## Physical Nucleic Acid and Protein Separation system with power supply

### **Physical Nucleic Acid and Protein Separation**

- ➤ Should have a gel capacity of 1 to 4 gels
- ➤ Should run gels of 16 X 20cm size to perform SDS-PAGE and the second dimension 2-D using IPG Strips, upgradeable to accommodate 18.3 x 20cm gels
- ➤ Should accommodate 11cm and 13cm IPG strips, upgradeable to accommodate 17 and 18cm IPG strips
- The casting stand should have single-screw clamps that exert even pressure along the entire length of the glass plates, providing leak-proof seal without grease or agarose plugs
- ➤ Central cooling core should have option to be connected to tap water or a cooled recirculating bath, or filled with coolant, providing smile-free patterns with as little as 1.5 L of buffer
- > Should include minimum two sets of glass plates and spacers for running two gels at a time
- ➤ Should include minimum two combs of 15 wells each to run 30 samples at a time
- > Should have separate facility for easy and correct alignment of the spacers quickly during gel casting
- Should include a leveling bubble for even gel casting and running
- > Gel caster should have four height adjustable screws for balancing uneven platforms for uniform gel casting
- > System should have lid with safety banana jacks which break the circuit if lid is opened during a run
- ➤ The electrodes should be color coded to remove any confusion of wrong orientation
- > The lid should have integrated cables to connect to power pack directly
- > System should conform to CE standards

# Power supply

- Should have minimum programmable output specifications:
- ➤ Volts 10–250 V, fully adjustable in 1 V steps
- ➤ Current 0.01–3.0 A, fully adjustable in 0.01 A steps
- ➤ Power 1–300 W, fully adjustable in 1 W steps
- Should have the following output types:
- Constant voltage
- Constant current
- Constant power with automatic crossover
- Should have minimum 4 output terminals floating in parallel
- ➤ Should have fully adjustable timer control from 1 min to 99 hr 59 min
- ➤ Should have Pause/resume function
- Should be able to store minimum 1 Programmable method with up to 3 steps
- ➤ Should have automatic recovery after power failure
- Should have an internal fan to keep the power pack cool during long hours of working
- ➤ Should have electrical safety compliance EN61010
- ➤ Should conform to CE standards for emissions and immunity class A, tested at 120/230

#### **Eligibility Criteria**

- Bidder should be Manufacturer/ Authorized Partner/ Reseller of the manufacturer and a Letter of Authorization from manufacturer for the same and specific to the tender should also be enclosed. The bidder should also be the Authorized Service Provider.
- Bidder should be financially sound to execute the order. Certificate to this effect should be issued by any nationalized/ scheduled bank showing its annual turnover of at least 25Lakhs each in the last three financial years.

- The Bidder shall provide the Registration number of the firm along with the LST/CST/WCT No. and the PAN Number issued by the concerned authorities.
- The bidder should enclose similar orders provided to various reputed Government Institutes/Research labs/ICAR/CSIR institutes throughout India in the last 5 years.
- Separate technical and price bid should be uploaded.
- Technical Bid must contain a Technical Compliance sheet.
- Technical compliance sheet must have the page number of a published catalogue/operating manual/manufacture website as proof for compliance with the instrument and accessories for each technical point. Relevant copies of catalogue/operating manual/manufacture website pages that have been listed as proof should be attached.
- All vendors are requested to attach original technical literature/ catalogue in support of the mentioned specifications & highlight the above features. The same features should be available in the company website.
- Price Bids should contain the prices, terms of delivery, sales, payment terms etc.
- The bidder must not be blacklisted by Delhi University. A Certificate or undertaking to this effect must be submitted.

## No Commitment to Accept Lowest or Any Tender

- Demonstration of the equipment will be required if needed.
- University of Delhi shall be under no obligation to accept the lowest or any other offer received in response to this tender notice and shall be entitled to reject any or all offers. University of Delhi will not be obliged to meet and have discussions with any vendor, and or to listen to any representations.

### **Warranty / Comprehensive Maintenance**

- Machine should be warranted for minimum 12 months from the date of installation.
- Warranty up to 5 years on the machine from date of installation after expiry of standard warranty should be quoted, year wise under optional items in the price bid.
- Installation and commissioning to be completed up to the satisfaction level of the technical purchase committee followed by training and handling by the bidders

# **Price quotation**

- F.O.R. UDSC price only in INR to be quoted which includes transportation charges to site of installation. IGST/CDEC will be provided.
- A performance bank guarantee for the entire duration of the warranty period must be submitted at the time of installation.
- Payment will be made against successful installation.
- Validity of the quotation should be till 31<sup>st</sup> March 2023.

KAUSTUV DATA, Ph. D Associate Professor Department of Genetics University of Delhi South Campus, New Delhi-110021