

## Specification for HPLC system

S.No.	Item	Specification
01.	<b>Solvent Delivery System</b>	<ul style="list-style-type: none"> <li>&gt; Low pressure Quaternary Gradient Mixing.</li> <li>&gt; Flow Rate: 0.001ml/min to 10ml/min or better.</li> <li>&gt; Flow Rate accuracy: <math>\pm 1</math> % or better.</li> <li>&gt; Flow rate precision must be less than <math>\pm 0.1\%</math> RSD or better.</li> <li>&gt; Pressure max.: 40 Mpa, 5000 psi or more.</li> <li>&gt; Gradient Formation: Low pressure Quaternary mixing.</li> <li>&gt; It must have a leak sensor as safety feature.</li> </ul>
02.	<b>Degassing Unit</b>	<ul style="list-style-type: none"> <li>&gt; Degasser Type: Membrane On line degasser 4 lines or better.</li> <li>&gt; Must have a leak sensor as a safety feature.</li> </ul>
03.	<b>Dual Wavelength UV-Vis Detector</b>	<ul style="list-style-type: none"> <li>&gt; The Bandwidth should be 8nm or better.</li> <li>&gt; Wavelength range must be from 190nm to 700nm.</li> <li>&gt; Wavelength accuracy must be <math>\pm 1</math> nm maximum or better.</li> <li>&gt; Wavelength reproducibility must be <math>\pm 0.1</math> nm.</li> <li>&gt; Drift should be less than <math>1 \times 10^{-4}</math> AU/Hour or better.</li> <li>&gt; Noise level should be <math>\pm 0.5 \times 10^{-5}</math> AU.</li> <li>&gt; A standard cell (length 10mm) should be available.</li> <li>&gt; Light source should carry warranty of 1 year or 2000 hours.</li> </ul>
05.	<b>Autosampler</b>	<ul style="list-style-type: none"> <li>&gt; Sample injection volume: variable between 0.1 <math>\mu</math>l to 100<math>\mu</math>l.</li> <li>&gt; Number of samples : 100 (aprox) for 1 ml. Or 1.5ml.</li> <li>&gt; Carry-over no more than 0.05 % or better</li> <li>&gt; Injection volume accuracy within 1%, Precesion: 0.3% RSD.</li> <li>&gt; Maintenance kit should be quoted.</li> <li>&gt; It should have a leak sensor and vial recognition as safety feature.</li> </ul>
04.	<b>Manual Injector</b>	<ul style="list-style-type: none"> <li>&gt; Manual Rheodyne Injector</li> <li>&gt; Injection volume range for analytical: 20<math>\mu</math>l, 50<math>\mu</math>l</li> <li>&gt; Syringes capacity: 10ml and 50 ml (5 each)</li> <li>&gt; Injector Adaptor</li> <li>&gt; 25<math>\mu</math>l Syringe</li> </ul>
06.	<b>Column Oven</b>	<ul style="list-style-type: none"> <li>&gt; Temperature Setting Range: 4 °C to 80 °C or better.</li> <li>&gt; Temperature Control Precision: <math>\pm 0.1</math> °C.</li> <li>&gt; Column capacity: 2 or more column of 250mm.</li> <li>&gt; Temperature Control Range: (Ambient temp. – 15 °C) to room ambient temp. + 60 °C.</li> <li>&gt; Safety Features: Thermal fuse, Solvent leak sensor.</li> </ul>
07.	<b>Column</b>	<ul style="list-style-type: none"> <li>&gt; C-18 Column (250 X 4.6mm, 5<math>\mu</math>) – 1 No.</li> <li>&gt; Chiral cel OJH (250 X 4.6mm, 5<math>\mu</math>) – 1 No.</li> <li>&gt; Zorbax LC-NH<sub>2</sub> (250 X 4.6mm, 5<math>\mu</math>) – 1 No.</li> </ul>
08.	<b>Software</b>	<ul style="list-style-type: none"> <li>&gt; Software compatible for the quoted system (Department of Biotechnology, possess <b>Empower 3</b> per single system SW 5 users license)</li> <li>&gt; Operation of the system should be very easy and intuitive via a state-of-the-art 32/64 bit Windows 7 based software.</li> </ul>

