

# CENTRAL INSTRUMENTATION FACILITY, UNIVERSITY OF DELHI, SOUTH CAMPUS

Benito Juarez Road, New Delhi 110021

Tender Ref. No.: UDSC/CIF/BLI/2025-26 Dated: April 30, 2025

# ONLINE TENDER DOCUMENT

Bio-Layer Interferometry based Bio-molecular interaction system

# 1. TERMS AND CONDITIONS OF THE TENDER

#### (a) Two-Bid System Tender

Online Tenders shall be submitted in **2-PARTS**: **PART-I TECHNICAL BID**, duly signed by the bidder and **PART-II COMMERCIAL BID**,

#### PART-I OF THE TENDER (TECHNICAL BID) must contain the following:

- Tender Document, each page duly signed by the bidder as token of acceptance.
- All necessary information as are considered essential for full and correct evaluation of offers.
- Company profile and detailed list of installation of the offered/quoted system in Indian Institutions.
- Write up and documents supporting the eligibility criteria
- Technical compliance sheet

# PART-II OF THE TENDER (COMMERCIAL BID) must contain the following:

- The duly completed Commercial Bid in form of BOQ, (Part II), to be uploaded.
- Bidder must submit to undermentioned address the Earnest Money Deposit (EMD) of ₹ 6,50,000/- (Rupees Seven lakhs thirty four thousand only) in the form of an Account payee Demand Draft in favour of "Chief Executive Officer, IOE, DU, payable at Delhi" valid for at least three months from the date of opening of tender failing which the quotation will be rejected.

Professor-in-charge CIF, Biotech Building 3<sup>rd</sup> Floor University of Delhi South Campus Benito Juarez Road New Delhi 110021

- (b) All documentation is required to be in English. Correction / overwriting, if unavoidable, should be signed separately. Tender papers must be signed on all the pages by the tenderer.
- (c) Ambiguity must be avoided in filling tenders. All entries in the tender form must be type written neatly. The quotation must be entered both in figures and in words. All pages of the bid should be numbered with a running serial number and signed with office stamp by the tenderer.
- (d) University of Delhi reserves the right to reject any or all the tenders, wholly or partly without assigning any reason thereof and shall not be bound to accept the lowest tender.
- (e) The University of Delhi will not be responsible for non-receipt of tender quotations within the specified date and time due to any reasons including postal delay or holidays.
- (f) Tender once submitted shall not be returned to the tenderer in future.
- (g) The Schedule to tender, Instruction to tenderers and General Terms and Conditions of the Contract should also be returned along with the offer.
- (h) Each page of the tender form, the Instructions to the tenderers must be stamped and signed by the person authorized by the tenderer. Full address of the tenderer must be mentioned on the tender forms, failing which the tender may not be considered.
- (i) In case a successful tenderer (on whom purchase order would be placed) fails to comply the order within specified time schedule and terms and condition, the University of Delhi will forfeit the earnest money.
- (j) The earnest money for the successful tenderer shall be returned after successful initiation of the job.
- (k) Unsuccessful tenderer will be refunded earnest money without interest, on application to University of Delhi within 3 months from the tender awarding date.

## 2. ELIGIBILITY CRITERIA

(a) A participating vendor should have proven record of marketing and maintenance of Bio-Layer Interferometry based Bio-molecular interaction system.

#### 3. PAYMENT TERMS

- (a) Payment will be made to the agency after satisfactory installation of the system, onsite demonstration of all the offered technical specifications and necessary training.
- (b) NO ADVANCE PAYMENTS WILL BE MADE UNDER ANY CIRCUMSTANCES.

(c) The rates quoted shall be inclusive of all such taxes such as Goods & Service Tax, VAT, etc., i.e. *the rates quoted shall be all inclusive*. All the duties/ taxes with respect to the work should be borne and paid by the Tenderer himself. The Office shall not be responsible for any payment/ penalty on this account at any stage. The company shall indemnify the University from all.

# 4. <u>SELECTION PROCESS</u>

- (a) A committee specially constituted for the purpose would evaluate the eligibility of tenderers as supported by documentation.
- (b) The Technical evaluation of the bids will be conducted by the Committee at a date, time and venue to be intimated subsequently. The bidders must make a presentation on their bids highlighting their experience and strategy to fulfill scope of the work as given in Annexure I. Evaluation will be based on the presentation and submitted documents. The recommendations of the Technical Committee will be final, which may recommend opening of the price bid based on technical bid evaluation.
- (c) The price bid of only the qualified tenderers will be opened after technical evaluation.

## 4. VALIDITY OF OFFER

Tenders submitted by tenderers shall remain valid for a minimum period of 3 (three) months from the date of opening of tenders. The tenderers shall not be entitled during the said period of three months, without consent in writing from University of Delhi, to revoke or cancel their tenders or to change the tenders given or any term thereof. In case of tenderers revoking or cancelling their tenders or varying any terms in regard thereof without consent of University of Delhi in writing, the earnest money deposited by them with their offers, will be forfeited.

