi

[File No. Store-I-PI-AICRP: 22-46/2019-20]

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**Institute of Forest Productivity**

**Lalgutwa, NH-23 Ranchi Gumla Road, Ranchi - 835303 (Jharkhand)**



E-Tender  
Two Bid Tender Document  
For  
Purchase of Total Organic Carbon Analyser for Institute of Forest  
Productivity, Ranchi

**CONTENT OF TENDER PAPER**

This Paper includes the following Documents:

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निदेशक  
Dr. Nitin Kulkarni  
Director

**वन उत्पादकता संस्थान**  
(भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद्)  
(वन, पर्यावरण एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार का एक स्वायत्त निकाय)

लालगुटवा, एन. एच.-23, गुमला रोड, रांची-835303 (झारखण्ड)

**INSTITUTE OF FOREST PRODUCTIVITY**

(Indian Council of Forestry Research & Education)

(An Autonomous Body of the Ministry of Environment, Forest and Climate Change, Govt of India)

Lalgutwa, Gumla Road, N.H.-23, Ranchi-835303 (Jharkhand)

E-mail : dir\_ifp@icfre.org, ifpranchi2018@gmail.com

Website:-<http://ifp.icfre.gov.in>



Phone : 0651- 2526140  
2526150

No. Store- I-PI-AICRP:22-46/2019-20

Dated: 06.01.2021

E-Tender No. 46/2020-21 (Store)

### TENDER NOTICE

Institute of Forest Productivity, Ranchi invites e-tender from registered/well equipped reputed firms/manufacturers/authorized suppliers for Purchase of Total Organic Carbon Analyzer. For detailed information please visit website <http://ifp.icfre.org> or <https://moefcc.euniwizarde.com> all corrigenda, agenda, amendments, clarifications etc to the tenders will be posted on both the website only. Bidders should regularly visit website to keep themselves updated. Tender will be accepted through online mode only.

Director  
Institute of Forest Productivity  
Ranchi





वन उत्पादकता संस्थान  
 भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद  
 वन, पर्यावरण एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार की एक स्वायत्त निकाय  
 लालगुटवा, एन.एच-23, गुमला रोड, राँची -835303झारखण्ड  
**INSTITUTE OF FOREST PRODUCTIVITY**  
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 Lalgutwa, N H-23 Ranchi Gumla Road, Ranchi - 835303 (Jharkhand)  
 E-mail: dir\_ifp@icfre.org Phone: 0651-2526140, 2526150

No. Store-I-PI-AICRP: 22-46/2019-20

Date: 06.01.2021

**NOTICE INVITING TENDER**

Tenders are invited from reputed Firms/suppliers etc. For “Procurement of Total Organic Carbon Analyzer for IFP, Ranchi at Institute of Forest Productivity, Lalgutwa, NH -23 Ranchi Gumla Road, Ranchi - 835303 (Jharkhand), through the E-procurement portal at the URL <https://moefcc.euniwizarde.com>.

The tender documents and other document may be downloaded from the above Portal site <https://moefcc.euniwizarde.com> and NIT of the tender will also be available at <http://ifp.icfre.gov.in> as per the schedule given in CRITICAL DATE SHEET as under. No hard copy of the tender document will be provided from the institute.

**CRITICAL DATE SHEET**

Published Date	08 <sup>th</sup> January 2021 (11.30 AM)
Bid Submission Closing Date and Time	29 <sup>th</sup> January 2021 (05.00 PM)
Bid Opening Date and Time	1 <sup>st</sup> February 2021 (11.00 AM)

Only bidders registered on E-wizard Portal i.e. <https://moefcc.euniwizarde.com> can participate in online bidding process. Hence, the prospective bidders should ensure their registration on the E-wizard Portal. For further reference, bidders can check “Bidders Manual Kit” available in Downloads link at <https://moefcc.euniwizarde.com>

**Name of Tender** : Purchase of Total Organic Carbon Analyzer  
**Tender No.** : 46/2020-21 (store)  
**Ref. No.** : No. Store-PI-AICRP:22-46/2019-20  
**Tender Processing Fee:** As per the terms of ITI Limited.  
**Tender Fee** : Rs. 590.00 (including 18% GST)  
**EMD** : Rs. 50,000/-  
**Address of Office** : Institute of Forest Productivity, P O - Lalgutwa, NH-23 Ranchi Gumla Road, Ranchi - 835303, Jharkhand.

