# OFFICE OF THE REGISTRAR :: DIBRUGARH UNIVERSITY DIBRUGARH :: ASSAM PIN: 786 004



# **BID DOCUMENT**

#### **FOR**

NAME OF THE WORK: Supply, installation and commissioning of Contact Angle

Measuring System for the Measurement of Static & Dynamic Contact Angle, Interfacial Tension at Department

of Petroleum Technology, Dibrugarh University.

TENDER No: DU/NIT-2021/File-I/71 dated 15.09.2021

# **CUT-OUT SLIP**

NAME OF THE WORK: Supply, installation and commissioning of Contact Angle

Measuring System for the Measurement of Static & Dynamic Contact Angle, Interfacial Tension at Department of Petroleum

Technology, Dibrugarh University.

TENDER NO.: **DU/NIT-2021/File-I/71**, **Date: 15.09.2021** 

SUBMISSION DUE DATE & TIME : 30.09.2021 up-to 11.00 A.M.

FROM: TO:

NAME: THE REGISTRAR

ADDRESS DIBRUGARH UNIVERSITY DIBRUGARH, ASSAM

(To be pasted on the outer envelope containing "Technical" & "Commercial" bids



### OFFICE OF THE REGISTRAR :: DIBRUGARH UNIVERSITY :: DIBRUGARH

No. DU/ NIT-2021/File-I/71 Date: 15.09.2021

#### **Tender Notice**

Sealed Tenders are invited from reputed manufactures/authorized dealers/suppliers for Supply, installation and commissioning of Contact Angle Measuring System for the Measurement of Static & Dynamic Contact Angle, Interfacial Tension at Department of Petroleum Technology, Dibrugarh University. Detailed specification of the items, terms & conditions etc are given below. Last date of submission of Tender as per annexure with all relevant papers is 30.09.2021 up-to 11:00 A.M. to be submitted at the Tender Box placed at Registrar's Office, Dibrugarh University, Dibrugarh, Assam.

Availability of Bid papers	From 15.09.2021
Last date for receipt of Bid	30.09.2021 upto 11:00 A.M.
Time & Date of opening of Bid	30.09.2021 at 02:30 P.M.
Place of opening of Bid	Office of the Registrar, DU
Cost of Tender Document	1000/- Non refundable
EMD	2.5 % of the Tender value

The tender should be submitted in two separate sealed envelopes *i.e.* **Part - I** TECHNICAL BID and **Part - II** FINANCIAL BID. The technical bid shall be opened on above mentioned date and time and the financial bid of only those bidders who qualify in technical bid shall be opened on the same date or at a later date which shall be intimated to the tenderer whose technical bid are found to be valid. Dibrugarh University reserves all the rights to reject any or all the tenders without assigning any reason thereof.

Sd/-**Registrar** Dibrugarh University

#### Copy to:

- 1. The Deputy Registrar (F&A) i/c, D.U. for information.
- 2. Dibrugarh University Website
- 3. Notice Board
- 4. Office File

Sd/-Registrar Dibrugarh University

#### PART A - TERMS AND CONDITIONS

#### **GENERAL INFORMATION**

The tender bids duly complete in all respects, along with the necessary documents should be submitted to the Registrar, Dibrugarh University, Assam. The Technical Bids so received, shall be opened on 30.09.2021 at 02:30 P.M. in the Office of the Registrar, Dibrugarh University in the presence of the representatives of the bidders. The Financial Bids of the Tenderers shall be opened on the same date or at a later date to be intimated to the Tenderers whose Technical Bids are found to be valid. Right to reject any or all Tenders, without assigning any reason thereof is reserved by Dibrugarh University.

#### Terms and Conditions of Supply:

- 1. All the manufacturers/ authorized dealers should also give a brief profile about their company and the facilities available with them of the quoted items. Their turnover and important firms/ Government Institutes/ P.S.U.s *etc.* to which they are supplying quoted items, should also be mentioned.
- 2. The last date and time for the submission of the bids is 30.09.2021 up-to 11:00 A.M.
- 3. Suppliers shall submit the following documents along with their quotations:
  - i) VAT/TIN/GST Registration No.
  - ii) Technical specifications offered by the Supplier.
  - iii) Technical compliance table
  - iv) Technical literature regarding the offered products including pictures/sketch/diagrams etc.
- 4. The rates should be mentioned in the **FINANCIAL BID** attached with the Tender Document as **ANNEXURE-II**. Each page of the tender shall be signed in full and stamped with the seal by the supplier. The supplier must clearly state in what capacity he/she is signing the Tender.
- 5. The supplier shall submit the tender in 02 (two) envelopes. The first envelope (Technical Bid) shall contain all the following documents and be sealed.
  - Filled in Format Technical Specifications/Literature
  - Valid copy of Trade License,
  - PAN Card,
  - Registration certificate of GST,
  - Dealership/Manufacturing/Small Scale Industry (SSI) Certificate (if any)
  - The cost of tender of Rs. 1000/- (Rupees One thousand) only which is non-refundable, along with the Earnest Money of 2.5 % of the Tender value in the form of Demand Draft/Bankers Cheque in favour of the Registrar, Dibrugarh University, Assam payable at Dibrugarh University.
- 6. Supplier should read carefully all the instructions and terms and conditions, etc before registering rates in prescribed schedule of the tender. Taxes and duties etc. should be shown separately.
- 7. The Technical Documents shall be opened, at *02:30 P.M. on 30.09.2021* or on the next working day if the offices of the University remain closed due to any reason
- 8. Technical specifications of the instruments/equipments are given in **Annexure** to these papers (Part B).
- 9. The delivery and installation should be completed within 1 month or as specified from placing of the order. No extension shall be granted to the contractors/suppliers for the period of delivery, under any circumstances.

