Indian Institute of Science Bangalore

Dr. Susanta Hazra

Assistant Professor Department of Inorganic and physical chemistry Indian Institute of Science Bangalore Bengaluru, 560012, Karnataka, India



Domestic tender notification for the Procurement of HPLC System (Analytical cum semipreparative) with PDA Detector.

Tender Summary

1	Tender Number	IPC/SH/2023/HPLC-01
2	Tender Date	12 th May 2023
3	Item Description	HPLC System (Analytical cum semipreparative) with PDA
		Detector
4	Tender Type	Two bid system:
		(a) Technical Bid (Part A)
		(b) Commercial Bid (part B)
5	Place of tender submission	To The Chairperson
		Attn: Dr. Susanta Hazra
		Department of Inorganic and Physical Chemistry,
		Indian Institute of Science, Bengaluru 560012, India
6	Last Date and Time for tender	26 th May 2023, 5:00 PM
	submission	

This is a Request for quote (RFQ) from **Class I and Class II local suppliers/manufacturers** for the procurement of a High-performance liquid chromatography (Analytical cum semipreparative) with PDA detector at the Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore (dated 12th May 2023). All interested vendors shall submit a response demonstrating their capabilities to produce the requested equipment to the primary point of contact listed below.

This Invitation for Bids is open to only domestic (India-based) manufacturers, Indian OEMs or its authorized Indian distributors. All interested vendors shall submit a response demonstrating their capabilities to produce the requested equipment to the primary point of contact listed below.

Concerning this tender, the rules laid out by the Government of India in order No. P45021/2/2017-pp-BE-II issued by the Public Procurement Section, Department or Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, dated 4th June 2020 will be followed. The bidders must go through the Government of India order stated above and follow all the rules and regulations therein.

Relevant definitions as per the Government of India order:

- Class-I local supplier A supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50%.
- Class-II local supplier A supplier or service provider, whose goods, services or works are offered for procurement, has local content of more than 20% but less than 50%.
- Local content The amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in per cent.

General Terms and Conditions

- 1. Quote should come only from Indian Original Equipment Manufacturer (OEM) or their authorized Indian distributor.
- 2. The bid should be submitted in the two-cover system, i.e., technical bid and commercial bid separately in sealed covers. The technical bid should contain all commercial terms and conditions except the price. The SEALED COVER superscribing tender number / due date & should arrive Main office, Inorganic and Physical Chemistry Department, Indian Institute of Science, Bangalore 560012, India, on or before due date mentioned in the tender notice. In case the due date happens to be a holiday the tender will be accepted and opened on the next working day. If the quotation cover is not sealed, it will be rejected.
- 3. The technical bid must contain a point-by-point technical compliance document. The technical proposal should contain a compliance table that should describe your compliance in a "yes" or "no" response against each of the items in the table listed in this RFQ. If the response is "no", the second column should state the extent of the deviation. The third column should state the reason for the deviation, if any. The fourth column can be used to compare your tool with that of your competitors or provide details as requested in the technical requirement table below.
- **4.** In the commercial bid, the price (in INR) should be inclusive of all discounts.
- **5.** The price of every line item in the commercial bid should be quoted along with the total quoted price for the instrument to be operational (installed and ready to use) in our facility. Please quote the price of each optional line item separately.
- **6.** The vendor should have qualified technical service personnel for the equipment based in India (preferably in Bangalore).
- 7. The delivery time of the equipment should not be more than 3 months from the date of receipt of our purchase order. It should be clearly mentioned in the technical and commercial bids.
- **8.** All quotations must be valid for at least 90 days at the time of submission.
- **9.** The Bidder should have supplied similar equipment in reputable institutes, preferably IITs, IISc, IISERs, NITs, CSIR Labs, etc. Please provide the details and contact information of the individuals.
- **10.** The Bidder must NOT be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere. A declaration certificate should be provided.
- 11. Vendors are encouraged to highlight the advantage of their tools over comparable tools from the competitors.
- **12.** If required, a meeting for any technical clarifications can be scheduled with the undersigned by sending an email.
- 13. The Institute reserves the right to accept or reject any bid or to annul the bidding process and reject all bids, at any time before the award of the contract without thereby incurring any liability of the affected bidder or bidders.
- **14.** Lowest bid will be calculated based on the total price of all items tendered for Basic equipment along with accessories selected for installation, operation, preprocessing and post processing, optional items, recommended spares, warranty, annual maintenance contract.

