



DEPARTMENT OF BIOCHEMISTRY UNIVERSITY OF KERALA, INDIA

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QUOTATION NOTICE

(BCH/BIOSAFE/NONPLAN/EQUP-2/2022)

Sealed quotations are invited for the supply of BIOSAFETY CABINET with relevant specifications with on or before 14/03/2022 at 4.00 pm. Sealed quotation should be addressed to **Dr. Janeesh P.A, Assistant Professor and Principal Investigator, Establishment of Biosafety Laboratory, Department of Biochemistry, University of Kerala, Thiruvananthapuram-695581** with superscription “Quotation for the supply BIOSAFETY CABINET”. The quotation will be opened on **15.03.2022 at 11.00 AM** in the presence of such tenderers or their authorized representatives who may be present at that time. The rate quoted shall be valid for a period of one year. Quotations should also include all the supportive work for installation, loading and unloading of the equipment. Bidders have to note the Appendix I -Technical Specifications and Appendix II - Terms and Conditions and should attach the relevant documents along with the quotation.

Name of the Equipment: BIOSAFETY CABINET

Department of Biochemistry, University of Kerala, Kariavattom-695 581, India

APPENDIX I- TECHNICAL SPECIFICATIONS

SPECIFICATION DETAILS

- The Bio safety cabinet should be Type A2 in which 70% Air should be recirculated and 30% of the air should be exhausted.
- The Bio Safety Cabinet must include dual DC motors. High power consuming AC motors should not be used
- The motor must automatically adjust the airflow speed without the use of a damper to ensure continuous safe working conditions, even without maintenance adjustments.
- In order to preserve safety to the user and the environment, the exhaust blower on the cabinet must continue operating when the supply blower stops working. If the exhaust blower should fail, the supply filter will also be turned off.
- In order to ensure consistent and reliable down flow velocity across the supply HEPA filter over the life of the cabinet, the cabinet must use a pressure sensor (rather than anemometer) to detect pressure drop across the supply filter, rather than in just one point across the down flow. The pressure sensor must be cased in order to protect the sensor from temperature, humidity and other environmental phenomena that can impact the sensor's performance.
- The microprocessor must display the inflow and down flow air velocities in real time on an LED display to ensure the user knows whether or not the cabinet is working under safe operating conditions.
- The front window must be a 10" sash opening and be made of laminated safety glass to ensure containment of potentially hazardous samples in the case of accidental glass breakage.
- All interior and exterior parts must be painted or smooth to ensure no risk of cuts to users or maintenance personnel.
- The front of the cabinet must be angled 10° to help minimize glare on the window to the user, and to ensure that the user's posture is comfortable during a working session. Inadequate user ergonomics in a safety cabinet may lead to excessive fatigue, unsafe working habits and harmful consequences to user safety or product contamination.
- The cabinet noise level must be less than 63 dB(A) for a 4 foot cabinet as measured in a sound proof room 12 inches in front of the cabinet and 15 inches above the work surface. Lower noise levels promote more comfortable and safer working habits of the user.
- The Biosafety Cabinet should have microprocessor controller and same must be located on a slanted front panel so it is easy to see and reach from a seated working position in front of the cabinet.
- The interior of the front window must be accessible for cleaning without requiring the user remove or support the window.
- The biological safety cabinet must be capable of achieving current state of the art in energy efficiency. A biological safety cabinet with lights on and fan at operating speed should consume less than 200 watts for a nominal four foot width and have a reduced energy mode for non-operational maintenance on containment in the work area.
- The cabinet must automatically reduce fan/blower motor speed to 30% when the front window sash is in closed position to ensure reduced energy consumption when the cabinet is not in use.
- In order to provide maximum effectiveness, efficiency and safety to laboratory Personnel, UV light must be programmable to allow for specific exposure times from 0 to 24 hours. The automatic shut off feature on the UV light saves money on replacement of the bulbs.
- The Cabinet should have provision to fit taps for Vacuum Water and Non-

APPENDIX II- TERMS AND CONDITIONS

1. Tender along with all necessary documents should be submitted for each instrument. The main envelop should be superscribed: "TENDER FOR SUPPLY OF (ENTER NAME OF EQUIPMENT). The tender should be submitted in two sealed cover, one containing Technical specification and other containing financial details.
2. 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.
3. The tenders received late, without required documents or incomplete in any respect / misleading will be summarily rejected.
4. The proposals shall be submitted **sealed envelopes** (with respective marking superscribed in bold). cover must also contain Name and Address of the tenderer, telephone and other contact details for further correspondence..
5. The models quoted should be in successful operation for at least one year as on the date of Bid opening.
6. Prices are to be quoted **FOR DESTINATION (Department of Biochemistry, University of Kerala, Kariavattom)**. The prices quoted should clearly indicate the following charges: Price of the equipment; Price of optional accessories if any; Customs duty (after submission of custom and excise exemption certificate); Customs Clearance Charges and transportation charges. **If these details are not provided it will be considered that the price quoted is inclusive of all charges.**
7. The manufacturer /supplier should provide training to the laboratory personnel in the installation, operation and maintenance of the instruments.
8. The supplier should be fully equipped to render us after sale service during warranty and thereafter.
9. The University of Kerala reserves the right to accept or reject any or all quotations without assigning any reason thereof. In case of any dispute the decision of the University Authority shall be final.
10. Minimum warranty of 3 years should be quoted with main system.
11. Suppliers with service centers in South India, preferably in Kerala shall be an added advantage.