



**PONDICHERRYUNIVERSITY**

(A Central University)

([www.pondiuni.edu.in](http://www.pondiuni.edu.in))

Kalapet, R.V. Nagar

Puducherry-605 014

**Tender Notice for Major Laboratory Equipment**

The Centre for Nanoscience and Technology, Pondicherry University invites sealed tenders under Two Bid system (Technical and Commercial) for the purchase of Major Laboratory Equipment under. The complete details regarding Specifications, Technical details, Eligibility, Tender DSR-SERB project. Document Fee, EMD, address and Method for submission of Bid Documents, etc. are available on the

**University website: [www.pondiuni.edu.in](http://www.pondiuni.edu.in).**

The last date and time for submission of Tenders is **10<sup>th</sup> April 2017, 3.00 pm.**



**Pondicherry University**  
**Centre for Nanoscience and Technology**

**Tender Document**

The Centre for Nanoscience and Technology, Pondicherry University invites sealed tenders under two-bid system for the supply and installation of the following items under DST-SERB Research project funded by SERB of **Dr. S. Kannan, Assistant Professor**. The technical specifications for the equipment are given below. All tenders should be sent to the address given below. The last date for the submission of tender is **10<sup>th</sup> April 2017, 03.00 PM**.

**Name and List of the Equipment:**

- Equipment No. 1 : Universal Testing Machine**  
**Equipment No. 2 : High Temperature Furnace**  
**Equipment No. 3 : Temperature Programmed Autoclave**

**DETAILED TECHNICAL SPECIFICATIONS**

**1. Universal Testing Machine (Table Top Model)**

- **Type:** Electro Mechanical Table top
- **Capacity:** 5 kN or more
- **No. of Testing Columns:** Single
- **Force Measurement device:** Load cell set
- **Load Cell Force Calibration:** +/- 0.5 %
- **Maximum Cross Head travel:** Min 750 mm (without grips)
- **Operating temperature range:** Room Temperature
- **Displacement resolution:** 0.0001 mm
- **Moving body wedge grips:** Minimum of 50 mm gripping length and with 25 kN maximum capacity
- **Compression Plate:** Minimum of 100 mm diameter

- **Bend Fixture:** 3 or 4 point bend tool
- **Should be equipped with a standard Desktop computer ( a minimum of 23 inch monitor) along with standard material testing licenced software (based on ASTM and ISO standards)**
- **Warranty:** 36 months

## **2. High Temperature Box type Furnace**

High Temperature Box type Furnace (Max. Temperature: 1600 °C)

<b>Specifications</b>	<b>Details</b>
Maximum Temperature	1600 °C
Regular Operating temperature	1550 °C
Volume	3 Litre or more
Controller	<b>Controller</b> with programmable control for <b>1 program</b> with up to a minimum of 6 segments (Provide the technical details of the PID controller including Make and Model)
Rate of Heating	2-35 °C/ minute
Temperature Accuracy	±1°C
Input Power	Single/Three phase
Heating element	Silicon Carbide (SiC)
Thermocouple	Platinum/Platinum Rhodium (Pt/PtRh) thermocouple

High temperature furnace should have following additional technical features:

- a. Double walled inner and outer body should be made of proper thick metallic sheet.
- b. Appropriate insulation to be provided to avoid maximum thermal loss.
- c. The Furnace should be able to support programmable control with graphical interface
- d. Additional four heating elements along with the Furnace

## **3. Temperature Programmed Autoclave**

### **Construction:**

The inner and outer chamber is made of high grade stainless steel sheet; 304 grade strong and sturdy sheet lid is also made of high grade stainless steel sheet. In This autoclave we provide automatic purging system through solnoid valve with automatic steam release after sterilization. The unit is fitted with very efficient radial locking system made of stainless steel

plated, with paddle lifting device. Supplied complete with two stainless steel drum. The unit is fitted with safety valve, pressure release valve, water level indicator, cord and plug. To operate 220 volts single phase 50 cycles.

**Mode of Heating:**

Electrically heated by special flange type/immersion type heaters bearing ISI mark, to work on 220 volts single phase 50 cycles.

**Working Pressure:**

The pressure inside the chamber is variable from 5 psi. to 20 psi. But the normal recommended pressure for sterilization process is 1.2 kgf/cm sq.g (15 psi - 17 psi )

**Working Temperature:** 121° C . Temperature is controlled by Digital Temp.Controller.

**Hydro test Pressure:** 2.5 kgf/cm sq.g (35 psi)

**Features:** • Double safety radial locking arrangement. • Stainless steel steam release valve. • Spring loaded safety valve of stainless steel (grade SS-304) • Water valves. • Water level indicating gauge glass with stainless steel guard. • Pressure gauge. • Electrical control box, fitted with toggle switch, indicating Neon lamps and steam release valve. Foot paddle lifting device.

**Size of the Inner Chamber 250 dia. x 450 ht. mm (10 x 18”)**

## **TERMS AND CONDITIONS**

**I. General Information:**

- a) Last date and time of receipt of the Quotations: **10<sup>th</sup> April 2017, 03.00 PM.**
- b) Date and Time of Opening of the Quotations: **10<sup>th</sup> April 2017, 03.30 PM.**
- b) Quotation / Tender Document fee Rs. 500/-
- c) EMD rates: 2.5% of the Total Equipment Cost
- d) 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.
- e) However, the tender document fee and EMD as specified above should be remitted by each firm/bidder, collectively for all their bids advertised under this tender.
- f) 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.

