1- K100 premium tensiometer, Kruss, Germany

Force Tensiometer – K100 performs high-precision, automatic and reliable measurements of surface tension and interfacial tension, critical micelle concentration CMC and contact angle on solids, fibers and powders. With high-quality components and a uniquely wide range of methods, the instrument carries out many tasks in the field of surfactant analysis and wetting measurement for your quality assurance or research.

Tasks and applications

- Determination of the effectiveness and efficiency of surfactants by CMC measurement
- Wetting behavior of tablets, pharmaceutical active ingredients and excipients
- Wetting of varnishes and paints
- Decomposition product content in oils
- Tank clearance and cleaning validation in the foodstuffs industry
- Wetting and adhesion of coatings
- Development of cosmetic products
- Wetting properties of inks
- Wetting of fiber bundles and textiles
- Sedimentation and ductility of dispersions
- Checking of surface modifications

2- Brookfield Digital DV III Ultra Programmable Rheometer/ Viscometer, USA

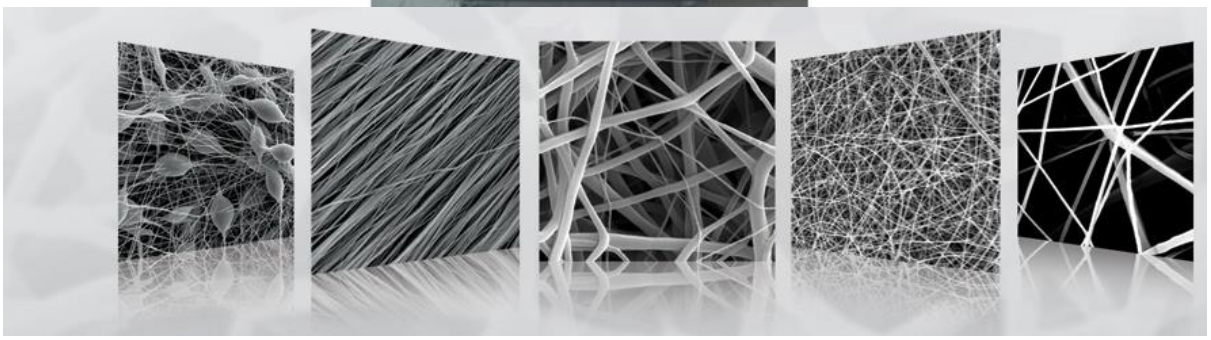
DV-III™ Ultra Rheometer for measuring viscosity and yield stress and the “all-in-one” tool to easily predict a material’s complete flow behavior. Benefits include: Analyze characteristics such as yield stress, flow curves, (mixing, pumping, spraying), leveling and recovery. Bi-directional RS-232 PC interface for optional computer control and using the optional Rheocalc32 software gives complete computer control. Accuracy is +/- 1.0% of range and repeatability is +/- 0.2%.

Specifications
Speed Range: 0-250 RPM, 0.1 RPM increments
Viscosity Accuracy: ±1.0% of full scale range for a specific spindle running at a specific speed.
Temperature sensing range: - 100°C to 300°C (-148°F to 572°F)
Temperature accuracy: ±1.0°C from -100°C to 150°C ±2.0°C from +150°C to 300°C
Analog Torque Output: 0 - 1 Volt DC (0 - 100% torque)
Analog Temperature Output: 0 - 4 Volts DC (10mv /°C)

3- Lab Scale Electro spinning RN/X, Asian Nanostructure, IRAN
Development of Nanofibrous materials and products for a vast variety of application in different fields, e.g. agriculture, biotechnology, biopharmacy industry, chemical and petrochemical industry, filtration and separation industry, food and beverage industry, coating.

Specifications	
High Voltage Power Supply (HVPS) Unit	
Number of HVPS Units:	2
Voltage:	0 – 50.00 KV
Emission Current:	Max 500 μ A
Control Unit	
All the parameters can be easily programmed, configured, and controlled using a touch screen panel through the electro spinning process.	
Collectors	
Plate Collectors (Static):	Width: 20 – 200 mm Height: 20 – 200 mm
Disc Collectors (Dynamic):	Diameter: 50 – 200 mm Rotating Speed: 0 – 5000 rpm
Drum Collectors (Dynamic):	Diameter: 0.5 – 200 mm Length: 50 – 200 mm Rotating Speed: 0 – 5000 rpm
Spinning System	
Number of Spinning Heads:	2
Number of Attachable Nozzles:	Max 10
Feed Rate:	0.1 – 35 ml/hr

Nozzles' Angle:	0 - 90º
Nozzles' Dimension:	Length: 0 – 35 mm Inner Diameter: Max 1 mm
Nozzles' Transverse Speed:	5 – 50 mm/min
Electrospinning Distance:	3.0 – 30.0 cm
Safety Precaution	
(1) Safety Door Lock System (2) Pilot Lamp (3) Air Exhaust Filter	



4- Bio Atomic Force Microscopy (Bio-AFM), Ara Research CO, IRAN

Atomic force microscopes (AFM) are one of the most powerful tools for determining surface topography at subnanometer resolution. Biomedical Atomic force microscopes (bio-AFM) paves the way for a multitude of applications in Soft Matter and Life Science research.

Specifications

- The ability to see biological samples, including cells, bacteria, viruses, DNAs and antigens, and antibodies in nanometer sizes.
- Imaging in Contact, Non-Contact and Tapping Modes
- Head: H-M21
- Scanner: S-C3
- Controller: C-2BFP
- Options: High Speed Modulus

Optical Microscope: Included Best Scope