



राष्ट्रीय औषधीय शिक्षा तथा अनुसंधान संस्थान गुवाहाटी
**NATIONAL INSTITUTE OF PHARMACEUTICAL
EDUCATION AND RESEARCH GUWAHATI**

(Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers, Govt. of India)
SilaKatamur (Halugurisuk), P.O.: Changsari, Dist: Kamrup, Assam, Pin: 781101.

**Minutes of the Pre Bid Committee Meeting held on
24/02/2021 at 11:00 AM**

Item Description: High Performance Liquid Chromatograph

Reference No: NIPERG/157/EQP/HPLC/2020-21 dated: 17.02. 2021

With reference to the tender enquiry No: NIPERG/157/EQP/HPLC/2020-21 dated: 17.02. 2021 NIPER-G has been invited open tender enquiry for the procurement of High performance Liquid Chromatograph. The following points has been discussed during the pre-bid meeting held on 24.02.2021 and the necessary amendments has been made in the tender document. Bidders are here by requested to quote the bids accordingly

General terms and Conditions	Revised terms and Conditions
<p>Payment Terms: As a matter of policy being a Government institution no advance payments can be made to suppliers. The following payment terms may please be noted: 80% payment after receipt and satisfactory installation, demonstration and acceptance by user department. Balance 20% payment after watching performance for 30 days and after receiving performance bank guarantee to cover warranty obligations. For imported items: A letter of credit will be established for 100% value with the following stipulations: 50% payment will be released against physical delivery of items at NIPER-Guwahati in good condition. 40% payment deducting Indian agency commission component after satisfactory installation, commissioning, demonstration, training etc. The component of Indian agency commission will be released separately in equivalent Indian currency to Indian agent against submission of their claim. Balance 10% will be released after receiving performance bank guarantee to cover warranty obligation</p>	<p>The payment terms remains same as mentioned in the tender document</p>

REVISED TECHNICAL SPECIFICATION FOR High Performance Liquid Chromatograph

	HPLC WITH PDA, RI AND FLD	Amendment
Solvent Management System:	<ul style="list-style-type: none"> The system should have pump which has two independent pistons with independent motors and pressure transducers, which must help in reducing the baseline ripples and provides the smooth base line in detecting and quantifying the smallest peaks. 	<p style="text-align: center;">Quaternary pump</p> <p>The system should have pump which has two independent pistons with independent motors and pressure transducers or better technology, which must help in reducing the baseline ripples and provides the smooth base line in detecting and quantifying the smallest peaks.</p>
	<ul style="list-style-type: none"> Optional: Continuous and Automatic compressibility compensation provided in the pumping mechanism helps in greater accuracy of flow rate when working with gradient analysis and help in reproducibility of retention time in results. 	<p>Term "optional" is removed</p> <p>Continuous and Automatic compressibility compensation provided in the pumping mechanism helps in greater accuracy of flow rate when working with gradient analysis and help in reproducibility of retention time in results</p>
	<ul style="list-style-type: none"> Integrated Vacuum Degasser: Integrated high efficiency vacuum degassing (with < 500 µl internal volume per chamber) of minimum 4 channels must be provided. 	<p>Integrated Vacuum Degasser: Integrated high efficiency vacuum degassing (with 500 µL to 2.0 mL internal volume per chamber) of minimum 4 channels must be provided.</p>
	<ul style="list-style-type: none"> Flow rate up to 10 ml / min or higher. 	NO CHANGE
	<ul style="list-style-type: none"> Flow precision of < 0.075% RSD or better. 	NO CHANGE
	<ul style="list-style-type: none"> Dry prime and wet prime should be Automatic and controlled from front panel 	Purging (Dry prime and wet prime, equivalent or better) should be Automatic
	<ul style="list-style-type: none"> Effective delay volume of < 650 µl strictly, independent of system backpressure or better. 	Effective delay volume of ≤650 µl (equal or less); independent of system backpressure or better.
	<ul style="list-style-type: none"> Facility for Automated Solvent Blending, online pH, ionic strength & organic modifier blending from solvents must be present to attain a perfect pH without human intervention. The pump shall have a means within the method for the on-line blending 	Facility for Automated Solvent Blending/mixing, online pH, ionic strength & organic modifier blending from solvents must be present to attain a perfect pH without human intervention.

