

जैव रसायन संभाग

DIVISION OF Biochemistry

भा.कृ.अ.प.–भारतीय कृषि अनुसंधान संस्थान, पूसा, नई दिल्ली–110012

ICAR-Indian Agricultural Research Institute, Pusa, New Delhi-110012

File No. BC/ST/NAE/2019-20

Dated : 27/07/2019

निविदा-सूचना

Online quotations are invited from reputed Manufacture/Dealer/Supplier in two bid system (Technical bid & Financial bid) for purchase of following Scientific Equipment/Items on behalf of Director ICAR- Indian Agricultural Research Institute, New Delhi. The **last date for submission of Bid 21.08.2019 at 1.00 PM**. The **bid will be opened on dated 23.08..2019 at 14.00 hrs** by the prescribed committee.

Please visit www.iari.res.in for Details Rules and Regulation and Log on www.eprocure.gov.in for online.

Sl. No.	Name of Scientific Equipment/ Item	Quantity
1.	2-D- PAGE UNIT (2-DIMENSIONAL POLYAERY LAMIDE GEL ELEETROPHORESSES) With software	1. No.

Instructions to the bidder and terms & conditions of tender:

1. The rates quoted shall be valid for a minimum period of 180 days from the last date fixed for submission of bid.
2. The rates quoted shall be free of cost delivery and installation at the Division/Unit of **Biochemistry**, IARI, New Delhi – 110012. However, equipment quoted in foreign currency must be quoted on FOB/ CIP basis
3. Custom Duty Exemption Certificate (CDEC) will be issued only when the bid is quoted in foreign currency in case of foreign made items only and meant for IARI
4. Full specifications of the item/ article quoted for shall be given in the quotation.
5. If taxes, duties or any other charges over and above the rates quoted livable, actual percentage of such taxes/duties/other charges should be clearly indicated.
6. **EMD of Rs. 32,000/- Rupees thirty two thousand only** should be in the form of D.D./Pay Order/Fixed Deposit Receipt/Bank Guarantee from commercial bank drawn in favors of Director, IARI payable at New Delhi. The original EMD should be submitted to the Tender Inviting Authority on or before the last date and time of offline bid submission. The details of D.D./Pay Order/Fixed Deposit Receipt/Bank Guarantee physically sent, should tally with the details available in the scan copy and the data enter during the bid submission time otherwise the uploaded bid will be rejected.
7. No interest on security deposit and earnest money deposit shall be paid by the Institute totenderer.

8. The EMD shall be refunded to the unsuccessful bidders after finalization of the quotation. In case of successful bidder, it can be adjusted towards security deposit which is 5-10% of the order value in the form of D.D./ Pay Order/Fixed Deposit Receipt/Bank Guarantee from commercial bank drawn in favour of Director, IARI payable at New Delhi and shall remain valid for 60 days beyond the date of completion of all contractual obligation of supplier including warranty obligation for the equipment/goods costing Rs.1.00 lakhs (Rs. One Lakh) or more. Here would however, be no performance security deposit for equipment/goods costing less than Rs. 1.00 lakhs (Rs. One Lakh).
9. One year warranty has to be invariable provided by the firm. In case, there is any variation in the warranty period given in the specification of the item/equipment, the warranty period shall be the final as given in the specification.
10. Payment will be made by mode of e-payment to the supplier/firm after satisfactory completion of work and receipt of pre-receipt bills triplicate.
11. The Director IARI, New Delhi reserves the right to accept or reject any or all the quotations either in full or in parts without assigning any reason.
12. Quotations not complying with the above conditions are liable to be rejected.
13. Scanned copy of GST/TIN/VAT/PAN/C.S.T. Nos may be attached with the bid.
14. In case, any dispute arising out of this contract shall be subject to the jurisdiction of Indian laws & Court at New Delhi. Sole arbitrator is appointed by the Secretary, ICAR, New Delhi. His decision will be final and binding on both parties (Supplier and Purchaser)
15. The successful bidder has to execute the indented Job/Work as mentioned in the supply order placed with them within the stipulated period as given in the supply order placed by this office failing which 2% per week and maximum of 10% deduction as liquidated damage charges will be made from the bill in case the job is not completed within the given stipulated period.
16. Firm should enclosed proof for three years' experience in this line (copies of supply order received in 3 years . should be enclosed.
17. For locally (within India) manufactured good/items. Proforma invoice for the goods/items to be procured from the OEM or Authorized agent/Distributor for goods/ spare parts of equipment manufactured aboard, proforma invoice is to be procured from the OEM in the currency of that country and not in INR . The firm (providing proforma invoice) should mention/undertake that "the rates quoted by them are the same and not higher than those quoted with other Government, public sector or private organizations and undertaking that, in case it supplies or quotes a lower rate to other Government , public sector or private organizations, it would reimburse the excess" The firm may mandatorily submit the purchase order of same goods/items which it supplied to Government Departments in recent past in order to justify the quoted rates.
18. Certificate from the OEM in favor if Authorized Agent/Distributor clearly stating that "the agent is the sole authorized agent to provide goods / service in India for the OEM products" The certificate shall not be dated more than one year old and valid for at least next 12 months. The agency Agreement/Distributor certificate should clearly bring out Exclusive status of the agent (Sole selling agent in India) after sales service arrangements, validity of the Agreement with foreign Principal. Agency Commission. The agreement between the OEM and the Agent/Distributor must make the Indian Agent/Distributor responsible for all the contractual obligations including quality aspects, replacement of parts/items and warranty/guarantee obligations.

