

PONDICHERRYUNIVERSITY

(A Central University) R.V.Nagar, Kalapet Puducherry-605 014

Tender Notice for Scientific Laboratory Equipments

Department of Biotechnology, Pondicherry University invites sealed tenders under Two Bid system (Technical and Commercial) for purchase of – Trinocular Inverted Phase Contrast Fluorescent Microscope, -20°C Freezer, -80°C Freezer, PCR, Multimode Microplate Reader and NIBP for rodents. The complete details are available on the University website: www.pondiuni.edu.in.

The last date and time for submission of tenders is extended to 21st November 2016 at 3.00 pm.

Principal Investigator Dr. A. Hannah Rachel Vasanthi

Department of Biotechnology

Pondicherry University

Puducherry-605014

PU/DBT/HRV/DST-DPRP/Equipment Tender/2016

31.10.2016

Sealed quotations **under two bid systems** are invited for the purchase of the following laboratory equipments under DST (DPRP) 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, Associate Professor, Department of Biotechnology, Pondicherry University, Puducherry -605 014.**

The quotation should be sent by post (speed/Registered Post) 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 extended to **21.11.2016**.

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

120°C Freezer	: 1 No.
280°C Freezer (Imported)	: 1 No.
3. Thermal Cycler (Imported)	: 1 No.
4. Multimode Reader (Imported)	: 1 No.
5. Trinocular Inverted Phase Contrast	
Fluoroscent Microscope (Imported)	: 1 No.
6. Non Invasive Blood Pressure Monitor (Imported)	: 1 No.

Detailed specifications of the individual equipments are given below:

1. -20°C Freezer

• Capacity	: 350 L (Approximately)
• Temperature range, C ^o	: -16 to -25
 No. of Shelves 	: 6-8 Shelves
• Power consumption per 24h, kW	: 1.45
• Rated load, W (with R134a)	: 180
• Rated load, W (with R600a)	: 140
Refrigerant	: R134a / R600a
• Lock should be provided	

2. -86°C Freezer (Imported)

- Capacity : 460 L (Approximately)
- Temp. Range $: -86^{\circ}$ C to -40° C
- Microprocessor based Temperature controller
- Duly Polished 304 Grade Stainless Steel inner chamber.
- Sensor: PT 100 sensor
- Resolution: 0.1⁰
- Audio Alarm for high and low temperature.
- Door ajar alarm with lock provision
- Power failure alarm
- Built in cascade refrigeration system.
- Heavy duty Castor wheels for easy movement
- Control of temperature within 3^oC of set temperature.
- No of trays: 4Nos (Adjustable)
- Outer made of Mild Steel with powder coated.
- Fin & Tube type air-cooled condenser.
- Double walled main door (interior lined with stainless steel) with sub doors.
- Sub doors made of stainless steel sheet.
- Triple Gasket system for leak proof.
- Heavy duty hinges with toggle type.
- Polyurethane Insulation (PUF).
- Voltage 230V, 50 Hz
- Certification : ISO/CE Certified
- Storage racks and boxes to be supplied

3. Thermal Cycler (Imported)

- A sample capacity of 96x0.2ml tubes, 0.2ml tube strips or 1x96-well plate with Peltier heating and cooling.
- Dynamic ramping (identical hold times) for all the 8 rows of a gradient.
- Temperature differential range of 1-25degC.
- Intuitive 5.7" (14.5 cm) touch screen interface which can display graphics in high resolution for easy programming.
- The touch screen should be responsive for both gloved and ungloved fingers.
- Capable of running reaction volumes from 1-100ul.
- Maximum ramp rate of 4 degC/second with an average ramp rate of 2.5degC with power save mode.
- Temperature range of 4-100 deg C with accuracy and uniformity of \pm 0.5 deg C and block and calculated temperature control modes
- Gradient range of 30-100 deg C
- Memory of >500 programs with further expansion through a USB Flash drive for transfer of files.
- The software should have exportable Run logs and system error logs
- Quick boot up time of not more than 1 min.