- **15.** After receiving the purchase order, the vendor must provide an Order Acknowledgement within 30 days from the receipt of the Purchase Order.
- **16.** The vendor should have a good track record of having previously supplied similar equipment in IISc and other centrally funded universities/institutes.
- 17. The vendor should be able to provide End User Certificates from at least five users.
- **18.** The vendor is encouraged to provide recommendation letters from the user's university/institute, and the contact of people with the PO number.
- **19.** 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.
- **20.** The detailed technical literature and make of each component should be submitted by the bidders.
- 21. The quotations should be on FOR-IISc Bangalore basis in INR only.
- **22.** GST/other taxes, levies etc., are to be indicated separately. The BIDDER should mention GST Registration and PAN in the tender document.
- **23.** If price is not quoted in Commercial Bid as per the format provided in tender document the bid is liable to be rejected.
- 24. The Bidder should belong to either Class-1 or Class-2 suppliers distinguished by their "local content" as defined by recent edits to GFR. They should mention clearly which class they belong to in the cover letter.

 a) Class-1 supplier: Goods and services should have local content of equal to or more than 50%.
 b) Class-2 supplier: Goods and services should have local content of equal to or more than 20 % and less than 50%
- **25.** Bidders offering imported products will fall under the category of non-local suppliers. They cannot claim themselves as Class-1 local suppliers/Class-2 local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training, and other sales service support like AMC/CMC, etc., as local value addition.
- **26.** Purchase preference as defined by the recent edits to GFR (within the "margin of purchase preference") will be given to the Class-1 supplier.
- 27. MSMEs can seek an exemption to some qualification criteria. IISc follows GFR2017 for such details.

Service, Training, and Warranty

- 1. The vendors must have a locally dedicated Sales & Service team & Application lab in Karnataka.
- **2.** The vendors must have an appropriate set-up and capability to provide after-sales service efficiently and effectively. The supplier should give training with a similar system in their facility to that proposed in this tender.
- 3. Installation and training should be conducted by a qualified trained engineer.
- **4.** Support should be available on working day from 9:00 am to 5:00 pm (excluding Public Holidays), local time.
- 5. A declaration of Conformity certificate, and System Validation certificate must be provided.
- **6.** Two years of complete system warranty should be given for all the components. If the system requires service during the warranty period, the vendor must guarantee or replace the instrument free of cost. Vendors should have logistic support to ensure that over at least 95% of the service parts are readily available and upkeep delivery within 3-5 days.
- **7.** Terms and conditions for the annual maintenance contract (AMC) beyond the warranty period should be mentioned.
- **8.** Vendors should provide a copy of the Site-Preparation checklist.
- **9.** Problems occurred during the warranty period should be rectified within 2 weeks or less.
- 10. If there is any delay in replacement or rectification, the warranty period should be extended accordingly.

Technical requirements

The requirements listed below are only guidelines, vendors are requested to quote for equipment that fulfills the requirement to the best extent possible and least deviations, if any. Deviations are NOT an automatic reason for disqualification. A technical group will discuss them before making an informed decision.

Technical Specifications:

Technical requirements for HPLC Analytical cum Semi Prep system with all accessories.

- ➤ Analytical cum semi-preparative HPLC system
- Analytical cum semi-preparative HPLC system should consist of the following units:
- > Pump module One Unit
- ➤ PDA detector One Unit
- Original Manufacturer's Licenced Software One Set
- Column Oven One Unit

Specifications:

Pump:

- The pump should provide error-free programming of pump parameters including flow rates, operating pressure limits, compressibility compensation, calibration, and diagnostics.
- It should be a Binary Gradient HPLC system using low-pressure mixing and high-pressure delivery for accurate and precise solvent delivery with a single pump.
- The pump module should have isocratic and gradient capabilities.
- The system should have a flow rate range from 0.01 to \geq 22 ml/min or better
- Flow accuracy should be ± 1 %
- Must have an operating pressure of pressure range of 0 to ≥ 6000 psi or better for the entire flow rate range
- It should have an integrated degassing unit
- Module should have mobile phase monitoring.
- Should have the provision for complete upgradation capability (module-wise and system-wise) in the future.
- Should have a leak sensor.
- Should have a pH range 1.0 —13

Flex Injector Dual Injector Module: It should be used as analytical cum semi-prep. A suitable manual injector with loops of 20uL, 50uL and 100uL must be provided. Auto-start capability upon injection.