Sl. No.	Description / Specification of the Equipment/ Item
1.	<p>Name of Equipment : 2D-PAGE UNIT One No.</p> <p>(2-Dimensional Polyacrylamide Gel Electrophoresis Unit with software)</p> <p>Specification : As per Annexure -A</p>

Asstt. Admn. Officer
SKB

Specifications for 2-D electrophoresis based proteomics set up

1st DIMENSION IEF SYSTEM

- System should include Individual Lane Control for running different samples, pH Gradients and focusing protocols in a single run.
- System should be able to run minimum 12 strips simultaneously.
- System should have touch screen User Interface for easy creating and editing protocols and setting up the program rapidly.
- System should include dedicated site for online data interpretation for Graphing data, Comparing lanes and generating reports.
- System should include USB Port to export data for storage and analysis
- System should include run mode flexibility- to run IPG strips gel Side Up, Gel Side Down and with cup loading configuration.
- System should have voltage 0–10,000 V, 1 V increments(50-10000V)
- Current range should be 0–100 μ A per lane, 1 μ A intervals
- Power range of 0–1 W per lane.
- System should have peltier based cooling platform.
- Temperature range should be 10–25°C \pm 1.0°C @ max ambient 23°C 18–25°C \pm 1.0°C @ max ambient 31°C.
- Focusing trays minimum 1 pair should be made of polycarbonate for contaminant free process.
- System should accommodate IPG strip of length 7, 11, 13, 17, 18, and 24 cm.
- System should have display QVGA resolution (320 x 240) touch screen or mouse control.
- System should have ramping Step, linear, gradual, and hold voltage ramping for each focusing step. Hold mode as a final step to prevent diffusion when IEF is complete.
- System should have 2GB capacity for storing protocols.
- Data collection should be in .dat format.
- System should have following regulatory compliances:
 - Safety EN 61010-1:2001, IEC 61010-1:2001 Use NRTL to test for compliance to UL61010-1:2004 and CAN/CSA C22.2 No. 61010-1-04
 - EMC EN61326 (1997 w/A1:98) Class A FCC Code of Federal Regulations, Title 47, Part 15, Subpart B, Class A
 - Other approvals RoHS/WEEE Research Materials to determine level of EFUP.
- Instrument should be supplied with positive and negative electrode assemblies, 7 cm, 11 cm, and 17 cm focusing trays (1 pair each) with IPG strip retainers.

- Instrument should be supplied with 1 pack each of 7 cm, 11 cm, and 17 cm rehydration/equilibration trays
- Instrument should be supplied with 2 pairs of forceps, 2 packs of electrode wicks for gel-side down and gel-side up applications, mineral oil, 2 cleaning brushes, cleaning concentrate, 2 USB flash drives, 3 styluses.
- Instrument should be supplied with pH 3–10 ReadyStrip™ IPG strips in 7 cm, 11 cm, and 17 cm lengths, rehydration sample buffer, 2D cleanup kit (50 exp), 2D starter kit for 30 exp of 7cm (complete chemicals & kit for minimum 24 strips) and instruction manual.

2nd DIMENSION (SDS PAGE)

A) Tetra Mini SDS PAGE Apparatus (7cm IPG strip)

- The system should be capable of accommodating & simultaneously running 1 to 4 mini gels in less than an hour.
- The system should be easy to assemble, include a casting stand and glass plates with permanently bonded gel spacers for leak proof casting of gels and avoid messy agarose sealing & tape casting of gels.
- The system should be capable of accommodating interchangeable modules for tank transfer, 2-D electrophoresis & electro-elution.
- The system should come with molded, one-piece buffer dam when running (only) one or three gels.
- The system should come with color coded electrodes to prevent accidental reversal of polarity.
- The system should be capable of accommodating 5 well, 9 well, 10 well, 15 well & Prep/2D combs for sample volumes ranging from 20-150 µl.
- System should be supplied with a starter kit of acrylamide solution with dissolved fluorescence dye such that the PAGE gel after running does not require any staining for visualizing proteins in gel.
- The system should be capable of accommodating both hand cast & precast gels of the below said dimensions :
 - Gel size (W x L) : Approximate Precast 8.6 x 6.8 cm , handcast 8.3 x 7.3 cm

B) Midi Vertical Electrophoresis System

- The system should have following features:
- Gel Capacity: 1 to 2 gels
- Runs gels of approximate 18 X 20 cm size to perform SDS-PAGE and the second dimension 2-D using IPG Strips.
- Can accommodate 11cm, 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 can 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

C) Power Supply:

- Should have four slot Power pack with LCD display
- Should have volt: 10-500V 1 V steps, Current: approximate 0.01-2.0 A or better with 1mA step, Power: 1-500W
- Should have constant voltage, constant current or constant power
- Should have timer: 1min-99hr59min
- Should have volt-hour control 99000
- Pause /resume function
- Should have safety feature no load, load change, overload/short circuit detection
- Should have automatic recovery after power failure
- Should be programmable 9 methods with 9 steps.
- Should have EN61010 safety

SOFTWARE FOR 2D ANALYSIS

- Easy-to-use wizard-directed user interface
- Automated spot detection and matching
- Sophisticated quantitation
- Statistical analysis tools
- Flexible visualization tools
- Sample classification for comparative analysis
- Gaussian modeling based software is preferred.
- Sophisticated algorithms for Automatic Spot Detection & Quantification.
- Sypro ruby filter for auto recognition and removal of background speckles
- Simultaneous analysis of unlimited images.
- User adjustable significance level and Boolean analysis by using different set and subset
- Can be upgradable for multiplex gel normalization with normalization table feature.
- Gel land marking and automatic spot matching
- Sophisticated variable background removal to quantitate low abundance protein
- Can Export XML data and JPEG file format
- Software should have network license for IARI

Compulsory Accessories and conditions:

- 2 KVA UPS with 1hr backup and Branded laptop (I-5) should provide with system.
- On site wet demonstration/training should provide.
- System should quote with 3 year warranty.