

**Notice Inviting Open Tender for:**  
**Supply, Installation, Commissioning & Training of an Ion chromatography (IC) for**  
**Determination of Anions & Cations at the Indian Institute of Science, Bangalore**

(Tender from Domestic Vendor and Suppliers)  
**Bids are invited from a domestic OEM / authorised distributor of domestic OEM**

Last date of Submission 11<sup>th</sup> August 2025

Date: 25<sup>th</sup> July 2025

Dear Sir/Madam:

Please send your tender documents valid for 60 days from the actual date of opening the technical bid, for the supply of equipment described below. Your documents/quotation should clearly indicate the terms and conditions of the quotation, 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 the other containing the “Commercial bid”, both of which should be duly signed and must reach the undersigned on or before 17:00 hours on 11<sup>th</sup> August 2025. Please provide your contact details so that we can get in touch with you and schedule appointments for opening the bids.

The primary interest of the Centre is the procurement of an Ion chromatograph. Any vendor who is not a manufacturer of an IC should NOT quote. The pricing for the instrument should be treated as a stand-alone purchase that should be clearly indicated in the financial bid.

**Mailing Address:**

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Interdisciplinary Centre for Water Research,  
Indian Institute of Science,  
Bengaluru 560012, Karnataka, INDIA.

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**Section 2 - Eligibility Criteria:**

With respect to this tender, the rules laid out by the Government of India in order No. P-45021/2/2017-PP (BE-II) issued by the Public Procurement Section, Department of Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, dated 16<sup>th</sup> September 2020, will be followed. Per this order, only Class-I and Class-II local suppliers, as defined below, are eligible to participate in this open domestic tender. Non-local suppliers are ineligible to participate in this tender.

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 have local content equal to or more than 50%
- Class-II local supplier - a supplier or service provider, whose goods, services, or works offered for procurement have local content of more than 20% but less than 50%.
- Non-local supplier - a supplier or service provider, whose goods, services, or works offered for procurement have local content of less than 20%.
- 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 custom duties) as a proportion of the total value, in percent.

**Only Local Suppliers are eligible to participate in the bid.** The bidders must go through the Government of India order stated above and follow all the rules and regulations therein. The covering letter should clearly indicate whether the vendor is a Class I or Class II local supplier; failing which, the vendor will automatically be disqualified.

## **SECTION 3 – Technical Specifications:**

### **Ion Chromatograph:**

Ion Chromatograph System for the determination of Anions and Cations using conductivity detectors. Complete PC control and data acquisition through software should be provided. A separate PC for data processing and reporting through software should be provided. The system should be able to identify its components, such as the Pump, detector, column, etc., automatically upon insertion into the system, and should load the default parameters for these modules

### **Conductivity Detector:**

The conductivity detector should also be microprocessor-based with a thermostatic micro-flow cell conductivity block with an accuracy of  $\leq 0.001$  °C. The user should be able to set the temperature of the conductivity block between 20 - 40 °C.

Adjustable temperature coefficient adjustment 0 - 5%/K

Conductivity measurement range: 0 to 15000  $\mu\text{S}/\text{cm}^{-1}$  or higher

High-capacity suppressor columns for both anion and cation mode warranty is 10 years from the day of installation

### **Pump:**

The high-pressure solvent delivery pump must have the following specifications.

- Serial dual pistons with two inert check valves.
- Flow range: 0.001 to 20.00 ml/min or higher
- Resolution of flow rate: 0.001 mL
- Pressure range: 0-5000 PSI or more

The quoted system should be upgradable to a low-pressure ternary gradient, and accessories for the same should be quoted as optional items

### **Column Housing:**

Housing for columns (up to two) in a thermostatic block with a temperature control range between the ambient temperature and more than 40 °C. The housing should be able to identify the columns and set the optimal operating conditions for column operations.

**Detection Limits:**

**Anions:** Fluoride, Chloride, Nitrite, Nitrate, Sulphate, Bromide, Bromate and Phosphate-  
Detection level 5-10 ppb of each,

**Cations:** Sodium, Potassium, Calcium, Magnesium, Ammonium – Detection level: 5-10 ppb of each

Elutant matrix (NaHCO<sub>3</sub>), high purity

Suitability for groundwater/surface water/drinking water

**Injector:**

Dual-position 6-Port injector valve with fast response time and control through software. 4-100 µl

**IC Columns: separate systems for cations and anions**

Two columns each for cation and anion analysis, along with their guard columns.

**Automatic calibration and auto-dilution**

Multilevel calibration using a single calibration standard. The auto dilution system should be automatic, programmable, and should generate various concentrations of standards from a single standard and sealed calibration concentration.

**Auto-sampler:**

Minimum 60-position auto sampler with sufficient vial volume capacity for samples (minimum 5 mL sample volume) capable of creating a 6-point calibration curve using a single standard, using a liquid handling device should be quoted along with the system. The auto sampler may have an LCD display. The entire setup provided should be automatic and controlled through the software.

