

**UNIVERSITY INSTITUTE OF CHEMICAL ENGINEERING AND
TECHNOLOGY, PANJAB UNIVERSITY, CHANDIGARH-160014**



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TENDER DOCUMENT FOR THE PURCHASE OF

- i) DYNAMIC RHEOMETER
- ii) BET SURFACE AREA AND PORE SIZE DISTRIBUTION ANALYZER

TENDER NUMBER: SKK/AICTE/UICET/02

DATE OF ISSUE: 06/02/2013

LAST DATE FOR RECEIPT OF TENDER: 26/02/2013 by 3pm

DATE AND TIME OF OPENING THE TENDER: 27/02/2013 at 3pm

Tender Fee: Rs. 1000/-

Earnest Money Deposit (EMD): Rs 25,000/- (For Dynamic Rheometer)

: Rs 20,000/- (For BET Surface Area and Pore Size Distribution Analyzer)

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PROCEDURE FOR SUBMITTING THE BIDS

1. There will be Two bid system for this Tender: *Technical bid* and *Financial bid*
2.
 - i) The Technical Bid (in duplicate) of the Tender should be covered in one sealed cover super scribing the words "Technical Bid".
 - ii) Likewise, the Financial Bid (in duplicate) should also be covered in a separate sealed cover super scribing the words "Financial Bid".
 - iii) **Technical bid (s) and Financial bid (s) for each equipment are to be quoted and submitted separately.**

The two documents viz., Technical bid (in duplicate) and Financial bid (in duplicate) covers prepared as above should be enclosed in a single sealed cover (separate for each equipment) marked as under:

Tender for supply of Dynamic Rheometer Due date: Name and Address of the Tenderer	If tendering for Dynamic rheometer
Tender for supply of BET Surface Area and Pore Size Distribution Analyzer Due date: Name and Address of the Tenderer	If tendering for BET Surface Area and Pore Size Distribution Analyzer

Note: Price should not be indicated in the Technical bid otherwise the Tender will be rejected

3. Two separate demand drafts for earnest money deposit (EMD) and tender fee (Rs.1000/-) are to be submitted along with the Tender bids. **The EMD and tender fee are to be prepared in favour of The Registrar, Panjab University Chandigarh, payable at Chandigarh.**
4. **The demand draft for EMD is to be prepared separately for each equipment.**
5. The tender must be submitted along with the copies of:
 - i) Manufacturer's License or authority letter from the Manufacturer (ML/AL).
 - ii) Latest income tax clearance certificate (ITCC)
 - iii) Sales tax registration certificate (STRC)
6. **The demand drafts (EMD and Tender fee) along with ML/AL, ITCC and STRC must be placed in a separate sealed envelope indicating the amount (EMD and tender fee separately), tender notice number, due date and name of the tenderer. The same is to be submitted along with Tender bids.**
7. The tenderer should indicate specifically the basic price, taxes/excise duty, other duties (if any), and govt. levies chargeable qualitatively against each equipment. No additional information will be entertained after the due date.
8. The bids should indicate clearly that the rates are F.O.R. destination (University Institute of Chemical Engineering and Technology), Panjab University, Chandigarh.
9. Each page of the tender document should be signed by the authorized signatory.
10. **Sealed tenders prepared in accordance with above procedure should be submitted to:**

AMIT SOBTI Principal Investigator SERB (FTSYS) Project University Institute of Chemical Engineering and Technology Panjab University, Sector-14, Chandigarh-160014	If tendering for Dynamic Rheometer
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Dr. Sushil Kumar Kansal Principal Investigator AICTE (RPS) Project University Institute of Chemical Engineering and Technology Panjab University, Sector-14, Chandigarh-160014	If tendering for BET Surface Area and Pore Size Distribution Analyzer
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11. Tenders received after the due date and time will not be accepted. If the last date for submission of Tender falls on any declared holiday in the University, the next working day will be considered as the last date for the same.
12. The bids prepared by the Tenderer and all correspondence and documents relating to the bids, shall be type written in English language, otherwise the same will be rejected.
13. The contract for the supply of the items is non-transferable.
14. Each offer should be complete in all respects. No Telegraphic/electronic/conditional offers will be accepted.
15. The Tenders will be opened on the date and time indicated in the presence of tenderers, if any, present on the occasion. If the date of opening of the tender is declared to be a holiday, the Tenders will be opened on the next working day at the same time.

