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Subject: Request for submission of quotation/tender for Fast Protein Liquid Chromatography System.

Please send a sealed quotation in duplicate for **Fast Protein Liquid Chromatography System** for our laboratory at Center for Environmental Sciences and Engineering (CESE), Indian Institute of Technology Kanpur (IIT K) with specification and requirement as given below. The quotations should include taxes, warranty, educational discounts if any, freight and delivery. The quotation should reach our office at below mentioned address on or before **10.01.2012**.

FAST PROTEIN LIQUID CHROMATOGRAPHY SYSTEM

SPECIFICATIONS

- For protein purification and analysis, optimization of chromatographic matrices and columns and also for purification and prep of macro-biomolecules such as peptide, polysaccharide, nucleic acid, etc. And for application of all chromatography technologies including ion exchange, gel filtration, CHT, hydrophobic interaction and reverse phase HPLC, etc.
- Detectors and monitors: UV detector for protein and nucleic acid detection with options of using at different wavelength, pH and conductivity monitor. Possibility of adding more detection system for upgradation. Detection range should be highly sensitive.
- Flow properties: variable flow rate properties and flow rate upto 30-40 ml/min. with maximal pressure of 1000psi (6.6MPa). Flow accuracy: increment: 0.1ml/min. Possibility of upgradation for higher flow rates upto 80-100 ml/min.
- The system has to be open for connecting chromatographic columns from different make/sources and indigenously made columns using connecting kit accessories.
- Pump system: double pump heads with double pistons. The pump systems compatible of handling at different salt concentrations, viscosity, pH and temperature. Mixer system: mixing under high pressure for high accurate gradient applications.
- Fraction collector: a flexible fraction collector with variable motion. Possibility of operating independently as well. Able to collect fractions in variable tube sizes and formats and also possible to use 96 well microtitre plate for sample collection.

- Software and Control System: A user friendly software to operate the machine with data collection and interpretation options. Should be operational for simple and multi-dimensional chromatography. Measurements of adsorption kinetics, flow rate properties, gradient applications, etc should be operational with the software.
- PC/Printer/Monitor: A standard company high capacity PC with laser printer and LCD monitor (approx. 23 inch) with an option of parallel port for connecting to other chromatographic related machines.
- Accessories: Chromatographic columns (empty and with filled resins for protein A, C18 HIC, IMAC, ion exchange). Tubing kits, column connecting kits, starter kit, instruction manual. All necessary accessories. Amplification system: thermal cycler as 96-well T100 thermal cycler. Single/double channel peristaltic pump with flow rate upto 20 ml/min
- Optional accessories: Multiwell plate reader (400 – 750 nm wavelength). Vertical electrophoresis apparatus with power pack. Blotting system for 2-4 gels (Input power: 100–240 VAC).
- **Warranty:** One –two years from the date of installation
- **Installation and demonstration:** Free of charge at the site of use.
- **Proprietary,** authorization/distribution, instrument brochures and any other relevant documentation should be submitted along with the quotation.

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