

# **DEPARTMENT OF BIOCHEMISTRY**

(DST-FIST Sponsored Department)
UNIVERSITY OF KERALA



Established as University of Travancore by the Travancore University act in 1937 and reconstituted as University of Kerala by the Kerala University act of 1957 and presently governed by the Kerala University act of 1974 passed by the Kerala state Legislative Assembly)

(Re - accredited by NAAC with 'A\*\*' Grade)

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## **QUOTATION NOTICE**

## (BCH/AH/PF/2021)

Sealed quotations are invited for the supply of **Electrophoresis System, Western blot and power pack** with relevant specifications with on or before 07/11/2022 at 4.00pm. Sealed quotations should be addressed to Dr. A. Helen, Professor & Head of the Department, (Principal Investigator Plan Fund, University of Kerala), Department of Biochemistry, University of Kerala, Thiruvananthapuram-695581 with superscription "Quotation for the supply **Electrophoresis System, Western blot and power pack.** The quotation will be opened on at 09/11/2022 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 Appendix I- Technical Specifications and Appendix II- Terms and Conditions and should attach the relevant documents along with the quotation.

Name of the Equipment: Electrophoresis System, Western blot and power pack

### **Appendix I- Technical Specifications**

#### 1. Electrophoresis unit

- > System should have a the buffer tank with lid, power cables and electrode assembly.
- > System should cast and run 4 gels.
- > The system should be compatible for both readymade precast gels and hand cast gels

- > Gel holder cassettes to hold the gel and membrane sandwich between two foam pad and filter paper sheets and placed into the tank within a gel holder cassette
- > Cooling systems consist of an ice block, a sealed ice unit, or a cooling coil that is coupled to an external cooling mechanism.
- > Side by side casting strands made of polycarbonate (2nos)
- > Casting frames should be provided.
- > Casting gaskets for leak free casting.
- > Short plates and long plates (5 each) and the spacers should be permanently bonded to the long plate.
- > 10 well plastic combs (2nos)
- Electrophoretic run should not exceed 45min (200V)
- > Sample Loading guide should be provided.
- > SDS PAGE starter kit, Protein marker and other necesssary consumables should be supplied along with the unit

#### 2. Electroblotting system

- ➤ High quality western transfer of two gels within a time frame of 1hr
- ➤ Must accommodate two mini gels at a size of 10 \* 7.5cm
- > Cooling unit to take care the heat generated
- ➤ Unit should be mountable on a magnetic stirrer
- ➤ Buffer requirement should not exceed 450ml-500ml per run
- Modularity of same tank to run PAGE gels must be available.
- > Stand alone apparatus or a module compatible with mini SDS PAGE Gel running apparatus
- > Transfer cassettes and electrodes should be colour coded to ensure proper orientation of the gel during transfers
- The apparatus should be complete with gel holder cassettes, foam pads, electrode assemblies, cooling unit within tank, lower buffer tank and lid with power cables
- Nitrocellulose membranes/ PVDF should be available with the system
- > Reservoirs or gel boxes for blotting membranes

### 3. Power pack

- ➤ Output range (programmable): 5–250 V, fully adjustable in 1 V increments, 0.01–3.0 A, fully adjustable in 0.01 A increments, 1–300 W
- > Output terminals: 4 pair recessed banana jacks in parallel
- ➤ Timer control: 1 min–99 hr 59 min, fully adjustable
- > Pause/resume function: Yes
- ➤ Display: 2-line, 16-character backlit LCD
- > Operating conditions: 0–40°C; 0–95% humidity in absence of condensation
- ➤ Safety compliance: EN61010
- ➤ EMI: Conforms to CE standards for emissions and immunity class A, tested only at 230 V. TÜV EMC certification
- > Safety features: No-load detection; rapid resistance change detection, ground leak detection, overload/short circuit detection, over voltage protection, over-temperature protection
- > Input protection: Fuse on hot and neutral
- ➤ Input power (nominal): 100–120/220–240 VAC, autoswitching
- ➤ Should have CE certification

## **Appendix II- Terms and Conditions**

- > Delivery within 4-6 weeks from the date of receipt of our order
- > 2-3 years Warranty