

Detailed specification for procurement of
High Performance Liquid Chromatography (HPLC) System

1) Solvent System (Binary):

1. No. of Channels : 2
2. Flow range : 0.001 to 10 ml/min in 0.001/min increments or Better.
3. Flow Precision : <0.07% RSTD or better
4. Flow Accuracy : $\pm 1\%$ or better
5. Pressure operating range : 8000psi or better
6. Gradient Composition Precision: <0.2 % SD or better
7. Online degasser with max flow rate 10 ml/min should be quoted with the system
8. The Pump should have a solvent selection Valve to allow switching between 4 mobile phases.

2) UV Detector:

1. Wavelength : 190-600nm or better
2. Detection Type : Double beam
3. Light Source : D2 Lamp
4. Short term Noise : $\pm 0.35 \times 10^{-5}$ AU at 230 nm or better
5. Drift : 3.0×10^{-4} AU/h at 254 nm or better
6. Linearity : >2 AU upper limits or better
7. Safe leak handling must be provided together with the leak sensor

3) Auto sampler:

1. Sample capacity : 100 X 2 ml and/or above
2. Injection Volume : 0.1 – 100 μ l injection range in 0.1 μ l
3. Precision : <0.5 % RSD from 5-100 μ l, < 1% RSD from 1-5 μ l
4. Carryover : < 0.05%
5. Replicate injections : 1 – 99 from one vial

4) Column Heater/Cooler:

1. 10°C above ambient to 60°C or better in 1°C increment or better
2. Column capacity: Should accommodate 2 column of 25 cm length or more

5) Operational Software:

1. Original software with Single point control; of whole HPLC module
2. Early maintenance feedback (EMF), electronic records of maintenance and errors should be available

6) Computer and printer:

1. Intel Pentium Core 2 Duo E 7400 processor, 4 GB Ram, 160 GB HDD, DVD Writer, 17" Monitor, Window XP Professional, SP2 OEM.
 2. HP Laser Jet Printer
- 7) 1 C-18 Column should be quoted with system.
- 8) The HPLC should have capacity to be used as an inlet for LC/MS-MS system of any make. The system should have the option to upgrade with any detector.
- 9) Warranty: Minimum warranty of 12 Months should be quoted with the system. Addition AMC prices for next 5 years should be also quoted separately.