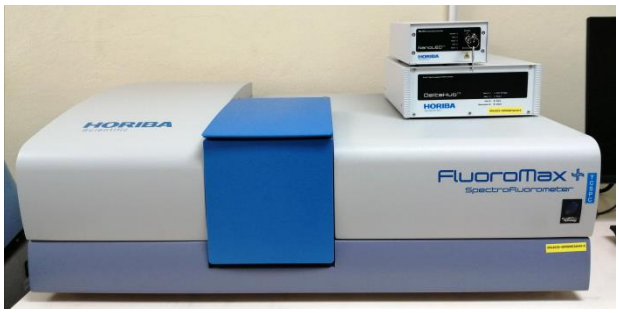
Spectrofluorometer



Model : FluoroMax 4+ Time Correlated Single Photon Counting (TCSPC)

Custodian : Sirichai Kositarat

Location : K647 Room, 6th Floor, Chaloemprakiet Building, Phyathai Campus

Description and Specification

Optics	All reflective optics for high sensitivity at all wavelengths and for microsamples
Source	150 W CW ozone-free xenon arc lamp
Monochromators	Czerny-Turner design with plane gratings for optimized focus at all wavelengths and minimum stray light
Excitation Grating	1200 groove/mm blazed at 330 nm
Emission Grating	1200 groove/mm blazed at 500 nm
Optional Second NIR Grating	600 groove/mm blazed at 1 µm, gold coated, on a computer-controlled turret
Bandpass	0 to 30 nm, continuously adjustable
Wavelength Accuracy	± 0.5 nm
Integration Time	1 ms to 160 s
Base Detector	Photomultiplier R928P, 185 to 900 nm, air-cooled and stabilized
Reference Detector	UV-enhanced silicon photodiode
Standard Filter Holders for Excitation and Emission Path	2” square filters can be added for any specific use
Water Raman S/N	10,000:1 FSD method
Steady State Reaction Kinetics Acquisition Rate	1 KHz to 0.02 Hz
Dimensions	83 cm (w) x 28 cm (h) x 48 cm (d)
Weight	34 kg
Optional Extended NIR Base Detector	Photomultiplier R13456, 185 to 980 nm, air-cooled and stabilized
Optional Cooled NIR PMT Detector	200 nm to 1050 nm
Optional Cooled Extended NIR PMT Detector	950 nm to 1700 nm
Optional Extended LN-cooled NIR InGaAs Detector	800 to 1700 nm spectral detection
Optional Transmission Detector	UV-enhanced silicon photodiode
Optional Pulsed Xenon Lamp for Phosphorescence	10 Watt (software controlled from 0.03 to 25 Hz)
Optional Automated Plate Reader	96 or 384 well plates
Optional Integrating Spheres for PLQY	Easy, quick change of either internal 80 mm diameter sphere, or external 150 mm sphere

Lifetime Options	
TCSPC:	
Lifetime Range with Standard PMT Detector	<150 ps to 1 s

Accessories:

1. Liquid Sample holder	
2. Solid and thin film holder	
3. Lifetime measurement* with NanoLED N-390 Peak wavelength 390 ±10nm Pulse width typical <1.3ns * For this option you can use at 202 Room, SC1 Building, Salaya Campus