**Tender Processing Fee – As per the terms of ITI Limited.**

Tender Fee, EMD etc. in the form of DD in favour of Director, Institute of Forest Productivity, Ranchi payable at Ranchi must be delivered to the Director, Institute of Forest Productivity, P O - Lalgutwa, NH-23 Ranchi Gumla Road, Ranchi - 835303, Jharkhand **on or before bid opening date/time as mentioned in critical date sheet (1<sup>st</sup> February, 2021 (11.00 AM))** Duly filled and signed tender document complete in all respect may be uploaded on the E-wizard Portal latest by **29<sup>th</sup> January, 2021** as per the critical datasheet along with all the documents mentioned in the tender form. Tenders submitted in the **hard copy will not be accepted**. Only original hard copy of Tender Fee and EMD will be accepted.



## Instructions to Bidders

The bidders are required to submit the soft copies of their bids on the e-tender portal using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the e- procurement portal, prepare their bids in accordance with the requirements and submitting their bids online on the e- tender Portal.

More information useful for submitting online bids on the e-procurement portal may be obtained at <http://moefcc.euniwizarde.com>

### **Registration with M/s ITI Ltd. Portal (<https://moefcc.euniwizarde.com>)**

Registration with M/s ITI Ltd: - Intending bidders are requested to register themselves with M/s ITI Ltd (if not registered earlier) through <https://moefcc.euniwizarde.com> for obtaining user-id, by paying a registration fee (2000 + GST), online tender processing fee etc. Bidders are also required to obtain **Digital Signature** for participating in the e-tender.

E-Tender Processing Fee – As per the terms of ITI Limited

For participating in the e-Tendering process, the contractor shall have to get them registered on the site <https://moefcc.euniwizarde.com> by making required payment through only online payment mode so that they will get user ID and Password. This will enable them to access the website, <https://moefcc.euniwizarde.com> with the help of Digital Signature by which they can participate in e-Tender. For this intending bidder may contact following e-Wizard Helpdesk numbers.

**1. E-Wizard Helpdesk**

1stfloor, M-23,Road No.-25,

Near SBI Sri Krishna Nagar, Patna-800001.

Phone No.: 0612-2520545 or 9504661237, 9835871522, 9852764810, 9504486212

The intending bidder must have valid Class-III (**Signing+Encryption**) Digital Signature to submit the bid online. For this intending bidders may contact above mentioned helpdesk number.

### **Searching for Tender Documents:**

There are various search options built in the e-procurement portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Item/work id, Title, Date, etc.



Once the bidders have selected the tenders in which they are interested, bidder can pay non-refundable processing fee as per terms of ITI limited by net banking /Debit/ Credit Card they you may download the required documents / tender schedules, Bid documents etc. Once you pay both fee, tenders will be moved to the respective "Register" Tab. This would enable the e-procurement portal to intimate the bidders through e- mail in case there is any corrigendum issued to the tender document.

- Institute of Forest Productivity, Ranchi is a research organization under Indian Council of Forestry Research and Education, Government of India. The IFP campus is situated at Gumla Road NH-23, Lalgutwa, Ranchi. Online Tenders are invited from reputed, experienced contractors/service firms/persons, who have not been blacklisted by any government Department/Agency
- Earnest Money Deposit (EMD) and e-tender fees are to be submitted in the form of DD in favor of Director, IFP and scanned copy/soft copy of the DD receipt shall be uploaded along with the bid. Offers/Bids. Tender/Bid/Offer without e-Tender fees and the Earnest Money Deposits would not be considered and liable to be rejected.
- The contractor/firm shall have the nationality of an eligible country. A contractor/firm shall be deemed to have the nationality of a country. If it is a citizen or constituted, incorporated, or registered and operates, it will be in conformity with the provision of the laws of India. Nationality must be disclosed by the supplier.

The prices should be quoted in the following manner:

- I. The price quoted for the item of works would include the cost of materials required as per the specification specified in the said item of work as well as labour charges etc. including all excise duty and sales and other taxes already paid or payable for the said work.
- II. The Director, IFP reserves the right to reject any or all the tenders without assigning any reasons whatsoever.