- 10. If the supplier fails to deliver the article as per the delivery schedule, the University shall be free to procure the balance/undelivered supply, at the risk and cost of the supplier, from other such suppliers.
- 11. The goods, articles, materials supplied by the supplier shall be accepted after inspection by an officer authorized by the competent authority. No articles/materials which do not conform to the specifications laid down in the terms and conditions or damaged in transit shall be accepted.
- 12. The bills of the suppliers shall be paid by the University after all the materials/articles/equipments have been received and installed, inspected as above.
- 13. Vendor must submit Compliance statement in tabular form comparing each specification of the quoted item with that given in the Tender Document **Part B**.
- 14. The warranty period shall be for minimum one year or may be more as offered.
- 15. The tendering firm must provide proof of documents for executing similar works earlier.
- 16. In the event of any breach of the terms and conditions of the supply, the University may terminate the contract placed with the supplier and forfeit the security deposit of the supplier.
- 17. Whether OEM or Authorized Distributor/ Dealer a letter or a valid certificate of authorization of manufacturer shall be enclosed.
- 18. Copy of product literature and catalogue, testing report, BEE rating, ISO etc.
- 19. The quantity as mentioned at Part-B (Specifications) may be increased or decreased at the time of placing Order as per requirement.
- 20. Tenderers are advised to study all technical and commercial aspects, instructions, forms, terms and specifications carefully in the tender document. Failure to furnish all information required in the Tender Document or submission of a bid not substantially responsive to the Tender document in every respect will be at the tenderer's risk and may result in the rejection of the bid.
- 21. This tender document is not transferable.

#### Note:

- (a) Tenderers are advised to read carefully the Terms and Conditions of supply before recording the rates in this Schedule.
- (b) No erasures or overwriting shall be allowed, unless they are authenticated under the full signature and the seal of the tenderer.
- (c) The University reserves the right to:
- (i) Accept/reject any/all tenders without assigning any reason thereof.
- (ii) Revise the quantities at the time of placing the order without change in the rate quoted by the bidder.

- (iii) Add/modify/relax or waive any of the conditions stipulated in the tender document whenever deemed necessary
- (iv) Award the contract to one or more tenderers for the items covered by the tender.

ITEM No	DESCRIPTION OF GOODS WITH DETAILS OF SPECIFICATIONS	Unit Price	Taxes	Qty.	Total Amount
1					
2					
3					

Signature of the Tenderer Seal of the Firm

# **Specifications**

# Supply, installation and commissioning of Contact Angle Measuring System for the Measurement of Static & Dynamic Contact Angle, Interfacial Tension at Department of Petroleum Technology, Dibrugarh University

Parameter	Specification	
Measuring methods	Sessile Drop Method & Pendent Drop Method	
Analysis	Measurement of Static & Dynamic contact angle	
Measuring range	Contact angle: 0-180°	
Accuracy & Resolution	Accuracy of Contact angle: ±0.05°& Resolution: 1°	
Contact Angle Analysis	Half Angle, Circle, Ellipse & Tangent Fitting methods	
Method:		
Special Feature : Measurement	Auto Detection & Fine adjustment provision of Base line &	
of Contact Angle	Edge	
Liquid Dispenser	Software Controlled Auto dispenser	
Dispensing Syringe & Needle	250 Micro Litre Syringe & Compatible Needle.	
Measurement of Interfacial	Pendent Drop Method	
Tension		
Camera type	High speed C-mount CCD	
Substrate Stage	150 X 100 mm	
Dimension (LXB)		
Substrate Stage Z Axis	Up to 40 mm	
Movement		01 No.
Camera speed & Resolution	Max Speed 2000 fps & Resolution 648 x 488 pixels	01 140.
Tilting Angle Analysis	Programmable Tilting for Roll-off Angle detection &	
	Hysteresis calculation for Highly Hydrophobic sample.	
	Range :0° to 90°	
Optics	Minimum 5x zoom lens	
Measuring temperature	Ambient	
•	Power requirement Indian standard	
-	PC connectivity USB 3.0 & USB 3.1	
PC Software	User friendly Widows 10 64 bit Compatible	
Warranty	1 year onsite warranty	
Computer	Processor: i5 Processor/240 GB SSD /8GB RAM.	
	Windows10 OS	
System Upgradability in	The system should be upgradeable to Substrate Stage	
Future	Heating.	
	System should be upgradable to Surface Energy	
	Measurement Unit	
	System upgradable for measurement of Advancing &	
	Receeding contact Angle.	

Signature:	Date
Name :	
Address:	
Mobile No.	