	of eluents to a specific pH based on experimental pH calibration file that are created by user.	
	<ul style="list-style-type: none"> 5000 psi or higher operating pressure for both Solvent and Sample Management functions 	No change
	<ul style="list-style-type: none"> Ten (10 or more) different programmable gradient profiles including linear, step, concave and convex. 	Omitted
	<ul style="list-style-type: none"> Integrated active, programmable and continuous plunger seal-wash 	No change
	<ul style="list-style-type: none"> Tool-free, simple access to plungers, plunger seals, plunger wash seals. 	No change
	<ul style="list-style-type: none"> Column Heater: Should be present integrated there with the system at a Temperature range upto 60^o C or better. 	Column oven: Should be present integrated there with the system at a Temperature range upto 60 ^o C or better.
In-Built/ Integrated Auto Sampler:	<ul style="list-style-type: none"> The flow through needle design with active and continuous needle wash help in reducing the carry over effect of the previous sample. 	No change
	<ul style="list-style-type: none"> Number of sample vials/wells: More than 110 no. with five trays 	Number of sample vials/wells: More than 110 no. with minimum suitable tray
	<ul style="list-style-type: none"> Volume of sample: Up to 2ml 	1.5 mL to 2.0 mL
	<ul style="list-style-type: none"> Sample carryover must be ≤ 0.0025% or better. 	No change
	<ul style="list-style-type: none"> Sample delivery precision: 0.3% RSD 	No change
	<ul style="list-style-type: none"> Injection Needle wash: Integral, active and programmable. 	No change
	<ul style="list-style-type: none"> The Autosampler must be fully integrated / integral part of the entire system. 	The Autosampler must be fully integrated /modular integral part of the entire system.
	<ul style="list-style-type: none"> Sample temperature: 4°C to 40°C 	No change
Photo Diode Array Detector:	<ul style="list-style-type: none"> Wavelength range: 190-800 nm or better. 	No change
	<ul style="list-style-type: none"> Wavelength repeatability: ± 0.1 nm or better. 	No change
	<ul style="list-style-type: none"> Wavelength Accuracy: ± 1 nm or better. 	No change
	<ul style="list-style-type: none"> Data Acquisition: Up to 80 points / sec or higher. 	No change

	<ul style="list-style-type: none"> Light Source: Preferably must be a Single Deuterium lamp covering entire range; Lamp should be of 2000 hrs warranty without drop in the energy level with appropriate backup from software and hardware. It should be associated with Lamp optimization software to ensure consistent high sensitivity applications & reproducibility. 	Light Source: Preferably dual lamp i.e. Deuterium lamp and tungsten lamps covering entire range from 190-800 nm or better; Lamp should be of 2000 hrs warranty without drop in the energy level with appropriate backup from software and hardware. It should be associated with Lamp optimization software to ensure consistent high sensitivity applications & reproducibility.
	<ul style="list-style-type: none"> Flow cell Design: Suitable flow cell design for avoiding total internal reflection with a Cell Volume must be less than 10 μl. 	Flow cell Design: Suitable flow cell design for avoiding total internal reflection with a Cell Volume must be in the range 8-13 μ l.
	<ul style="list-style-type: none"> Spectral Resolution/Optical Band pass: 1.2nm per photodiode with a total of 512 photodiodes, digital and optical (3D mode) 	Spectral Resolution/Optical Band pass: suitable resolution per photodiode with a total of 1024 photodiodes, digital and optical (3D mode)
	<ul style="list-style-type: none"> Operating mode: Both 2D and 3D 	No change
	<ul style="list-style-type: none"> Linearity Range: $\leq 5\%$ at 2.0 AU 	No change
	<ul style="list-style-type: none"> Noise: $\leq 10 \times 10^{-6}$ AU 	No change
	<ul style="list-style-type: none"> Drift : $\leq 1 \times 10^{-3}$ AU/hour 	No change
Fluorescence Defector (optional)	<ul style="list-style-type: none"> Wavelength Range: 200 to 890 nm 	200 nm to 880 nm or better
	<ul style="list-style-type: none"> Emission Wavelength Range: 210 to 900 nm 	
	<ul style="list-style-type: none"> Bandwidth: 20 nm 	No change
	<ul style="list-style-type: none"> Wavelength Accuracy: ± 3nm 	Wavelength Accuracy: In the range of ± 3 nm
	<ul style="list-style-type: none"> Wavelength Repeatability: ± 0.25 nm 	No change
	<ul style="list-style-type: none"> Sensitivity: S/N, Raman peak of Water ≥ 1000 	No change
	<ul style="list-style-type: none"> Measurement Range: 0.001 to 100,000.000 emission units. 	Omitted
	<ul style="list-style-type: none"> Data Channels: Up to Four 2D channels or One 3D channels. 	No change
	<ul style="list-style-type: none"> Sampling Rate: Upto 20 points / s. 	No change
	<ul style="list-style-type: none"> Light Source: Xenon Lamp, should have 2000 hrs warranty. 	No change
<ul style="list-style-type: none"> Flow cell design: Axially Illuminated. 	Omitted	