Tenders/Bidders who has downloaded the tender form the <http://ifp.icfre.org> and <http://moefcc.euniwizarde.com> shall not tamper / modify the tender form including downloaded price bid template in any manner. In case if the same is found to be tampered/modified in any manner, tender will be completely rejected and EMD shall be forfeited and tenderer/bidder is liable to be banned from doing business with IFP in future. Signed and Scanned Copy of EMD must be uploaded at <http://moefcc.euniwizarde.com> and Original must be submitted and or before Closing date.



## CHECKLIST

Item No.	Qualifying Documents	Yes/no	Page No.
1.	Scan Copy of Tender Fee of Rs.590/- in shape of DD in favour of Director, Institute of Forest Productivity, Ranchi payable at Ranchi		
2.	Scan Copy of EMD in shape of DD in favour of Director, Institute of Forest Productivity, Ranchi payable at Ranchi		
3.	Signed and scanned copy of PAN card		
4.	Signed and scanned copy of Tender Acceptance letter as per tender document		
5.	Signed and Scanned copy of GST certificate		
6.	Signed and scanned copy of MSME/ NSIC Registration ( if exemption of tender fee and EMD is claimed)		
7.	Signed and Scanned Copy of Audited Balance Sheet of last three years		
8.	Signed and scanned copy of authorized dealership certificate		
9.	Signed and scanned copy of complete technical details/specifications of the quoted items with make and model of all systems, sub-systems and additional items mentioned in the technical bid BROUCHERS/ORIGINAL CATALOGUE with other literature and write-ups should be uploaded as proof		
10.	Signed and scanned copy affidavit in non – judicial stamp paper of Rs.10/- by the firm that it has NEVER BEEN BLACK- LISTED/DEBARRED/BANNED by any Govt. Department/Public Sector must be attached along with the bid, failing which the Bid shall be rejected.		
11.	Scanned and signed copy of Tender Document		

- Note: 1. It is compulsory to fill the above check list.  
 2. The document should be submitted/uploaded online in e portal in the above order of the check list and place the check list as cover page with pagination of documents.  
 3. In the absence of any of the above documents, the bid shall be rejected.

**SIGNATURE OF THE TENDERER**



## Conditions of Contract

### Submission of Tender

The tender shall be submitted/uploaded online in two bids viz., Technical and Price Bid

The offers submitted by Hardcopy/Fax/email shall not be considered. No correspondences will be entertained in this matter.

All the pages of the bid being submitted/uploaded must be signed and sequentially numbered by the bidder irrespective of nature of content of the documents before uploading.

### Cover 1 Technical Bid:

Following documents are to be furnished by the Tenderer/Bidder along with Technical Bid as per the tender document.

### Qualifying Documents:

- I. Tender Fee of Rs.590/- in shape of DD in favour of Director, Institute of Forest Productivity, Ranchi payable at Ranchi and scanned copy of the same should be uploaded in the portal. <http://moefcc.euniwizarde.com>
- II. EMD: Rs.50,000/-(Rupees: Fifty Thousand only) is to be deposited in form of DD in favour of the Director, Institute of Forest Productivity, payable at Ranchi and scanned copy of the same should be uploaded in the portal. <http://moefcc.euniwizarde.com>
- III. Signed and scanned copy of PAN number
- IV. Signed and scanned copy of GST certificate , if applicable
- V. Signed and scanned copy of MSME/ NSIC Registration ( if exemption of tender fee and EMD is claimed)
- VI. Signed and scanned copy of audited balance sheet of last three years.
- VII. Signed and scanned copy of authorized dealership certificate/OEM Certificate.
- VIII. Signed and scanned copy of complete technical details/specifications of the quoted items with make and model of all systems, sub-systems and additional items mentioned in the technical bid BROUCHERS/ORIGINAL CATALOGUE with other literature and write-ups should be uploaded as proof
- IX. Signed and scanned copy of affidavit in non – judicial stamp paper of Rs.10/- by the firm that it has never been black listed / debarred /banned by any Govt. Department/Public sector must be attached along with the bid, failing which the bid shall be rejected.
- X. Scanned and signed copy of tender document.
- XI. Scanned and signed copy of Tender Acceptance letter as per tender document.

