



**DEPARTMENT OF BIOTECHNOLOGY**  
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D.KARUNAGARAN  
Professor and Head

Date: 09.04.2015

**Ref: BT/RAMS/2015/001/SPL**

**Dt. 09.04.15**

**Due Dt.24.04.15**

1. Quotations are invited in duplicate for the various items shown below/overleaf/ enclosed list.
2. The quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS & D Rate Contract, Rate Contract Number and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the rate contract price. If so, please send copy of the R.C. (Please note that we are not Direct Demanding Officers).
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for should be submitted free of charges and collected back at the supplier's expenses.
6. **Local Firms:** Quotations should be for free delivery to this Institute. If quotations are for Ex-Godown, delivery charges should be indicated separately.
7. **Firms outside Chennai:** Quotations should be for F.O.R Chennai. If F.O.R. Consigner stationer freight charges by passenger train/lorry transport must be indicated. If Ex-Godown, Packing, forwarding and freight charges must be indicated.
8. The rates of Sales/General Taxes and the percentage of such other taxes legally livable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales/General Taxes will be admitted at any stage and on any ground whatsoever. **The taxes livable should take into consideration that we are entitled to have concessional sales tax applicable to non-government educational institutions run with no profit motive for which a Concession. Sales tax certificates will be issued at the time of final settlement of the bill.**
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. **Payment:** Every attempt will be made to make payment within 30 days from the date of receipt of bill/acceptance of goods, whichever is later.

## **Specifications for Fast Protein Liquid Chromatography (FPLC)**

Versatile Chromatography System for protein purification that must be automated with a flow rate not less than 10 ml/min with a suitable piston pump meeting the following specifications

Flow rate setting 10 ml/min pumps: 0.001 to 10 ml/min,

Flow rate accuracy  $\pm 2\%$

Pressure range 10 ml/min pumps: 0 to 25.2 MPa (3,650 psi)

Viscosity range 0.5–10.8 cP

Conductivity monitor must be integrated with following specifications:

Conductivity reading range 1  $\mu\text{S/cm}$ –999 mS/cm

Accuracy  $\pm 2\%$

Operating pressure 0–5.5 MPa (800 psi)

Flow cell volume with not less than 6  $\mu\text{l}$

Temperatures monitor range of 4–100°C

Temperature monitor accuracy  $\pm 2\%$

pH module must be provided for monitoring meeting the following criteria:

pH reading range 0 to 14

Accuracy  $\pm 0.1$  pH unit within pH 2–12

Operating pressure 0 to 70 psi with pH probe inline and 0–500 psi in bypass mode

Flow cell volume 100  $\mu\text{l}$

Standard UV detector with single-wavelength (UV) of 255/280 nm.

System must be capable of carrying out accurate gradients equipped with automated sample injection.

Automated fraction collector compatible for the system with option to collect fraction in 96 well plates with suitable diverter valve and fittings kit.

Other features'

Guided Flow path Interface for graphical system flow path control from set up to operation

Drag and drop adjustment of gradient profile with intuitive user interface

LED status display for system status at a glance

Core software package and peak integration to be included

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