

Department of Biotechnology
Pondicherry University
Puducherry-605014

PU/DBT/HRV/DST-Project/Equipment Tender/2012

21.1.2012

Sealed quotations under single bid systems are invited for the purchase of the following laboratory equipments under DST (SERC) project. The quotations can be submitted for one or more equipments. The quotations duly signed and sealed should be submitted to **Dr. A. Hannah Rachel Vasanthi, Reader, Department of Biotechnology, Pondicherry University, Puducherry-605 014.**

The quotation should be sent by post (normal/speed/Registered/courier) only. The price quoted should include all the costs such as delivery, installation, testing etc and also inclusive of all taxes. Warranty terms should be explicitly specified in your quotation. The technical specifications are given below. Last date for receiving quotation is **05.02.2012**

Name of the required items for DST (SERC) Project:

- | | |
|---|---------|
| 1. Vertical Electrophoresis unit | : 1 No. |
| 2. Horizontal Electrophoresis unit | : 1 No. |
| 3. Power Pack Unit for Electrophoresis | : 1 No. |
| 4. Transfer Unit for Western Blotting (Semidry) | : 1 No. |
| 5. Ultrasonicator | : 1 No. |
| 6. Refrigerated Micro centrifuge | : 1 No. |
| 7. Microplate reader | : 1 No. |
| 8. Biochemical Semi Auto-Analyser | : 1 No. |
| 9. Adjustable Micro-pipette of different Volumes as mentioned below | |
| a. Volume range: 0.1µl to 2µl | : 1 No. |
| b. Volume range: 2µl to 20µl | : 1 No. |
| c. Volume range: 20µl to 200µl | : 1 No. |
| d. Volume range: 100µl to 1000µl | : 1 No. |
| e. Volume range: 500µl to 5000µl | : 1 No. |

The detailed specifications of the individual equipments are given below:

1. Vertical Electrophoresis unit

The electrophoresis unit must be suitable for rapid protein screening and nucleic acids combining the advantages of a small format and efficient cooling. The unit should accommodate and run two gels with glass plate size maximum of 10 x 10.5 cm simultaneously and the design of the

unit should be flexible to accommodate and run two gels of 10 x 8 cm glass plate sizes with optional accessories. The unit should have the running condition at power settings up to 500 V, 500 mA and 12 W. The unit should accept up to 30 samples at one time under identical power conditions. In addition, the unit must accept a wide range of precast gels that are easily available in the market. The equipment should be supplied with complete set of accessories including casting cradle with sealing gasket set, casting clamp assemblies, 4 numbers of spring clamps, Gel seal, safety lid with high voltage leads, 10 pieces of glass plates rectangular (10 x 10.5 cm), 5 pieces of alumina plates notched (10 x 10.5), 4 pieces of spacers 0.75 mm thick and 2 pieces of combs (10 wells).

2. Horizontal Electrophoresis unit

The unit must be designed for fast separations of DNA Restriction fragments in agarose gels of gel size of 7 X 10 cm in as little as 5 minutes. The unit should have a maximum sample handling capacity of up to 32 samples. The system must use the technology of passive cooling system providing option to fill the single molded base with 50% ethylene glycol coolant solution. The system should contain a safety lid with high voltage leads. The system should be supplied with UV transparent running tray, height adjustable combs of 1.5 mm thick (8 wells) with comb holder for effective handling, casting tray, 4 pieces of gaskets and bubble level. The maximum buffer volume of the unit should not be more than 250ml. The unit should have the running condition at power settings up to 500 V, 500 mA and 15 W.

3. Power Pack Unit

The versatile power pack unit should be able to run with constant voltage or constant current mode with automatic crossover facility. The variable settings of the power supply must be between the range of 10-300 V, 4-500 mA and 90 W. The unit should be able to run 4 electrophoresis units in parallel with suitable sets of 4 output jacks compatible to any standard universal power cords. The unit should have continuous running mode and timed running mode with timer facility ranging from 0-999 minutes. The unit should have all the necessary alarms with facility of open circuit detection, short circuit protection and current leakage with auto cut off function. The user interface should have LED display and membrane keyboard. The weight of the unit should not exceed 3 kg.