- Built in library of standard protocols for long PCR, fast PCR, reverse transcription PCR etc. required
- "instant incubation" to keep samples at constant temp for ligation and restriction digests required.
- Should be licensed for both diagnostic and research applications.
- Should be compatible with all kind of plastic consumables and reagents specially Reusable sealing Mats.
- Accessories and Consumables to be supplied
 - ο Adjustable Micro-pippettes of different volumes (2-20, 10-100, 100-1000 μl)
 - o cDNA Synthesis Kit, 500 x 20 μl rxns
 - ο DNA Polymerase, 5,000 U (5 U/μl), 1 ml
 - HF Master Mix, 100 x 50 µl rxns, 5 ml
 - MgCl2 Solution for PCR, 50 mM, 5 ml
 - o dNTP Solution Mix, 10 mM, 200 μl
 - PCR Plate Sealing Film, adhesive 250 Nos
 - 0 0.2 ml 8-Tube PCR Strips with Caps 500 Nos
 - o 96-Well PCR Plates, low profile, unskirted 100 Nos
 - o 96-Well PCR Plates, high profile, semi skirted, clear/clear 200 Nos

4. Multimode Reader (Imported)

- Monochromator-based Multimode Microplate Reader
- Should be able to read monochromator based absorbance 230-999nm with **resolution 0.0001** and with fluorescence & luminescence.
- 4-zone temperature controller with linear, orbital & double orbital shaking.
- Wavelength Selection : Quadruple Monochromators
- Detection method : Fluorescence, Luminescence, UV-Visible Absorbance, Time Resolved Fluorescence
- Read method : End-point, kinetic, spectral scanning, well-area scanning
- Microplate types : 1- to 384-well plates
- Temperature control :To 45 °C; ±0.2 °C at 37 °C
- Software :advanced data analysis, Excel export Control through USB or serial port
- Quartz cuvette
- Adapter plate assembly

Absorbance

- Light source : Xenon Flash Lamp
- Wavelength selection :Monochromator
- Bandpass : 4 nm (230-285 nm), 8 nm (>285 nm)
- Dynamic range : 0 4.0 OD
- Pathlength correction : Yes
- Monochromator wavelength accuracy : $\pm 2 \text{ nm}$
- Monochromator wavelength repeatability : ± 0.2 nm
- OD accuracy : <1% at 2.0 OD typical <3% at 3.0 OD typical
- OD linearity : <1% from 0 to 3.0 OD typical

- OD repeatability : <0.5% at 2.0 OD typical
- Stray light : 0.03% at 230 nm typical
- Reading speed : 96: 11 seconds 384: 22 seconds

Fluorescence Intensity

- Light source : Xenon flash
- Detector
- Wavelength selection : Quad monochromators (top/bottom)

: PMT

- Wavelength range : 250 850 nm
- Monochromator bandwidth : Fixed, 16 nm
- Dynamic range : 5 decades

Sensitivity

- <u>Quad Monochromator:</u> Fluorescein 2.5 pM (0.25 fmol/well, 384-well plate) - top Fluorescein 4 pM (0.4 fmol/well, 384-well plate) –bottom
- Reading speed (kinetic)
 384 wells: 22 seconds
 96 wells: 11 seconds

Luminescence

- Sensitivity : 20 amol ATP typical (flash)
- Wavelength range : 300 700 nm
- Dynamic range : >6 decades

Any other special features will have an added advantage in decision making.