		> Spares of minimum essential components and consumables (such as tubing, connectors, o-ring, PEEK tubing, PEEK ferrules etc.) for smooth running of equipment for at least 3 years. Quote any component (if left above) essential required for the functioning of equipment.
06.	<b>Power Requirements</b>	> Online UPS with ½ hr backup compatible with the complete system. > 200-240V/50-60Hz
08.	<b>Hardwares</b>	> Computer of standard make should be supplied with mentioned specification: Processor: i3-quad core or better, 4GB RAM or higher, 500GB hard disc drive or higher; DVD Read Write Drive, 17" or more wider LED colour monitor; Key board, Mouse and Mouse Pad; with latest version of windows based operating software;
09.	<b>Warranty</b>	36 months from the date of installation.
10.	<b>Spares</b>	> Spares of minimum essential components and consumables (such as tubing, connectors, o-ring, PEEK tubing, PEEK ferrules etc.) for smooth running of equipment for at least 3 years. Quote any component (if left above) essential required for the functioning of equipment.

**Optional items:**

01.	<b>Evaporative Light Scattering Detector (ELSD)</b>	> Light Source : Laser Diode/ Tungsten halogen polychromatic/ LED > Evaporative Zone Temperature : Ambient to 100 °C or better > Detector : Hermetically Sealed photo diode/ PMT or better > Liquid Flow Rate : 0.3ml/min to 3ml/min or better > Gas Requirements : Nitrogen 50 psi or more > Unattended Operation : Full diagnostic data capture through console software
04.	<b>Refractive Index Detector</b>	> Refractive Index range : 1-1.75RIU > Noise Level : Less than $2.5 \times 10^{-9}$ RIU > Drift : Less than $2 \times 10^{-7}$ RIU/hour or better > Range : A mode : $0.01-500 \times 10^{-6}$ RIU > P and L modes: 1 - $5000 \times 10^{-6}$ RIU > Flow Cell Volume : 8-10 µL > Ambient Temp. : 4 °C -35 °C

**SECTION – I**

**PROCEDURE FOR SUBMISSION OF BIDS**

1. There will be Two bid system for this Tender: i) **Technical Bid** ii) **Financial Bid**.
2. The Technical Bid of the Tender should be covered in a sealed cover Super scripting the words "Technical Bid". Likewise, the Financial Bid should also be covered in a separate sealed cover

superscribing the words "Financial Bid". The two documents viz., Technical bid and Financial bid covers prepared as above should be enclosed in a single sealed envelopes marked as under:

Tender for the supply of equipments to Deptt. of Biotechnology-2015

Due on 26/11/2015 (last date for submission of the bid).

Name & Address of the Tenderer.....

Tender should be raised in name of undersigned as:

THE PRINCIPLE INVESTIGATOR,

DBT FUNDED PROJECT,

DEPARTMENT OF BIOTECHNOLOGY,

HIMACHAL PRADESH UNIVERSITY,

SUMMER HILL, SHIMLA-171 005.

**Note: Price should not be indicated in the Technical bid otherwise the Tender will be Rejected.**

3. Tenders received after the due date will not be accepted. If the last date for submission of tender falls on any declared holiday in the University, the next working day will be considered as the last date for the same.

4. The bids prepared by the tenderer and all correspondence and documents relating to the bids, shall be written in English language.

