

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE
2A & 2B, Raja S.C.Mullick Road, Jadavpur, Kolkata-700032

Tender Notice No: IACS/SAIS/AD/2022-23/73

Date: 17.02.2023

Sealed tender in two bids system (technical bid and price bid) is invited from bonafide, resourceful and eligible manufacturer/exclusive distributor/vendors for the purchase of **GPC SYSTEM WITH REFRACTIVE INDEX DETECTOR ALONG WITH ACCESSORIES (SHOULD BE FULLY SOFTWARE CONTROLLED)**.

Part-I (Technical Bid) of the tender should contain technical specifications in detail as well as commercial terms and conditions. Part-II (Price Bid) should clearly indicate group-wise price, if needed, as mentioned in the technical bid. The Technical Bid and Price Bid are to be submitted in separately sealed envelopes, distinctly marked accordingly and both to be put inside another envelop, that should be sealed and superscribed with tender notice no. and due date. The bidders may submit bids duly signed in their own letterheads.

Completed tender bids should reach the office of the **Registrar, Indian Association for the Cultivation of Science (IACS), 2A & 2B Raja S. C. Mullick Road, Jadavpur, Kolkata-700032** on or before the scheduled date and time specified below:

Tender Notice No.	Tender Notice No: IACS/SAIS/AD/2022-23/73 Date: 17.02.2023
Last date and time of submitting tender	06/03/2023, 12 noon
Date and time of opening tender (tentative)	07/03/2023 at 3.00 PM
Place of opening tender	IACS Kolkata
Contact	Dr. Anindita Das Email: psuad2@iacs.res.in Tel.+91 33 2473 4971 [Extn. 1352]

The technical bids will be opened first to judge/evaluate the technical specifications of the said instrument and thereafter the price bids of only technically qualified bidders will be opened.

Technical Bid Evaluation: The Technical Bids will be evaluated in the presence of the representatives of intending bidders who will be able to clarify technical aspects of their bids, if any, required by the Technical Evaluation Team.

Opening of price-bid: The Price Bids of the bidders qualifying the technical bid will only be opened, the date of which will be intimated to the short-listed bidders at their email addresses. The rest of the bids will be rejected.

Please note that IACS will not provide any accommodation or reimburse any expenses to any of the bidders for attending opening of technical bid.

Quotations received incomplete or beyond the stipulated time will be summarily rejected.

Bidders should submit their past experience for supplying and successful installation of similar equipment to other research Institutes/Universities/other organizations in India and abroad. Please provide documentary proofs of such successful installation and supportive documents that the instruments are running successfully.

1. TECHNICAL BID

The technical bid should contain technical specifications and should be kept in a separate sealed envelope duly superscribed as 'TECHNICAL BID' on the outer cover of the envelope as already detailed above. It should be clearly mentioned on the envelope as "**Technical Specification for GPC System with Refractive Index Detector along with Accessories (Fully Software Controlled).**"

Approved Technical Specification for the GPC System with Refractive Index Detector along with Accessories (Fully Software Controlled).

1. HPLC Pump (or Solvent Delivery System) - 1 NO.:

- 1 No. of HPLC pump integrated with Manual Injector with dual reciprocating pistons and non-circular gear driven, free standing pump should be provided. A pump drawing / design must be shared in the Bid.
- Programmable flow range: 0.000 to 10.000 ml/min per pump with 0.01 ml/min increment or better for all kinds of Analytical application.
- The system should be capable of delivering precise volumes of mobile phase with minimum 48 step/ μ l or better.
- Flow Precision: 0.1% RSD or better.
- Maximum Pressure: 6000 psi throughout entire flow rate.
- The system delay volume should be lesser than 200 μ l. Data sheets must be properly mentioned.
- Flow accuracy: + 1% or better.
- The system should be capable to withstand the retention time variations of less than 0.1% for highly reproducible peak performance.

