

Quotations are invited for purchasing research instruments in a DST FAST TRACK PROJECT sanctioned to Dr. Tandrima Chaudhuri, Deptt. of Chemistry. Visit www.bdndsm.edu.in for details.

Submit quotations within 7 days.

Dated Burdwan
19/12/2013

Principal
Dr. B. N. Dutta Smriti Mahavidyalaya
Hatgobindapur, Burdwan.

SPECIFICATIONS OF INSTRUMENTS REQUIRED

1. Specification of Double beam UV-VIS Spectrophotometer

FEATURES :

- Use of long-life lamp
- Double-beam optical system
- **Operation by use of PC**
- Simple and easy-to-understand performance check function
- Automatic 2-cell turret as standard equipment

SPECIFICATIONS :

- Optical system : Czerny-Turner mount, Double beam monochromator
- Wavelength range : 190 to 1,100 nm
- Spectral band width : 1 nm
- Wavelength accuracy : ± 0.3 nm
- Wavelength repeatability : ± 0.1 nm
- Photometric range Abs : -3.0 to 3.0%T : 0 to 300
- Photometric accuracy : ± 0.002 Abs (0 to 0.5 Abs)
- Photometric repeatability : ± 0.002 Abs (0 to 1.0 Abs)
- Scan speed : 10, 40, 100, 200, 400, 800, 1,200, 2,400, 4,800, 6,000 nm/min
- Response : Fast, Medium, Slow
- Baseline stability : 0.0005 Abs/h
- Noise level : < 0.0001 Abs
- Baseline flatness : ± 0.0009 Abs over entire wavelength range
- Absorbance ratio : 2.04
- Light source : High intensity Tungsten-Halogen and Deuterium lamp with automatic changeover or Xenon lamp
- Interface : LAN port : connected to a router or PC
: USB port : connected to USB memory for use when transferring software-format files
- Power : 220, 230, 240V, 50/60 Hz, 150VA
- Power consumption : 70 W or Less
- Ambient temperature : 15 to 35 °C
- Ambient humidity : 25 to 80 %
- Guaranteed compliance with all Pharmacopoeial requirements
- Built in validation program, diagnostic and security functions
- All operational modes as standard – Photometric Spectrum; Quantitation; Kinetics, Time Scan, DNA and Protein Quantitation in standalone and PC mode.
- Large sample compartment compatible with wide range of accessories
- Compact design with small footprint.
- **Should be supplied with water circulated cell holder with magnetic stirrers (temp range 5^o-60^oc)**
- **Instrument should be supplied with compatible Laptop/PC and Temp. controlled Water circulated bath**
- **One Pair of Quartz cuvettes, 10 mm path length, 3.5ml; one pair of Semimicro cell (1.0 - 1.6 ml)**
- **Branded PC & 2KVA UPS for the operation of spectrophotometer.**

2. Electrochemical Analyzer / Workstation

Electrochemical Workstation with Electrochemistry s/w, Latest Windows Based Acquisition s/w also includes power supply 220-240 V/50-60 Hz, Interface Cable for USB Port, Cell Cable, Manuals & Installation.

- Cyclic Voltammetry (CV)
- Linear Sweep Voltammetry (LSV)
- Chrono Amperometry (CA)
- Chrono Coulometry (CC)
- Bulk Electrolysis with Coulometry (BE)
- Open Circuit Potential – Time (OCPT)
- Limited version of CV simulator
- IR Compensation
- External Potential Input
- Auxiliary Signal Measurement Channel

Electrodes

Cell assembly including Teflon cell cap:

- Voltammetry, spectral cum coulometry cell
- Pt. Working electrode
- Pt. flag counter electrode
- Pt. wire gauge WE for coulometry
- Ag/AgCl reference electrode

Latest computer with fittest configuration.

3. Tentiometer

SPECIFICATIONS :

Range of 0 to 90 dynes and 0.2 dynes interval in dynes/cm. Dual scale in front of instrument with vernier that can read 0.02 dynes. Platinum ring, circumference, sample dish, length torsion wire, spirit level (fitted with machine), metallic case. Electrically operated. Power supply of 220 V A/C.

Thermostatic vessel for temperature controlling of the test specimen. Temp. range -5°C to 100°C.

Supplied with Standard chart, instruction manual, Procedure and Warrantee certificate.

4. -22°C Deep Freezer

FEATURES

Robust Construction for heavy-duty use
Corrosion resistant body made of pre-Coated sheet
Tropicalised for high sub continental ambient temperatures
Twin door large capacity models to avoid cooling loss
Recessed handle for single door models
High Density PUF insulation for better holding time
High energy efficient compressor
Auxiliary condensers for faster pull down
Low emission imported glass for better hold time
Fitted with customized digital temp. indicator cum controller

Specification

Gross Capacity	:~110Lt
Tank Volume	: ~100Lt
Temperature range	: -1°C to -22°C
Power Supply	: 230V/50Hz
Refrigerant	: R134a
No. Of Lids	: 1
No. Of Baskets	: 1
Wheels	: Heavy Duty Wheels
Energy Consumption per 24Hrs	: <1.4Unit
Tank Material	: Embossed Aluminium
Voltage Stabilizer	

5. Airconditioner machine (2Ton): LG/ Blue Star/ Samsung

6. Online UPS (5KVA).