

CSIR-INDIAN INSTITUTE OF PETROLEUM

DEHRADUN (U.K.) INDIA



BID DOCUMENT

Under TWO BID System
For

"Advance Proximate Analyzer"

Ref No. PUR/1/18-19/471/AN/BFD/PO

Date: 23.07.2019

Last Date/Time of submission: upto 15:00 hrs (IST) on 13.08.2019

Date/Time of opening: at 15:00 hrs (IST) on 14.08.2019

To Be Submitted To

Stores & Purchase Officer
CSIR-INDIAN INSTITUTE OF PETROLEUM

P.O. IIP, MOHKAMPUR,
HARDWAR ROAD, DEHRADUN (U.K), India
Ph: 0135-2525762, 2525945

Telefax: +91-135-2660202-203

website: www.iip.res.in

INVITATION FOR THE BIDS

Ref No. PUR/1/18-19/471/AN/BFD/PO

Date: 23.07.2019

Bids in two parts shall be submitted on CPP Portal (<https://etenders.gov.in>) , Part A(Technical Bid) : containing scanned copy of Earnest Money Deposit (EMD), Documents in support of "Eligibility Criteria", checklist & "Technical Bid" and Part B (Financial Bid): containing Financial Bid valid for 120 days are invited from eligible bidders for supply of "**Advanced Proximate Analyzer**" for the INDIAN INSTITUTE OF PETROLEUM (CSIR-IIP), Dehradun as per detail specification provided at the Schedule of Requirement.

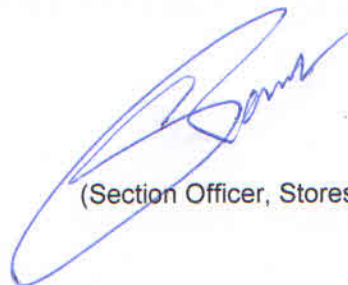
1.0 Eligibility Criteria/ Pre-qualification Requirement

- I. The Bidder should be a manufacturer or a dealer specifically authorised by the manufacturer to quote on their behalf for this tender as per manufacturer authorisation form and Indian agents of foreign principals, if any who must have designed, manufactured, tested and supplied the equipment(s) similar to the type specified in the "Technical Specification".
- II. Details of service support facilities that would be provided after the warranty period should be submitted in the Service Support Details Form.
- III. In the case of a Bidder not doing business in India, the Bidder is/or will be (if successful) represented by an Agent in India who shall be equipped and able to carry out the Supplier's maintenance, repairs and spare parts, stocking obligations prescribed by the conditions of the contract.
- IV. The Bidder will assume total responsibility for the fault-free operation of equipment, application software, if any.
- V. Bidders who meet the criteria given above are subject to be disqualified, if they have made untrue or false representation in the forms, statements and attachments submitted in proof of the qualification requirements or have a record of poor performance, not properly completing the contract, inordinate delays in completion or financial failure, etc.
- VII Bidder should submit valid documentary proof of GSTN and the details of income tax registration (PAN).
- VIII Bidder should have to submit earnest money deposit (EMD) of Rs 90,000.00 (Rupees Ninety Thousand only) in the form of Bank Guarantee or Demand Draft drawn in favour of 'The Director, I.I.P., Dehradun,' on a scheduled/ nationalized bank payable at Dehradun on or before the Tender submission date and time. Delay in submission of EMD may lead the bid as non-responsive. Only online quotations will be entertained from the registered bidders of CPP Portal (www.etenders.gov.in) and the original EMD should be physically furnished in our institute on or before tender submission date. Please note that those who have submitted EMD earlier (in form of Demand Draft or Bank Guarantee) need not to submit it again.

- 1.1 CSIR-IIP reserves the right to verify/seek confirmation of all original documentary evidence submitted by vendors in support of above mentioned clauses of eligibility criteria. In case any information furnished by the bidder is found to be false /incorrect at any stage, the bid shall be summarily rejected and no correspondence on the same shall be entertained.
- 1.2 The vendor must fulfil the above eligibility criteria/ pre-qualification conditions. Technical bid of vendors fulfilling the pre-qualification conditions will only be evaluated by the duly constituted technical evaluation committee. Bid of vendors not fulfilling the Eligibility- Criteria given above will be summarily rejected. Undertaking for subsequent submission of any of the above documents will not be entertained under any circumstances.
- 1.3 ***Part –A of the bid comprising documents in support of “Eligibility Criteria”, “Technical Bid”, “Earnest Money Deposit” and check list and Part – B “Financial Bid” should be submitted on Central Public Procurement Portal (<https://etenders.gov.in>) in accordance with the instructions/terms & conditions of the tender. .***
- 1.4. An Envelope containing EMD in original addressed to the Director, I.I.P., Dehradun should reach by hand/post at the following address **on or before the Tender submission date and time:**