Tender Specifications for Dynamic Rheometer

Dynamic Rheometer should have the following specifications:

Bearing Type	: Air/Magnetic
Motor Design	:EC motor/ Drag cup motor
Minimum Torque (nNm)	:≤10
Maximum Torque (mNm)	:≥150
Torque Resolution (nNm)	:≤0.5
Minimum Frequency (Hz)	:≤ 1.00 x 10 ⁻⁶
Maximum Frequency (Hz)	:100
Minimum Angular Velocity (rad/s)	:≤1.00 x 10 ⁻⁸
Maximum Angular Velocity (rad/s)	:≥150
Angular Resolution (nrad)	:≤12
Normal Force Range (N)	:0.01-50
Normal Force Resolution (mN)	:1
Measuring Geometry	: Cone and Plate, ≥50mm dia with 1° cone angle[No.(s)-01]
Peltier Plate Temperature Range(°C)	:5 to 200
Software	: Should be able to perform flow, transient (creep and stress relaxation) and oscillation experiments. It should be able to analyse the data through model fitting etc.
Compressor	: Suitable air compressor must be quoted along with the equipment
PC along with UPS	: PC, Compatible with above software along with UPS should be provided along with equipment.

Standard reference material should also be provided for calibration of equipment.

Includes installation, commissioning and one year international warranty and all freight handling airport, insurance, CFR value (airport) etc, clearing from airport and transportation to University Institute of Chemical Engineering and Technology, Panjab University, Chandigarh, F.O.R. to University Institute of Chemical Engineering and Technology, Panjab University, Chandigarh. **Rates should be inclusive of all taxes and duties and F.O.R., University Institute of Chemical Engineering and Technology, Panjab University, Chandigarh.**

Tender Specifications for a BET Surface Area & Pore Size Distribution Analyzer

BET surface area and pore size distribution analyzer should have following specifications:

- Two analysis stations under nitrogen atmosphere; Upgradeable to 3/4 stations at site
- Minimum two degassing ports
- Vacuum and flow degassing inbuilt
- Surface area range: 0.01 to 2000 m²/g
- Pore diameter range: 0.5 to 400 nm
- Pore size distribution; High resolution adsorption and desorption isotherm
- Temperature range: ambient - 450°C with accuracy of $\pm 5^{\circ}\text{C}$
- Ability to measure saturated equilibrium vapor pressure of the adsorbate throughout the isotherm measurement
- Pressure measurement range: 0 to 1000 Torr
- Pressure transducers: Transducer resolution should be atleast 0.016 mm of Hg with accuracy of ± 0.1 .

and the following accessories compatible with the surface area and pore size distribution analyzer:

- Vacuum Pump
- Gas cylinders with regulators
- Voltage stabilizer for instrument
- Sample cells/bulbs- 02 each
- PC with latest configuration and UPS
- Storage Dewar (10/20 litre) with LN₂ transfer device
- Standard Reference Materials: four/five different surface area samples
- Instrument for control from PC and enhanced data and Instrument having CFR facility
- Window software package for data reduction
 - Full adsorption and desorption isotherm
 - Single point and multipoint BET surface area and Langmuir surface area
 - BJH adsorption and desorption and Meso / micropore information
 - Total pore volume

Includes installation, commissioning and one year international warranty and all freight handling airport, insurance, CFR value (airport) etc, Clearing from airport and transportation to University Institute of Chemical Engg.& Technology, Panjab University, Chandigarh, FOR to University Institute of Chemical Engg. & Technology, Panjab University, Chandigarh. **Rates should be inclusive of all taxes and duties and F.O.R, University Institute of Chemical Engg. & Technology, Panjab University, Chandigarh.**

