

**Department of Biotechnology
Pondicherry University
Puducherry-605014**

Ref.No.: PU/DBT/2018-19/Open Tender/Equipments/Retender

Dt. 19.03.2019

Sealed quotations under Double bid system (technical and commercial) are invited for the purchase of the following Laboratory equipments for the Department of Biotechnology. The quotations can be submitted for one or more equipments. The quotations duly signed and sealed should be submitted to **Dr. V. Arul, Professor and Head, Department of Biotechnology, School of Life Sciences, Pondicherry University, Kalapet, 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 **08.04.2019**

Name of the required items:

- 1. PCR Gradient with Micropipettes - 1 No.**
- 2. Spectrophotometer with Micropipettes - 1 No.**
- 3. Elisa Reader with Multichannel Micropipettes - 1 No.**

The detailed specifications of the individual equipments are given below:

**1. PCR Gradient with Micropipettes:-
Specifications:-**

- 2 x 48 x 0.2 ml tubes or 2 x 48- well plates to be accommodated in the thermal block. For performing two different PCR experiments invariable of time.
- Upgradeable options for the mentioned block formats to be available in the system: 96 x 0.2ml well blocks or 96 deep well for 0.5ml tubes or 384 well block options is needed when more sample load to be tested.
- Gradient function for optimization of protocols is necessary with atleast eight different temperatures in both the 48 well blocks and in other available thermal blocks also.
- Thermal Gradient differential range with 1-24⁰ C would be ideal.
- Mass sample reduced block design to provide quick time to target for fast protocol runs.
- Fully adjustable heated lid is necessary.
- Settling time of 10 seconds would be ideal for the block.
- Upgradeable to Realtime PCR would help for future applications.
- Software support for generating an optimal protocol based on the polymerase, primers and product length is needed for optimizing long range PCR experiments.
- Maximum Ramp rate of 4⁰ C /Sec and average ramp rate of 3⁰ C /Sec.
- Temperature range of 0-100⁰ C /Sec.
- Temperature accuracy ±0.2°C of programmed target at 90°C.
- Touch screen will be an added advantage for user friendly operation.

- Temperature uniformity $\pm 0.4^{\circ}\text{C}$ well-to-well within 10 sec of arrival at 90°C .
- Touch screen for user friendly operations.
- Temperature control modes as both as Calculated and block mode.
- Gradient accuracy $\pm 0.2^{\circ}\text{C}$ of programmed temperature at end rows.
- Row uniformity $\pm 0.4^{\circ}\text{C}$ well-to-well (within row) within 10 sec of arrival at target temperature.
- Input power of Up to 700 W, maximum.
- Ports 1 USB B.
- The system should be able to support plates which can be used for low reaction volumes as low as 5ul to 120ul. And minimum 50 plates to be supplied along with the machine.
- And a minimum of 25 reactions c DNA Synthesis kit to be supplied along with the machine.
- **With Set of three adjustable-volume micropipettes: 100-1000 μl , 20-200 μl & 2-20 μl**

2. Spectrophotometer with Micropipettes

- Wavelength Range 190-1100 nm
- Photometric Range ± 3.0 Abs (Usable upto ± 4.0 Abs)
- Stray Light Less than 0.05 %T at 220 nm and 340 nm
- Wavelength Accuracy ± 0.5 nm
- Wavelength Repeatability ± 0.2 nm
- Wavelength Resolution 0.1 nm
- Wavelength Bandwidth 1.0 nm
- Photometric Accuracy ± 0.005 Abs at 1.0 Abs
- Photometric Repeatability ± 0.002 Abs at 1.0 Abs
- Baseline Correction Automatic Baseline correction
- Baseline Flatness Within ± 0.003 Abs from 200 to 1100 nm
- Scan Speed Slow, Medium and Fast
- Data Interval Depends on wavelength range and scan speed
- Power 230V $\pm 10\%$, 50Hz
- Accessories Two matched 10 mm pathlength Quartz cuvettes
- Dimension 570(W) X 505(D) X 185(H) mm
- **With Set of three adjustable-volume micropipettes: 100-1000 μl , 20-200 μl & 2-20 μl**

3. Elisa Reader with Multichannel Micropipettes

- Wavelength range : 400–750 nm
- Photometric range : 0.0–3.5 OD
- Linearity : $\leq 1.0\%$ from 0.0–2.0 OD; $\leq 2.0\%$ from 0.0–3.0 OD
- Accuracy : $\pm 1.0\%$ or 0.010 from 0.000–3.000 OD at 490 nm
- Precision : 1.0% or 0.005 OD from 0.0–2.0 OD; 1.5% from 2.0–3.0 OD
- Resolution : 0.001 OD
- Filter wheel capacity : 8
- Plate shaking : 3 speeds: low, mid, high; duration: 0–999 sec
- Read time : 6 sec at single wavelength, 10 sec at dual wavelengths
- Data storage : Calendar/clock function; 64 assay protocols
- Data output : Onboard graphical thermal printer and USB2 interface with PC or Mac data stations

- Flexible configurations with ability to read flat-, U-, or V-bottom micro plates or 8- or 12-well strip plates
- Automatic calibration before each reading
- Variable-speed plate-shaking capability
- Easy-access 8-position filter wheel with 6 standard filters along with the machine.
- USB2 port for external computer control (with Micro plate Manager software, PC) and suitable PC
- Data and protocol presentation on LCD display
- Onboard data storage of protocols, standard curves, and graphs
- Self-diagnostic capabilities to detect lamp burnout at startup
- Motorized door for plate loading
- Minimally Six filters of wavelengths - 415, 450, 490, 595, 655, and 750 nm to accompany the reader at no extra cost
- Software should be provided.
- Software with intuitive user interface, customized end point, kinetic analysis protocols, powerful curve fittings routines and statistical analysis.
- Test protocols reporting for TSEs
- Integrated thermal printer.
- Automatic calibration before each reading.
- At least user list of 15 numbers should be provided.
- **With Multichannel (8-Channel) adjustable Micropipette : 2-20 µl & 20-200 µl**

TERMS AND CONDITIONS

I. General Information:

a) **Last date and time of receipt of the Tender: 08.04.2019 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. **The price for individual equipment should be quoted.**

f) The Tender must be submitted along with the stipulated EMD fee in the sealed cover, superscribing **“Tender for Department of Biotechnology – (Name of the Equipment)”** 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. V. Arul, Professor and Head, Department of Biotechnology, Pondicherry University, Kalapet, 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 SIX 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 safe guard 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.
