



INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

GT ROAD, KALYANPUR, KANPUR – 208016

UTTAR PRADESH, INDIA

TENDER REFERENCE NO.: IITK/CHM/PSS/2022/01

Bid Submission End Date- 28.01.2022

Tender Document

For

“Flash chromatography Instrument”

Tender document

Department of Chemistry
Indian Institute of Technology Kanpur
Kanpur (UP) 208016 India

Tender Ref. No.: IITK/CHM/PSS/2022/01

Bid Submission Start Date: 18.01.2022

End Date: 28.01.2022 at 17:30 hrs

Sealed quotations are invited for flash chromatography Instrument. The detailed specifications and address are given below.

A	Flash Chromatography system	
1.	Flow rate and pressure :-	Automated flash Chromatography system with with flow rate :- 1 ml to 200ml per min Pressure :- 10bar(145 psi)
2.	Control unit :-	Interface :- On-board computer with 10" or more capacitive touch screen interface with Ethernet port, USB ports
3.	Separation :-	Separation on the basis of Isocratic, linear gradient and step gradient, normal and reverse phase separation. Gradient Hold, Zoom, Drag, scroll options are required.
4	Base line Correction :-	Base Line correction option when using low absorbance wave length. Real gradient zeroing for baseline correction to eliminate background shifts.
5	Pump and features :-	Binary pumping system with selection for 4 different solvents in the method. A 3 rd line with modifier can be passed in the solvent system at any time. System should have minimum two pumps in it for solvent pumping.
6	System features :-	Real-time method change facility, flow rate, fraction settings, collections pattern during purification and running conditions. Changing of Tray to bypass collection and adding of new trays while run is possible.
7	Upgradation :-	ELSD and Mass Detector can be connected to the system at any time in future.
8	Safety features:-	Safety features allows system to stop of flow if racks containing all test tubes filled up and new rack position is not defined. System asks for new tray. If un-due pressure increases then system gives error message and if it still continue then pause the flow and system.
9	Software controlled Level sensor :-	The Software Solvent Level monitoring in each Solvent inlet & Waste Level Monitoring system
10	Different mode :-	Binary gradient with four solvent system option using Linear, Step and isocratic Mode.
11	Collection :-	Fraction collector- broad fractions rack capacity to collect different fraction volumes. it should have minimum capacity 100 test tubes or more. Automated fraction collection. Facility to collect fractions on the basis of peak, AU, slope and combination. Collect all, threshold, slope, and manual collection mode.
12	Detection mode :-	Detection mode: PDA detector with all wave length screening option as well as collection of peak in test tubes. Also along with PDA screening there is the option of variable, dual-wavelength selection option ranges from 200-400nm, on line monitoring,

13	Additional features :-	Feature for automatic calculation of Rf value of TLC plate and creation of automatic Gradient as well as Linear method. Based upon RF values Instrument allows to select the suitable cartridges for the run. Preferably Manufacturer should have upgradation with microwave synthesizer, evaporator from same brand
14	Spectra Display and detection :-	With real time & post run spectra display and peak purity display by spectral ratio based upon the wavelength. λ -all detection mode and baseline correction should be included along with system
15.	Detector :-	Photodiode Array (PDA) detection to flash chromatography The full spectrum for each compound can be seen as it elutes from the cartridge – in real-time as well as post run. This information can be used to confirm purity and compound identity. Identify impurities by taking advantage of the PDA 3D chromatogram display. Chemists can view the chromatogram in terms of both elution volume and UV absorbance which provides even more purity confirmation.
16	Cartridges	Silica cartridges of following sizes and numbers should be supplied along with the system free of cost at the time of installation. a) 5 g: 50 Nos., b) 10 g: 50 Nos.

Dr. Parthasarathi Subramanian

Department of Chemistry
Indian Institute of Technology Kanpur
Kanpur 208 016, India
Email: parthas@iitk.ac.in

Terms and Conditions:

1. All equipment must be compatible with Indian electrical standards and codes. Engineering documentation on the physical sizes and weights of all major and minor components must be submitted.
2. TENDER Specific Manufacturer Authorization Form from OEM Required.
3. The Institute reserves the right of accepting or rejecting any/all quotations without assigning any reason thereof.
4. All prices should be **F.O.R.**
5. Installation by OEM is preferred.

Appendix -1

TENDER ACCEPTANCE LETTER
(To be given on Company Letter Head)

Date: _____

To,

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No: _____

Name of Tender / Work: - _____

Dear Sir,

1. I / We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:

_____ as per your advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. _____ to _____ (including all documents like annexure(s), schedule(s), etc .), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We do hereby declare that our Firm has not been blacklisted/ debarred/ terminated/ banned by any Govt. Department/Public sector undertaking.

6. I / We certify that all information furnished by our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organisation shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

**Yours Faithfully,
(Signature of the Bidder, with Official Seal)**