Important: Earnest Money Deposit (EMD) and E- tender fees are to be submitted through DD in favour of Director, Institute of Forest Productivity payable at Ranchi in original must be Submitted on or before closing date and the scanned copy/soft copy of the same shall be uploaded along with the Tender/ Bid offers. Bids without Earnest Money Deposits would not be considered and the same would be rejected.



## **Cover 2: Price Bid:**

**Hard copies of financial bid should not be submitted physically in this institute.** The financial proposal must be submitted/uploaded in the schedule of price bid in the form BOQ.xls separate of each item. Full details of business terms and conditions e.g. GST 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. **The price bid undertaking and schedule of price bid in the form of BoQ\_1.xls must be filled as per format given in Chapter – V: Price Bid schedule.**

## **Proposal Evaluation**

### **Clarification of Bids**

To assist in the examination, evaluation, comparison of the bids and qualification of the Bidders, the Purchaser, at its discretion, may ask any Bidder for a clarification of its Bid. The Purchaser's request for clarification and the response shall be in writing by post/email/fax etc. Any clarification submitted by a bidder in respect to its Bid and that is not in response to a request by the Purchaser shall not be considered. No change, including any voluntary increase or decrease, in the prices or substance of the bid shall be sought, offered, or permitted except to confirm the correction or arithmetic errors noticed by the Purchaser in the evaluation of the bids.

If a bidder does not provide clarifications of its bid by the date and time set in the Purchaser's request for clarification, its bid may be rejected.

### **Unresponsive Bids**

The bids will be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. as prescribe in the Bid Document. The Bids are liable to be treated as non- responsive and will be rejected if bidder does not upload qualifying and technical documents as required in the bid Document.

### **Minor Informality/Irregularity/Non – Conformity**

If during the preliminary examination, the purchaser find any minor informality and/or irregularity and /or non- conformity in a bid, the purchaser may waive the same provided it does not constitute any material deviation and financial impact and, also, does not prejudice or affect the ranking order of the bidders. Whenever necessary, the purchaser will convey its observation on such 'minor' issues to the bidder asking the bidder to respond by a specified date. If the bidder does not reply by the specified date or gives evasive reply without clarifying the point at issue in clear terms, that bid may be ignored.



A two stage procedure will be adopted in evaluating the proposals.

**(i) Technical Evaluation:**

- (a) Evaluation of Qualifying Documents: Tenders shall be scrutinized and evaluated by the Technical Committee or a Committee constituted by competent authority with reference to parameters prescribed in the Bid Document. First of all, the qualifying documents of the bid will be checked and in absence of any qualifying documents the bid will be rejected.

**(ii) Financial Evaluation:**

- (a) Financial Bids of only technically qualified bidders shall be opened online for further scrutiny and evaluation.

**Terms and Conditions**

1. The Director, Institute of Forest Productivity (Indian Council of Forestry Research and Education), Govt. of India, Ranchi invites e-tender under Two Bid System for Purchase of Total Organic Carbon Analyzer from experienced and registered contractors/service firms/ persons who fulfill the minimum eligibility criteria prescribed in the e-tender document. There will be no manual submission of documents.
2. E-tender documents can be downloaded from IFP website and e – portal. Aspiring bidders/suppliers who have not enrolled/registered in e-procurement should enroll/register before participating through the website <http://moefcc.euniwizarde.com>
3. E-tender must be electronically submitted through online within prescribed data and time as mentioned in the e-procurement portal. Hard Copy of the E-tender documents will not be accepted.
4. Earnest Money Deposit (EMD) are to be submitted through DD, in favour of the Director, Institute of Forest Productivity payable at Ranchi and the scanned copy/soft copy of the same shall be uploaded along with the Technical Bid. Offers/Bids without E-Tender fees and the Earnest Money Deposit would not be considered and rejected.
5. The Bidders who are registered with the National Small Industries Corporation (NSIC) are exempted from EMD. They have to upload documentary proof along with the bid.
6. The number and quantity mentioned in the above E-tender Notice is the probable number and the same may be increased/decreased according to the requirement. The Director, IFP reserves the right to order or not to order any number and quantity of any instrument/equipment.
7. All the required document like technical documents, user certificate, supply order to other institutes, accreditation to quality management, PAN, TAN, GST, income tax, small scale industries exemption certificates, import license, authorization from principal supplier/manufacturer etc. along with E-Tender document should be uploaded and attached against the above E-Tender. If failed to upload and attach the E-Tender will be rejected.
8. Earnest Money Deposit (EMD):-
  - (a) The EMD to the unsuccessful e-tenderer (s) will be returned at the earliest after expiry of the



final bid validity or latest on or before the 30<sup>th</sup> day of the award of the purchase order whichever is earlier.