	<ul style="list-style-type: none"> Flow Cell Volume: 13 μl 	<ul style="list-style-type: none"> Flow Cell Volume: in the range 8-13 μL
Refractive Index Detector (optional)	<ul style="list-style-type: none"> RI Units: 1.00 to 1.75 with measuring range of 5×10^{-4} to 7.0×10^{-9} RIU. 	RI Units: 1.00 to 1.75 with measuring range of 5×10^{-3} to 7.0×10^{-9} RIU.
	<ul style="list-style-type: none"> Flow cell should be temperature controlled or with heat exchangers to have minimum noise of 1.5×10^{-9} RIU with 2s time constant. 	Flow cell should be temperature controlled or with heat exchangers to have minimum noise of 2.5×10^{-9} RIU with 2s time constant.
	<ul style="list-style-type: none"> Cell should have minimum volume of 10microliter or less to be compatible with flow rates upto 10ml/min. 	Cell should have minimum volume of in the range 8-10 μ L to be compatible with flow rates upto 10ml/min.
	<ul style="list-style-type: none"> Flow Cell: Fused Quartz 	No change
	<ul style="list-style-type: none"> Flow cell volume: 10 μL 	No change
	<ul style="list-style-type: none"> Light source: LED 	LED or equivalent
Evaporating light scattering Detector (optional)	<ul style="list-style-type: none"> Minimum detection limits for non-volatile (example: Glucose) and typical semi volatile (example: caffeine) analytes should be 2 ng or better. 	Light source: LED
	<ul style="list-style-type: none"> Should have lowest background noise and excellent signal to noise ratio. 	No change
	<ul style="list-style-type: none"> Data accusation rates should have minimum 60 Hz provides full compatibility with fast separations. 	No change
	<ul style="list-style-type: none"> System should have nebulizers for flow rates from 5 μL/min to 5 mL/min cater for all important UHPLC techniques. 	System should have nebulizers for flow rates upto 2 mL/min cater for all important UHPLC techniques
	<ul style="list-style-type: none"> System should have nebulizer and optical head designed for optimized peak shape and peak width. 	No change
Instrument along with Detectors and Software Qualification Service & Certification (optional)	<ul style="list-style-type: none"> System Qualification (as per GLP Compliance) along with all detectors and Software (IQ/OQ) must be quoted. 	No change
	<ul style="list-style-type: none"> Vendors must quote the Qualification kits with defined list of items along with valid Cat. No./Product ID etc. 	No change
	<ul style="list-style-type: none"> During installation and qualification, Instrument should perform as per submitted specification in presence of user. 	No change

Columns & Accessories: Optional	<ul style="list-style-type: none"> Suitable analytical C18 (Synergi fusion RP-C18 or similar chemistry from different vendor) (1 No.), Chiral column (01), phenyl column (01), amino column, Luna amide column (01), x bridge (01) & Normal phase column (1 No.) should be quoted with the system with the dimension of 4.6×250 mm, with 5µm particle size 	Suitable analytical C18 (Or similar chemistry from different vendor) (1 No.), Chiral column (Amylose based Chemistry, 01), amide column (01) & Normal phase column (silica or equivalent 1 No.) should be quoted with the system with the dimension of 4.6×250 mm, with 5µm particle size.
	<ul style="list-style-type: none"> Solvent filtration assembly (02 numbers with 47 mm diameter) 	No change
	<ul style="list-style-type: none"> oil less Vacuum Pump (02) for solvent and buffer filtration 	No change
	<ul style="list-style-type: none"> Suitable Peek Tube Cutter – 1 no. 	No change
	<ul style="list-style-type: none"> Suitable Stainless-Steel Tubing Cutter with Blades – 1 no. 	No change
	<ul style="list-style-type: none"> Suitable Solvent Inlet Filter – 10nos 	No change
	<ul style="list-style-type: none"> Suitable Stainless-steel Union – 1 no. 	No change
Future up-gradation	The Quoted system should be capable enough for future up-gradation to different detection attachments.	No change
Software (Please quote as optional) (One software and it should be compatible to connect with other equipment's)	<ul style="list-style-type: none"> Original standalone control software and network connectivity software should be quoted as optional 	No change
	<ul style="list-style-type: none"> The software should be capable enough to calculate PDA/DAD peak purity both in 2D and 3D mode. 	No change
Server based Chromatography Network Software (Optional)		
Original Server based Network Chromatography Data Software (Optional)	<ul style="list-style-type: none"> Network based Chromatography Data Software must contain a structurally validated and ORACLE relational database management system which should allow searching and filtering of information using multiple search parameters. 	Network based Chromatography Data Software must contain a structurally validated and ORACLE or suitable/equivalent relational database management system which should allow searching and filtering of information using multiple search parameters.
	<ul style="list-style-type: none"> Network based Chromatography data software can connect 10 nos Chromatography systems. 	No change
	<ul style="list-style-type: none"> Oracle database must be present for easy tracking and trending, Instrument Method, Processing Method, Report Method, etc. 	Oracle database or suitable/equivalent must be present for easy tracking and trending, Instrument Method, Processing Method, Report Method, etc.