5. Trinocular Inverted Phase Contrast Fluoroscent Microscope (Imported)

- 6V30W/50W Halogen Body.
- Quintuple revolving nosepiece.
- Focusing range: 8mm up and 3mm down from focusing position
- Condenser adjustable.
- Filters: blue, green and frosted
- Specimen stage 160 x 250 mm with glass insert plate.
- Collector system with integrated iris diaphragm.
- Trinocular head for INFINITIVE optics, 30° inclined, 360° rotatable.
- Interpupillary distance 48 75 mm
- Eyepiece EW 10x/22Widefield (Ø 30mm)
- Object micrometer 1mm divided into 100 units, 0.01 mm
- Brightfield condenser, n.A. 0.3, WD 72mm
- Should have dust cover, 2 spare bulbs and instruction manual.
- Mechanical stage X-Y coaxial control, moving range 120 x 78 mm
- Auxiliary stage 70 x 180 mm
- Phase Contrast kit with relevant objectives
- Centering telescope (\emptyset 30 mm) and Green filter, 45mm \emptyset

- Terasaki holder, Petri dish holder 35mm, Slide Glass holder 54mm
- Epi-Fluorescence attachment for 3 normal filter cubes with relevant objectives.
- Equipped with a HBO burner 100 Watt and focusing/centering screen.
- The light-filter system of main body: 2 excitation light waves, B (blue filter), G (green filter) and O (transmitted light).
- Excitation filter Blue: BP460-490, Green: BP 510-550
- Double direction dichroic mirror DM500, DM570
- Cut-off filter BA520, BA590
- Super high pressure spherical mercury lamp HBO 100 Watt atleast 2 Nos
- Fuse 250V: 8A atleast 2 Nos
- Screen for eye protection
- Special oil for fluorescence.
- UV-light filter system for fluorescence Microscope Auxiliary excitation filter EX 330-385, Cut-off filter DM400 + BA420
- ET Series DAPI Bandpass Filter
- ET-EGFP (FITC/ CY2)
- mCherry, Texas Red
- Filter tray for FL filters
- 2-5Megapixel cooled CCD Color Live Camera for a wide variety of scientific applications. Cooled models are perfect for low-light conditions like fluorescence applications.
- Camera to offer a high quality sensor technology with the high color fidelity these for outstanding image quality.
- Resolution: 2-5 MegaPixel
- Power: USB Bus
- Bit Depth: 12-bit Digitization and Processing / 012-bit RGB Uncompressed Output
- Mater Clock: 24MHz
- Enclosure: Die Cast Aluminum
- Microscope Interfacing: Stainless Steel C-mount
- Sensor Technology: CCD
- Pixel Array: 1600 H x 1200 V
- Sensitivity: 31.0 DN/(nJ/cm²) at Unity Gain with IR Filter
- Pixel Size: 4.4 μm x 4.4 μm
- Signal-to-Noise Ratio: 65dB
- Imaging Area: 7.04mm x 5.28mm; 8.8 mm Diagonal (1/1.8")
- Electronic Shutter Type: Global
- Frame Rate: 8.2 fps at Full Resolution
- Maximum Exposure Time: 419 Seconds
- OS Compatibility: 32- bit and 64-bit Window 7. 32-bit Window Vista and XP,IR Filter: BP680
- Video Attachment 0.45x,C-Mount Adapter for use with TV cameras on trinocular head and photoport, with factor 0.45x
- Holder to fix Video Attachments

• Image Analysis software and suitable PC

Any special features will have an added advantage in decision making.

6. Non Invasive Blood Pressure Monitor (Imported)

- BP Recorder for Rat and Mice with a pressure generation pressure monitoring system, pulse amplifier, digital recording system, pulse rate measuring and recording and microprocessor controlled functions for self diagnosis, calibration signal filtering and signal storage.
- It should be non invasive on unanesthetized rodents
- Dedicated Data Acquisition software with direct connection to PC serial cable
- Pulse Pick up for Rat and Mice
- Pressure cuff for Rat and Mice.
- Rat Holder and Mice Holder.
- Internal memory and PC output
- Start and Stop keys for operations
- Pressure Range : 50 to 290 mm Hg
- Operating Temperature : 0° to 40° C
- Sound level : <70dB

Any special features will have an added advantage in decision making.

