Open Tender Notification for the procurement of "Strong-Anion Exchange High

Performance Liquid Chromatography (SAX-HPLC)" at the Indian Institute of Science,

Bangalore

(Last date of submission of tenders: 31-March-2021)

(TENDER FROM DOMESTIC VENDORS)

Date: 17.03.2021

Dear Sir/Madam:

Please send your quotation valid for 90 days for the supply of equipment described below.

Your quotation should clearly indicate the terms and conditions of the quotations, delivery,

delivery schedule, entry tax, payment terms, warranty coverage etc. The tender should be

submitted in two separate sealed envelopes – one containing the "Technical bid" and other

containing the "Commercial bid", both of which should be duly signed and must reach the

undersigned on or before 17:00 hours 31-March-2021.

The Chair

**Department of Biochemistry** 

**Division of Biological Sciences** 

**Indian Institute of Science** 

Bangalore-560012

Karnataka, India

Strong-Anion Exchange High Performance Liquid Chromatography (SAX-HPLC)

**Specifications:** 

PUMP:

1) It should be Binary Gradient HPLC system, delivery for accurate and precise solvent

delivery with binary hplc pumps. The pump module should have Isocratic and Gradient

capability. System should be able to upgrade to a flow rate of ≥ 22.5 ml/min with pressure

range of 0 to  $\geq$  6000 psi for the entire flow rate range. It should have 11 gradient profile.

- Flow rate: 0.00 to 10.00 mL/min in 0.01 mL increments.

- The system must have an in-built degasser (optional)

- Plunger seal wash integral, active and programmable

- Online, automatic, and continuous compressibility compensation without user intervention

to help in greater flow accuracy and hence better reproducibility of retention time and

results

- System delay volume for pump should be less at 200 uL.

- Composition range: 0.0% to 100.0% in 0.1% increments

- Composition accuracy: +/-1% independent of back pressure

- Composition precision: ≤ 0.15%

- Flow accuracy: +/-1%

**Manual Injector :** Injection volume range: 10 – 1000ul standard.

2) It should be Isocratic HPLC system, delivery for accurate and precise solvent delivery with

a single pump. System should be able to upgrade to a flow rate of ≥ 22.5 ml/min with

pressure range of 0 to ≥ 6000 psi for the entire flow rate range. It should have 11 gradient

profile. Pump Control Module and manual injector need to quoted.

**Column selector:** 

- The selector valve should support up to three different columns

- It should have digital display of valve position

- It should allow to select positions remotely by built-in instrument compatible electronic

interface. Position selection should be done locally by pushbutton.

#### Column and related stuffs:

- SAX cartridge column 125 x 4.6 mm x 5 μm; 6 NOS
- SAX cartridge column 250 x 4.6 mm x 5 μm; 2 NOS
- Cartridge column end fitting kit; 1 no
- Anion guard cartridge; 3
- Guard cartridge holder; 1

### **UV Detector:**

- Wavelength range: 190 to 700nm or better
- Bandwidth: 5 nm or better
- Wavelength Accuracy: 1nm (via patented Erbium filter) or better
- Wavelength repeatability: 0.1nm or better
- Linearity: <5% or better
- Drift: 1x10-4AU/hour or better
- Data acquisition: Up to 80Hz or better
- Flow Cell design: Patented Taper Slit
- Operating humidity: <95%, non-condensing

Original Manufacturer's Licensed Software: Chromatography software with integrated database (Oracle 8.0);32 Bit architecture; Report publisher facility for customized reports; It should be able to control single stage LCMS; It should be up gradable for Automated Method development Software; It should be operated with semi-Preparative system up to ≥ 22 ml/min flow when upgraded.