	<ul style="list-style-type: none"> The software must come with System Suitability facility for checking Detector noise and drift, USP Resolution, Signal to Noise ratio, USP Peak Tailing, Plate count etc. 	No change
	<ul style="list-style-type: none"> Vendor should quote 2 nos LC control Licenses (with catalogue no.) to connect above HPLC systems & 5 numbers of user's licenses for the creation of separate user names & passwords. 	No change
	<ul style="list-style-type: none"> Software should have extensive custom calculation capabilities, eliminating the need for external applications to meet the laboratory needs. For example, these might include calculations for multi-component assay, impurities and system suitability. 	No change No change
	<ul style="list-style-type: none"> Software must be able to store each analytical method including instrument set points, data acquisition, data evaluation and reporting parameters as one analytical specification. 	No change
	<ul style="list-style-type: none"> Apex peak integration algorithm should be available. Software must allow the system to run unattended, and it must be capable of monitoring the instrument during acquisition and recording both instrument performance parameters: temperature, pressure and including ambient temperature and any unusual or unexpected events that would affect the integrity or quality of the results. A log to record each functional step the software executes. A log to record when and who modified the methods. The software must allow programmed shutdown of the instrument, including the lamps in the detector. 	No change No change
	<ul style="list-style-type: none"> Pre-made templates, customizable data reports, online help and answer Wizards must be included to help maximize lab's productivity. 	No change
	<ul style="list-style-type: none"> Each injection is time and date stamped for easy archiving, retrieval of data. 	No change
	<ul style="list-style-type: none"> Report publisher facility for customized reports. 	No change
	<ul style="list-style-type: none"> Software should offer multiple levels of password, security to ensure the integrity of all your raw data and results. 	No change
	<ul style="list-style-type: none"> The Software must be associated with Audit 	No change

	Trail.	
	<ul style="list-style-type: none"> It must be complied with GLP/GMP & 21 CFR PART 11 & documents must be submitted related to same. 	No change
Chromatography Data Software Amended term: Computer system (optional)	<ul style="list-style-type: none"> Intel® Xeon® E5 series Single Quad Core 2.1 GHz or more 	No change
	<ul style="list-style-type: none"> 16 GB RAM 	
	<ul style="list-style-type: none"> Dual RAID Controller Card 	No change
	<ul style="list-style-type: none"> HDD – 300 GB SAS 15K - 6 nos. 	No change
	<ul style="list-style-type: none"> DVD ROM Drive 	No change
	<ul style="list-style-type: none"> LAN card 1GBPS - 2 no's (Including on board) 	No change
	<ul style="list-style-type: none"> Windows 2016 Server Standard edition (64bit OS) 	No change
	<ul style="list-style-type: none"> SVGA Monitor (27 inch), keyboard and Mouse 	SVGA Monitor (21 inch), keyboard and Mouse
	<ul style="list-style-type: none"> DLT Tape backup systems and DLT Tapes for Backups. 	No change
Computer for connecting HPLC Systems with inbuilt wifi (optional) (one per each HPLC system)	<ul style="list-style-type: none"> Intel i7 processor 2.4 Ghz or More 	No change
	<ul style="list-style-type: none"> 12 GB RAM 	No change
	<ul style="list-style-type: none"> 300 GB Hard Disk 	No change
	<ul style="list-style-type: none"> DVD ROM Drive 	No change
	<ul style="list-style-type: none"> LAN card 1GBPS - 2 no's (Including on board) 	No change
	<ul style="list-style-type: none"> Windows 10 Professional (64 bit – OS) 	No change
	<ul style="list-style-type: none"> 27 inch Monitor, keyboard and Mouse. 	Monitor: 20-22 inch
Printer (1 Nos, optional)	Laser Jet Printer (3 in one)	Omitted

The other terms and conditions remains same as mentioned in the tender document.

Sd/-

Stores and Purchase officer

Sd/-

Registrar Incharge