5. The contract for the supply of the items is non-transferable.

6. Each page of the tender document should be numbered and signed by the authorized signatory.

7. Each offer should be complete in all respects.

8. Telegraphic/electronic/conditional offers will not be accepted.

## **SECTION – II**

### **TERMS AND CONDITIONS**

1. Opening of bids: Technical bids will be opened by the Committee after the closing date and the same will be confirmed and studied. The Tenderers will be invited for presentation and clarifications if needed. Financial bids of the Tenderers complying with the prescribed Technical specifications will be opened by the Committee. Tenderers or their authorized agents may be present if they so desire during opening of the Tenders.

2. Rejection of bids: The Committee reserves the right to reject any or all offers without assigning any reason.
3. Earnest Money Deposit (EMD): The Tender bid should accompany an EMD of Rs. 30,000 for HPLC system. The EMD should be made in the form of an A/c payee DD in favour of the Finance Officer, Himachal Pradesh University, Shimla-5 payable at Shimla. No interest is payable on EMD.
4. Refund of EMD: The EMD will be returned to unsuccessful Tenderer only after the Tenders are finalized. In case of a successful Tenderer, it will be retained till the successful and complete installation of the equipment(s) is accomplished to the satisfaction of the purchaser.
5. The amount under above clause shall be forfeited in the event of any misleading information provided in the compliance statement/specifications or any default/delay in the supplies and or the manufacturer's failure to execute the order in accordance with the terms and conditions stipulated here in.
6. Price: The rate should be FOR Department of Biotechnology, H. P. University, Shimla-5 inclusive of all levies, taxes, freight, octroi, entry tax etc.
7. CIF value and comparison of Financial bids: The manufacturers shall dispatch material "Freight Paid" in all cases. In the event of their failure to do so a penalty of 5% shall be charged on the amount paid as freight by the consignee on their behalf. In case of imported equipment(s) the University will supply the necessary documents needed for the custom clearance. The charges for custom clearance and transportation upto the Department of Biotechnology will be borne by the supplier. The University shall pay the custom duty as per actual. Bids quoted in foreign currency will be converted into Indian Currency at the exchange rate applicable on the day of opening of the financial bids for comparison purposes.
8. Warranty Period: The warranty period should be minimum 2 years (with spares) from the date of installation with satisfactory performance as per specifications.
9. PBG: Tenderer selected for supply of equipment, will have to provide Performance Bank Guarantee (PBG) on any scheduled bank situated in India, equivalent to 10 percent of the cost of the equipment which should be valid until the expiry of the Warranty period. The PBG will be provided by the Company along with the letter of acceptance of the order by the Principals. In case of Letter of Credit (LC), it will be opened in favour of the Principals only after obtaining the PBG. In case of payment by sight draft, the PBG should be given before the receipt of sight draft. PBG should be in favour of, Finance Officer, Himachal Pradesh University, Shimla-5.
10. Payment: Payment shall be released after delivery and satisfactory installation of the equipment.
11. Authorised Signatory: Signature of the tenderer will be deemed to be the authorized signature of the manufacturer/authorized supplier.

12. No quotation/tender will be considered unless and until all the documents including compliance statement are properly signed by the authorized person/supplier.

13. Delivery period: Delivery of the goods in question should be made within 60 days of opening of the LC.

14. Delayed delivery: If the delivery is not made within the due date for any reason, the Committee will have the right to impose penalty as decided by the purchase committee.

15. Non delivery or non-execution of Purchase Order: If the Tenderer fails to execute the order within the specified delivery period, the order shall be cancelled and EMD will be forfeited. The tenderer will also be liable for all damages imposed by Department of Biotechnology, H.P. University, Shimla for non supply of equipment(s) including the liability to pay the difference between the price accepted by him and those ultimately paid by the Department of Biotechnology, H. P. University, Shimla for the equipment. Such damages will be assessed by the Purchase Committee for the purchase of these equipments.

16. Increased statutory levies and duties above the rate quoted in the offer will not be an excuse for the Tenderer to delay the supply beyond the date specified in the Tender document.