TERMS AND CONDITIONS

I. General Information:

- a) Last date and time of receipt of the Tender: November 21, 2016 at 3.00 PM
- b) Date and Time of opening of Tender and Technical Bid: 21.11.2016, 3.30PM
- c) Date and Time of opening of Price Bid: will be intimated
- d) Quotation/ Tender document Fee: Rs.500/- for each equipment

e) EMD rates for the various equipments

120°C Freezer	- Rs. 5,000.00
280°C Freezer	- Rs. 10,000.00
3. Thermal Cycler (Imported)	- Rs. 10,000.00
4. Multimode Reader (Imported)	- Rs. 25,000.00
5. Trinocular Inversted Phase Contrast	- Rs. 25,000.00
Fluoroscent Microscope (Imported)	
6. Non Invasive Blood Pressure Monitor (Imported) - Rs. 15,000.00

f) Two bid systems have to be strictly followed. One for Technical bid and another for commercial bid and each bid should be submitted in separate sealed covers.

g) 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.

h) The Quotation/Tender Document Fee and EMD should be submitted along with your technical bid.

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

j) 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 Associate Professor, Department of Biotechnology, Pondicherry University Puducherry – 605 014

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

II. Common Conditions (Import or Indigenous)

1. Purchase of Tender Document

The Tender document can be downloaded from the University website <u>www.pondiuni.edu.in</u> The downloaded application should be accompanied with the tender document fee, in the form of a Demand Draft.

2. 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.

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

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

4. 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.

5. 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.

6. 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 been closed.

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.

7. 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 incase 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. Payment 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.

3. The total cost should be quoted for FOB as well as CIF- Pondicherry University.

4. However, the price quoted under FOB or should also include the following cost if they are required during the initial stage:

a) Local freight / insurance for Chennai airport to University laboratory.

b) Installation cost if any.

c) Cost of consumables which are required for the equipment for initial operation upto a reasonable time.

5. In case of the Principal supplier of Foreign country unable to meet the conditions stated at para no.4, the local agent / dealer should fulfill the above said conditions in respect of Local Insurance, Freight, safety transport and installation, etc.

6. The bidder from within India shall obtain the requisite approval for Imports etc., if required

Date: 31.10.2016

PRINCIPAL INVESTIGATOR

ANNEXURE - I

BANK GUARANTEE

Pondicherry University

Bharat Ratana Dr. B R Ambedkar Administrative Building

R Venkataraman Nagar

Puducherry 605 014

This guarantee made this	day of_	201_ by
Bank having its Registered Office at		and one of its branches
at		(hereinafter referred to as "the Guarantor" which
expression shall, unless it be repugnant to	o the subje	ct, meaning or context thereof, be deemed to
mean and include its successors and assig	gns) in favo	our of the Pondicherry University, Puducherry
605 014 represented by its Registrar, hav	ing his off	ice at R. Venkataraman Nagar, Kalapet
hereinafter referred to as the "University	" which ex	pression shall include his successors in office for
an amount not exceeding Rs	(Rupees	
	_only) at th	ne request of

M/s._____ (more fully described hereunder)

2.	Whereas	the	University	has	placed	Work	Order	No:	PU/	
dated										
for										

______with ______having its office at ______ and hereinafter referred to

as the "Contractor" which expression shall include their successors and assigns.

3. And whereas the Contractor has accepted and agreed to execute the work as per the work order as per undertaking / agreement dated ______ within the time stipulated and in the manner specified therein.

4. And whereas the University has called upon the Contractor to furnish Bank Guarantee for the sum of Rs.______ (Rupees_______ only) for fulfillment of the said work as specified in the work order and as agreed to by the Contractor.

5. And whereas the Contractor has requested the Guarantor herein to furnish an irrevocable and unconditional Bank Guarantee in favour of the University for an amount of Rs._____ as guarantee towards execution of the work as agreed to by the contractor to the University.