4. Semi-Dry Transfer Unit for Western Blotting

The transfer apparatus should be able to transfer gels of size maximum of 14 x 16 cms or should be able to transfer up to four mini gels using the stacked format. The unit should support as many as two stackable layers of larger gels for simultaneous transfers. The system must be included with safety circuit breaker function to limit the voltage and current from the user's power supply preventing electrical damage to the transfer unit. The unit must have low power consumption with a maximum power setting of 30 V, 500 mA and 15 W to eliminate the chances of generation of excessive heat. The unit must use minimum quantity of buffer to transfer proteins and nucleic acids in less than an hour providing lower reagent cost and reduced preparation time. The system must have molded base with platinum coated titanium anode, stainless steel cathode lid and high voltage leads. The unit must be supplied with 50 sheets of blotting paper (14 x 16 cm), 50 sheets of porous cellophane sheets (20 X 35.5 cm) and 2 pieces of masks (16.5 x 18.5 cm).

5. Ultrasonicator

The Ultrasonic Cleaner with a Volume of 2.0 Ltrs. The Tank internal Dimension should be: 234 x 132 x 65mm. The Operation Frequency - 40 Hz. The Ultrasonic power - 50W with heating Unit should be provided with HI POWER Transducer to ensure thorough cleaning. The unit should be provided with digital control panel. Should be provided with special Touch keys and should be Splash proof, Shock proof with finger touch control and No pressure press. Fully stainless steel tank with stainless steel basket and cover

6. Refrigerated Centrifuge

- Table top centrifuge for high volume applications
- Temperature range from -9°C to 40 °C
- Basic machine with IVD Conformity
- Machine should have capabilities of holding 8 different rotors for maximum versatility.
- ECO shut off that engages after 8 hours of non use to reduce energy consumption and extend compressor life.
- Fixed angle rotor with max capacity of holding 6 nos of 85ml tube with max 11000 RPM (15550xg) and adapter for 7-15ml tube and 15ml falcon tube that should accommodate in the same rotor. It should be made of anodized aluminum for high chemical resistance.
- Fixed angle rotor for 30nos of 1.5/2ml tube with 14000RPM (20800xg)
- Autoclavable rotors, lids and adapters at 121°C, 20 min
- Timer : 30 s – 99 min, with continuous mode
- Ability to maintain 4°C at max speed.

- Centrifuge timer should start after the set RPM reached
- Short spin key with selectable rotational speed
- Built in drainage facility for condensed water.
- Standby Refrigeration for maintaining temperature when not in use
- Noise level <56 dB(A)
- 10 Acceleration and Braking ramps for added protection of sensitive sample material.
- Automatic rotor recognition to sense rotor type and to set maximum allowable speed and ensures safety.
- Program memory upto 35 nos.

7. Microplate Reader

- Flexible configurations with ability to read flat, U- or V-bottom microplates or 8 to 12 well strip plates
- Should do automatic calibration before each reading
- Suitable for broad Wavelength range for varied applications.
- Should have variable – speed plate shaking capability
- Easy access 8-position filter wheel, with 4 standard filters
- USB2 port for external computer control
- Compact design and external printer connectivity through standard printer port
 - Wavelength range of 400-750nm
 - Photometric range: 0.000 – 3.500 OD
 - Multilingual interface and Clear LCD display
 - Onboard storage of curves and graphs
 - Self-diagnostic capabilities to detect lamp burnout at startup.
 - Data and protocol presentation on LCD display
 - Motorized door for plate loading
 - Works on 220/240V, 50/60 Hz,
 - Should include filters **415,450,490,655nm** and plate shaker

