

INDIAN INSTITUTE OF TECHNOLOGY KANPUR
Department of Chemical Engineering

Enquiry No.: IITK/CHE/NT/2014-2015/04

Opening Date: 14/11/2014

Closing Date: 08/12/2014

Sub: Purchase of a tensiometer

Contact angle meter specification:

A modular optical tensiometer for computer controlled measurement contact angle, surface and interfacial tension, and surface free energy measurements.

System should include below things:

1. Basic frame with back light and control electronics and an interface for extra light source and temperature control options
 2. software for determination of below things :
 - contact angle by sessile/rising drop method with automatic base line detection
 - surface/ interfacial tension by pendant/ rising drop method
 - surface tension and contact angle by liquid meniscus method
 - image fitting: polynomial, Basforth-Adams, circular fit, Young-Laplace, including autobaseline algorithm"
 - surface free energy, based on calculation equations: Zisman, OWRK/ extended Fowkes, Wu, Acid-Base, Equation of State Schultz 1, Schultz 2
 3. liquid and solid library with predefined entries
 4. Instruction manual
 5. Calibration ball, with certificate
 6. Camera : 344 fps digital video camera with zoom Includes zoom lens 0.7 – 4.5 magnification
 7. Temperature control : electrically heated, 250°C
 8. Hooked needle
- Option for accessories such as 3D Topography module and disposable tip dispenser available
- Bigger max sample size
 - 6.5x magnification
 - LED brightness setting through software

- Higher camera resolution: 782x582
- Meniscus measurement mode
- Superior amount of publications

Other Tender Criteria

- Authorization certificated required along with the Quotation
- Only Bidders with good record of supply and after-sale support in India can quote.
- Technical and financial details should be in separate envelope. In the document for technical bid, mention in tabular form the compliance to each of the above specifications.
- All quotations must reach undersigned on or before 08/12/2014 at 1500 hrs.
- Quotation must be valid for 90 days.
- Delivery period should not be more than **8 weeks**.
- IITK is exempted from excise/custom duty.
- Send complete detail of the product(s).
- Warranty/Guarantee should be clearly mentioned.
- Payment terms will be as per IIT Kanpur rules.
- The rate quoted should be inclusive of sales tax and other taxes including freight charges (if any).
- All prices are to be FOB IIT Kanpur.
- The Institute reserves the right of accepting or rejecting any quotations without assigning any reason thereof.