2. Manual injector:

- The manual injector should be fully integrated with the pump. No separate free-standing panel should be there for the injection. A sketch / drawing should be provided along with the technical details which must show the same.
- Should come with 5, 20, 50 and 200 μ l sample loops along with preferably 25 μ l syringe.
- Should have the construction for sample load without interruption of flow.
- Dead volume-free syringe guidance must be present along with Built-in injector signal.

3. Refractive Index Detector:

- RI Units: 1.00 to 1.75 with measuring range of 5×10^{-4} to 7.0×10^{-9} RIU or better.

- Flow cell should be temperature controlled with heat exchangers to have minimum noise of 1.5×10^{-9} RIU with 2s time constant.
- Cell should have minimum volume of 10 microliter or less to be compatible with flow rates up to 10ml/min.
- Flow Cell: Fused Quartz.
- Flow cell volume: 10 μ l or better.
- Light source: LED with lifetime warranty.

4. Original Manufacturer Chromatography Software (Instrument & Software should be from a single manufacturer):

- Chromatography software should be integrated with Oracle & secured database.
- Oracle database must be present for easy tracking and trending Instrument Method, Processing Method, Report Method, etc.
- The software must come in-built with System Suitability facility for Method validation, System performance, Reproducibility, Tracking and plotting trends & Processing and reporting.
- The Software also must come with two (or more) numbers of Base Licenses & five (or more) numbers of named user's licenses for the creation of separate usernames & passwords. The software must control at least two numbers of GPC systems simultaneously.
- It should come with GPC/SEC option for Polymer analysis.
- Each injection is time and date stamped for easy archiving, retrieval of data with Drag and Drop, look and feel of Windows.
- Report publisher facility for customized reports along with Custom reporting with view filters for easy retrieval.
- Software should offer multiple levels of password, security to ensure the integrity of all your raw data and results.
- Security of data, custom reporting with view filters for easy retrieval must be present.
- The software should be able to show the capability of the system to operate in at least ten or more various curve mode including Linear, Step, Concave, Convex. Exponential etc.
- It should be upgradable for automated method development Software.

5. Column Oven:

- Should have provision for housing at least three or more columns.
- Temperature setting range: Ambient to 150 °C or higher.
- Operating temperature: Ambient to 150 °C or higher.
- Peltier heating facility should be available to have maximum temperature accuracy and quick heating.

6. Columns & Standards with Accessories:

- GPC High Resolution Column 7.8 x 300 mm, THF Solvent, Molecular Weight 100 Da to 5000 Da – 1 Qty

- GPC High Resolution Column 7.8 x 300 mm, THF Solvent, Molecular Weight 500 Da to 20 KDa – 1 Qty
 - GPC High Resolution Column 7.8 x 300 mm, THF Solvent, Molecular Weight 50 Da to 100 KDa – 1 Qty
 - Guard Column must be quoted for the GPC columns.
 - Organic Standards: Polystyrene Standards covering entire molecular weight range of the mentioned columns.
 - Organic Standards: PMMA Low molecular standards Kit with different molecular weight range in different vials for the GPC application.
 - Aqueous Standards: PEG Standards Kit with different molecular weight range for the GPC application.
 - Desktop Computer: Suitable & Branded Desktop computer with Windows 10 Pro Original, 64 BIT, 16 GB RAM must be provided.
 - Online UPS with 2 KVA & 30 mins Backup.
7. **Warranty:** Warranty must be minimum two years of comprehensive warranty from the date of installation except consumables & perishables. Three years extendable warranty is preferred. Proper installation and training should be provided by the vendor. Onsite after sales service, within 48 hours of reporting any problem, is mandatory. It is preferable to have technical person stationed at Kolkata.
8. The entire instrument must be upgradable to ELS Detector, UV/Visible Detector or any 3rd party Detectors in the near future without any extra hardware & software changes other than the Detectors & seamless integration must happen.
9. Number of customer references and purchase orders of the quoted model (or similar model) in the last ten years from reputed Government Institutes in India to be submitted along with the bid. Such past references will be given due consideration.

