

## **Specification of Video Based Optical Contact Angle Measuring System(Goniometer)**

The instrument should be Automatic and Software Controlled Video Based system for determination of Contact Angle, and provision for Surface Free Energy, Wettability, Surface Tension and Interfacial Tension by pendent drop and Lamella Counter Method both. Also provision for tilting method, substrate temperature should also be controllable.

### **The instrument should be capable and equipped with the following features :**

- Capable of measuring the following:
  - (a) Static contact angle
  - (b) Advancing/Receding angle measurements ( contact angle hysteresis)
  - (c) Dynamic contact angle measurement
- There should be a provision of temperature control
- Tilting :Substrate should be able to rotate +/-180 degrees
- software : User friendly software.
- Backlight Illumination :Lighting with continuously adjustable intensity without hysteresis

- Dispensing type : Manual and motorized syringe pump for precise micro litre dispensing.
- Compatibility : Compatible with glass ,plastic and SS syringes
- Maneuverability: Should be able to precisely adjust the height and also should provide the provision of angular adjustments.
- Captured image and the contact angle measured table should be able to be stored.
- Separate computer should be provided with the instrument.

**NOTE:**

- 1. Installation should be at free of cost at IIT, Madras**
- 2. Training also at free of cost at IIT Madras.**
- 3. Minimum one year Warranty.**



  
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