



**Department of Mechanical Engineering
Indian Institute of Technology Kanpur
Kanpur (UP) 208016 India**

Sameer Khandekar
Professor
Room: SL-109
Tel: #-(0512)-259-7038
E-mail: samkhan@iitk.ac.in

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Subject: Web Enquiry

CORRIGENDUM AND DATE EXTENSION

We are planning to purchase a Contact angle (Static and Dynamic) and Surface Tension measurement instrument(s) for sponsored research project.

General requirement of the workstation is as follows:

1. Semi/fully automatic software operated system/workstation
2. It should measure solid - liquid contact angle (static, dynamic and hysteresis) including single sided textured solid surfaces (preferably sessile drop and/or Captive bubble method). Surface tension of pure and miscible liquids, powders, Nano-fluids and colloids, interfacial tensions/free energy of immiscible liquids at different temperatures (preferably Pendant drop method/Ring, Plate and Rod method or any other standard method).
3. Provision for measurement of density as integral or an optional attachment.
4. Operating environment: 15 to 40°C.
5. Power Supply: 230V, frequency 50 Hz (Accordingly to Indian standard).
6. The station must be supplied with compatible software for 64 bit windows 10.0 or better, and the software should be able to compute the surface tension, contact angle and surface free energy by standard methods.

Technical specification of Surface Tension measurement:

- Method of Measurement: Preferably Ring, Plate and Rod using electronic balance.
- Wilhelm plate, Du Nouy ring and/or any other required accessories, as applicable.
- Measuring range for surface and interfacial tensions: 1.0 - 500 mN/m or better.
- Resolution: 0.01 mN/m or better.
- Measuring range for densities: 0.50 to 2.00 g/cm³ with 0.01 g/cm³ or better resolution
- Temperature range: 0°C to 100°C or better through external circulator bath (The offer must clearly mention the price with/without constant temperature bath), if applicable. Temperature Resolution: 0.05° or better.
- Movement of sample stage: Motor driven and software controlled for precision height positioning of the sample table.

- Provision of mounting the ring/plate directly by hand without tweezers and storing of the results as optional features.
- Interfaces: Preferably through USB Port.

Technical Data of Contact Angle Measurement:

- Determination of static, dynamic contact angles preferably using optical (sessile drop/captive bubble, surface tension by pendent drop method and surface free energy) /standard methods.
- Measurement Range: 0 to 180°, Accuracy $\pm 0.5^\circ$ or better
- Reproducibility: $\pm 0.1^\circ$
- Liquid dispensing unit: Software controlled and manual both.
- High Speed camera with adjustable zoom and focus.
- LED lighting (manual/Software controlled) with/without adjustable intensity of light.
- Adjustable sample stage (X-Y-Z directions) with manual/automatic drive.
- Tilting of the sample stage (sample stage and the camera both) for the measurement of sliding contact angle as an optional feature.

The offer must clearly and point wise mention, whether the instrument meets our tender requirement or not. The offer must mention the deliverable/optional accessories with the base model. Such accessorie(s) for the betterment of measurement and analysis should be quoted separately with the price (if any).

Technical and financial offers must be packed separately.

Hard copy of the offer may be sent at the following address before 31th October, 2017, containing the usual terms and conditions of supply, tax, freight charges, offer validity, warranty, educational discount, and delivery period etc.

Our payment terms: 90% against delivery and remaining 10% after the installation and satisfactory approval of the instrument, as per existing Government of India norms.

Sameer Khandekar

Phase Change Thermal Sciences Laboratory

SL-109

Indian Institute of Technology Kanpur (INDIA) 208 016

Phone: 0512-2597967, e-mail: cgoswami@iitk.ac.in