

	<p style="text-align: center;"><b>INDIAN INSTITUTE OF TECHNOLOGY MADRAS</b> Chennai 600 036</p> <p style="text-align: center;">Telephone: [044] 2257 9798/9723 E-mail: tender@imail.iitm.ac.in</p>	
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The Senior Manager (Project Purchase)

**Ref: BT/RBAS/022/2019**  
Date: 27.06.2019

**Open Tender No: BT/RBAS/022/2019**

**Due Date: 17<sup>th</sup> July 2019, 3 PM**

**Pre-Bid meeting: - Not required.**

**Technical Bid opening meeting on 17<sup>th</sup> July 2019, 4:30 PM at Department of Biotechnology, IIT-Madras.**

Dear Sir/Madam,

On behalf of the Indian Institute of Technology Madras, offers are invited for the supply of **“ANALYTICAL-CUM-SEMI PREPARATIVE HPLC SYSTEM”** conforming to the specifications given in Annexure I.

**Instructions to the Bidder**

- I. Preparation of Bids:** - The tenders should be submitted under two-bid system (i.e.) Technical bid and Financial bid.
- II. Delivery of the tender:** - The tender shall be sent to the addresses mentioned below, either by post or by courier so as to reach our office before the due date and time specified in our schedule. The offer/bid can also be dropped in the tender box on or before the due date and time specified in the schedule.  
The tender box is kept in the office of the:

**The Senior Manager,  
Project Purchase,  
IC & SR Building 2<sup>nd</sup> floor,  
I.I.T. Madras,  
Chennai - 600 036.**

- III. Opening of the tender:** - The offer/bids will be opened by a committee duly constituted for this purpose. The technical bids will be opened first and will be examined by a technical committee which will decide the suitability of the bids as per our specifications and requirements. All bidders will be invited for opening of the technical bids. With respect to opening the financial bid, only technically qualified bidders will be called.

- IV. Prices:** - The price should be quoted in net per unit (after breakup) and must include all packing and delivery charges to the **Department of Biotechnology**. The offer/bid should be exclusive of taxes and duties. The percentage of tax & duties should be clearly indicated separately. Kindly note that IIT Madras is eligible for concessional GST and relevant certificate will be issued.

In case of import supply, the price should be quoted without custom duty. IIT Madras is exempted from levy of IGST on Imports and eligible for concessional custom duty (not exceeding 5%) and the price should be quoted on EX-WORKS and CIP basis indicating the mode of shipment.

- V. Agency Commission:** - Agency commission, if any, will be paid to the Indian agents in rupees after receipt of the equipment and its satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in the tender document even in the case of 'Nil' commission. The tenderer should indicate the percentage of agency commission to be paid to the Indian agent. The foreign Principal should indicate the percentage of payment and it should be included in the basic price quoted originally (if any)..
- VI. Terms of Delivery:** - The item should be supplied to the **Department of Biotechnology, IIT Madras** as per the Purchase Order. In case of import supply, the item should be delivered at the cost of the supplier to our Institution. The Installation/Commissioning should be completed as specified in our important conditions.
- VII. Technical Bid Opening:** The technical bid will be on 17<sup>th</sup> July, 2019, 4:30 PM at the **Department of Biotechnology, IIT-Madras**. The financial bids of those tenders who are technically qualified will be opened at a later date under intimation to them.
- VIII. IIT Madras** reserves the full right to accept / reject any tender at any stage without assigning any reason.

Yours sincerely,

**The Senior Manager (Project Purchase)**  
**IC&SR Building, I.I.T. Madras,**  
**Chennai - 600 036.**

## SCHEDULE

### Important Conditions of the tender

1. The due date for the submission of the tender is **17.07.2019, 3 PM.**

The offers / bids should be submitted in two bids systems (i.e.) Technical bid and financial bid. The Technical bid should consist of all technical details / specifications only. The Financial bid should indicate item-wise price for each item and it should contain all Commercial Terms and Conditions including Taxes, transportation, packing & forwarding, installation, guarantee, payment terms, pricing terms etc. The Technical bid and financial bid should be put in separate covers and sealed. Both the sealed covers should be put in a bigger cover. The Open Tender for supply of **"ANALYTICAL-CUM-SEMI PREPARATIVE HPLC SYSTEM"** should be written on the left side of the Outer bigger cover and sealed.

2. **EMD: The EMD in the form of account payee DD for 2% value of the item in favor of The Registrar – IIT Madras, payable at Chennai should be enclosed in the cover containing financial bid.** Any offer not accompanied with the EMD shall be rejected summarily as non-responsive.