TERMS AND CONDITIONS

1.	Opening of bids: Technical bids will be opened by the Committee on the date and time mentioned for opening of bids in room of the Chairman, UICET, PU, Chd and studied. The Tenderers will be invited for presentation and clarifications if needed. Financial bids of the Tenderers complying (who meet the technical specifications) with the prescribed Technical specifications will be opened by the Committee. Tenderers or their authorized agents may be present if they so desire during opening of the Tenders.
2.	Rejection of bids: The Tender/Purchase Committee reserves the right to reject any or all offers without assigning any reason.
3.	Earnest Money deposit (EMD): The Tender bid should accompany an EMD of Rs.25,000/- (If tendering for Dynamic Rheometer) and Rs.20,000/- (If tendering for BET Surface Area and Pore Size Distribution Analyzer). The EMD should be made by means of an A/c payee DD in favour of The Registrar, Panjab University, Chandigarh-160014, payable at Chandigarh. No interest is payable on EMD.
4.	Refund of EMD: The EMD will be returned to unsuccessful Tenderer only after the Tenders are finalized. In case of successful Tenderer, it will be retained till the successful and complete installation of the equipment.
5.	CIF value and comparison of Financial bids: CIF value upto University Institute of Chemical Engineering and Technology, Panjab University, Chandigarh (shipment by air upto Delhi and insured up to the installation site) should be quoted. Bids quoted in foreign currency will be converted into Indian Currency at the exchange rate applicable on the day of opening of the financial bids for comparison purposes.
6.	Warranty Period: The warranty period should be minimum 1 year (with spares) from the date of installation with satisfactory performance as per specifications.
7.	PBG: Tenderer selected for supply of equipment, will have to provide Performance Bank Guarantee (PBG) on any scheduled bank situated in India, equivalent to 10 percent of the cost of the equipment which should be valid until the expiry of the Warranty period. The PBG will be provided by the Company along with the letter of acceptance of the order by the Principals. Letter of Credit (LC) will be opened in favour of the Principals only after obtaining the PBG. LC will be opened for the 100% value of the equipment, 90% of the amount will be released after the shipment and remaining 10% after the installation and satisfactory performance of the equipment.
8.	In case, the item(s) is/are to be imported for supply, irrevocable letter of credit will be opened with the bank. In case the shipment documents viz.-invoice, packing list, airway bills (AWB), delivery-note, etc are supplied late by the firm, the demurrage levied, if any, by the airport authorities will be borne by the firm. However, in case the equipment is supplied indigenously no advance payment against proforma invoice will be made. The articles if supplied on Bill, the payment will be made by crossed A/c payee cheque on receipt of the articles in good condition and after being installed and commissioned to the satisfaction of the Principal Investigator of the concerned project. The decision to purchase each item is taken independent of other items quoted by the firm. There is no binding on the institute to purchase all the items quoted by any particular firm.
9.	Delivery period : Delivery should be made within 120 days of opening of the LC
10.	Delayed delivery: If the delivery is not made within the due date for any reason, the Committee will have the right to impose penalty as under: i) First extension for one month or part thereof @ 2%. ii) Second extension for an additional month or part thereof @ 3%

