

SPECIFICATIONS OF THE SPECTROFLUOROMETER FOR THE PURCHASE UNDER RUSA 2.0 THEME BASED RESEARCH FOR THE DEPARTMENT OF BIOELECTRONICS AND BIOSENSORS

LIGHT SOURCE	: Xe lamp with shielded lamp house, 150 watt
MONOCHROMATOR	: Holographic concave grating
WAVELENGTH RANGE	: Zero Order, 200 – 900nm
WAVELENGTH ACCURACY	: Should be at least +/-1.5nm
WAVELENGTH REPEATABILITY	: +/-1 nm
SPECTRAL BANDWIDTH	: Variable and minimum should be 1, 2.5, 5, 10,20nm on Both excitation and emission monochromators
W.L. SCAN SPEED	: Variable in the range of 20 - 20,000nm/min For both excitation & emission monochromators
SLEW SPEED	: 30,000 nm/min
SENSITIVITY	: S/N (Signal to Noise) Ratio RMS 8000:1 or better,
RESOLUTION	: 1 nm (at 546.1nm)
PHOTOMETRIC RANGE	: -10,000 – 10,000

ACCESSORIES :

- 1) Microplate Reader – 1No with following specifications:
Compatible plate: 96 well microplate for fluorescence
Min. sample requirement should be 80µl/well
- 2) Air cooled Peltier thermostatted cell holder with stirrer
(Temperature Range: 10 to 60degC)

Other compulsory specification to supplied by the company

1. Automatic cut filter for higher order diffraction to be provided as standard.
2. Automatic sensitivity calculation system to be provided.
3. Automatic Gain control should be provided.
4. Should have provision to measure Fluorescence and Phosphorescence.as standard.
5. Should have start button for starting measurement immediately after placing the sample for kinetic measurements.
6. Should have auto accessory recognition software for identifying the accessories and to select necessary parameters.

7. Should be provided with Mercury Lamp for validation of the instrument.
8. Should Provide Windows Based Software for Quantitative Measurement, Spectrum Measurement, Time Course Measurement, Fixed Wavelength Measurement, 3d Fluorescence Measurement, Abs measurement and spectral correction, validation, Spectral Analysis, File Viewer, and Facility for Documentation & Presentation.
9. Fluorescence cell 10mm path length – 1 no should be provided along with the instrument.
10. Warranty for 3 years with extended AMC for 3 years
11. Free installation
12. Computer with recent specifications
13. UPS 5KV with free installation
14. List of users of your instrument in India especially in Tamilnadu