



Indian Institute of Technology Madras
I.I.T.P.O., MADRAS-600 036
DEPARTMENT OF CIVIL ENGINEERING

Form for Inviting Quotations

Ref. No. CIE/ATUL/2017/GONIMETER/SPL

Date: 20.3.2017

SPEED POST

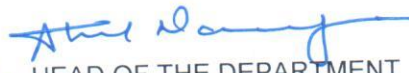
To
List enclosed

Dear Sirs,

DUE DATE: 3.4.2017

1. Quotations are invited in duplicate (two bidding covers) for the various items shown below / overleaf / **Enclosed list.**
2. **The Quotations duly sealed and superscribed on the envelope with the reference No. and due date, should be addressed to the Head of the Department and contain in 2 bid system i.e. Technical bid and Commercial bid in two separate envelopes should be enclosed in a single envelope only so as to reach on or before the due date stipulated above.**
3. The Quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS&D Rate contract No. and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for, should be submitted free of charges, and collected back at the supplier's expenses.
6. Local Firms : Quotations should be for free delivery to this Institute. If Quotations for Ex-Godown delivery charges should be indicated separately.
7. Firms Outside Madras : Quotations should be for F.O.R. Madras. If F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If Ex-Godown, packing, forwarding and freight charges must be indicated.
8. The rate of sales / General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales / General Taxes will be admitted at any stage and on any ground whatsoever. The taxes leviable should take into consideration that we are entitled to have concessional Sales Tax applicable to non Government Educational Institutions run with no profit motive for which a concession. Sales Tax Certificate will be issued at the time of final settlement of the bill.
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. Payment : Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later.

Yours faithfully


For, HEAD OF THE DEPARTMENT

Note: (i) Quotation should be sent by SPEED POST only or to be delivered directly to the concerned.
(ii) Firms are requested to submit the specifications of their product along with supporting technical Documentation / brochure instead of reproducing the specifications sent by us.

Technical Specifications for Contact Angle Goniometer

General Specification:	
Design	- A research-grade modular contact angle goniometer that can be used for measuring static contact angle of a drop by Sessile Drop Method
Measurement and Control	- Fully automated contact angle measurement with a digital camera - Movable sample stand
Size, capacity and resolution	
Allowable sample dimensions	100 × 100 × 30 mm or higher
Upper limit of measurable surface tension	2000 mN/m or higher
Lower limit of measurable surface tension	0.1 mN/m or lower
Surface tension resolution	0.1 mN/m or higher
Contact angle measuring range	0 to 180°
Contact angle resolution	0.1° or lower
Camera resolution	640 × 480 pixels or higher
Camera frame rate	30 fps or higher
Dosing system	Manual and software-controlled high precision dosing system
Control and data acquisition	
Basic control	- Software for control of device from a PC - Ability to control temperature and dosing - Automatic angle measurements and surface tension calculation
Data acquisition	- Capabilities for high speed image processing
Additional requirements	
Power supply	220-240 V, 50-60Hz AC
Technical support	
Prompt technical support not only during the warranty period but beyond that as well upon payment of annual maintenance contract	Required

In addition, the instrument should be compatible with the following accessories:

1. Temperature control chamber with a temperature range of 0 to 150°C that can accommodate 20 mm thick samples
2. Accessory to measure advancing and receding contact angle of a drop by Tilting Plate Method.
3. Accessory to measure surface tension and interfacial tension by Pendant Drop Method.

The price for the above accessories must be quoted separately.

Please include the following in the quotation:

- A compliance table listing whether the equipment quoted meets each item mentioned in the technical specification
- List of other optional accessories available for the equipment
- Cost of essential utilities such as personal computer, compressor, filter, circulator, etc.
- Delivery and installation charges

In addition, please consider the following aspects while supplying the quotation

- We are an academic institution. If you have any special discount offers for such establishments, please state them explicitly in the quotation
- We would like to have your commitment in terms of maintenance. Please offer free annual maintenance contract (after warranty period) so that the instrument will be maintained for an additional 2 years at least.
- Please specify policy for the purchase of spares and additional attachments within 1 year of procurement
- Demonstration of having provided such satisfactory technical support to customers in India will be an added advantage.
- The vendor should supply a list of academic institutions/research laboratories wherein they have supplied similar equipment.