#### 5. IMPORTANT DOCUMENTS TO BE SUBMITTED

In addition to the filled in tender form, tenderers are to provide the following enclosures:

- (a) Documents in support of Company Profile.
- (b) Documents for establishing eligibility.

#### 6. INCOME TAX CLEARANCE CERTIFICATE

Copy of the latest IT Clearance Certificate in the proforma prescribed by the Govt. Of India should accompany the tender. The IT Clearance Certificate should be in the name of the firm quoting for the work.

#### 7. SALES TAX CLEARANCE CERTIFICATE

Tenderer must submit copies of Sales Tax registration and clearance certificates.

# 8. RESOLUTION OF DISPUTES

University of Delhi, and the vendor shall make every effort to resolve amicably, by direct informal negotiations, any disagreement or dispute arising between them under or in connection with the services provided. If after thirty days from the commencement of such informal negotiations, University of Delhi, and the Vendor have been unable to resolve amicably a contract dispute, either party may require that the dispute be referred for resolution by formal arbitration. Chief Executive Officer, IOE, DU, Delhi, shall appoint a sole Arbitrator of the dispute who will not be related to the contract and whose decision shall be final and binding.

# 9. **JURISDICTION**

All questions, disputes and / or differences arising under and out of, or in connection with the contract if concluded, shall be referred to the relevant Courts of Delhi.

# Technical specifications for Bio-Layer Interferometry based Bio-molecular interaction system

- 1. The system should be an automated, flexible and biosensor based. It should provide real time kinetic data for bio-molecular interactions requiring no fluorescent tags or labeling of compounds or proteins.
- 2. The system should be based on Bio-layer interferometry technology using dip and read based method.
- 3. The system should be capable of simultaneously measuring at least 8 independent binding reactions.
- 4. The system should provide answers about the speed, strength and specificity of binding, resulting in accurate measurement of affinity (KD), association (ka) and dissociation (kd) rate constants.
- 5. The system must also determine active concentrations of components with high precision and accuracy.
- 6. The system should have an injection free simple mode of ligand macromolecule interaction so that the washing and equilibration require minimum amount of time and consumables. The system should be **Fluidics free and there should be no aspiration of the samples**.
- 7. The system should be capable of accommodating samples ranging from small organic molecules through to peptides, proteins and DNA, lipid vesicles, particulates, viruses and cells to crude extracts without the need of any clarification process. Same should be supported with relevant publications.
- 8. Specific methods for coupling through multiple modes such as amine coupling, His tag, biotin binding, anti-GST, anti-Human and Anti Mouse FC, Protein A, G and L, Anti-Fab(Human), Anti-CHO HCP Kit and Residual Protein A Leachate Kit must be available on the self without the need of any optimization. All of the above mentioned kits should be available.
- 9. The system should be Capable of performing Ligand Fishing directly in Mass Spec Compatible Buffer and should be able to collect more than 150uL of analyte in a single run.
- 10. System should be capable and should furnish published data for performing cell based assays by binding a whole cell on the biosensor tip and same should be supported with relevant publications.
- 11. The system should combine high sensitive protein/protein interaction studies with small molecule interactions down to a molecular weight as low as 150 Da to whole cell.
- 12. The instrument should provide double referencing options for improved accuracy.

- 13. The system, chemistry and software must be ideal for multi-sample analysis and flexible for batch mode of data analysis in single window for the pool of samples from a single batch.
- 14. Sample analysis should be non-destructive and recoverable. Post analysis the sample should not be diluted. The sample should not be passed to waste and it should be possible to store for future application.
- 15. The system should be compatible to detect and quantitate all kind of samples from purified to crude (Lysate, tissues extract, serum) and works for multiple applications like replace ELISA, Western blot, immunogenicity, host cell protein quantitation and protein A leachates analysis.
- 16. System should have fast acquisition rate of at least 10Hz or better.
- 17. System and Biosensors both should be compatible to perform assays in the pH range 2-9
- 18. Data analysis with capability to analyses kinetic and affinity analysis (kobs, ka, kd, KD), concentration monitoring, automated concentration determinations. Data presentation of plots displaying kinetic binding, equation fits and residuals of fits as well as tabulated kinetic data and data charts and the same can be exported in Excel or PDF.
- 19. The system should be capable of tolerating more than 5% of DMSO and Glycerol. The Software and system should be free of micro calibration and should not have the need of bulk effect corrections.
- 20. The system should be capable of immobilization and regeneration of biosensors offline and outside the system to increase system throughput.
- 21. Biosensor should be multichannel pipette compatible so that at least 8 Biosensor can be transferred at the same time from one plate to another plate without the need of any manual intervention or damage to the biosensors.
- 22. The system should include a suitable preconfigured computer with all appropriate software for acquisition and analysis. The Software should be license free and can be installed in multiple computers for post data analysis.
- 23. All accessories like Computer, Software, UPS or any other required to setup the machine and keeping it in running condition should be included in the quote.
- 24. Any material/kits required for training purposes should also be included in the quote.
  - a) Streptavidin based Biosensor 2 trays
  - b) Ni-NTA based Biosensor 1 tray
  - c) Amine coupling based Biosensor 1 tray
  - d) Protein A based Biosensor 1 tray