The EMD may be forfeited if an e-Tenderer withdraws his bid during the period of bid validity specified or in case of a successful Bidder, if the bidder fails to furnish security deposit

i. The EMD of the unsuccessful bidder will be released after finalization.

ii. For the successful bidder EMD will be released after they submit the security deposit as per our instructions, otherwise

9. Technical Bid: E-tenderers shall furnish complete technical specification and duly signed failing which E-Tender will not be accepted.
10. The following scanned documents (Self attested with rubber seal, in case of photocopies) should be uploaded along with the technical bid. In case of photocopies original documents for the following should be produced whenever required; failing which E – Tender submitted will be rejected at any moment.
  - a. Brochures supporting of the specifications quoted.
  - b. Authorization Certificate of the concerned company in favour of the e-tenders or the Principal dealer if the e-tenders is a sub – agent to sell/service/give annual maintenance service for the items quoted.
  - c. Document supporting both past and present status of supply of the instruments by both the Manufacturer and Supplier.
  - d. Valid proof of any orders received from various Govt./ Semi – Govt./P.S.U. etc. for supply and installation of the same make and model of scientific equipment /instruments.
11. The data of sequencing has to be delivered at this Institute.
12. Financial Bid: The e-tenders should use Price Bid format as provided in website and rates offered should be entered in the allotted space only and submitted after filling the relevant columns. Any financial bid not given in the prescribed format will be rejected.
  - (i) The rate should be valid for a minimum of 120 days from the date of opening of the E-Tender.
  - (ii) Price list of the company if any should be uploaded along with the bid.
13. **SECURITY DEPOSIT (SD):** The successful bidder/tenderer should deposit security money @ 5% of total ordered value in the form of Demand Draft within 15 days of issue of the supply order which **will be refunded on completion of warranty period.** Otherwise, the EMD deposited with E-Tender will be forfeited and the order placed will stand cancelled.
14. ICFRE, the parent body of the IFP, Ranchi is registered with the Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology, Government of India, New Delhi for the purpose of availing customs duty exemption in terms of Government Notification No. 51/96 – Customs dated 23-7-1996 and central excise duty exemption in terms of Government Notification No 10/97 – Central Excise dated: 1<sup>st</sup> March 1997. Therefore the parties may offer their rates without including Customs and Central excise duty.
15. The bids shall remain valid for 120 days after the date of bid opening. Any e-tenderers whose validity of the financial bid is for a lesser duration shall be rejected by the Institute as non-responsive.
16. The successful e – tenderers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until the service completed.
17. The competent authority does not bind himself to accept the lowest or any other tenderer, and



reserves its right to reject any or all tenders received without assigning any reasons whatsoever.

18. The tenders, in which any of the prescribed conditions are not fulfilled or are incomplete in any respect, shall be summarily rejected.
19. The Institute will not be responsible for any delay on the part of the e-tenderers in submission of the E-tender bids. Any bids received by the Institute after the deadline prescribed for submission of bids, will be rejected.
20. Each page of the general terms and conditions uploaded with the E-tender should be duly signed as a token of acceptance of all terms and conditions of the E-tender. No deviation in the terms and conditions of the E-tender notice will be accepted. The supporting documents should be duly stamped & signed by the e-tenders otherwise rejected. No retyping of the general terms and conditions supplied is accepted. Submit these terms and conditions duly signed along with the technical bid.
21. The Director, Institute of Forest Productivity, Ranchi reserves the right to cancel/reject full or any part of the e-tender, without assigning any reason. No correspondence will be entertained in this regard.
22. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
23. System must supply with all required accessories, and the points below:-
  - (a) The tender / proposal must include installation / commissioning and demonstration training in laboratory / field as per the standard requirement including after-sales & services.
  - (b) **Minimum 1(One) year onsite warranty is required.**
  - (c) The delivery must be made at Institute of Forest Productivity, Lalgotwa Ranchi.

