



**Department of Biochemistry
University of Kerala
Kariavattom, Thiruvananthapuram, Kerala 695 581**

BCH/UOK/Plan/NBL/VV1-3/2021

Date: 26 October 2021

Sealed quotations are invited from the reputed firms/ manufactures/distributors for the supply of **Behavioural apparatus - Y maze, water maze, video tracking software, camera and laptop** with relevant specifications with on or before 10 November 2021 at 4.00 PM. Sealed quotations should be addressed to Principal Investigator, Setting up of neurobiology lab – Department of Biochemistry (Plan Fund), Department of Biochemistry, University of Kerala, Thiruvananthapuram - 695581 with superscription "**Quotation for the supply of Behavioural apparatus - Y maze, water maze, video tracking software, camera and associated accessories**". The quotation will be opened on 11 November 2021 at 3 PM in the presence of such tenderers or their authorized representatives who may be present at that time. Bidders have to note *Appendix - Technical Specifications* and *Appendix II- Terms and Conditions* and should attach the relevant documents along with the quotation.

APPENDIX - I

(1.) Y maze

Purpose: A Y maze for studying spatial learning and memory in mouse is required

SL No.	Technical specifications for Y maze
1.	The Y maze should have dimensions of arm length x arm width x arm height 15", 3", 5"
2.	The material composition of the Y maze should be acrylic
3.	The maze should be black in colour

(2) Water maze

Purpose: A water maze for studying spatial learning and memory in mouse is required

SL No.	Technical specifications for water maze
1.	The water maze should have dimensions of 48" diameter, 3" height and 210 GAL water capacity
2.	The maze should be non-reflective and black in colour
3.	The tank material composition should be FRP or fibre reinforced polymer
4.	The platform dimensions should be: rod height 12", squared base (LXW): 12" x 12", top square plate (LXW): 4" x 4", top round plate 4" diameter
5.	The platform material composition of the water maze should be acrylic

(3.) Video tracking software for maze

Purpose: A software is required to automate behavioural tests that can be used for water maze, Y maze, plus maze, open field, Barnes maze, light dark box, radial arm maze, forced swim test etc.

SL No.	Technical specifications for video tracking software
1.	Track and analyze the behaviour, movement and activity of mouse without the use of sensor
2.	Possess the feature of video or image capturing for presentation purposes.
3.	Have the feature to track 4 animals in 4 different types of mazes
4.	Have the provision to record video files and tract video files
5.	Have the provision to save the video file without arena tracking overlay Be able to export data into an excel sheet for analysis.
6.	Have the feature to record and track tail suspensions apparatus experiment with individual start or all start functions at a time
7.	Have the facility for calibration and animal body length adjustment settings
8.	Be able to provide data on distance travelled, body movement whilst stationary, immobility, visit to zones, time spent in zones, part of body in zone, head out, contact to reward, rearing, head movement
9.	Have data logs: centre of mass data log in time (sec), activity (act) data log in distance (mm) and event counts, blob data log (time and event count), region of interest intersect data log, tracking line, excel data log, real time activity chart, latency file for recording start of activity in excel format, curled up and stretch out parameter logs.
10.	The software license should have a lifetime validity without any periodic renewals

(4.) Camera for the maze

SL No.	Technical specifications for camera
1.	A quality camera with CMOS sensor with resolution of 1280 x 720 pixels along with USB cable of 5 feet
2.	The camera should be provided with a stand for holding the camera with 140 degree rotation and possible extension of 7 feet or more.

(5.) Laptop

SL No.	Technical specifications for Laptop
1.	Processor: 11 th Generation Intel Core i5 Core Processor (8 MB)
2.	Windows 11 Home or Windows 11 Pro (Genuine)
3.	Memory 8 GB
4.	Hard drive 256 GB
5.	Backlit keyboard with numeric keyboard
6.	Intel UHD Graphics with shared graphics memory
7.	Driver for wireless card
8.	Wireless and bluetooth
9.	Powercord
10.	Laptop bag/ case
11.	Microsoft office license (Genuine)
12.	Security software (Genuine)
13.	Battery 3 cell battery
14.	Display 15.6 inch or more with antiglare display
15.	Adapter 65W AC adapter
16.	Warranty of 3 years comprehensive of charger and battery

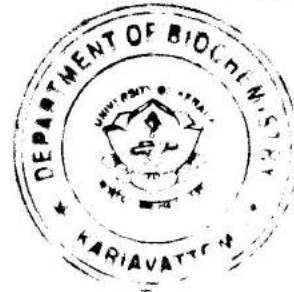
APPENDIX – II**Terms and conditions**

1. The prices quoted should be that applicable for educations institutions (5% GST)
2. The item should have a warranty of 3 years
3. The firm should extend service within 3 days.
4. Prices are to be quoted FOR DESTINATION (Department of Biochemistry, University of Kerala, Kariavattom). The prices quoted should clearly indicate the 4 following charges: Price of the equipment including taxes; Price of optional accessories if any; Customs duty if any (after submission of custom and excise exemption certificate); Customs Clearance Charges, transportation charges and installation charges. If these details are not provided it will be considered that the price quoted is inclusive of all charges.

- 5. Technical Bid and Financial Bid must be placed in individual sealed envelopes and these envelopes must be placed inside a bigger envelope.
- 6. 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 single tender it will be summarily rejected.
- 7. Performance Certificate of the specified model should be attached along with the quotations.
- 8. The undersigned reserves have the right to reject any or all of the tenders received without assigning any reason thereof.
- 9. If any of the components is found to be defective during the warranty period, the vendor has to replace the defective item immediately at their own cost.
- 10. **Supplier authorization letter and specification compliance sheet to be provided along with the quotation.**
- 11. Quotations should also include all the supportive work for installation, loading and unloading of the equipment.
- 12. The interested bidders shall submit their best possible offer before last date to the undersigned.
- 13. Should be a certified company which has provided at least 10 installations of products within or outside India
- 14. The rate quoted shall be valid for a period of one year.

Handwritten signature

VIJI VIJAYAN Ph.D.
 Assistant Professor
 Department of Biochemistry
 University of Kerala, Kariavattom
 Thiruvananthapuram-695 581, Kerala



Handwritten signature

Professor & Head
 Department of Biochemistry
 University of Kerala, Kariavattom
 Thiruvananthapuram-695 581