**Data-Processor:**

PC based data acquisition & processing system, along with complete system control, should be offered. The necessary software should be fully Windows-based. The software should be able to control the system.

**Tools and Manuals to be provided:***1. Tools required for assembly and/or maintenance of the supplied Goods*

Standard operation kit including all required items, fittings for start-up / regular operation of the instrument

Operation kit including all required items, tubing, and fittings for start-up / regular operation of the instrument

*2. Detailed operations and maintenance manual for each appropriate unit of supplied Goods*

- Operation and Maintenance Manual for each unit
- Service manual with a set of required tools for each system/unit
- Printed Pamphlets/catalogues 2 copies for each item or equipment.
- Instruction book for installation, operation, repair & maintenance of the complete system.
- Drawing of all the equipment, including system interface drawings, system interconnection, and block diagrams.

- Any other relevant information to be incorporated at the time of placing the purchase order: 2 copies.
- The manufacturer/agency shall furnish the required certificates along with the consignment of the material. Manpower for operating the Ion chromatograph at ICWaR for 3 years (The individual will operate and maintain the Ion Chromatograph, analyze samples, submit reports, manage records, coordinate with service personnel, and train students in its proper use & Qualification and Experience: Post Graduation with chemistry as one of the subjects or equivalent from a Govt. recognized institution/university).
- Comprehensive annual maintenance on the whole equipment for 2 years, starting from the end of the 3-year warranty
- The bidder will provide all high-purity standards (cations and anions), chemicals for 3 years for each unit of IC.

### **Software and control PC**

- Suitable Data Station with all Software controls & future upgrade controls with Instrument software.
- Software should provide comprehensive functionality for analysis through a fully automated process with auto-tuning.
- The software should have data management, data security, and access control with a 21 CFR part 11 environment support, compliance management, and customizable reporting.
- The system should have Server connectivity and should be capable of 21 CFR Part 11. There should be a facility for automatic data transfer from the IC-PC to the central server.
- Minimum 2 offline software licenses must be provided as standard.
- The software should be customizable to meet QA/QC functionality needs and automated QA/QC checks.
- The software must be a 64-bit application for future upgradeability.
- The future software upgradeable should be free of cost.
- The system should be upgradable with a suppressor-based separation system using integrated single window-based software operation for all the modules connected with MS.
- A branded HP/Dell Personal Computer should be supplied along with the instrument from the manufacturer.

### **Consumables:**

- A complete set of essential and comprehensive accessories/consumables/spares/samples should be quoted for 3 years of operation. These include columns, Standards, injectors, preventive maintenance kits, etc.
- Any other consumables required for the smooth operation of the system must be quoted separately. (List of comprehensive and essential consumables must be mentioned in tabular form, with the individual cost of the item)

### **Other requirements:**

- Details of installation-site requirements, maintenance and service support should be described in detail.
- The operation and service manual shall come with the equipment.
- Suitable UPS with 30-minute Backup may be quoted separately as well.
- The vendor must give a list of references in India and elsewhere in the world where the quoted system is working satisfactorily.
- The vendor must give at least 5 days of on-site training after the installation for practical demonstration.

## **Water purification system (WPS)**

WPS systems are engineered to deliver laboratory-grade water across a range of purity needs from pure/water Type II to ultrapure Type I, with a storage tank capacity of 20 litres, > 7 lpm flow suitable for applications like IC, LC-MS, ICP-MS, molecular biology, and RNase-free processes.

Pure Water (Type II):

- Resistivity: > 5 MΩ·cm @ 25 °C
- TOC: < 30 ppb
- Bacteria: < 0.1 CFU/mL
- Particulates (>0.2 µm): < 1/mL
- Endotoxins & RNase/DNase levels: Similar to standards for pure water

Ultrapure Water (Type I):

- Resistivity: 18.2 MΩ·cm @ 25 °C
- TOC: < 5 ppb
- Bacteria: < 0.01 CFU/mL
- Particulates (>0.2 µm): < 1/mL
- Endotoxins: < 0.001 EU/mL
- RNase: < 1 pg/mL
- DNase: < 5 pg/mL

## **Warranty**

- Warranty service that includes parts and labour for at least 36 months, which shall begin after successful commissioning of the equipment. Please also quote subsequent (i) comprehensive maintenance cost (parts & labour) and (ii) maintenance cost (labour only) after expiry of the warranty period.
- Equipment, installation, commissioning tests and training should be included in the tendered price.

## **Support Service**

- Online support includes phone, e-mail and internet-based remote access within 24-48 hours of initial contact.
- On-site service is included, as deemed necessary, following online evaluation. The goal is to provide on-site service within 48 hours once a service call has been entered, based on the engineer's availability.