17. Validity of rates: Rates quoted should be valid for at least 4 months from the closing date of the tenders.

18. Consistent pricing: The rates quoted for the equipment(s) by the supplier shall in no case exceed the lowest price at which the supplier of this Equipment(s) of identical description made to any other person/organization/Institution during the above said period and should attach an undertaking in this regard.

19. Installation requirements: The Supplier will clearly mention installation requirements on our part in the Technical bid.

20. Free Installation: The equipment and software should be installed and tested to the specifications free of cost.

21. Licensed software and its upgradation: One user license for analysis software should be provided. The certified/licensed software and programs should be the part of the supplies. There should be free upgradation of software for at least 5 years from the date of installation of the equipment.

22. Tenderers are advised to study all technical aspects and terms & Conditions, of the Tender documents. Submission of Tender shall be deemed to have been done after careful study and examination of the Tender Document with understanding of its implications.

23. Only Manufacturers or Authorized dealers to bid: The offering firm should clearly mention whether they are the manufacturer or authorized agent/dealer of the manufacturer. In case of agent for

overseas manufacturer, a letter of authorization from the manufacturer should be submitted along with the offer. The Tenderer can also enclose the rates on the letterhead of the manufacturer if he has been authorized to do so by the manufacturer.

24. Descriptive literature: A set of specifications, description and illustrated literature of the equipment and related peripherals should accompany the Technical bid.

25. User and Service Manuals: A set of User's manuals and Service manuals of the main instrument, attachments and related equipment should be supplied with the equipment.

26. Equipment must be new: The Tenderer must ensure that the equipment being offered is a new one and not refurbished or repaired one.

27. Defective Equipment: If any of the equipment(s) supplied by the Tenderer is found to be substandard, refurbished, unmerchantable or not in accordance with the description /specification or otherwise faulty, the committee will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the Tenderer with 18% interest if such payments for such equipment has already been made to him.

28. All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 45 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges.

29. Damage during transit: In case of any mishappening/damage to equipment and supplies during the carriage of supplies from the origin of equipment to the installation site, the supplier has to replace it with new equipment/supplies immediately at his own risk. Supplier will settle his claim with the insurance company as per his convenience. Department of Biotechnology, H. P. University, Shimla will not be liable to any type of losses in any form.

30. The PI, Department of Biotechnology reserves the right to accept or reject any or all the quotations/tenders and increase or decrease the quantity i.e. mentioned in the enquiry without assigning any reason and no claim of the tender will be admitted in this regard.

31. Legal jurisdiction: In case of any dispute, the decision of the Vice-Chancellor, H. P. University, shall be the final authority for decision which will be binding on the both parties and legal dispute will be subject to Shimla jurisdiction only.

32. Training: One week training should be provided free of charge at the premises of Department of Biotechnology, H. P. University, Shimla to our satisfaction.

33. Availability of Spares: The Tenderer must assure the availability of spares for servicing of equipment for at least next 10 years. Supplier should give an undertaking that spares parts will be supplied within the specified periods as and when ordered.

34. Bank Charges: Bank charges in India will be borne by the H. P. University, Shimla University and Bank charges abroad will be borne by the suppliers in case of Letter of Credit.

35. Similar Models installed: The Tenderer must mention in the Technical bid the similar model of equipment installed in India during the last two years and the addresses of contact persons at these places.

36. Application Specialist: The Tenderer should mention in the Technical bid the availability and names of Application Specialist and Service Engineers in the nearest regional office.

37. Response Time: The Tenderer should mention in the Technical bid the response time for attending to a complaint about the equipment.

38. The tender/quotation along with all documents (duly signed) viz. compliance sheets, terms and condition brochures of the quoted product, earnest money etc. shall reach the office of The Principle Investigator, Department of Biotechnology, H. P. University, Shimla positively by 4.30 P.M. on 26/11/2015.

Dated.....

(Signatures of the authorized Dealer/Manufacturer with seal)