

**Department of Zoology, University of Kerala**  
**Kariavattom, Thiruvananthapuram, Kerala, India - 695 581**

**02/05/2023**

**Re-Tender Notice**

Department of Zoology, 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 "**Microplate Spectrophotometer**" in the Department, in connection with the implementation of the Innovative Project "**Influence of altered cholesterol biosynthesis on mitochondria in the hair loss condition**".

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| Last date and time for submission of tender online | <b>17/05/2023: 5 PM</b>  |
| Date and time of opening of Technical bid          | <b>20/05/2023: 11AM</b>  |
| Date and time of opening of Financial bid          | After technical Evaluation.  |
| For technical details contact                      | <b>Dr. Sreejith.P. Assistant Professor, Dept. of Zoology, University of Kerala</b><br><b>Mob: 9496793794</b> |

### TECHNICAL SPECIFICATIONS

| SI No. | Specification                     | Description  | Compliance (Yes/No) | Remarks if any |
|--------|-----------------------------------|--|---------------------|----------------|
| 1      | Detection modes                   | Absorbance   |                     |                |
| 2      | Wavelength selection              | Monochromator  |                     |                |
| 3      | Wavelength range                  | 200 - 1000 nm, selectable in 1 nm increments                               |                     |                |
| 4      | Read methods                      | Endpoint, kinetic, spectral scanning, well area scanning                   |                     |                |
| 5      | Microplate types                  | 6- to 48-, 96-, 6-384-well plates  |                     |                |
| 6      | Temperature control               | Incubation to 60°C - 65 °C with Condensation Control $\pm 0.2$ °C at 37 °C |                     |                |
| 7      | Shaking                           | Linear, orbital, double orbital  |                     |                |
| 8      | Light source                      | Xenon flash lamp   |                     |                |
| 9      | Detector                          | Photodiode   |                     |                |
| 10     | Monochromator bandwidth           | 2.5- 3 nm  |                     |                |
| 11     | Dynamic range                     | 0 - 4.0 OD   |                     |                |
| 12     | Resolution                        | 0.0001 OD  |                     |                |
| 13     | Path length correction:           | yes  |                     |                |
| 14     | Monochromator wavelength accuracy | $\pm 2$ nm   |                     |                |
| 15     | Monochromator wavelength          | $\pm 1$ - $\pm 2$ nm (standard deviation)                                  |                     |                |

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|    | precision                  |   |  |  |
| 16 | OD accuracy                | < 1% at 2.0 OD, < 3% at 2.5 OD  |  |  |
| 17 | OD linearity               | < 1% from 0 to 2.5 OD   |  |  |
| 18 | OD repeatability           | < 0.5% at 2.0 OD  |  |  |
| 19 | Stray light                | 0.03% at 230 nm   |  |  |
| 20 | Reading speed<br>(kinetic) | 96 wells: 8-10 seconds<br>384 wells: 14-16 seconds  |  |  |
| 21 | Power Supply               | 100–240 V (50/60 Hz)  |  |  |
| 22 | Desktop Computer           | <ul style="list-style-type: none"> <li>• Processor: Intel core i5 11<sup>th</sup> generation or higher</li> <li>• Chipset: Compatible chipset</li> <li>• Mother board: OEM Motherboard</li> <li>• Memory: 8 GB DDR4 RAM upgradable to 32 GB</li> <li>• Hard Disk Drive: 512 GB SSD</li> <li>• Graphics Adaptor: High end Graphics adaptor with 1.0 GB memory</li> <li>• Monitor: 21.5 “or larger TFT/LED Digital colour Full HD Monitor. Same make as PC</li> <li>• Key board: USB interface. keyboard. Same make as PC</li> <li>• Mouse: Optical with USB interface. Same make as PC</li> <li>• Ports: 6 USB ports or more (at least 2 USB 3.0 ports and two ports in front panel (at least 1 should be USB 3.0)</li> <li>• Network facility: 10/100/1000 on board integrated Network Port, &amp; Wi-Fi 802.11 b/g/n connectivity</li> <li>• Warranty: Minimum 3-year comprehensive on-site warranty including Monitor, Mouse and Keyboard</li> <li>• Operating system: Windows 11 Home</li> </ul> |  |  |
| 23 | Service and protection     | <ul style="list-style-type: none"> <li>➤ 3 years Warranty</li> <li>➤ Five years Comprehensive AMC</li> <li>➤ Nearest Service station in South India, preferably in Kerala</li> <li>➤ Performance certificate with two phone number</li> </ul>   |  |  |

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|  |  | <ul style="list-style-type: none"> <li>➤ Relevant supporting documents have to be submitted</li> <li>➤ Data sheet should be submitted.</li> </ul> |  |  |
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### **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. 7,000/-**.
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 Zoology, 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. For those bidders submitting tenders for more than one instrument, separate applications for each instrument must be placed in individual sealed envelopes. Only one model can be quoted in a tender. If the tenderer wants to quote for more than one model separate tenders should be submitted. If more than one model is quoted in a single tender it will be summarily rejected.
19. Warranty period: Three year comprehensive on-site warranty (including service and spare

parts). If any of the components is found to be defective during the warranty period, the vendor has to replace the defective item immediately, to the satisfaction of the University, at their own cost. 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**