

## Department Biochemistry, University of Kerala

Kariavattom, Thiruvananthapuram, Kerala, India - 695 581

25/07/2022

### E-Tender Notice

Department of Biochemistry, University of Kerala, Kariavattom invites open tenders through e-Procurement (in two bid system), from reputed manufacturers/authorized distributors/Indian Agents for the purchase of the equipment 'Cell Sorter' in the Department, in connection with the implementation of the DST FIST Grant ”.

Last date and time for submission of tender online	<b>25/08/2022: 5 PM</b>
Date and time of opening of Technical bid	<b>27/08/2022: 11AM</b>
Date and time of opening of Financial bid	After technical Evaluation.
For technical details contact	Dr. Mini. S , Professor, Department of Biochemistry Phone :0471-2308078 Email : biochemistrykariavattom@gmail.com

## **TECHNICAL SPECIFICATIONS**

- Quantitative fluorescent-based detection of cell health parameters and cell signal activation pathways, Advanced cell analysis - Cell Cycle Analysis, Mitochondrial Potential, Annexin V, Caspase 3/7, 8 & 9, DNA Fragmentation, Cell Vitality, GFP Transfection Efficiency
- Laser based optics with minimum three detection channels
- Flow based fluidics with or without sheath fluid
- User defined cell concentrations
- Data presentation - Images, tables, histograms, scatter plots
- Data export - CSV, ACS, FCS, PDF
- Software - PC controlled software for documentation and presentation
- Three Years Comprehensive Warranty including spares and service

### **Cell Analyser**

#### **Specifications for Cell Analyser (Laser based)**

##### **1. Laser and Optics Specification**

- a. Excitation source should be a Green Laser (532nm)
- b. Emission max should range from Yellow: 28nm bandwidth at 576nm; Red: 30nm bandwidth at 680nm

##### **2. Sample handling**

- a. Running time should be less than 2 minutes per sample
- b. User should be able to define the cell number per assay
- c. Cell concentrations required should be of 10,000–500,000 cells/mL with final concentration of  $1 \times 10^4$  to  $5 \times 10^5$  particles/mL
- d. Sample volume required should be 200  $\mu$ L or less.
- e. Parameter dynamic ranges should be 4.0 decade or more
- f. Every particle (cell) should be time stamped
- g. Sample loading via capillary Flow cell with 100- $\mu$ m round bore using positive displacement pump
- h. Sample flow rate: 7  $\mu$ L/minute to 36  $\mu$ L/minute

### **3. Assays and Kits**

- a. The unit should be able to do at least 20 different assays or more ranging from cell counting, viability and other antibody-based detection kits.
- b. Various assays for cell signaling, immunology studies for oncology research is an advantage
- c. System should have functionality and kits to test the performance check time to time for consistency

### **4. Software and handling**

- a. The unit should be preferably integrated with computer and software for quick setup and handling
- b. Preferably with touch screen control for easy handling
- c. The unit should be smaller in footprint to be kept inside a cell culture hood
- d. Optional multiple user accounts to keep the data secured
- e. Binary data storage in Flow Cytometry Standard (FCS) 3.0, CSV and PDF formats

### **5. Warranty & Maintenance**

- a. Integrated cleaning & waste bottles for easy handling
- b. Minimal waste generation of <40 mL or less
- c. Dead volume should not be more than 50  $\mu$ L

Three-

year comprehensive warranty, including replacing parts and service with additional 2-year AMC

## Terms and Conditions

1. Every tenderer should submit Tender fee of **Rs. 2,500/-**.
2. Every tenderer should submit Earnest Money Deposit (EMD) of **Rs. 20,000/-**.
3. Quantities can be increased or decreased by purchaser and bidder has to supply deviated quantities at the rates prescribed and approved by the purchaser in the tender document. Purchase of optional items will be finalized at the time of financial evaluation. However, the bidder must quote the optional items. The bidder should quote all items; partial quote will not be accepted.
4. **Original Equipment Manufacturer (OEM) Certificate/ Undertaking:** If the bidder is not an OEM, Certificate of authorized dealership/ distributorship from the OEM for technical support to the bidder and supply of spares shall be furnished.
5. Incomplete & conditional tenders and tenders received after the due date will be summarily rejected without assigning any reasons thereof.
6. Commercial bids of short-listed vendors will only be opened. Please note that the Vendor(s) who do not qualify in the technical bid will not be considered for commercial bid.
7. The bidder must not sub-contract the work to other providers.
8. The prices quoted must be on “**all-inclusive till destination**” basis. The prices quoted should be inclusive of all Taxes, Insurance, Freight, Packing & Forwarding Charges, Handling, Delivery Charges, installation charges etc.
9. **Payment terms:** Payment against delivery and successful installation of the equipment in the department.
10. The configuration given is the minimum configuration that is/are required. Vendors may choose to supply higher/better/ enhanced systems/peripherals, but their financial quotes shall be treated as if they have been offered for the specified configuration only.
11. The Bidder shall bear all the costs associated with the preparation of the documents, submission of its bid and we will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.
12. The bid shall be typed and shall be signed by the bidder or a person duly authorized to bind the bidder to the contract.
13. The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder. In such case the person or persons signing the bid shall initial such corrections.
14. The bidder is expected to examine all instructions, forms, terms, condition, and technical

specifications in the tender Documents. Failure to furnish all information required by the tender Documents or submission of a bid not substantially responsive may result in the rejection of its bid.

15. The bidders shall give undertaking that all the Components used in the equipment shall be original make as per the technical specifications submitted and the hardware/software shall be supplied with the authorized license certificates, if found contrary the supplier shall replace the component/equipment with original one at their own cost.
16. Validity of tender: Tender submitted shall remain valid at least for 90 days from the date of opening the tender. Validity beyond three months from the date of opening of the tender shall be by mutual consent.
17. Delivery and installation: Proposed delivery schedule should be mentioned clearly. **Delivery and installation should be made at the Department of Biochemistry, University of Kerala, Kariavattom Campus Trivandrum - 695581, without any extra cost. Complete installation, testing and demonstration of the system and day to-day maintenance are to be provided at site**(inclusive of documentation, demurrage, customs duty, clearance and transportation charges). University of Kerala will provide customs duty exemption certificates if required.
18. The Supply and installation of items must be made within four weeks from the date of issue of supply order. Delay in supply will lead to penalty @1% of the value of tender for every week of delay or part thereof. (i.e. exceeding three days will be calculated as one week). If it is found that the items so supplied are not as per supply order specifications, the supply made will be rejected and Earnest Money Deposit will be forfeited.
19. Warranty period : 3 Year will start(including parts/service) with additional 2-year AMC Service facility. Supplier should mention their details of service setup and manpower in Trivandrum who are responsible for after sales support. The service provider should be available within 24 hours and preferably in Trivandrum.
20. In case of any dispute, the decision of the University authority shall be final and binding on the bidders. The undersigned reserves the right to reject any or all of the tenders received without assigning any reason thereof.

**Documents to be uploaded:**

1. Signed Compliance Matrix
2. Detailed Technical Brochure
3. BoQ
4. Detailed Financial Bid in pdf format.

**Registrar**