# DEPARTMENT OF CHEMISTRY INDIAN INSTITUTE OF TECHNOLOGY KANPUR

Enquiry No.: IITK/CHM/DHD/16-17/18

To, Dear Sir, Opening Date: March 17, 2017 Closing Date: March 28, 2017 April 4, 2017 (Extended)

## Subject: Request for quotation

#### Automated High Performance Liquid Chromatographic system- Preparative:

An Automatic computer controlled High Performance liquid chromatograph system with suitable software equipped with Preparative pump (Dual Piston Design) capable of working in both Isocratic & gradient operations, PDA Detector & Fraction Collector. It should provide error-free programming of pump parameters including flow rates, operating pressure limits, compressibility compensation, calibration and diagnostics.

#### Solvent Delivery Unit (Pump): Qty -2

Pump: Two Preparative Pumps with gradient kit to have isocratic as well as gradient operation.

Settable Flow range: 0.001 – 100 mL/min,

Flow Increment: 0.001 ml or better

Flow Precision: RSD < 0.5 % or better

Gradient formation: High pressure using two combined pumps

Pumping System: Software controlled

Maximum Pressure: 5500-6000 Psi or better.

Injector: Fixed loop manual injector with 20 ul, 100 ul, 500 ul, 1 ml & 5 ml loop

Detectors

#### **Diode Array Detector (PDA)**

Wavelength range 190 to 900 nm or better

With 1024 diodes array for fine spectral resolution

Wavelength accuracy +/- 1

Programmable slits, as max as possible

Diode width < 1nm

Data acquisition rate: 120 Hz or better

Prep flow cell with 3 mm path length

Light Source: Deuterium lamp & Tungsten Lamp

**Fraction Collector:** Fraction Collector with standard rack for minimum 100 tubes with all other required accessories.

## Column: C-18 prep Column, Qty-2

## **Preparative Auto Sampler :( Optional)**

Capacity: 100 vial or more

Injection Range: 0.1 to 800 ul or better in 0.1 ul increment.

Precision: 0.5% RSD or better

Achievable carry over: 0.06 % or better

#### Software:

Chromatography Software should have 32/64-bit design for windows 7 or compatible software. Real time triggers to react the condition i.e. to take action on Fault, Stop, Start, wavelength switching, injection etc. The software should be genuine & original

## Local Items:

PC along with latest configuration with LCD/LED monitor, optical mouse, key board. Laser

Printer etc to be provided to operate the instrument.

3 KVA UPS with 30 minutes back up should be provided.

NOTE:

- 1. Price should be quoted in on F.O.R, IIT- Kanpur
- 2. The system should be quoted with 3 years' warranty (Quote as optional)

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