11.	Non delivery beyond extended period: If the Tenderer fails to execute the order within the second extension mentioned above or mutually agreed time frame, the order will be cancelled and EMD forfeited by the Dept. He will also be liable for all damages imposed by UICET, Panjab University, Chandigarh for non supply of equipment including the liability to pay the difference between the price accepted by him and those ultimately paid by the University Institute of Chemical Engineering and Technology, Panjab University, Chandigarh for the equipment.
12.	Increased statutory levies and duties above the rate quoted in the offer will not be an excuse for the Tenderer to delay the supply beyond the date specified in the Tender.
13.	Validity of rates: Rates quoted should be valid for at least 4 months from the closing date of the tenders.
14.	Consistent pricing: The rates quoted for the Equipments by the supplier shall in no case exceed the lowest price at which the supplier of this Equipments of identical description made to any other person/organization/Institution during the above said period and should attach an undertaking in this regard.
15.	Installation requirements: The Supplier will clearly mention installation requirements on our part in the Technical bid.
16.	Installation time: The company must install the equipment within a period of two months of the date of delivery of the equipment at UICET, Panjab University, Chandigarh.
17.	Free Installation: The equipment and software should be installed and tested to the specifications free of cost.
18.	Supporting Equipment: The Tenderer will provide all requisite supporting equipments, if needed. We need the complete installed system.
19.	Licensed Software and its upgradation: The certified/licensed software and programs should be the part of the supplies. There should be free upgradation of software for future.
20.	Factory Acceptance Data: Proposed acceptance criteria for the equipment should be provided by the supplier in order to compare the performance against the quoted specifications. Manufacturer's test certificate along with test conditions and results is to be supplied along with the equipment.
21.	Tenderers are advised to study all technical aspects and terms & Conditions, of the Tender documents. Submission of Tender shall be deemed to have been done after careful study and examination of the Tender Document with understanding of its implications.
22.	Only Manufacturers or Authorized dealers to bid: The offering firm should clearly mention whether they are the manufacturer or authorized agent/dealer of the manufacturer. In case of agent for overseas manufacturer, a letter of authorization from the manufacturer should be submitted along with the offer. The Tenderer can also enclose the rates on the letterhead of the manufacturer if he has been authorized to do so by the manufacturer.
23.	Descriptive literature: A set of specifications, description and illustrated literature of the equipment and related peripherals should accompany the Technical bid.
24.	User and Service Manuals: A set of User's manuals and Service manuals of the main instrument, attachments and related equipment should be supplied with the equipment.
25.	Equipment must be new: The Tenderer must ensure that the equipment being offered is a new one and not refurbished or repaired one.
26.	Defective Equipment: If any of the equipment supplied by the Tenderer is found to be substandard, refurbished, unmerchantable or not in accordance with the description /specification or otherwise faulty, the committee will have the right to

	reject the equipment or its part. The prices of such equipment shall be refunded by the Tenderer with 18% interest if such payments for such equipment has already been made to him.
27.	All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 45 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges.
28.	Damage during transit: In case of any mishappening/damage to equipment and supplies during the carriage of supplies from the origin of equipment to the installation site, the supplier has to replace it with new equipment/supplies immediately at his own risk. Supplier will settle his claim with the insurance company as per his convenience. UICET, Panjab University, Chandigarh will not be liable to any type of losses in any form.
29.	Legal jurisdiction: Any dispute in this regard of any term of the offer and on the supply of equipment is subject to Chandigarh jurisdiction only.
30.	Availability of Spares: The Tenderer must assure the availability of spares for servicing of equipment for at least 10 years. Supplier should give an undertaking that spares parts will be supplied within the specified periods as and when ordered.
31.	Infrastructure: University Institute of Chemical Engineering and Technology, Panjab University, Chandigarh will provide required infrastructure.
32.	Clearance: The Principals will do all types of clearance work to deliver the equipment at the site of installation. Department will provide all types of documentary support including Customs Duty Clearance. Principals will themselves have to procure any requisite permission from the Govt. of country of origin of equipment.
33.	Any change in the terms that are beneficial to the UICET and PU can be carried out before the opening of the commercial bids of each equipment.
34.	The tenderer should clearly indicate the availability of service and maintenance facilities at Chandigarh for the equipments/items quoted.
35.	Similar Models installed: The Tenderer must mention in the Technical bid the similar model of equipment installed in India during the last two years and the addresses of contact persons at these places.
36.	Printed conditions of the firm sent along with the quotations, if any, shall not be binding on us.