

CSIR- CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE MYSORE-570 020, INDIA (Constituent Laboratory of CSIR, New Delhi (Ministry of Science & Technology) An ISO 9001:2008, ISO 14001:2004 & ISO 17025:2005, NABL Accredited Laboratory



Invitation to Bid.

Tender No. CFTRI/52254/2019 Date: 30/May/2019

HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC) WITH ACCESSORIES.

etender: For submitting tenders, login to <u>https://etenders.gov.in/eprocure/app</u>

LAST DATE:

1) TENDER SUBMISSION:

AT 14.00 HRS (IST) ON 26-JUN-2019

2) TENDER OPENING (Technical Bids only): AT 15.00 HRS (IST) ON 27-JUN-2019

Contact Details: Section Officer (Stores & Purchase) CSIR-CFTRI, Cheluvamba Vilas, K.R.S. ROAD, Yadavgiri P.O. Mysuru -570020 Tel: 0821-2515440/2515447 Fax: 0821-2515440 E-mail: cosp@cftri.res.in <u>sosp@cftri.res.in</u>

INSTRUCTIONS TO BIDDERS

- The Instructions, Terms & Conditions, General Conditions of Contract (GCC), Special Conditions of Contract (SCC), Annexures and Formats hosted in our website <u>www.cftri.com</u> [Path: Home page → Tenders → Standard Tender Document (Scrolling Text)] constitutes integral part of this tender.
- 2. <u>BOQ (Bill of Quantity)</u> Bidders should submit their financial bid in the format provided and no other format is acceptable. <u>BOQ (Price Schedule)</u> has been given as a standard format_along with the tender document. It is mandatory for all the bidders to upload duly filled BOQ (in MS Excel Format) towards submission of their Financial Bid. No changes or modification to the given format is acceptable. Bidders are required to go through the instructions carefully before filling BOQ.
- 3. Bid Security (EMD): INR 1,00,000/- [Rs. One Lakh Only].
- 4. Performance Security: 10% of the Contract Value.
- 5. Integrity Pact is not applicable for this tender.
- 6. Warranty: Minimum Two Years from the date of Installation and Commissioning.
- **7.** Delivery Period: Delivery should be effected within **8 (Eight) Weeks** from the date of contract signed/Letter of credit.
- **8. Terms of Payment:** The method and conditions of payment to be made to the supplier under this Contract shall be as follows:

A. Payment for Goods supplied from Abroad:

Payment of foreign currency portion shall be made in () [currency of the Contract Price] in the following manner:

- (i) <u>On Shipment:</u> 90 % (Ninety Percent) of the Contract Price of the Goods shipped shall be paid through irrevocable letter of credit opened in favor of the Supplier upon submission of documents specified in GCC/SCC.
- (ii) On Acceptance: 10 % (Ten percent) of the Contract Price of Goods received shall be paid within thirty (30) days of receipt of the Goods and successful installation & commissioning upon submission of claim supported by the acceptance certificate issued by the Purchaser along with the Performance security.

The L/C will be confirmed at the suppliers cost, if requested specifically by the supplier. All bank charges abroad shall be to the account of the beneficiary i.e. supplier and all bank charges in India shall be to the account of the opener i.e. purchaser. If L/C is requested to be extended/ reinstated for reasons not attributable to the purchaser, the charges thereof would be to the suppliers' account. Payment of local currency portion shall be made in Indian Rupees within thirty (30) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed. The LC for 100% value of the contract shall be established after deducting the agency commission payable if any, to the Indian agent from the FOB/FCA value.

B. <u>Payment for Goods and Services supplied from India:</u>

Payment for Goods and Services supplied from within India shall be made in Indian Rupees, [INR] as follows:

On Delivery, Installation and Acceptance: 100 % (Hundred Percent) of the Contract Price shall be paid on receipt of the Goods, upon submission of the documents specified in GCC/SCC and the Performance Security along with the acceptance certificate issued by the Purchaser.

SPECIFICATION FOR HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC) WITH ACCESSORIES

Modular high performance liquid chromatography system along with its accessories and Consisting of following modules as per their specifications mentioned below are required.

- 1. Solvent Delivery System for Analytical, Semi-Prep Flow Rates
- 2. On-line Degasser
- 3. Auto sampler
- 4. Detectors
- 5. Computer and Printer
- 6. Chromatographic Software

System Controller: It should be capable of controlling solvent delivery unit, auto sampler, column oven and detectors.

Degasser: Online degassing system of up to four solvents.

Pump:

Quaternary pump capable of making gradient of four solvents at a time with pressure up to 6000 psi.

Flow rate: 100 μ l - 5 ml/min.

Flow accuracy: ±1%

Sensor to detect leakage and pressure limit

Auto sampler:

Auto sampler should be able to do full volume injection and variable injection without any sample loss and should works at pump pressure range.

Temperature range: 10°C to 30°C

Injection volume: 1µl - 100 µl.

Needle mode flow to reduce the carryover issues: 0.1 % or less.

Needle cleaning with different wash solvents, before and after injection.

Apart from standard volume sample loop additional volume sample loops at least 2 extra should be provided.

Sample rack holder with vials 96 or above.

Column Oven: Must have the capability to maintain ambient temperature to 70 °C and should hold at least two columns of 300 mm length.

Detectors: Compatible detectors for the HPLC system

1. Diode Array Detectors

Wavelength range: 200 – 800 nm

Wavelength accuracy: ± 1.0 nm

Linearity should be equal or more than 2.0 AU.

Flow cell: Standard cell with path length 10mm.

2. Fluorescence detector

Wavelength range: 240 nm to 650 nm

Light source: Xenon lamp

Spectral bandwidth: 20 nm

Wavelength accuracy: ± 4 nm

Flow cell: Standard flow cell

3. Refractive Index detector

Refractive index range: 1.00 – 1.70 RIU, calibrated.

Sample Cell: standard flow cell with temperature control.

Range, auto zero and auto purge programming.

Polarity switching.

Maximum flow rate: up to 5 mL/min

Software and desktop system

Original licensed upgradable software to run on windows operating system (preferably windows 7) with features to control the HPLC, scanning spectra, peak purity. Compatible with all the modules and must have data processing and interpretation features.

Branded desktop system (windows 7 and above) with high-speed operation and high data storage features compatible with all the operations that can be performed with HPLC provided by the vendor. Laser jet printer with USB port that can be connected to the network should be provided.

Accessories

All required electrical cables, device drivers, accessories to be provided by the vendor. Solvent filtering device, sample-filtering units and following HPLC columns with respective guard columns to be supplied.

- 1. C-18-250 X 4.5 mm, 5 μ 2 Nos.
- 2. C-18- 150x 4.6 mm, 5 μ 2 Nos.
- 3. C-8- 150 x 4.6 mm, 5 μ -1 Nos.
- 4. NH2 250 X 4.6 mm, 5 μ 2 Nos.
- 5. C-18, Guard columns 3 Nos.
- 6. C-8, Guard columns- 3 Nos.
- 7. NH2, Guard columns 3 Nos.