#### 25. System specifications:

Type of information: Detection (Yes / NO), Concentration, Kinetics and

affinity data

A. Number of simultaneous interactions: Minimum 8 interactions in parallel

B. Data presentation: Real time monitoring of interactions

C. Molecular weight detection limit: 150 Da to Mega Daltons and Cells.

D. Sample usage: Non-destructive and Recoverable without dilution.

E. Baseline noise: Typically < 5 pm (RMS)

F. Quantitation range: 0.025-2000 μg/ml

G. On-rate ka): Range  $(M^{-1}s^{-1}) 10^1 - 10^7$ 

H. Off-rate (kd): Range (s<sup>-1</sup>)  $10^{-6} - 10^{-1}$ 

I. Affinity (KD): Range 1 mM - 10 pM

- 26. **Warranty:** A five-year warranty (comprising 3 years + 2 years) should be offered with the system. The vendor should supply the entire system with all necessary accessories and complete system integration of hardware components. The vendor should be responsible for the complete system installation, functioning, maintenance, and training by trained engineers.
- 27. The Vender provides 02 ton Air Conditioner for better efficiency of the quoted system (pre -Site preparation requirement).

#### **General Instructions**

- Premium branded instruments should be provided to ensure the high quality and reliability of experimental outcomes.
- A list of at least 10 academic user installations of the quoted and similar equipment within the country should be enclosed. Users contact details should be provided with the list.
- The bidder must quote all items together. Partial quotes will not be accepted. For each item, the make, model and technical specifications, and quantity must be mentioned clearly.

- Bidder should provide a technical brochure and clearly mention the manufacturer's website and brochure URL to verify the technical details/specifications of the quoted system/ models. Instantly making/designing and providing and/or uploading of a Technical Brochure to the bidder's/ manufacturer's website by copying the above-specified technical details will automatically disqualify the bidder(s) without any further correspondence.
- The vender MUST provide a compliance statement vis-à-vis specifications in a "tabular form" clearly stating the compliance and giving justification, if any, supported by technical literature with clear reference to page number, paragraph, or lines. This statement must be signed, with the company seal, by the tendered for its authenticity and acceptance that any incorrect or ambiguous information found submitted will result in the disqualification of the Tender. Please note that the self-prepared compliance statement will be verified with the manufacturer's technical brochure and the website.
- The vendor must certify that relevant spare parts will be available for at least 10 years in the future. The vendor must provide a certificate saying that prompt after-sales service such as regular maintenance, troubleshooting, and fixing will be carried out by company-trained engineers
- **Installation and training:** The vendor must provide on-site installation, demonstration, and training by a well-trained engineer. Required training for the smooth operation of the instrument should be provided free of charge during and after installation. The Principal Company should have a local Application Specialist in India who can conduct training sessions when required by the host, at least upto 6 times a year, or as requested.
- The principal companies should have at least one demo system in India to support us during any breakdown situation. The quoting company may be required to bring the demo system to our facility for a review before quoting in the tender.
- The supplier should have a service centre in Delhi/NCR for quick service within 48 to 72 hours
- The CIF-UDSC purchase committee reserves the right to request the participating vendor for demonstration of all the quoted technical specifications/ capabilities of the offered model, preferably at CIF South Campus, New Delhi-110021, or within the Delhi state. The CIF-UDSC purchase committee reserves the right to disqualify a participating vendor if they fail to demonstrate the quoted technical specification and/or capability of the offered equipment/ model within 10 days of request.

#### **Important information**

- The quotation should be addressed to the "Chief Executive Officer, Institute of Eminence, University of Delhi, Delhi-110 007". The quote should be submitted with all terms and conditions and necessary documents latest by the end of the tender date.
- Quotations have to be submitted in a two-bid system. The first part, the technical bid, should consist of all technical details and supporting documents with terms and conditions. The compliance sheet must be filled out by the vendor.
- The second part, the financial bid, should contain item-wise pricing of items mentioned in the technical bid. Both the quotation documents/ bids are to be submitted through GeM/ CPP portal of the Government of India only (e-procurement). Hard copies of the bid will not be accepted.
- The successful bidder must provide a performance bank guarantee (PBG) as per Rule 171 of the GFR 2017, totaling 3% of the value of the main machine quoted, with a validity of 60 days upon completion of the warranty period. The PBG should be in favour of "Chief Executive Officer, Institute of Eminence, University of Delhi, Delhi-110007". PBG must be provided at the time of installation to avoid delay in payment release.
- The quote should be valid for at least 90 days from the last date of submission of the bid.