6. Now, therefore, we _____ Bank, the Guarantor herein, do hereby irrevocably and unconditionally Guarantee the payment to the University the sum not exceeding Rs._____ (Rupees______ only) in the event of any breach, failure, neglect or inability on the part of the Contractor in the execution of the said work, on demand without reference of the matter to the Contractor and without any prior consent

of the Contractor, at all times throughout the period of execution of the work, without demur, cavil or argument or delay.

7. The Guarantor agrees and undertakes that the decision of the University as to whether the contractor has committed any breach of the obligation with respect to the wok to be executed, and the quantum of amount therefore payable by the Contactor to the University in that regard, shall be final, binding and conclusive as against the Guarantor and the Guarantor shall make payment accordingly, on demand by the University.

8. The Guarantor further agrees and undertakes to pay to the University the amount demanded by the University irrespective of and not withstanding any dispute raised by the Contractor in any suit or proceeding before any judicial forum relating to the Contracted work and the Guarantor's liability under this Guarantee shall be absolute and unequivocal.

9. This Guarantee is issued subject to the condition that the liability of this Guarantor under this guarantee is limited to the maximum of Rs._____ (Rupees

______ only) and the guarantee shall remain in full force up to ______ and cannot be invoked otherwise than by a written demand or claim by the University for the payment of the said amount by the Guarantor on or before______ or any extended date as decided by the University.

10. This University shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the contracted work or to extend time for performance of the work by the Contractor. Any change to the contracted work shall not in any way release the Bank (Guarantor) from liability under this Guarantee and we waive notice of any such change. The University shall have full liberty to forbear or enforce any of the terms and conditions of the contracted work.

11. This Guarantee shall not be affected by any legal limitation, disability or other circumstances relating to the Contractor or the Guarantor.

12. This Guarantee shall be valid for the period upto ______ and shall extend further and beyond ______ for such period as determined by the University.

13. The Guarantor undertakes not to revoke this guarantee except with the previous consent of the University in writing.

14. Notwithstanding anything contained herein:

This guarantee shall be valid upto ______ and for such further period as determined by the University for fulfillment of the contract.

We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before ______ or such extended period / date.

In witness whereof, this Guarantee has been executed by ______ for an on behalf of the Bank (Guarantor) on the day, month and year first above written.

SIGNATURE AND SEAL NAME OF THE BANK (GUARANTOR) ADDRESS:

ANNEXURE - II BIDDER'S WARRANTY

Thereinafter referred to as "The Bidder" having carefully studied all the bid documents, Specifications, etc. accompanying the tender for supply of the above mentioned Equipment and desirous to submit the bids as per the Tender Document advertised vide Notification No. PU/MB/EQ/XII Plan/2013-14/ dated 05.07.2013.

DO HEREBY WARRANTY THAT

1. The bidder is familiar with all the requirements of the bid documents.

2. The bidder has investigated the site and satisfied, he regarding the character and scope of the work and local conditions that may affect the supply or its Performance.

3. The bidder is satisfied that the supply can be performed and completed as required in the contract.

4. The bidder accepts all risk directly or indirectly connected with the performance of the contract.

5. The bidder has had no collusion with other contractors, with any of the men of Pondicherry University, Puducherry, or with any other person in preparation of the bid.

6. The bidder has not been influenced by any statement or promise of the Officials of Pondicherry University, Puducherry but only by the bid documents.

7. The bidder is financially solvent.

8. The bidder is experienced and competent to perform the contract to the satisfaction of the Coordinator, Central Instrumentation Facility, Pondicherry University, Puducherry.

9. The statements submitted with the bid are true.

10. The contractor is familiar with all general and special laws, acts, ordinances, rules and regulations of the Municipal, District, State and Central Government that may affect the work, its performance or personnel employed therein.

11. All the terms & conditions of the Supply Order will bind the bidder once his quote is accepted and supply order issued.

Signature of the Bidder