The EMD of the unsuccessful bidders shall be returned within 30 days of the end of the bid validity period. The same shall be forfeited, if the tenderers withdraw their offer after the opening during the bid validity period. The Institute shall not be liable for payment of any interest on EMD. EMD is exempted for Micro and Small Enterprises (MSE) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME).

3. **Performance Security:** - The successful bidder should submit Performance Security for an amount of 5% of the value of the contract/supply. The Performance Security may be furnished in the form of an Account Payee DD, FD Receipt from the commercial bank, Bank Guarantee from any nationalized bank in India. **The performance security should be furnished within 21 days from the delivery of the purchase order.**

**Performance Security in the form of Bank Guarantee:-** In case the successful bidder wishes to submit Performance Security in the form of Bank Guarantee, the Bank Guarantee should be routed through the Beneficiary Bank to the end user bank. Otherwise, the Indian Agent of the foreign vendor has to submit a Bank Guarantee from a Nationalized Bank of India.

The Bank Guarantee should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including the warranty obligations.

4. **Indian agent:** If an Indian agent is involved, the following documents must be enclosed:  
Foreign principal's proforma invoice indicating the commission payable to the Indian Agent and nature of after-sales service to be rendered by the Indian Agent.
  - ✓ Copy of the agency agreement with the foreign principal and the precise relationship between them and their mutual interest in the business.
5. The offer/bids should be sent only for a machine that is available in the market and supplied to a number of customers. A list of customers in India and abroad with details must accompany the quotations. Quotations for a prototype machine will not be accepted.
6. Original catalogue (not any photocopy) of the quoted model duly signed by the principals must accompany the quotation in the Technical bid.

7. Compliance or Confirmation report with reference to the specifications and other terms & conditions should also be obtained from the principal.
8. **Validity:** Validity of Quotation not less than 90 days from the due date of tender.
9. **Delivery Schedule:** - The tenderer should indicate clearly the time required for delivery of the item (subjected to the executive committee-IITMadras approval). In case there is any deviation in the delivery schedule, liquidated damages clause will be enforced or penalty for the delayed supply period will be levied.  
If there is delay, the penalty will be @1% per week of delay subject to a max of 10% of the value of purchase order and if the delay is more than accepted time frame by IITM, the PO would be cancelled and liquidated damages will be enforced.
10. **Risk Purchase Clause:-** In the event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from other sources on the total risk of the supplier under risk purchase clause.
11. **Payment:-**
  - (i) No Advance payment will be made for Indigenous purchase. However 90% Payment against Delivery and 10% after installation are agreed to wherever the installation is involved. In case of import supplies the payment will be made only through 100% Letter of Credit i.e. (90% payment will be released against shipping documents and 10% after successful installation wherever the installation is being done).
  - (ii) **Advance Payment:** No advance payment is generally admissible. In case of specific percentage of advance payment is required, the Foreign Vendor has to submit a Bank Guarantee equal to the amount of advance payment and it should be routed through the Beneficiary Bank to the end user Bank. Otherwise, the Indian Agent of the foreign vendor has to submit a Bank Guarantee through a Nationalized Bank of India.
12. **Late offer:** - The offers received after the due date and time will not be considered. The Institute shall not be responsible for the late receipt of Tender on account of Postal, Courier or any other delay.
13. **Acceptance and Rejection:** - I.I.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.
14. **Do not quote the optional items or additional items unless otherwise mentioned in the Tender documents / Specifications.**

**15. Disputes and Jurisdiction:**

**Settlement of Disputes:** Any dispute, controversy or claim arising out of or in connection with this PO including any question regarding its existence, validity, breach or termination, shall in the first instance be attempted to be resolved amicably by both the Parties. If attempts for such amicable resolution fails or no decision is reached within 30 days whichever is earlier, then such disputes shall be settled by arbitration in accordance with the Arbitration and Conciliation Act, 1996. Unless the Parties agree on a sole arbitrator, within 30 days from the receipt of a written request by one Party from the other Party to so agree, the arbitral panel shall comprise of three arbitrators. In that event, the supplier will nominate one arbitrator and the Project Coordinator of IITM shall nominate on arbitrator. The Dean IC&SR will nominate the Presiding Arbitrator of the arbitral tribunal. The arbitration proceeding shall be carried out in English language. The cost of arbitration and fees of the arbitrator(s) shall be shared equally by the Parties. The seat of arbitration shall be at IC&SR IIT Madras, Chennai.

- a. **The Applicable Law:** This Purchase Order shall be construed, Interpreted and governed by the Laws of India, Court at Chennai shall have exclusive jurisdiction subject to the arbitration clause.
- b. Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Chennai in Tamil Nadu.

16. All Amendments, time extension, clarifications etc., will be uploaded on the website only and will not be published in newspapers. Bidders should regularly visit the above website to keep themselves updated. No extension in the bid due date/ time shall be considered on account of delay in receipt of any document by mail.

