SPECIFICATION FOR VERTICAL GEL ELECTROPHORESIS

- 1. Vertical Unit should be with sliding clamp for set up of time and leak-free operation in normal temperature.
- 2. Active gel size should be in the range of 8x8-10x10cm with a capacity of PAGE80 samples of 20/gel and 4 blots.
- 3. Interchangeable module for PAGE and 2D the electrophoresis as wellas Electro blotting should be possible in a single Buffer Tank.
- 4. Should be open to use consumables from any brand.
- 5. Should be injection molded, durable and leak proof unit.
- 6. Buffer tank should be with min. 250ml and max. 1500ml.
- 7. Precast gel can be used from known brand effectively.
- 8. Rapid gel casting and loading ensures travel free gel setup.
- 9. Warranty of this instrument should be min. 24 months.

Specifications for Power Supply

Power Supply Unit for 220V. 50Hz. The power supply should give Voltage: 0 -600V, Current: 0-500mA, Power:0-150W, Timer:99.59hrs, Display: LCD, Resolution: 1V, 1mA, 1W, Outputs:4 in parallel, 4mm sockets, No load detection: On/off, programmable, Minimum load resistance: 30Ω , Buffer depletion detection: On off programmable, Ground leakage detection, Overload detection, Ambient temperature: 0 – 40°C, **Outputs:** 4 outputs for running 4 gels at a time with cross over the facility. Short circuit protection, automatic recovery after power failure.

Gel Documentation System

Technical Specifications:

- 1. Versatile and easy to use Gel documentation system for Protein, DNA, and blotting applications.
- 2. Should have an Image resolution of 5 megapixels for resolving closely spaced bands on a gel or blot.
- 3. Pixel Density: 12/16 with 65536 Gray Scales.
- 4. Should be with Motorized Zoom lens with F1.2.

sof la

Prof. Avinash Agrawal

al University, UP, Lko.

- 5. Should have a large viewing area, Slide out Transilluminator, size 20x20 cm or better with 302 nm wavelength UV lamps.
- 6. System should have an integrated Touch screen and built-in processor for running software for image capture and editing.
- 7. Images should be saved directly to a USB memory stick for easy transfer to a PC.
- 8. System Should have EPI White LED light illumination, Trans UV illumination, and UV to visible light conversion Screen. UV to blue light conversion screen for Safe dyes to be quoted in option.
- 9. System should have a safety switch: override UV protection from accidental UV exposure when opening the door.

Software

- 1. System should come with intuitive software for the control and image capture and Analysis.
- 2. Software should be Application driven. The user only needs to tell which application they are using along with their gel or blot size and the software should automatically configure the system for that application.
- 3. Analysis software should automatically detect lanes and bands and easily add a molecular weight ladder.
- 4. Software should do 1D analysis, Molecular weight calculation, Quantification, E Gels,
- 5. It should also have the feature of Colony counting.
- 6. It Should be able to do Band matching with a dendrogram
- 7. Analysis software should be multiuser licensed and should be able to load on unlimited number of PC/Laptops.
- 8. Software should Create cluster analysis diagrams,
- 9. RFLP, RAPD, Fingerprinting Analysis.
- 10. VNTR and Dendrogram Analysis.
- 11. Suitable PC with software should be provided with the system.

Offer must include:

1. Should be quoted with adaptors of all possible sizes and all absolutely essential requirements

Prof. Avinash Agrawal

MD, IDCC, IFCCM, FIGCM, FIG

MD, IDCo Head, I King

Head, Department Page 2 of 6 re,

Medical University, UP, Lko.

Dagg

- 2. Certified list of consumers should be provided.
- 3. All the accessories should be provided for proper installation and to check the quality control of the equipment
- 4. Servo/Luminous/ V Guard (or of equivalent quality) UPS of 3to5 KV (as appropriate) to be included in the offer
- 5. Free system installation and operator training performed by a vendor service engineer.
- 6. Availability of local service engineers.
- 7. Free 5-year warranty after completion of basic warranty
- 8. Availability of regional technical support/applications training.
- 9. Free on-site, in-lab customer training.
- 10. Technical phone support.

The offer should include the supply of a comprehensive user's manual complete with a report documenting all test procedures along with the equipment.

Conditions for tenderer:

- 1. All accessories should be from the same Original Equipment Manufacturer for the main unit.
- Instruments must be ISO certified and a copy should be enclosed. (The ISO
 Certificate must be issued by any organization accredited by the Bureau of Indian
 Standard or accredited by the international accrediting forum "IAF" (Certificate to be
 attached).
- 3. Should be USA FDA and/orEuropean CE be approved by 4 digits notified body.
- 4. Other necessary certifications if any required will be provided by the bidder for the smooth functioning of the machine.
- 5. Installation process should be performed by O.E.M trained service engineers/ service representatives on OEM letterhead or Service Report within 15 days of supply, with the mandatory provision of providing preventive services visit of OEM trained Service Engineer/ Service Representative quarterly per year till the completion of warranty period (i.e., 20 visits for the first 05 years) & further quarterly visits (04 visits/year) year till the completion of CMC period.

