

DEPARTMENT OF MICROBIOLOGY

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TENDER DOCUMENT FOR THE PURCHASE OF HPLC SYSTEM

TENDER NO.

DATE OF ISSUE: 18/09/2012

LAST DATE OF RECIEPT OFTENDER: 01/10/2012

DATE AND TIME OF OPENING (TECHNICAL BIDS): 03/10/2012 / 12:00 noon

DATE AND TIME OF OPENING (FINANCIAL BIDS): 04/10/2012 / 12: 00 noon

TENDER FORM FEE Rs. 1000/-

EARNEST MONEY DEPOSIT (EMD) Rs. 20,000/-

Specifications for the purchase of analytical cum semi preparative high pressure gradient HPLC system from ICMR Project under Prof. Kusum Harjai, Department of Microbiology Panjab University Chandigarh.

SPECIFICATIONS FOR ANALYTICAL CUM SEMI PREPARATIVE

HIGH PRESSURE GRADIENT HPLC

SOLVENT DELIVERY SYSTEM: 2 NOS (BINARY PUMP)

- 1. Flow rate range from 0.001 to 10.0 ml/min with 0.01 ml/min increment. Flow rate should be upgradable up to 20 ml/min or better with each pump (with or without change of parts) for carrying out semi preparative applications.
- 2. Flow Accuracy: +/- 1.0% or better.
- 3. Flow precision: <0.1 % RSD.
- 4. Max. Operating pressure: 6000 psi.
- 5. Flow Calibration: Programmable.
- 6. Purge Function: Pre-programmed, user initiated.
- 7. Pump control module kit.
- 8. Gradient Mixer.

PHOTO DIODE ARRAY DETECTOR:

- 1. Wavelength range: 190-800 nm.
- 2. No. of Photodiodes: 512 or better.
- 3. Optical resolution: 1.2 nm or better.
- 4. Noise : $< +/- 10 \times 10^{-5} \text{ AU}$ or better.
- 5. Drift :< 1 X 10^{-3} AU/Hr of better.
- 6. Data Acquisition rate: Upto 80 Hz or better.
- 7. Auto Threshhold for Peak Purity.
- 8. Leak sensor as a safety feature.
- 9. Lamp optimization software built in.

TEMPERATURE CONTROL MODULE:

1. Column chamber with heating and cooling.

SOFTWARE:

- 1. The Software should be original, Authenticated and compliant for GLP/GMP/21CFR and licensed version with certificate.
- 2. Software should be Oracle database or equivalent.
- 3. Versatility for multitasking without multiple software packages.
- 4. Customizable data reports, online help and answer wizards.
- 5. Operation of the system should be very easy and intuitive via a state-of-the-art 32 bit window based operation compatible with window XP window vista window 7 window 8 systems or certificate to allow free upgrade of software to make it window 8 compliant.
- 6. It should cover full one-point digital instrument control, qualitative and quantitative processing, report creation and self-diagnosis online help.
- 7. The software should allow automatic execution of system checks, auto-purge and baseline check.
- 8. 3 D Peak Purity Option.

9. Electronic record and electronic sign off.

SAFETY FEATURES:

- 1. Leak sensor.
- 2. System suitability, system security as well as system check function must be provided which comply with Good Laboratory Practices (GLP) and regulatory conformity.

AUTO INJECTOR:

- 1. Injection volume range: 0.1 to 100μl with 1 μl increment upgradable to 1000 μl or better.
- 2. Injection system should be variable injection type.
- 3. Injection Reproducibility: RSD< 0.3%.
- 4. Accuracy better then + 1%.
- 5. No. of sample vials of 2 ml = 96 or better.
- 6. Temp. Setting 4 to 40° C.
- 7. Provision of wash between injections with variable injection volume.
- 8. Carry over: < 0.05% or less.
- 9. Wash solvent: Integrated wash solvent bottle.
- 10. Priority sample: Programmable.
- 11. Maintenance kit should be quoted.

COLUMN:

- 1. Sunfire Reverse Phase C-18 5 μ Prep (10 X 250 mm) Column.
- 2. Sunfire C-18 5 µ column (4.6 X 250 mm) Column.
- 3. C-18 1.8 μ (2.1 X 100 mm) Column.

FRACTION COLLECTOR:

- 1. Fraction collector with standard rack, up to 120 tubes.
- 2. Pre-programmed 128 Position Funnel Rack with four 4 x 8 Prep Funnels.
- 3. Independent RS -232 commands for Dispenser Movement and valve operation.
- 4. Pre-Programmed 4 Microtiter Plate rack holds up to 4 SBS compliant microtiter plates, standard 96, 384 or deep wells.
- 5. Fraction collector upgrade kit.

WARRANTY

3 Years from the date of installation.