



# NATIONAL INSTITUTE OF TECHNOLOGY, DURGAPUR

MAHATMA GANDHI AVENUE  
DURGAPUR –713 209, WEST BENGAL, INDIA  
FAX: 0343-2574078; Website: www.nitdgp.ac.in

**BID REFERENCE:** NITD/CHEMISTRY/DS/WBDST/2018/01

**Date:** 05.06.2018

To

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Dear Sir,

## **SUB: Invitation for quotations for supply and installation of Contact angle measurement apparatus**

1. You are invited to submit your most competitive quotation for all the listed items of as per **Annexure-II**. Bidder should furnish a single quotation comprising the quoted price for all the individual item. Lowest bidder (L1) will be evaluated from the cumulative unit price comprising all the items other than optional items (including taxes). If any bidder fails to quote any item, that tender document will be treated as non-responsive and will not be evaluated.
2. **Bid Price (Annexure-I)**
  - a) The contract shall be for the full quantity as described above. Corrections, if any, shall be made by crossing out, initialing, dating and re-writing.
  - b) All duties, taxes and other levies payable by the contractor under the contract shall be included in the total price **F.O.R. NIT Durgapur**.
  - c) The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
  - d) The bid price must be quoted in **Indian Rupees ONLY**.
  - e) **GST at 5% is applicable, as per Notification no. 47/2017-Integrated Tax (RATE) of Ministry of Finance (Dept. of Revenue), GOI, dated 14<sup>th</sup> Nov., 2017.**
3. Manufacturer/authorized dealers of reputed brands of high technical quality with adequate after-sales support facilities are eligible to apply. The bidder must have supplied similar good to reputed organization to their full satisfaction and furnish a list of the same.
4. **The bid submitted by the bidder must comprise the following:**
  - (a) Detailed technical specifications, conforming to the given specifications (vide Annexure – II), and literature /drawings /manuals of the goods/services are to supply.
  - (b) Authorized dealership certificate from the original manufacturer. Bidder having proper sub-authorization against current tender may also submit quotation.
  - (c) Credentials and list of organizations where the bidder supplied similar items
  - (d) Warranty period (1 year comprehensive on-site)
  - (e) Valid sales-tax / VAT clearance certificate including GST registration number and PAN.
  - (f) Price bid as per Annexure-I
5. **Validity of Quotation**

Quotation shall remain valid for a period not less than 60 days after the deadline date specified for submission.
6. **Evaluation of Quotations**

The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e.

  - (a) which are properly signed and
  - (b) Conform to the terms and conditions (as mentioned in sl. No. 1-5), and specifications.
  - (c) **Unit price of any item should include the cost of all the compulsory accessories.** Price of any optional accessory need to be quoted separately.

## 7. Award of contract

The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive, technologically acceptable and who has offered the lowest evaluated quotation price.

- 7.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.
- 7.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.
8. Payment shall be made within 30 days after satisfactory installation, commissioning and acceptance of the good.
9. Comprehensive onsite warranty shall be applicable to the supplied goods for a period of **12 months** from the date of installation.
10. The Institute is **exempted from payment of custom and excise duty** on items mentioned below:
  - a) Scientific and technical instruments, apparatus, equipment (including computers)
  - b) Accessories, spare parts and consumables thereof
  - c) Computer software, CD-ROM, recorded magnetic tapes, microfilms, and microchips.
11. The successful bidder must submit before the release of payment a valid bank guarantee or bank draft on any nationalized bank of 6% of the order value towards **Performance Security** during the warranty period.
12. **Liquidated Damage** will be applicable at the rate of **0.5%** per week. The purchaser has the right to cancel the purchase order when LD accumulates to 10 %.
13. A bank draft or bank guarantee worth **2%** of the quoted value payable to “**NIT Durgapur**” as Bid security (EMD). The EMD shall remain valid for a period of 45 days beyond the final bid validity period.
14. Settlement of any dispute will be made under the jurisdiction of Durgapur Court.
15. **You are requested to provide your offer latest by 15.00 hours on 21.06.2018.**
16. The purchaser will open the bids at **15.30 hours on 21.06.2018** in the HOD office of Chemistry Department, NIT Durgapur.
17. The bid document must be signed and sealed and enclosed with the bid as a token of acceptance of all terms and conditions in the bid document by the bidder.
18. The items must be delivered within **45 days** from the date of placement of purchase order at the respective department.
19. All other terms and conditions of GFR 2017 of the Government of India will be applicable.
20. **Delivery/Installation / commissioning / demonstration requirement: Delivery, Installation, commissioning, complete demonstration and successful running at Dept. of Chemistry, NIT, Durgapur.**

We look forward to receiving your quotations and thank you for your interest in this.

**Head, Chemistry Department**

**The bid must be addressed to:**

**Dr. Dipanar Sukul**  
**Head, Department of Chemistry**  
**NIT, Durgapur -713209, W.B.**  
**Telephones: + 91-9434788066**  
**E.MAIL: dip\_kar@yahoo.com**

**PRICE BID**

1	2	3	4		5	6	7	8
Sl. No	Name of the good	Quantity & Unit	Price for each unit		Unit Price	GST payable @5% only on col. 4(a)]	Total Unit Price	Total Unit Price (in words)
			Ex-factory/ ex-warehouse/ ex-showroom/ off the shelf	Incidental Services				
			(a)	(b)	(a)+(b)		(5)+(6)	

Price for optional items should be quoted separately.

**Detailed specification for Contact angle measurement apparatus**

Contact Angle Measuring Range	0°-180°
Contact Angle Accuracy	±0.05°
PC Connectivity	✓
PC Connectivity Type	USB 2.0
Horizontal Camera Assembly	✓
High Performance CCD Monochrome Sensor	✓
Aberration Corrected High Magnification Lens	✓
Integrated Fine Focus	✓
Infra-red Cut Filter	✓
Camera Type	Normal Speed C-Mount CCD
Camera Speed	75 fps
Image Resolution [Maximum]	744 x 480 Pixels
Image Distortion	< 0.1 %
Magnification [Minimum]	5X
LED based Lighting Mechanism	✓
Hysteresis Free Illumination	✓
Precise Controlling of Light Intensity	✓
PC Controlling of Light Intensity	✗
Substrate Stage Dimension [L X W (in mm)]	100 X 100
Substrate Stage Z-axis Movement	up to 30 mm
Precise Level Adjustment	By Four Adjustable Feet Screw
PC Software	Windows® 10 compatible
Contact Angle Measurement Method	Sessile Drop
Measurement & Display	Left, Right & Average Contact Angles
Measuring Surface Type	Flat Surface [Even, Uneven, Rough, Semi-transparent & Reflecting]
Baseline Operation	Auto-detection with Fine Adjustment Provision
Baseline-Liquid Droplet Contact Points Detection	Auto-detection
Edge Detection	Both Auto & Manual with High Precision
Contact Angle Analysis Methods	Half-angle Fitting, Circle Fitting, Ellipse Fitting & Tangent Method
Images saving & loading Option with Experimental Data	✓

Image Comparison Feature	✓
Original & Analysed Images Export Option	✓
Offline Processing & Analysing Option	✓
Experimental Data Export Option	to .txt File & .csv File
Precision dispensing module (micrometer Controlling) with suitable syringe and replaceable needle)	PC-Controlled Dispensing Speed Range of 0.038-16 µl/sec
Multi functional spirit level	
Branded Laptop of suitable configuration with CD-RW facility.	

**OPTIONAL:**

1. Auto-dispensing Module
2. Zoom lens (10X zoom)
3. Stage movement module (XZ or XYZ movement of substrate stage)