## **Section 4–Terms and Conditions:**

1. The tender document should be in English and be submitted in **a two-bid system, i.e., technical bid and Commercial bid, in two sealed envelopes with the commercial or technical bid clearly indicated on the envelope.** These two sealed envelopes should be placed within a larger envelope, and “IC Bid Prof. Praveen C Ramamurthy, Interdisciplinary Centre for Water Research, IISc” should be written on the outer envelope.
2. 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 documents may be enclosed to help with the evaluation of the technical bid. Please also include warranty terms and any other information on upgradation terms/extra accessories in the technical bid.
3. The technical bid must clearly state the specifications of the main instrument (A) along with the accompanying standard items and all other details, including the warranty terms (B-I) as specified in section 3 of this document, and with the following details.

- a. Quotes should come only from the Indian Original Equipment Manufacturer (OEM) or their Indian authorised distributor.
  - b. 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.
  - c. Purchase preference, as defined by the recent edits to GFR (within the “margin of purchase preference”), will be given to the Class-1 supplier.
  - d. MSMEs can seek an exemption from some qualification criteria. IISc follows GFR2017 for such details.
4. The commercial bid must include the base price of the instrument delivered in place and all components, including controller accessories, plus any additional GST component.
  5. The commercial bid must indicate a detailed component-wise and itemised price breakup and must include optional items/accessories.
  6. Bidder should have a well-established own establishment. Enclose the Company Registration Certificate, PAN, 3 years of audited balance sheets and turnover.
  7. **The covering letter in the technical bid should clearly mention whether the vendor is a Class I or Class II local supplier; failing this, the vendor will be automatically disqualified.**
  8. In the technical bid, include the complete details of all components of the main instrument and the accessories, as to whether they are sourced locally or foreign-made/imported, along with the manufacturer and sourcing details.
  9. The ‘Class-I local supplier/Class-II local supplier’ is required to indicate the percentage of local-content and provide self-certification that the item offered meets the local content requirement for ‘Class-I local supplier/Class-II local supplier’ as the case may be. They shall also give details of the location(s) at which the local value addition is made.
  10. The vendor should provide a detailed cost breakup for the Indian and foreign content of the bid in the commercial bid, proving their status as a Class I or Class II local supplier. Vendors who do not provide such justification in the commercial bid will be automatically disqualified.
  11. In case there are any imported/foreign-made components, the commercial bid must indicate the procurement price from the manufacturer and any import duties incurred. IISc will not be responsible for any import duties.
  12. The vendor should have a good track record of having previously supplied similar equipment in India or elsewhere in the world (Please furnish complete details, including names and contact addresses). Reference letters may be sought by the committee to arrive at the decision.
  13. The vendor should have qualified technical service personnel for the instrument based in Bengaluru.
  14. Bidder should have executed at least three orders of similar instruments in India in the last 2 years. (Please provide a copy of the purchase orders and details.)
  15. The bidder should provide a list of national and international publications resulting from the data of the instrument.
  16. The Bidder should not be currently blacklisted by any institution, bank in India or abroad (Please provide self-declaration).
  17. No advance payment will be made; the payment will be made after delivery and installation of the equipment.
  18. Agency commission (not encouraged), if any, should be clearly mentioned and detailed in the commercial bid.
  19. The lead time for the delivery of the equipment should be less than two months from the date of receipt of the purchase order and must be mentioned in the technical bid.

20. If the equipment or any parts/accessories are found to be defective, they must 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 needs to be extended by a year and/or face a penalty equal to the value of the equipment.
21. The technical bid will be opened first and evaluated.
22. Bidders meeting the required criteria as stated in Sections 2 and 3 of this document, as well as the terms and conditions, shall only be considered for the Commercial Bid opening. Further, agencies not furnishing the documentary evidence as required will not be considered.
23. Following the opening of the technical bid, a presentation may be sought from the bidder.  
If there is any delay in replacement or rectification, the warranty period needs to be extended by a year and/or face a penalty equal to the value of the equipment.
24. During the warranty period, the bidder shall attend to all the hardware problems on-site and shall replace the defective parts at no extra cost to the purchaser.
25. The Engineers of the parent manufacturer or bidding firm must install, demonstrate, and provide the training on IC for 5 days at IISc, Bengaluru, without additional cost.
26. The bids should be valid for at least 180 days from the last date of submission of the quotation.
27. The price should be quoted in INR only. The cost should be inclusive of delivery to the IISc campus. The price offer must be on a FOR-IISc Bangalore basis.
28. The decision of the purchase committee will be final.
29. IISc, Bangalore reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time to award or construct without thereby incurring any liability of the affected bidder or bidders.
30. Tender documents that do not satisfy the “Terms and Conditions” listed herein will be disqualified.
31. The tender documents should be sent to the following address no later than 11<sup>th</sup> August 2025, 5:00 PM IST.