Column Oven:

- The Column Compartment should be Thermostatted temperature controller with an ambient to 60 °C or better
- Four or more columns of at least or ≥ 250 mm should be accommodated.
- A future upgradable option should be available for onsite upgrade for an automated "Switching valve" for at least 4 columns.

PAD (Photo Diode Array Detector):

- It should provide unprecedented trace impurity detection and quantitation in conjunction with spectral analysis capabilities. It should be an ideal detector for any lab application from compound identification to method development. For routine analyses, the detector should be reliable, easy to use, and should have enhanced software control to provide flexibility for simultaneous 2D and 3D operation.
- Wavelength range: 190-800 nm or better
- Wavelength accuracy: ± 1 nm or better
- TaperSlit" flow cell or equivalent to ensures high sensitivity while maintaining optimal spectral performance
- Low noise performance of 10 ¼ AU or better
- Simultaneous quantification of high- and low-level components within a single chromatographic separation
- Flexible sampling rates for normal and fast LC separations from 1 to 80 Hz or better
- Definitive compound identification & co-elution detection

- Spectral exposure optimization to maximize the signal-to-noise across the entire wavelength range with a single lamp
- Lamp optimization for the best s/n performance over the lifetime lamp
- Console software for simple control, monitoring, and diagnostics
- Thermal wander management for maximum baseline stability
- Standard flow cell for Analytical Workflow
- Temperature control should be available for the complete optical unit

Original Manufacturer's Licensed Software:

- Chromatography software with integrated database (Oracle 11.0 or above); architecture; Report publisher facility for customized reports
- It should be able to control single-stage LCMS
- It should be upgradable for Automated Method Development Software
- Should be able to control PDA Detector;
- It should be operated with a semi-Preparative system up to ≥ 22 ml/min flow.

HPLC microliter syringes and accessories

- Four 25 μL
- One 100 μL
- In addition, appropriate tools and accessories for the HPLC should be provided, including Connecting capillaries, Solvent bottles, communication cable, plastic syringe with adapter, appropriate hex keys, wrenches, and screwdrivers Other Accessories like Ferrule, 1/8, Tefzel 2Nos, Syringe-10ml, Seal replacement pack 2 Nos, Solvent filters- 2 Nos, Assy., Fitting plug- 3 Nos, I EEE cable, Ethernet patch cord (to connect instrument module).

Training:

- The system should be accompanied by a Conformity Certificate.
- Onsite demonstration and training for the faculty/scientists/students to be provided periodically for the handling of the system and its application.
- A declaration of Conformity certificate & System Validation Certificate must be provided.
- Suppliers should have an application lab and a local office in Karnataka.

Warranty: Minimum Two years warranty should be provided on a complete system with all necessary accessories to be quoted.

Columns: The vendor should provide the following columns along with the HPLC system

- 1. CHIRALPAK AD, Analytical 250 X 4.6mm, 10um
- 2. CHIRALCEL OD-H Analytical, 250 X 4.6mm, 5um
- 3. CHIRALPAK IA, Analytical 250 X 4.6mm, 5um
- 4. CHIRALPAK IB, Analytical 250 X 4.6mm, 5um
- 5. C-18, Analytical 250 X 4.6mm, 5um

Optional items:

- Total warranty of 2 years + 3 years AMC optional
- Branded PC with HDD and 24" monitor; brand(s) to be specified for PC/monitor

Other requirements

- The payment terms should be mentioned in the commercial proposal, which should be consistent with IISc's domestic purchase policies.
- A set of basic experiments for performing routine checks of acceptable operation with clear instructions to be provided. A standard sample to estimate column efficiency should be included.
- Please provide details of the number of trained personnel in Bangalore who can service the instrument.
- Please include other options currently available which can be added in the future.

• The vendor should attach product brochures along with the technical bid.

Dr. Susanta Hazra
Assistant Professor
Inorganic & Physical Chemistry Department
USa Rangalora 560012

IISc Bangalore, 560012 Email: shazra@iisc.ac.in Contact:080-2293-2296