



सीएसआईआर-केंद्रीय खाद्य प्रौद्योगिक अनुसंधान संस्थान  
CSIR- CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE  
मैसूरु / MYSURU-570 020, भारत / INDIA

(Constituent Laboratory of CSIR, New Delhi (Ministry of Science & Technology)  
An ISO 9001:2008, ISO 14001:2004 & ISO 17025:2005, NABL Accredited Laboratory

**Corrigendum: Tender for HPLC System with Photo Diode Array and Refractive Index Detector and Accessories**

**Corrigendum Title: Revised Technical Specification based on PBC**

**Tender Ref: CFTRI/52347/24-25 Date: 27-12-2024**

**Tender ID: 2024\_CSIR\_221469\_1**

The revised final specification based on the discussion in Pre Bid Conference held on 07-01-2025 @ 10. 30A.M is uploaded herewith.

All the prospective bidders are requested to take cognizance of the revised specification and submit their bids accordingly on or before 03.00 p.m. on 06-02-2025.

**All other tender terms and conditions of tender remain unaltered.**

**Controller of Stores & Purchase  
CSIR-CFTRI, Mysore  
Dt. 22-01-2025**

## Revised specifications of HPLC System with Photo Diode Array and Refractive Index Detector and Accessories

HPLC System with Photo Diode Array and Refractive index Detector and Accessories	
Solvent Delivery Unit	<p>High-Pressure Binary Gradient with 2 individual solvent delivery units,            The flow rate setting range between 0.001 to 10 ml/min,            Flow rate accuracy should be less than <math>\pm 1\%</math>,            Flow rate precision should be less than <math>\pm 0.07\%</math> RSD,            The maximum pressure setting range is <b>5000</b> Psi or more,            The composition accuracy is <math>1\%</math> &amp; composition precision below <math>0.2\%</math> RSD,            Gradient curve setting function and Leak Sensor are available</p>
Mixer	Suitable High pressure (binary) Mixer to be quoted
Degassing Unit	Degassing unit to have 2 or more flow lines with 1 rinsing line
Auto-Sampler cooler with sample	<p>Sample injection volume should be variable between <math>0.1 \mu\text{l}</math> to <math>100 \mu\text{l}</math>,            Injection volume setting <math>0.1 \mu\text{l}</math>,            Sample Temperature setting range: <math>4</math> to <math>40^\circ\text{C}</math>,            The Carry over should be <math>&lt; 0.005\%</math>,            Injection precision: less than <math>0.3\%</math> RSD,            Number of samples: 80 Nos with <math>1.5\text{ml}</math> vial capacity and/or <math>300</math> micro liter vial capacity,            Safety features like leak sensor and automatic rack and vial recognition</p>
Column Oven	<p>The temperature Setting range is <math>5</math> to <math>80^\circ\text{C}</math> or better (to achieve column temp of <math>80^\circ\text{C}</math> or better)            Temperature control precision should be <math>0.1^\circ\text{C}</math>,            The oven compartment can accommodate a minimum of two columns of <math>25</math> cm in length.</p>
Column	<p>Supelco 504971 Discovery<sup>®</sup> C18 HPLC Column, <math>5 \mu\text{m}</math> particle size, <math>L \times \text{I.D.}</math> <math>25 \text{ cm} \times 4.6 \text{ mm}</math> (2 No.)            SUPELCOSIL<sup>™</sup> 58338 LC-NH<sub>2</sub> HPLC Column, <math>5 \mu\text{m}</math> particle size, <math>L \times \text{I.D.}</math> <math>25 \text{ cm} \times 4.6 \text{ mm}</math> (1 No.)            1.50858 LiChrospher<sup>®</sup> 100 RP-18 endcapped (<math>10 \mu\text{m}</math>) HPLC Columns <math>L \times \text{I.D.}</math> <math>250 \text{ mm} \times 10 \text{ mm}</math>, LiChroCART<sup>™</sup> HPLC cartridge, manuCART<sup>™</sup> holder required for use (1 No)</p>

Photo Diode Array (PDA) Detector	<p>Programmable bandwidth (8nm-high sensitivity mode, 1.2nm-high resolution or equivalent mode),  Wavelength range: 190nm to 800nm  No of Diode Elements: 1024 Diodes  Light Source: Deuterium and Tungsten Lamp,  Wavelength accuracy : <math>\pm 1</math> nm  Wavelength reproducibility : <math>\pm 0.1</math> nm,  Drift : <math>10 \times 10^{-4}</math> AU/Hour or better  Noise level : <math>\pm 7 \times 10^{-6}</math> AU or better  Linearity: 2.5AU or less  Detachable separate analytical and preparative flow cells for PDA should be supplied</p>
Refractive Index Detector	<p>Refractive Index measurement should be 1 to 1.75 RIU,  Noise Level should be &lt; 2.5nRIU or better  Drift &lt;0.2uRIU/h  Polarity switching : yes  Range A mode : 0.01 to 650 uRIU,  Maximum operating flow rate: 10 mL/min  Temperature control of cell unit: 30 to 60°C  Cell capacity: 8-10 uL</p>
Software and Data Management System	<p>Platform:- Windows latest based.  Performance:- Should cover one-point digital instrument control, qualitative and quantitative processing, report creation and self-diagnosis.  Data Report:- Shall be customizable  Help Wizard:- Available  Automatic execution of system checks, Auto Purge and baseline checks  Log files:- Available for complete audit trails  Regulatory Compliance:- Software shall comply with 21 CFR Part II. Should perform IQ /OQ and should provide a certificate</p>
Computer and Printer	<p>A Branded Computer (HP/Dell/Lenovo/Acer or equivalent) with 14<sup>th</sup> Generation i7 14700, 32 GB DDR5 RAM, 512 GB SSD, 4 TB External SATA HDD, Licensed Windows 11 OS, additional LAN card, 27-inch FHD LED Monitor</p> <p>HP/Brother or equivalent MFP Monochrome Duplex Laser Printer</p>
UPS	<p>10 KVA Branded UPS with 60 min battery backup on full load</p>
Other Requirements	<p>Suitable Sample solvent filtration kit with vacuum pump to be quoted  3 years Standard Warranty  No of Installation in India should be 3 or more. List of organizations with contact details should be provided,  Bidder should submit performance certificates from 3 central Government research Organizations.  Demonstration and Training on operation, application, calibration and troubleshooting of the equipment shall be provided by supplier without any additional cost,  The supplier should have service center and support team in Mysore/Bangalore.  All consumables for trouble free operation for 2 years post warrant  All specifications should be mentioned in brochure/ global website</p>