8. Biochemical Semi Auto-Analyser

- Assay types: End-point, Nephelometry, Multi- standards, Kinetic, Two-points, ELISA, Absorbency, Sample blank, Bichromatic.
- Linearity range: -0.3000-3.0000Abs
- Resolution: 0.0001 Abs (display), 0.00005 Abs (internal computing)
- Wavelength: 340 405 510 546 578 630±2nm
- Interface: 320 X 240 dots LCD graphic Touch screen:
- Light source: halogen lamp, 6V/10W, 3000hours, auto dormancy
- Temperature control: room temperature, 25, 30, 37[±] 0.1`C
- Flow cell: 30 u l ceramic body with quartz glass window flowing pool.
- Sample volume: 200-3000 u l
- Cross contamination: Les than 0.5%

- Stability: 0.005 Abs/hour
- Storage capacity: 200 test items, 1060 test results, 31 days quality control
- Data output: built-in 40 mm high-speed thermal matrix printer; RS232 serial port.
- Environment: temperature 5-40°C, humidity: 5-90%
- Power: 150V-260V, 50Hz±2% with 100W
- Dimension: 500(L) X340(W) X 138(H)mm
- I9 Weight: Not more than 7 Kg.

9. Adjustable Micro-pipette of different Volumes as mentioned below

- a. Volume range: 0.1µl to 2µl : 1 No.
 - b. Volume range: 2µl to 20µl : 1 No.
 - c. Volume range: 20µl to 200µl : 1 No.
 - d. Volume range: 100µl to 1000µl : 1 No.
 - e. Volume range: 10µl to 100µl : 1 No.
- Ultra light weight & fully Autoclavable
 - Four digit display and 2 Button operation
 - Pipette Piston with highly resistant to heat, acids and alkalies, mildew, bleaches, aging, sunlight and abrasion
 - Very low tip ejection force – 3.6N
 - Spring loaded tip cone to reduce stress without sacrificing tightness
 - Volume adjustment with few turnarounds from maximum to minimum volume.
 - Viable calibration seal to indicate factory calibration not changed
 - IVD Conformity and 3 years warranty

TERMS AND CONDITIONS

I. General Information:

a) Last date and time of receipt of the Tender: **February 5th, 2012 at 3.00 PM**

b) Quotation/ Tender document Fee: Rs.500/-

c) EMD rates: 2.5% of the quoted price

d) Quoting merely the lowest price does not confer any right to any bidder for award of supply order. The University's Purchase Committee, reserves the right to select the equipment any bid under the grounds of specification compliance, technologically advanced quality, proven performance track record, brand reputation, service backup support & training, offer of additional / special features, Compatibility with the existing System, etc.

e) The Quotation/Tender Document Fee and EMD should be submitted along with your quotations.

f) The Tender must be submitted along with the stipulated EMD fee in the sealed cover, superscribing “Tender for DST (SERC) Project Equipments – Department of Biotechnology”. The name and address of the bidder should also be mentioned at the “From address” space.

g) The Tender should be addressed and posted to the following address by speed, registered post or by courier. Dr. A. HANNAH RACHEL VASANTHI, Project Investigator and Reader, Department of Biotechnology, Pondicherry University Puducherry – 605 014

h) Tenders will not be accepted through fax / e-mail.

II. Common Conditions (Import or Indigenous)

1. Price Schedule

The rates should be quoted for a single unit and also for the total quantity required by the University. The price should include the Delivery, installation, training charges, etc. at the respective Department, Pondicherry University. The prices quoted shall remain firm until the Equipment is supplied to the respective Department, Pondicherry University.

2. Quoting the Core price & Tax, Duties, Discount etc.

The taxes / duties / discounts, if applicable, are to be explicitly and separately shown in the bid.

3. Eligibility:

The firm must have the requisite domain expertise with regard to supply, installation and post sale service of the items they are quoting. The firm should have been in existence for at least six years as on the date of this Tender and must have executed at least three orders for this kind of Equipment during the last three years.