**The Director,
(K/A: Stores & Purchase Officer),
CSIR-INDIAN INSTITUTE OF PETROLEUM
P.O. IIP, MOHKAMPUR, HARDWAR ROAD
DEHRADUN- 248005, U.K., India**

- 1.5. The “Part A (Technical Bid)” of bid will be opened in the Purchase Section of the CSIR-IIP on the next day (last date of submission of the Bid) at 15:00 hours (IST) in the presence of bidders who choose to be present.
- 1.6 CSIR-IIP will make its purchasing decision based on the ability of the bidder to meet its Labs/Institutes long term needs, technical expertise of the bidder, delivery capability, customer references and price. However, specific criterion used to evaluate bid response is listed in the chapter “Instruction to bidders”.
- 1.7. The Director, CSIR-Indian Institute of Petroleum, P.O. IIP, Mohkampur, Hardwar Road, Dehradun- 248005 (U.K) India, CSIR-IIP reserves the right to waive any minor irregularities; accept the whole, accept part of or reject any or all bids.



(Section Officer, Stores & Purchase)

Schedule of Requirements & Technical Specifications

1.1 Scope of the Work:

Supply, Installation, Testing, Commissioning, Support Services and on-Site Comprehensive Warranty Maintenance of the equipment as per detail technical specification given below.

Note: The bidder should undertake to provide support for the supplied systems/sub-systems for **warranty period of two year from the date of installation**. The bidders shall be required to confirm their willingness to accept the contract and indicate the terms and conditions in their technical bid along with the corresponding charges in the financial bid.

1.2 Potential suppliers should provide detailed activities time schedule, which represents the shortest practical time to complete all necessary tasks and meet the obligations of the requirements. All significant activities must be included, including those associated with the delivery, acceptance testing, installation and commissioning of the equipments/ products and quality certifications.

1.3 Technical Specifications:

The detailed technical specifications of the equipments/ systems are specified below:

Sl. No	Description	Quantity
1.	Advance Proximate Analyzer specifications: The detailed description of the instrument is given in attached document.	01 (One No.)

Please note that complete set of "Standard Bid Document" is available in our website www.iip.res.in at free of cost. The same may be downloaded and used while preparing your bid. A copy of the same may be attached along with the bid, duly signed and stamped. EMD should be in favour of Director, I.I.P., Dehradun in form of Demand Draft or Bank Guarantee. Please note that those who have submitted EMD earlier (in form of Demand Draft or Bank Guarantee) need not to submit it again. The scanned copy of EMD should be attached with your Technical Bid.


(Section Officer, Stores & Purchase)

TENDER SPECIFICATIONS

ADVANCE PROXIMATE ANALYZER

The instrument should be automatic PC based Advance Proximate Analyzer and capable of determining Ash, Moisture, Volatile matters, fixed carbon etc. as per ASTM D7582 in biomass samples and Other Standard for coal

Analysis method: The Analyzer should comply international standard ASTM method: D 7582 for Proximate analysis of biomass/coal/coke etc. Software supplied with the Analyzer should have methods programmed as per ASTM method for biomass/coke/coal Analysis and also other international standards. User should be able development, edit the existing methods and develop new methods.

Multi Sampler: Analyzer should have multi sampler system which should be able to analyze at least 20 (19 samples +1 reference) with no limit on minimum no. of samples.

Analyzer should have a single furnace for moisture, volatiles, ash, fixed carbon analysis

Analyzer should be able to analyze moisture, volatiles, ash, fixed carbon in a single run/analysis

Furnace temperature: Ambient to 1000°C

Heating rate: provide variable temperature ramp rate with programmable capabilities

Two thermocouples for measuring accurate temperature inside furnace and for monitoring the safety of the analyzer

Analyzer should display real time furnace temperature, sample status and time remaining

Temperature controlling precision and stability: +/- 2°C from ambient to 1000°C

Temperature Calibration: Facility to use external Thermocouple for temperature calibration

Should have dual carousel and automatic placing and removal of Crucible lids/covers inside the furnace during analysis according to the program.