A compliance table (see below) must be prepared and submitted along with the technical bid.

Sr. No	Tender specification	Your offered instrument specification	Extent of compliance

2. PRICE BID

The financial bid indicating (item-wise) price for the item(s) mentioned in the technical bid should be kept in a separate sealed envelope duly super scribed as 'PRICE BID' on the outer cover of the envelop as already detailed above. Price bids of only technically qualified bidders will be opened and they will be intimated the date and time of the opening of price bid at their e-mail ids. Rest of the bidders will stand rejected.

PRICE: Price to be quoted on CIF Kolkata and also FOB basis.

3. BID SECURITY DECLARATION :

a. An Account payee Demand Draft/Pay Order for Rs. 80,000(Rupees eighty thousand only) drawn in favour of “Indian Association for the Cultivation of Science (State Bank of India, Jadavpur University Branch, A/C No. 11079699211, IFSC: SBIN000093, MICR Code: 700002048)” is to be furnished by the bidders except those who are registered with the Central Purchase Organizations, National Small Industries Corporation or the concerned Ministry or Department, as Bid Security money or Earnest Money Deposit (EMD). Alternatively, bid security can also be provided in terms of Bank Guarantee.

b. The Demand Draft for the Bid-Security should have at least about 90 (ninety) days validity period of opening of the bids.

c. In case of non-award of the work the Bid Security money would be returned to the unsuccessful Bidders.

4. PERFORMANCE SECURITY:

An Account Payee Demand Draft or Bank Guarantee (BG) on any nationalized bank of India of 3% of the order value in the name of “Indian Association for the Cultivation of Science” is to be furnished by the successful bidder as Performance security. Performance security money should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty obligations. Bid security money or EMD will be refunded to successful bidder on receipt of the Performance security money.

5. TERMS OF PAYMENT:

Payment will be made through irrevocable Letter of Credit in two installments. 90% of the money will be released on submission of shipping of documents. Remaining 10% will be released after successful installation of the instrument.

6. GENERAL INSTRUCTIONS

1. Validity of tender: Tender submitted should remain valid for at least six months from the date of opening the tender. Validity beyond six months from the date of opening of the tender shall be lapsed by mutual consent.

2. The tender should accompany a compliance chart.

3. Incomplete and conditional tenders as well as tenders received after the due date will be summarily rejected without assigning any reasons thereof.

4. At any time prior to the bid due date, IACS may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents. The amendment(s) will be notified on the institute website. Prospective bidders are advised to occasionally visit the website (www.iacs.res.in/tender) for any amendment.

5. Installation/Demonstration/Application training at site: Installation & user training at IACS, free of cost by the supplier.

6. Service facility: In India, preferably Kolkata, supplier should mention their details of service setup and man powers who are responsible for after sales support. Response time should be within 24 hrs.
7. The model number, make and a printed literature of the product should be submitted positively.
8. Proposed delivery schedule should be mentioned clearly.
9. Manufacturers / exclusive distributors / vendors should have history of supplying this type of instruments to this or other scientific organizations. Availability of a list in this regard would be preferred.
10. Authorized dealership certificate should be provided in case of principal manufacturing company is not quoting directly.
11. Guarantee certificate, users' manuals etc. are to be handed over to the user after successful commissioning of the system.
12. In the event of date being declared a closed holiday for purchaser's office, the due date for submission of bids and opening of the technical bids will be the following working day at the appointed time.
13. In case of any dispute, the decision of IACS authority shall be final and bidding on the bidders.
14. For any clarification regarding technical specifications, information etc., please send your queries to Dr. Anindita Das(psuad2@iacs.res.in).
15. The authority of IACS reserves the right to reject any or all of the tenders received without assigning any reason thereof.

Registrar