4. Duty Exemption

The University has been granted the benefit of exemption from the payment of the Central Excise Duty and Customs Duty by the Department of Scientific and Industrial Re-search (DSIR),

India, vide their Notification No.10/97, dated 01-03-1997 and No.51/96 dated 23.07.96 respectively, in respect of a) Scientific and technical instruments, apparatus, equipment, Software including computers. b) Accessories and spare parts of goods specified in (a) above and consumables. c) Computer software, compact disks, CD ROM, Recording magnetic tapes, microfilms, micro-chips etc. d) Prototypes. Customs duties at Indian port, if any, will be to the account of the University.

5. Technical Specifications

i. WARRANTY: The Equipment covered under the purchase order, when installed, shall be warranted for the quality, workmanship, trouble free operation and performance for a period of at least 36 months (preferably 3 years) from the date of putting the system into operation at the Department of Biotechnology, Pondicherry University, or at least 42 months from the date of receipt of the last lot of the consignment.

ii. If any item covered under warranty fails, the same shall be replaced free of cost including all the applicable charges including shipping cost both ways.

iii. Complete technical specifications of the Equipment including the Operating system to be included in the bid.

iv. The necessary service support should be provided by Bidder during the agreement period.

v. The training should be provided by the supplying companies.

vi. Operating Manual should be provided in English.

vii. A recent customer list (within last five years) with contact details including email address is to be submitted with technical bids / bids as the case may be.

viii. If the Equipment is proprietary a product, a proprietary product certificate should be enclosed.

ix. The Equipment must operate at 230V / 50 Hz single phase and / or equivalent three phase electrical power.

x. The validity of the each quotation should be at least for THREE MONTHS from closing date.

- xi. The offers will not be considered if received after the bid closing date and time.
- xii. The offers received through telex / telefax / e-mail will not be accepted by the University under any circumstances.
- xiii. The University shall not be responsible for any delay / loss or non-receipt of the tender by post / courier service.
- xiv. No unsolicited correspondence shall be entertained after the submission of the offer.
- xv. If an order is placed with the firm, the purchase shall be governed by an agreement as per the University rules in force at the time.
- xvi. Additional terms and conditions will be incorporated in the purchase order, if needed, to safeguard the interests of the University.
- xvii. Tender is not transferable.
- xviii. In case of any dispute in respect of the Tender, all legal matters shall be instituted within the jurisdiction of the place where the purchaser ordinarily resides.

6. Power to reject the offer:

- i. Pondicherry University reserves the right to accept / reject any offer in full or in part or accept any offer other than the lowest offer without assigning any reason thereof. Any offer containing incorrect and incomplete information shall be liable for rejection.
- ii. No Agency commission will be paid to any authorized agent in India.
- iii. Liquidated damages: Timely supply of the ordered items, installation, commissioning (wherever is applicable) and training etc. is the essence of the contract. In case of failure to supply within the time specified in the Purchase order, a penalty / LD of 0.5% of the total value per week or a part thereof shall be levied subject to a maximum of 7.5% in respect of items which are not supplied. The decision of Pondicherry University shall be final in this regard.
- iv. Bidder(s) must be authorized business partners of Global / National service providers of the respective Equipment.

v. The Bidders must enclose authorization letter from the respective global / national service providers of the above said Equipment particularly mentioning an undertaking that in case of default by the Bidder, they (Global Service Provider) shall take over all the responsibilities of the Bidder.

vi. The Bidder should not be involved in any Bankruptcy filing for protection from it.

III. Specific Conditions for Imported Equipments

1. Payment of EMD:

The Quotation must be accompanied by EMD as stated above, by means of a Demand Draft, drawn in favour of The Finance Officer, Pondicherry University, payable at Puducherry. The Small Scale units are exempted from payment of EMD provided they enclose the proof of their exemption Certificate issued by the competent authority.

2. Payments terms:

Normally a payment 90% will be released after the installation & training. However, 100% payment will be released if the supplier provides Bank Guarantee towards performance Security for the 10 % of the total cost of the furnace to cover the warranty period. Bank charges in India shall be borne by the purchaser and outside India shall be borne by the contractor / supplier. The offer must be in English. The rates should be indicated both in figures and words against item specified in the given table. It is preferable that the price be quoted in US Dollars or in major foreign currencies.