*[Handwritten signature]*  
07/01/2024



**Detailed Specifications of Supply Total Organic Carbon Analyzer.**

Specification	Qty.
<b>1. Total Organic Carbon Analyzer</b> Specification: <ul style="list-style-type: none"> <li>• TOC Range : 0 to 30,000 ppm</li> <li>• Detection Limit: 4 ppb</li> <li>• Measurement Time: 3 Minutes</li> <li>• Reproducibility Precision: <math>\pm 1.5\%</math></li> <li>• Automatic dilution for out of range samples</li> </ul>	One
<b>2. Solid Sample Module with accessories</b> Specification: <ul style="list-style-type: none"> <li>• Measurements Items: TC, IC, TOC</li> <li>• Measurement range: 0.1 to 30 mg carbon</li> <li>• Measurement time: 5-6 minutes</li> </ul>	One
<b>3. Auto Sampler</b> Specification: <ul style="list-style-type: none"> <li>• Vial Type : Any sample container can be used</li> <li>• Number of Vials: 8 for OCT-1</li> <li>• Sample Sparging: No Sparging with OCT- (Sparging is done in the springe of TOC-L</li> </ul>	One

**1. General Features:**

- 1.1) Fully Automated Windows PC controlled Elemental Analyser for Solid and Liquid samples suitable for Chemicals, Pharmaceuticals, Polymers, inhomogeneous Soil samples
- 1.2) Simultaneous CHNS Analysis with single sample injection/ run.
- 1.4 Helium as well as Argon as a carrier gas in C mode.
- 1.5) Sample weight Range: 0.2 mg to 1000 mg
- 1.6) All parameters such as temperature, gas flow, pressure etc. must be controlled through software.
- 1.7) Temperature-controlled cooling fan with automatic real-time adjustment of cooling capacity to current cooling needs
- 1.8) The instrument must fulfill the international and national safety standards. For safety reasons, the entire instrument including furnaces must internally operate on low voltage (< 50 V).
- 1.9) Analysis time less than 10 min., automatic control, and automatic self-optimization of analysis time depending on element concentrations.
- 1.10) Should comply ASTM D1552, ASTM D5291, DIN EN ISO 16948

**2. Detection range:**

- 2.1) 0 to 100% for all elements (C) with the capability of measuring at least 14 mg absolute carbon in C mode and more than 40 mg in CN mode
- 2.2) Standard deviation :  $\leq 0.1\%$  of absolute.



### **3. Furnace System:**

- 3.1) Should have two zone furnace system, separate for combustion/reduction with independent temperature control for each furnace.
- 3.2) High temperature combustion furnace up to continuous operation 1200°C with a 10 years warranty
- 3.3) Easy slide-out mechanism of furnace for routine maintenance work.
- 3.4) It should be possible to set difference temperature for combustion and reduction.
- 3.5) Easy ash removal without change of combustion tube by means of an exchangeable ash crucible.

### **4. Integrated Autosampler**

- 4.1) Integrated 100 or more position automatic sampler with He-purged blank-free ball valve sample injection into the combustion furnace.
- 4.2) No stacking in order to allow reloading at any time during operation.
- 4.3) It should be possible to remove the auto sampler without having to shut of gas supplies or evacuate the flow path for loading more samples.

### **5. Separation System**

- 5.1) Combustion gases in the form CO<sub>2</sub>, H<sub>2</sub>O, N<sub>2</sub> and SO<sub>2</sub> are separated by means of one Temperature Programmed Desorption (TPD) column.
- 5.2) Baseline separation of C from N peak signal even with a concentration ratio of 12000:1 or better

### **6. Detector System**

- 6.1) Oxygen intrusion free thermistor technology-based Temperature stabilized TCD detector for measurement of C-N
- 6.2) Lower detection limit of < 50 ppm for N and S with thermal conductivity detector (TCD) depending on sample weight
- 6.2) 10-year warranty on TCD filament