**Acknowledgement:** - It is hereby acknowledged that the tenderer has gone through all the conditions mentioned above and agrees to abide by them.

**SIGNATURE OF TENDERER  
ALONG WITH SEAL OF THE  
COMPANY WITH DATE**

**SPECIFICATION FOR ANALYTICAL-CUM-SEMI PREPARATIVE HPLC SYSTEM**

Complete Analytical-cum-Semi Preparative HPLC System with PDA Detector, Refractive Index Detector, Fluorescence Detector, Automated Fraction Collector, Workstation Software etc, should be offered with the following specifications:

**Liquid Pump – Binary Gradient**

- High pressure binary gradient system consisting of 2 pumps should be offered
- Parallel-type double plunger design for pulse less operation
- Flow rate : 0.001 mL/min to 20mL/min
- Flow-rate accuracy:  $\pm 1\%$
- Flow-rate precision: 0.1 %RSD
- The same pump should be used for analytical method development and semi preparative scaling up
- Pressure tolerance : 45 Mpa (6,500 Psi) and above

**Mixer for preparative and analytical application should be offered.****Manual Sample Injector**

- Analytical Manual Sample Injector for analytical mode should be offered with 20ul loop.
- Semi-Preparative Manual sample injector should offered with different loops should be offered.

**Column Oven**

- Forced-air-circulation type for uniform temperature distribution with a quick feedback mechanism to maintain constant temperature level
- Temperature setting range 4°C to 85°C
- Temperature setting in steps of 1°C
- Temperature control range : Upto 85 deg C
- The oven compartment should be able to contain at least 3 Nos. of 25cm length each

**Column switching valve**

- For switching the flow from Analytical to Semi-Preparative should be offered.

**Columns**

- C18 Analytical Column 250 X 4.6 mm, 5 micron : 2 Nos
- C18 Semi Preparative Column 250 X 10 mm, 5 micron : 1 No.

**Photo Diode Array Detector**

- Light source: Deuterium (D2) lamp, tungsten (W) lamps
- Number of diode elements: 512
- Wavelength range: 190nm to 800nm
- Bandwidth: Selectable (selectivity and sensitivity) : 1.2 nm / 8nm
- Wavelength accuracy: 1 nm
- Wavelength precision: 0.1nm
- Noise:  $0.6 \times 10^{-5}$  AU

- Drift:  $5 \times 10^{-4}$  AU/h
- Linearity 2.0 AU (ASTM standard)
- Functions: Contour output, spectrum library, MX plotting
- Flow Cell: Optical wavelength; 10mm, Capacity : 10 $\mu$ L, Pressure : 12 MPa
- Flow Cell temperature-control range : 5°C above room temperature to 50°C
- Semi Preparative Flow Cell to handle upto 20mL should be included

### **Refractive Index Detector**

- Refractive Index Range : 1 to 1.75 RIU
- Noise:  $2.5 \times 10^{-4}$  RIU
- Drift :  $1 \times 10^{-4}$  RIU
- Response : 0.05 to 10 sec, 10 steps
- Flow rate : 20mL/min
- Cell volume : 9 $\mu$ L

### **Fluorescence Detector**

- Light Source Xenon lamp
- Wavelength Range : 200 – 650 nm
- Wavelength Accuracy :  $\pm 2$  nm
- S/N Water Raman peak S/N 1200
- Long life Xenon lamp – 2000 hours
- Capable of performing simultaneous dual wavelength monitoring in single run

### **Fraction Collector**

- Flexible approach to manual and automated fraction collection
- Should have facility to collect small scale fractions
- Necessary Vials and Rack should be offered

### **Chromatography Software**

- Software compliant with GLP standards and capable of controlling all the HPLC Modules through PC with data acquisition, data control , chromatogram and special analysis facilities.
- Easy operation with 32 bit Windows based software
- Online 3D Image window for contour and snapshot functions
- Capable of controlling upto 4 HPLC System and data acquisition of upto 8 channels
- System suitability, System security as well as System check functions has provided which comply with Good Laboratory Practice & Good Manufacturing Practice (GLP&GMP)
- US FDA 21 CFR part 11 compliance

### **Warranty:**

Three years from the date of installation should be offered.

**Installation Accessories**

- Branded computer suitable for the HPLC system should be offered
- Appropriate Capacity UPS with 1 hour battery back-up for the HPLC should be offered

**After Sales Service Support:**

- Should have a good after sales service/technical support capable of reaching our site at short notice. Visits towards breakdown calls by service/application support engineers should attend immediately within 48 hours.
- Troubleshooting training (Instrumentation/Application) as & when required free of cost.