**Fraction Collector**: Fraction collector should be quoted.

- should have standard rack for 120 tubes up to 180 mm height
- diverter valve for standard-applications (compatible with all racks)
- maximal flow 300 ml/min

# Sample loops (10 uL, 500 uL, 1000 uL) and other accessories needs to be quoted.

- Sample and solvent filtration kit
- 2 spare guard columns and 2 spare guard column holders

- The system must have a tray for holding the solvent bottles safely and securely minimizing the risk of spillage. Solvent bottles and appropriate suction tubes with inline metal/ceramic or equivalent filters must be provided for use with HPLC grade solvents.
- Stainless steel solvent inlet filters 5 nos
- Clear and easy valves and methods for purging must be available. The tools required for the purging must be provided along with the system.

## **Training and Warranty**

- 1. The bidder is completely responsible for installing the HPLC and making them functional once they arrive at IISC, Bangalore. The institute will provide appropriate power point plugs.
- 2. Minimum 2 years of complete system warranty. 1 year of AMC after completion of warranty period.

The above-mentioned technical specifications are highly desirable. However, lower technical specifications may be considered if the above-mentioned specifications are found to be unsuitable in financial terms. The Institute reserves the right to go for lower specifications taking into considerations its financial constraints and technical preferences.

### **Terms and Conditions**

- 1. The quotations should be submitted in two bids system; i.e., Technical bid, and Commercial bid.
  - a) The technical bid must include all details of technical specifications of the instrument along with commercial terms and conditions masking only the price component. Bill of materials, brochures, technical datasheets, and any other document may be enclosed to help the evaluation of the technical bid. Please also include warranty terms and any other information on upgradation terms in the technical bid.
  - b) The commercial bid must include the price of the instrument in Indian currency indicating break up of:
    - I. For goods and commercial terms
    - Installation, commissioning and training charges, including any incidental expenses, if any

- iii. Agency commission charges, if any
- iv. Provide certificates for country origin of manufacturing for each line item
- v. Price of every line item in the commercial bid should be quoted along with the total quoted price for the instrument to be operational (fixed and ready to use) in our facility
- vi. Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor.
- vii. The quotations should be on FOR-IISc Bangalore basis in INR only.
- c) Both the Technical and Commercial bid should be put in separate sealed envelopes and put together in another cover stating "Strong-Anion Exchange High Performance Liquid Chromatography (SAX-HPLC)" and should reach us on or before 17:00 hours 31-March-2021.
- 2. The vendor should have a good track record of having previously supplied HPLC system (10 or more) in IISC, Bangalore (please furnish details).
- 3. The vendor should have qualified technical service personnel based in Bangalore capable of servicing the equipment.
- 4. The payment will be through a letter of credit. No advance payment shall be made.
- 5. The lead time for the delivery of the equipment should not be more than three months from the date of receipt of purchase order or two months from the date of receipt of Letter of Credit details (whichever is earlier).
- 6. The validity period of the quotation should be 90 days.
- 7. Import code of the items should be indicated.
- 8. If the goods are found to be defective, they have to be replaced or rectified at the cost of the supplier within 30 days from the date of receipt of written communication from us. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.
- 9. The purchaser reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time period to award of construct without thereby incurring any liability of the affected bidder or bidders.

- 10. Vendors should be registered with PF, ESI, GST, MSME and other govt establishment as per Govt rules and regulation and Industrial workplace safety regulation. Copy of the same should be attached with tender.
- 11. Instruments must be attended within 24-48 hours in case of breakdown. Downtime of instruments should be less than 10 days. In the event of longer downtime, the vender shall increase the comprehensive maintenance period by five times of the downtime.

### **Additional terms**

- 1. SEP-PAK PLUS ACCELL PLUS QMA 50BX needs to quoted.
- 2. Spare 1525 pump and UV detector, and lamp should be provided.
- 3. HPLC Absorbance Test Solutions should be included in the final quote.
- 4. Complete accessories kit should be included.
- 5. Computer system supporting the software, color printer and data storage device should be included.
- 6. HPLC injector syringe and accessories, 3 nos.