## High Performance Liquid Chromatography (HPLC)



Brand: WATERS

Model: HPLC-Pump600-Autosampler717plus-PDA996

Location: K652 Room, 6<sup>th</sup> Floor, Chaloemprakiet Building, Phyathai

Custodian: PRADUP MESAWAT

## WATERS 600E Multi solvent Delivery

Description	Specification	
Waters 600E Multi solvent Delivery System		
Number of solvents	1 to 4	
Automatic eluents sparging	Helium, programmable eluent selection and rate	
	(0 – 100 mL/min)	
Flow programmable	Isocratic, gradient, and flow programming	
Flow rate range	0.00 - 20.00 mL/min, in 0.01 increments	
Composition range	0 to 100%, in 1% increments for each of four reservoirs	
Compositional accuracy	Better than 1.0%, independent of pressure	

Description	Specification
Waters 600E Controller	
LCD Display	5 inch
Program tables	flow rate, gradient, timed events 15 time-based
	step/table, 15 table capacity
Time-based multi-method capacity	includes linking Program table

- MILLENNIUM 32 Chromatography Manger Software
- COMPAQ 3650TH Computer



## WATERS 717 plus Autosampler

Description	Specification
Number of solvents	1 to 4 solvents
Degasser	Helium degassing
Linearity (1 to 100 μl)	At 1 to 100 $\mu$ l, Coefficient of deviation > 0.99
Carryover	< 0.1%
System pressure	4500 psi
Bandspreading	< 10% Contribution for all solvent systems
Precision of injector	At 5 to 50 $\mu$ l, RSD $\leq$ 0.5%
Flow accuracy	$\pm$ 1% or 10 $\mu$ U/min
Number Sample/tray	1. Tray for sample 1 to 48 vial (vial 4 mL)
	2. Tray for sample 1 to 96 vial (via1 1 mL)
Number for injection by program	1 to 99 vial
Minimum Sample Required	7 $\mu$ l using low volume inserts
Injection accuracy	± 1 μl
Injection volume range	0 to 200 $\mu$ l (Standard) or 0 to 2000 $\mu$ l
Total solvent volume	836 <b>µ</b> l
Run time	0 to 999.9 min
Wash Flow, Solvent Rate	> 0.4 mL per injection
Advance Sampling Routines	Priority Samples, Auto Standards,
	Auto Addition, and Auto Transfer
Operating Temperature Range	4 to 40 °C



## WATERS 996 Photodiode Array Detector (PDA)

Description	Specification
Wavelength range	190 – 800 nm
Wavelength accuracy	± 1 nm
Linearity range	5% over - 0.1 to 2.0 AU
Spectra resolution	1.2 nm per photodiode
Baseline noise	5x10 <sup>-5</sup> AU peak-to-peak at 254 nm
Drift	1x10 <sup>-3</sup> AU/hour at 254 nm (after warm-up)
Operating temperature	4 to 40 °C
Flow cells	Path length (mm)
- Standard	10