- g) The Tender Document Fee and EMD should be submitted in a separate cover superscribing **Bank Demand Draft** and **which should be enclosed with the bid. *Tenders received without the appropriate fees will not be entertained.***
- h) The Photo Copies of the Bank Instruments on payment of EMD should be attached with each bidding covers.
- i) The tender / quotation must be submitted along with the stipulated tender document fee and EMD in the sealed cover, super-scribing the name of the Department / Centre for whose equipment the tender is quoted for.
- j) The cover should also contain the information like, Name of the Equipment and  
Serial Number of Equipments for which the bids are submitted. The name and address of the bidder should also be mentioned at the from address space.
- k) The tenders should be addressed to ***Dr. S. Kannan, Principal Investigator and Assistant Professor, Centre for Nanoscience and Technology, Pondicherry University, Puducherry – 605 014.***

The examples for super-scribing the envelopes of the different categories of tenders are given below: -

<p>Tender Submitted under Double bid system for the Centre for Nano Science &amp; Technology Name of the Equipment: _____</p> <p>To <b>Dr. S. Kannan, Principal Investigator and Assistant Professor, Centre for Nanoscience and Technology, Pondicherry University, Puducherry – 605 014.</b></p>
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In case of local delivery, all tenders are to be dropped in the tender box placed at the Information Facilitation Counter, Bharat Ratna Dr.B.R.Ambedkar Administrative Block, Pondicherry University, R.V. Nagar, Kalapet, Puducherry – 605 014.

- l) Quotations will not be accepted through fax / e-mail.



## **II. Common Conditions (Import or Indigenous)**

### **1. *Purchase of Quotation Document:***

The Quotation / Tender document can be downloaded from the University website [www.pondiuni.edu.in](http://www.pondiuni.edu.in) or procured from the Pondicherry University on payment of fee as specified above, by means of a D.D, drawn in favor of **The Finance Officer, Pondicherry University, payable at Puducherry**. The downloaded application should be accompanied with the quotation 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 postsaleservice of the items they are quoting. The firm should have been in existence for at least six years as on the date of this quotation 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 Research (DSIR),India, vide their Notification No.10/97 dt. 01-03-1997 and 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, microchips etc.
- d) Prototypes. Customs duties at Indian port, if any, will be to the account of the University.





**6. WARRANTY:**

i) The equipments covered under the purchase order, when installed, shall be warranted for the quality, workmanship, trouble free operation and performance for a period of atleast 36 months from the date of putting the system into operation at the Centre for Nanoscience and Technology, Pondicherry University, or at least 42 months from the date of receipt of the last lot of the consignment in India.

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. The information pertaining to infra-structural, power and any other requirement for satisfactory installation and commissioning of the whole system must be provided by the bidder, at least 120 days in advance of the installation to be commenced if purchase order is issued. All drawing for electrical connections, electrical safety items piping work etc. must be provided in detail.

iii) Complete technical specifications to be included in the Technical bid. Complete technical specifications and literature, including process flow, to be included with the quotation. Manufacturers of various major parts/equipment must be mentioned explicitly.

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

v) The training should be provided by the supplying companies for a minimum period of two days from the date of installation with an expert team.

vi) Technical post sale support by email and telephone will be provided during the period.

vii) Detailed service and operating manuals in English with necessary electronic circuitry shall be provided along with the system.

viii) A clear statement regarding availability of after-sales service and availability of spare-parts for next 5 to 10 years should be included.

ix) 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.

x) If the equipment is proprietary a product, a proprietary product certificate should be enclosed.

xi) The information pertaining to infrastructural, power and any other requirement for satisfactory installation and commissioning of the whole system must be provided by the bidder, at least 30 days in advance of the installation to be commenced if purchase order is issued.

xii) The equipment must operate at 230V / 50 Hz single phase and / or equivalent three phase electrical power.

xiii) If the bidder is an authorized representative in India, they are requested to inform their technical ability to take care of the problems in the system, if developed later within the warranty and outside the warranty period. The responsibility of the Indian agent must be clearly specified.

xiv) The bidder from abroad shall obtain, if required, export permission from the University shall provide necessary information if required for this purpose.

**xv) The validity of the each quotation should be at least for SIX MONTHS from closing date.**

xvi) The offers will not be considered if received after the bid closing date and time.

xvii) The offers received through telex / telefax / e-mail will not be accepted by the University under any circumstances.

xviii) The University shall not be responsible for any delay / loss or non-receipt of quotations by post / courier service.

xix) No unsolicited correspondence shall be entertained after the submission of the offer.

xx) 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.

xxi) Additional terms and conditions will be incorporated in the purchase order, if needed, to safeguard the interests of the University.

xxii) Quotation is not transferable.

xxiii) In case of any dispute in respect of the quotation, 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 equipments 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.

vii) The training should be provided by the supplying companies on the specimen and operation of the equipments for a minimum period of two weeks from the date of installation with an expert team.

viii) For any clarification with respect to technical specifications, please contact the respective Department

Heads as per the details given below: -

Sl.No	Name of the Department/Centre	Name of the PI	Contact Details
01.	Centre for Nanoscience and Technology	Dr S. Kannan	0413-2654973 para_kanna@yahoo.com

### **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 favor 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:**

i) Normally a letter of Credit will be opened for 90% of CIP price, on receipt of order acknowledgement. However, 100% of the LC also be considered, if the supplier provide Bank Guarantee towards performance Security for the 10 % of the total cost of the equipment to cover the Warranty Period.

ii) Bank charges in India shall be borne by the purchaser and outside India shall be borne by the contractor / supplier.

iii) 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 Rupees or in US Dollars or in major foreign currencies.

iv) The total cost should be quoted for FOB as well as CIF – Pondicherry University.

v) 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.

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

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

**REGISTRAR**