### **7. Software**

- 7.1) Windows based and should have Operating software with automatic calculation and statistical evaluation of sample results, automatic leak check, sleep/wakeup function, gas stop, service, and maintenance support and weight transfer from external balance.
- 7.2) Temperature control of the heating ramp for gas desorption must be carried with a temperature sensor inside the gas stream (on the inside of the gas separation column) for direct signal response.
- 7.3) All instrument functions incl. gas flow and pressures must be digitally controlled for diagnosis and troubleshooting via the internet.
- 7.4) Data files must be in a format that is readable by Microsoft Excel and protected according to 21 CFR Part 11

### **8. Future Upgradation:**

- 8.1) Instrument should have the possibility to measure Chlorine by adding Chlorine detector to the above system
- 8.2) Instrument should have the possibility to measure trace Sulphur by IR detector by adding IR detector to the above system

See  
26/01



**9. Consumables**

9.1 To be supplied with consumables enough for 1,000 sample analysis in CN mode.

**10. Necessary documents: -**

10.1 Catalogue in original.

10.2 All technical specifications should be printed on the manufacturers catalogue/ data sheet.

10.3 The quoted model should be of latest technique and should not be more than 5 years old. Please declare the year of launch with proof on manufacturers letter head.

10.4 Please include the list of minimum 10 user s where the instruments is being used for similar applications.

*Jeel*  
*6/11*

*Jeel*  
*6/11*



**Price Schedule**

**(a) Price bid undertaking :** The format of Price bid undertaking as given under:

**From (Full Name and address of the Bidder)**

**To**

**The Director  
Institute of Forest Productivity, Ranchi**

**Dear Sir/Madam,**

I submit the price Bid for \_\_\_\_\_ and related activities as envisaged in the Bid Document.

I have thoroughly examined and understood all the terms and conditions as conditions as contained in the Bid document, and agree to abide by them.

I offer to work supply the quoted item at the rates as indicated in the price Bid inclusive of all applicable taxes.

Signature of authorized Representative

**(b) Schedule of Price Bid in the form of BoQ\_1.xls**

The prices should be quoted only in BoQ\_1.xls available in the e-portal.

The below mentioned Financial/Proposal/Commercial Bid format is provided as BoQ\_1.xls along with his bid document at <http://moefcc.euniwizarde.com> bidders are advised to download at this BoQ\_1.xls as it is the quote their offer/rates in the permitted column and upload the same in the commercial bid. Bidder shall not tamper/modify downloaded price bid template in any manner. In case if the same is found to be tampered/modified in any manner, tender will be completely rejected and EMD would be forfeited and bidder is liable to be banned from doing business with IFP

1. The rates, taxes, charges, etc. should be quoted as per BoQ.
2. All taxes , fees, leives, etc. and any revision in the statutory taxes/fees, etc will beth responsibility of the bidder.
3. In case of any discrepancy / difference in the amounts indicated in figures and words the amounts in words will prevail and will be considered.
4. The quoted rates shall remain firm throughout the tenure of the contract and no revision is permissible for any reason.

Authorized Signatory  
(Signature of the Authorized Person)



**Agreement/Contract Form Tender Acceptance Letter**

(To be given on company Letter Head)

**Date.....**

To

The Director,  
Institute of Forest Productivity, Ranchi.

**Sub: Acceptance of Terms and Conditions of Tender.**

Tender Reference No.

Name of the Tender/Work:

Dear Sir,

1. I/We have downloaded/obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) name \_\_\_\_\_  
\_\_\_\_\_As per your advertisement, given in the above mentioned website(S).
2. I/We hereby certify that I/we have read the entire terms and conditions of the tender documents from Page No. \_\_\_\_\_ To \_\_\_\_\_ (including all documents like annexure(s), schedule (s) etc.,) which form part of the contract agreement and I/we shall abide hereby by the terms /conditions/clauses contained therein.
3. The corrigendum(s) issued from time to time by your department/organization too have also been taken into consideration, while submitting this acceptance letter.
4. I/we hereby unconditionally accept the tender conditions of above mentioned tender document(s)/corrigendum(s) in its totality/entirely.
5. I/we do hereby declare that one firm has not been blacklisted/debarred/banned by any Govt. Department  
/ Public sector undertaking.
6. I/we certify that all information furnished by the our firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours faithfully  
(Signature of the Bidder, with Official Seal)