My Vo

Medical University, UP, Lko.
Page 3 of 6

86

X Page

- 6. The equipment should have a Brand name/ Model Number embossed/etched on the equipment.
- 7. All the technical specifications in the compliance statement must be supported by Original Literature from the firm/ O.E.M with highlighting Numbering & flagging of all technical certificates.
- 8. Offered Equipment should have a strong Government Installation base.
- 9. Offered Equipment should have a Regional Sales Service Centre of the Original Equipment Manufacturer in the region for a 95 % uptime guarantee.
- 10. For the offered main unit, the essential, optional required consumables'/accessories' shelf life should be declared on the Original Equipment Manufacturer's letterhead.
- 11. In case of technical snag/failure/breakdown the response time for the inspection should be within 24 hours and repair within 05 days otherwise provide a service machine/ alternate arrangement to be made till the period of recovery of the breakdown of the unit, failing which attracts penal action as per the decision of institute/ hospital.
- 12. For offered equipment the Training of technical staff and users should be performed by Original Equipment Manufacturer trained Service Engineers at the proper designated place- at bidders' cost.
- 13. Company should quote their latest model and need to provide an affidavit for the same.
- 14. As a tendering process the Demonstration of the offered Equipment is Mandatory at hospital/institute premises or other designated places at the bidder's cost.
- 15. The bidder must comply with the General Financial Rules and their modifications if any issued by the Government of India- 2017.
- 16. Any bidder from a country that shares a land border with India will be eligible to bid in the tender only if the bidder is registered with the Competent Authority (i.e., Registration certificate issued by the Ministry of Commerce and Industry (Department for Promotion of Industry and Internal Trade- DPIIT after October 2020). If any such bidder is not registered with DPIIT they will be liable for technical disqualification.

MD, IDCC, DCC, Page 4, Off Com, FCCP (USA)
Wead, Department of Critical care,
King George's Medical University, UP, Lk

Dag

- 17. Principal (OEM) must authorize only one agent to be quoted in the bid otherwise multiple quotes through different agents in the same bid will be canceled.
- 18. The Bidder and its OEM both have to submit a notarized affidavit on the Indian Non-Judicial Stamp Paper of Rs.100/- that the bidder has not quoted the price higher than the current financial year and last financial year supplied to any government Institute/ Organization/ reputed Private Organization. OEM also has to submit that the price quoted by the bidder in the bid is on its behalf and the lowest in the current and last financial year in the country. Therefore, if at any stage it has been found that the supplier and its OEM have quoted lower rates than those quoted in this bid; the Institute (the purchaser) would be given the benefit of lower rates by the Supplier and any excess payment if any, will become immediately payable to the Institute (the purchaser). If such an affidavit is not submitted, the bid will be outrightly rejected. (Part of technical bid).
- 19. Guarantee / Warranty Period: Separate offers of Comprehensive Maintenance Contract (CMC on main equipment) and Annual Maintenance Contract (AMC on main equipment) for further 5 years after expiry of 5 years of warranty (i.e., 6th, 7th, 8th, 9th and 10th years) in rupees only (and on basis of percentage of price) should be included in a financial bid in the absence of which the offer is liable to be rejected. Payment for CMC/AMC shall be made only after the expiry of the warranty of 5 years, in case the Institute (the purchaser) decides for availing of CMC/AMC services. Contract for CMC/AMC shall be decided on expiry of warranty but rates (not more than 5% inclusive of all taxes for 6th to 10th year) will be frozen at the price of an issued purchase order before the release of payment by the Institute (the purchaser). However, the Institute (the purchaser) may decide not to enter into any CMC/AMC contract without assigning any reason for the same, which shall be binding upon the bid.
- 20. Should provide 5-year CMC. CMC cannot be more than 5% of the contract value.
- 21. System configured application-specific educational video tutorials shall be provided as standard with the system.

22. Details of service outlet in India to render services during 5 years warranty period.

Prof. Avinash A Rage 5 of 6 ead, Decertment of Critical care,

ical University, UP, Lko.

23. The principals must give a certificate if the supplier/vendor is changed during the course of the guarantee/warranty period, the principals would be responsible for the upkeep/maintenance of the quote/supplied equipment, besides honouring all the terms and conditions of CMC/AMC in letter and spirit.

Q.

Prof. Avinest Agrawal
D., IDCC, IFOCM, FICCH, FIACCM, FCCP (USA)
Head, Department of Critical care,
King George's Medical University, UP, Lko.

Del la