DEPARTMENT OF CHEMISTRY
INDIAN INSTITUTE OF TECHNOLOGY - DELHI
HAUZ KHAS, NEW DELHI - 110016

Dated: 1st August 2014

NOTICE INVITING QUOTATIONS

Sub: Purchase of Gel Permeation Chromatography

Sealed quotations in ***separate envelops of technical and commercial bid*** kept in a one sealed outer envelope are invited for purchase of a **Gel Permeation Chromatography (GPC) system** as per specifications given below. Your sealed quotation should reach latest by 5 PM on 22 August 2014 to **Prof Ravi Shankar, Department of Chemistry, Indian Institute of Technology – Delhi (IIT Delhi), Hauz Khas, New Delhi - 110016**. Your quotation should be superscribed "Purchase of gel permeation chromate graphy (GPC) due on 22 August 2014".

SPECIFICATIONS

Gel Permeation Chromatography (GPC) system with the following specifications

Solvent system:

- Programmable flow rate 0.001 to 20.00 ml/min in 0.001 ml/min increament
- Flow precision: 0.1% RSD
- Flow accuracy: ±1%
- Max operating pressure: 6000psi
- Compressibility compensation: Programmable
- Plunger guiding system: Floating, self aligning mount
- Flow calibration: Programmable
- Operating pressure limits: Programmable high and low pressure limits, user selectable in psi, bar, k Pa.
- 11 gradient curves (including linear, step (2), concave (4) and convex (4)
- The pump should have GLP features like maintenance feedback for continuous tracking of instrument usage with user settable limits and feedback messages.

Manual Injector Rheodyne & Stand kit:

- A front end pressure screw for easy seal adjustment
- Wide port angles for improved access to fittings
- Internal position switch
- Operating pressure upto 5000 psi.
- 5, 50 & 200ul sample loops included
- 25ul Syringe included.

Refractive Index Detector:.

- Measurement range: 7.0x10-9 to 5.0x10-4 RIU
- Flow rate: 0.1 to 10.0 ml/min., analytical to narrorbore applications
- Cell volume: 10ul
- Cell pressure: <100psi maximum with built-in pressure relief valve
- Linear Dynamic Range: <5% over +/- 5.0 x 10-4RIU
- Temperature control: Internal oven: 30 - 55 0C, +/-0.5 oC, settable in 1oC increments
- Refractive Index range: 1.00 to 1.75 RIU
- Noise: < 1.5 x 10-9 RIU mode
- Drift: < 1.0 x 10-7 RIU/hr.

Column compartment:

- Wavelength range: 190 - 700nm
- Light source: Deuterium

Flow Cell Design: Taper Slit

- Noise: <+/-0.50 X 10-6 AU, dry cell, 254nm
- Drift: 1 X 10-4 AU/hour
- Linearity: <5% at 2.5 AU Propyleparaben, 257nm
- Bandwidth: 5 nm.
- Flowcell: 10ul,
- Time programmable: Wavelength polarity, lamp on/off
- Measurement range: 0.0001 to 4.0000 AUFS
- Accuracy: +/- 1nm
- Reproducibility: +/- 0.1nm
- On-line LCD display of chromatograms/spectras.
- Integral Cuvette holder to be used as qualitative bench-top Spectrophotometer

Chromatography Manager Software:

- Software for Control, acquire and process HPLC data
- Full 64 bit architecture
- Windows 7 Environment
- Pre-made templates, customizable data reports, online help and answer wizard embedded **oracle data base**, report publisher, versatility for multitasking without multiple software package.
- Inbuilt GPC software should be provided.
- 1) GPC Columns THF based 300 x 4.6mm for 500-30000Da, THF based 300 x 4.6mm 5000-600,000 Da with Standards.
- 2)C18, 250x4.6, 5µ

TERMS AND CONDITIONS:

1. Please submit the TECHNICAL and FINANCIAL bids in separate sealed envelopes. Mark the two envelopes clearly as "Technical Bid" and "Financial Bid". Both the sealed envelopes should be sent in a single sealed envelope, clearly marked as "Quotations for Purchase of Gel Permeation Chromatograpgy (GPC) due on 22 August, 2014". The quote should reach the following address on or before 22 August, 2014 upto 5 PM.

   Prof Ravi Shankar,
   Department of Chemistry
   Indian Institute of Technology Delhi (IIT Delhi)
   Hauz Khas, New Delhi-110016

2. Please quote prices at FOB New Delhi, inclusive of installation charges. CIP charges should be quoted separately.
3. The quotations should be in the currency of the country of origin as well as Indian Rupees wherever possible and should be valid for at least three months.
4. Please attach all the technical literature and a list of similar installations done in India.
5. Standard warranty details (minimum 3 years) should be provided.
6. Payment should be through irrevocable letter of credit.
7. If the quote is being submitted by the representative of the Principals/manufacturer themselves, a valid Agency ship/Dealership Certificate authorizing the agent to quote to IIT Delhi on behalf of the Principals should be enclosed.
8. Complete set of manuals for the operation of equipment should be given.
9. Clearly specify the installation requirements—such as space, power, frequency, environment (Temperature and humidity) etc.
10. If the items quoted are proprietary in nature, please enclose proprietary certificate from the principals stating "certified that_____ is a proprietary item M/s. _____ and no other manufacturer makes these items.
11. If the bidder is an Indian agent, the agency certificate should be enclosed.
12. Please produce compliance certificate for the specification.
13. Training should be provided free of cost.
14. Delivery period should be specifically mentioned and should be as small as possible.
15. The products will be used for educational purposes. Hence any applicable institutional discounts should be offered and stated.
16. SALES TAX : This Institute is not exempted from the payment of Sales Tax/Service Tax/VAT. The rate (i.e. percentage of Sales Tax should be clearly indicated included or excluded) wherever chargeable.
17. Institute reserves the right to accept or reject any or all the quotations without assigning reasons thereof.

Prof. Ravi Shankar
(Chemistry Department)