## < School of Biological Sciences >

# Indian Institute of Technology Hauz Khas, New Delhi-110 016

### NOTICE INVITING QUOTATIONS

Dated: <	01	Jul	ly	<b>20</b>	14>
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Subject: <Purchase of "Protein Separation System" >

#### **Invitation for Tender Offers**

Indian Institute of Technology Delhi invites **hardcopy** Bids (Technical bid and Commercial bid) from eligible and experienced OEM (Original Equipment Manufacturer) OR OEM Authorized Dealer for **<supply, installation & integration of "Protein Separation System" >** with three years on site comprehensive warranty from the date of receipt of the material as per terms & conditions specified in the tender document, which is available on CPP Portal <a href="https://eprocure.gov.in/epublish/app">https://eprocure.gov.in/epublish/app</a> and IIT Delhi website <a href="https://www.iitd.ac.in/tenders">https://www.iitd.ac.in/tenders</a>.

#### **TECHNICAL SPECIFICATION:**

Sl.	Technical Specifications	Remarks
No.		
1	System should be capable of caring out all chromatography techniques like Ion exchange, Hydrophobic, Gel Filtration, Affinity, Desalting/ buffer exchange.	
2	System must have a pump with a flow rate of 0.1 to 50 ml/min with increment of 0.1ml/min.	
3	System must have a pressure rating of 10 bar (145 psi).	
4	All in one detector for UV (260/280nm), Conductivity Range of 1micro S/cm – 999.9 mS/cm.	
5	System should have a linearity of <3% up to 2 AU at 254nm and <5% up to 1 AU at 280nm, Optical path length of 2mm. should be able to monitor the Absorbance in range 0.01–5 AU (full scale).	
6	System should be supplied with Hg lamp for wavelengths 254 and 280 nm, further should have option for adding additional filters – 313, 405, 436, 546 nm in the same detector.	
7	System must have an automatic motorized seven-port injection valve so samples can be applied automatically during a chromatography run.	
8	System must have an automatic motorized eight port inlet valve on the buffer-A inlet so methods requiring three or more buffers or direct loading of large sample volumes can be run automatically.	
9	System must be provided with column holders.	

10	System must be provided with Superloop 150 ml volume sample application	
11	Vendor should provide two pairs of additional Titanium alloy filters.	
12	System must have built-in preprogrammed methods for the following chromatography applications: Desalting, Purification of His-tagged protein, Purification of GST-tagged proteins, Purification of monoclonal antibodies, IgM purification. Removal of albumin, Protein renaturation on column, Size Exclusion chromatography, Anion exchange chromatography and Cation exchange chromatography.	
13	Fraction collector with flow diversion valve, 95 tube rack of 18 mm must be an integral, built-in part of the System and vendor should also provide additional fraction collectors of following: 175 tube rack of 12 mm & 40 tube rack of 30mm.	
14	System should be able to run at Ambient temperature: + 4 to + 40 °C	
15	System should have pH monitor for pH measurement from 0-14	
16	System should include software to monitor signals from the chromatographic run in real time, evaluate and generate reports.	
17	System should include computer with windows operating system with serial port, which should be compatible to run the software and system.	
18	System should be supplied with gel filtration column of the following specification: Bed volume of 120 ml pre packed column, Spherical composite of cross-linked agarose and dextran; maximum pressure of 3 bar, particle size of 34 um and in the fractionation range of 1 x 10 <sup>3</sup> -1.0 x 10 <sup>5</sup> for proteins column dimension 1.6/60 cm	
19	Should provide UPS to run the system and computer in case of power failure, should have back up time 10 minutes or more.	
20	Electrical: 230V/ 50 Hz.	

If any of the technical specifications offered are better than those listed, clear comparison should be provided in the compliance statement with a separate "Remarks" highlighting how the specification is better than that listed

Bid submission start date: 01 July 2014 Bid submission end date: 14 July 2014

Bid opening date: 21 July 2014

Purchaser: < Dr. Ashok Kumar Patel>,

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