

NIPER-G/PUR/GLOBAL/2018/11

Specification for Fully automated method development UPLC

	Specification as per the Tender Notification in Chapter 4	Amended Specifications as per the Pre Bid meeting held on 22-02-2018 in Chapter 4
1.	Pump - QUARTERNARY GRADIENT	Pump - QUARTERNARY GRADIENT
	Number of Solvents - one to four in any combination and should have an addition 6 solvent choices (~10 solvents) for different complex molecules analysis and method development.	No change
	Integrated high efficiency vacuum degassing	No change
	Effective delay volume should be less than 400 micro liters	No change
	Maximum operating pressure should be 12,000 psi or more with flow rate of 1 ml/min.	Maximum operating pressure should be 14,000 psi or more with flow rate of 1 ml/min.
	More than Ten (10) programmable gradient profiles including linear, step, concave and convex	This specification can be quoted as optional item.
	Auto blend feature for automation in 4 or more solvent blending for pH gradient.	No change
	Should have leak sensors and safe leak handing, full 96-hours diagnostic data display through software.	No change
	System should have a handling capacity for pH from 2 to 12 for various solvents & buffers.	No change
	Flow rate should be 0.010 to 2.0 ml/min. in 0.001 ml increments	No change
	Flow accuracy should be $\pm 1.0\%$ at 0.5 to 2.0 ml/min.	No change
	Flow precision should be 0.075% or ± 0.020 min SD	No change
	Pump seal wash- should be equipped with a wash system to flush the rear of high pressure seal and the	No change

	plunger	
	Flow path- Should have biocompatible flow path to insure robust and rugged operations in Ion exchange, Size exclusion, hydrophilic interactions and Reversed phase.	No change
	The equipment should have an automated software assisted purge function for ease of solvent changing and system purging.	No change
	A part from In vitro studies, this system is required for estimating very small quantities of biomarkers in biological samples like blood and urine.	No change
	System must combine the speed and performance of UHPLC and with ability to run HPLC separations.	No change
2.	INTEGRATED AUTOSAMPLER:-	INTEGRATED/ Modular AUTOSAMPLER:-
	Injection volume range should be 0.1 to 500 micro liters, $\pm 0.2 \mu\text{l}$ accuracy.	No change
	Maximum sample capacity should be 768 in two 384 - well plates or 96 in 2 ml vial holders, additional position for dilution functions is preferable.	No change
	Sample compartment temperature range should be 4 to 40 deg centigrade in 0.1 degree increments with a temp. Accuracy ± 0.5 deg centigrade.	No change
	Precision should be $<0.5\%$ for injections from 5-80 μl . Carryover should be $<0.01\%$ from previous injection.	No change
	Advanced sample manager capabilities-auto-dilution and transfer	No change
	Primary wetting materials- gold coated stainless steel, PEEK blend etc. or better	No change

3.	Column Compartment	No change
	Should be able to hold 15 cm and 25 cm long columns.	No change
	Column compartment temp range should be between 20-90 deg centigrade, setting in 0.1 degrees increments.	Column compartment temp range should be between 20-80 deg centigrade , or more setting in 0.1 degrees increments.
	Column compartment temperature stability ± 0.3 degrees	No change
	Solvent conditioning: active pre heating as standard.	No change
	Preferable to have some features to track the column usage history.	No change
4.	PDA Detector:-	No change
	Wavelength range 190 to 800 nm	No change
	Light source Should have Pre-aligned Deuterium lamp	No change
	Wavelength accuracy ± 1 nm	No change
	Optical resolution 1.2 nm or better	No change
	Digital resolution 1.2 nm/pixel or better	No change
	Data acquisition rate Up to 80 Hz	No change
	Drift $\leq 1.0 \times 10^{-3}$ AU/hour/ $^{\circ}$ C	No change
	Baseline noise ± 3 μ AU or better	No change
	Flow cell design Light-guiding UHPLC flow cell or better	No change
	Path length 10 mm (analytical cell)	No change
	Cell volume 500 nL (analytical cell) or less	No change
5.	SOFTWARE:-	No change
	The Chromatography software should be embedded with data base preferably Oracle	No change
	The software should provide all the functionality that a laboratory staff needs to efficiently work with	No change

	chromatography data.	
	The software should have robust peak integration capabilities, with effective detection of Low level peaks on noisy or sloping baselines.	No change
	The software should have the capacity to control triple quadrupole Mass detectors in a routine lab environment.	No change
	Should have custom field calculation option & should be able to control UV/PDA or MS detectors in future without any upgradation.	No change
	UHPLC system software shall provide a calculator for scaling HPLC methods for transferring from HPLC to UHPLC, the software will scale from UHPLC to HPLC. The method settings shall be fully transferable into UHPLC system instrument method to avoid transcription errors.	No change
	Software provision to blend different solvents (aqueous/buffer salt/ acid/base) to create gradients based on the pH and/or buffer salt concentrations for method developments. Method development software must support Quality by Design (QbD) guidelines of ICH or US FDA and compactable with regular UHPLC system chromatography software for quickly design and automated experiments.	No change
6.	Accessories	
	Suitable columns, Guard columns with sub 2 micron particle size for faster analysis.	Suitable columns with guard columns with sub 2 micron particle size for faster analysis as details

		C18 column: 2.1 x 100: 5 number C18 column: 2.1 x 150: 5 number C8 column: 2.1 x 150: 5 number
	Compatible PC & Printer	
	Suitable sonicator	Suitable bath sonicator along with solvent filtration kit
	Suitable UPS	Suitable UPS with 1hr back up
7.	Warranty: 3 years	Warranty: 3 years

Sd/-
Purchase officer

General Terms and Conditions applicable to all 13 tenders published in newspaper on 19th February 2018 and exhibited in NIPER Guwahati website.

Following additional information is provided for the information of prospective bidders for 13 different items for which tender inquiry is issued:

1. Payment terms:

Considering the request made by few prospective bidders during the pre-bid conference held in the institute on 22nd February 2018, regarding payment terms related with foreign suppliers it is clarified that the **indicated payment terms in the tender documents still remains unchanged**. However Director, NIPER Guwahati **at his own discretion** can consider any other mode of payment requested by suppliers based on the reputation, credentials of foreign suppliers in the field and also protecting the interests of NIPER Guwahati. **No request for advance payment will be considered.**

2. Clarification with regard to projecting the cost implications of free delivery of the item at NIPER Guwahati premises.

Subsequent to the Pre-bid conference with regard to projection of price for items coming from abroad, the following guidelines may be followed:

A) The F.O.B. C.I.F., C.I.P. prices as per the suppliers quote should be indicated in foreign currency only

B) The additional cost towards payments of custom duty against duty exemption certificated provided by the institute, clearance charges, forwarding consignment from port of clearance to NIPER Guwahati premises etc. can be quoted in Indian currency.

For comparing the price with other bids, the institute at the time of preparing comparative chart for the tenders, the total F.O.B., C.I.F., C.I.P. cost will be converted into equivalent Indian currency at the exchange rate prevailing on the date of tender opening i.e. 13th February 2018 at 1500 hours IST and add the equivalent Indian currency value to the clearance and forwarding charges indicated by the supplier.