Carousel of the analyzer should withstand high temperatures and corrosive gases without warping at 1000°C or higher

Weight of sample: up to 5 grams

Weighing Balance: The instrument must incorporate integrated balance should be in-built with automatic calibration facility and sensitivity of 0.1 mg resolution and weighing range: 100g or higher. The balance should be shielded and protected from any internal/external disturbances. LED display for showing balance weight data which makes the sample weighing more convenient

Readability balance: 0.1mg

Precision result: 0.02 % RSD (1 g inert sample)

Preprogrammed lid opening facility for rapid cooling to room temperature and internal fans/cooling system for cooling to room temperature.

Gas flow rate : 1 to 10 l/min adjustable

Gas requirement: high purity Oxygen, Nitrogen and compressed Air (moisture free) Cylinders. Drier unit for all gases to be provided with the instrument for moisture free gases.

Exhaust/Ducting facility : The exhaust gases should be vented through external blower or exhaust tube or standard ducting facility

Data Acquisition and Analysis: Latest windows operating system supported advanced user friendly data analysis/acquisition software equipped with quantitative data analysis feature(Including original CD with license numbers).

PC with latest processor and windows 10, 8GB RAM, 1TB HDD, DVD RW Multi with 22" LED Monitor, USB Key Board USB Mouse along with all original operating system and mother board CDs. PC with higher than above mentioned specification is preferable.

Latest LaserJet printer with Duplex printing facility

Memory & Data storage facility: Inbuilt programmable memory for storage analytical data and methods

Power: 230 +/-10% VAC 50/60 Hz

The warranty should be for one year from the date of successful installation and demonstration of the system

The spares parts for two years period after warranty should be supplied

Standard Accessories:

1. Air compressor (6-8 KSC) with moisture trap: 01 No. (99.99%)
2. Double stage low pressure regulator for oxygen: 02 No.
3. Double stage low pressure regulator for Nitrogen: 02 No
4. Double stage low pressure regulator for Air: 02 No.
5. Moisture filter set: one each for N₂, O₂, Air: 03 No.
6. Crucibles with lids: 20 Nos or more
7. Crucible covers: 20 Nos or more
8. Carousels for crucible and lids: 02 Nos or more
9. Fumes extractor, cables and accessories
10. Instruction/operational manual: 02 Nos.
11. Standards with different ash, volatile matter, fixed carbon and moisture: 02 Nos.
12. Consumables Kit, including standards for coal for 5000 analysis should be provided with the basic system

Installation Warranty, AMC and Training:

Necessary-pre installation advice should be sent immediately before shipping the instrument.

Onsite comprehensive user training and maintenance should be provided.

8 KV online UPS with back up 30 minutes should be supplied

ALL ELECTRICAL FITTINGS MUST BE FLAME PROOF FOR OPERATION IN HAZARDOUS ATMOSPHERE

DETAILED USER LIST AND PERFORMANCE CERTIFICATE FROM THE USERS.

SPARES KIT - INCLUDING ESSENTIAL PARTS AND CONSUMABLES FOR 2-YEARS SMOOTH OPERATION DURING WARRANTY.

TWO SETS OF OPERATION, SERVICE MANUAL AND ELECTRONIC CIRCUIT DIAGRAM OF INSTRUMENT HAVE TO BE PROVIDED FREE OF COST. ALL RELEVANT CALIBRATION CERTIFICATES MUST BE PROVIDED

TRAINING OF THE INSTRUMENT AT MANUFACTURE'S TRAINING CENTERS/EXISTING USER SITE TO BE PROVIDED FREE OF COST.

THE INITIAL RIGOROUS TRAINING IS NECESSARY FOR SMOOTH AND OPTIMAL RUNNING OF UNIT AND TO HAVE KNOW-HOW FOR BASIC TROUBLESHOOTINGS, MAINTAINANCE AND OPERATION.

To be provided compulsorily: Nitrogen, Oxygen and compressed air cylinders of capacity 47 litres with dual stage regulators and Filters systems for gases used for running of instrument. Filter system refers to moisture absorbent and purification filters.