



**PONDICHERRY UNIVERSITY**

**PONDICHERRY 605 014.**

**TENDER NOTICE**

Dr. C. Sivasankar, Associate Professor, Department of Chemistry, Pondicherry University, invites Global Tenders in sealed covers in **two bid systems** for the supply and installation of “**GLOVE BOX**”.

For SERB sponsored project, Scheme No. EMR/2014/000623

The tender schedule containing full details along with terms and conditions can be had from the Information Facilitation Counter, Pondicherry University, Pondicherry – 605 014 on payment of Rs.1000/- (Rupees one thousand only) by Demand Draft payable at Pondicherry in favour of the Finance Officer, Pondicherry University, Pondicherry – 605 014. The form and the schedule can also be downloaded from the website [www.pondiuni.edu.in](http://www.pondiuni.edu.in) and the **DD as said above for tender form fees should be included. For further details visit the University Website.**

The last date for submission of tenders is: **Thursday, 05-10-2015, 3.00 PM and will be opened on the same day at 4.00 PM.**

Pondicherry

**C.Sivasankar (PI)**

04.09.2015

**PONDICHERY UNIVERSITY**  
**Department of Chemistry**  
**R. Venkataraman Nagar, Kalapet**  
**PONDICHERY 605014, INDIA**

**SCHEDULE OF TERMS & CONDITIONS**

**Ref. No.: PU/CHEM/CS/SERB/TENDER/Glove Box/2015/**

**Sep. 04, 2015**

**Subject:** Supply, installation and commissioning of “**GLOVE BOX**” (with specifications given in Annexure I).

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1. Tenders are invited in a sealed cover for supply of “**GLOVE BOX**” having specifications as given in Annexure I.
2. Tender document/quotation must be submitted in sealed cover super-scribing thereon bidder's name, Tender No., and name of the Item. This is to be send to the PI Department of Chemistry, Pondicherry University, R. V. Nagar, Kalapet, Pondicherry 605 014, India by regular post positively before the tender bid closing time.
3. The Tender document must accompany an EMD of 2.5% of the total cost by means of a Demand Draft, drawn in favour of the Finance Officer, Pondicherry University, Payable at Pondicherry. This amount is refundable.
4. **Last date and time for submission of Tender : Thursday, 05-10-2015, 3.00 PM**
5. **Date & Time of opening of Tenders : Thursday, 05-10-2015, 4.00 PM**
6. Only original manufacturers are permitted to quote against the requirement. Original manufactures may, if they so desire, route their tenders/quotations through an authorized Indian agent. In the latter case, the tender must be on the Manufacturer's letter head and duly signed by authorized personnel (with name and designation) of the original company (Not by the agent).
7. The firm must have the requisite domain expertise with regard to supply, installation and
  - a. post-sale service of the items they are quoting.
8. The firm should have been in existence for at least six years as on the date of this
  - a. document and must have executed at least three orders for this kind of equipment during the last five years.

9. The offer must be in English. The rates should be indicated both in figures and words against item specified in the given Annexure. It is preferable that the price be quoted in Rupees or in US Dollars.
10. The taxes / duties / discounts, if applicable, are to be explicitly and separately shown in the bid and under no circumstances these components shall be added to the basic price and shown as single price. All the components of taxes, if applicable, should be shown explicitly and separately.
11. **The total cost should be quoted for FOB as well as CIF-Pondicherry, India.**
12. The prices quoted shall remain firm until equipment is supplied to the Pondicherry University.
13. **The validity of each quotation should be at least 120 days from closing date of the bid.**
14. The offers will not be considered if received after the bid closing date and time.
15. The offers received through telex / telefax / e-mail will not be accepted by the university under any circumstances.
16. The university shall not be responsible for delay / loss or non-receipt of tenders by post / courier service.
17. No unsolicited correspondence shall be entertained after the submission of the offer.
18. If an order is placed with the firm, the purchase shall be governed by an agreement as per the University rules in force.
19. Infra-structural, power and any other requirement for satisfactory installation and commissioning of the whole system, including room preparation, must be provided, at least 30 days in advance of the installation to be commenced. All drawing for electrical connections, electrical safety items piping work etc. must be provided in detail.
20. Complete technical specifications and literature, including process flow, to be included with the quotation. Manufacturers of various major parts/equipment must be mentioned explicitly.
21. A clear statement regarding availability of after-sales service and availability of spare-parts for next 10 years should be included.
22. Please give a recent customer list (within last five years) with contact details including email address.

23. If you have an authorized representative in India, you are requested to inform his 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.
24. The bidder from abroad shall obtain, if required, export permission from the appropriate authorities in his country or the country of origin for items to be shipped to India in case of items to be imported. The University shall provide necessary information if required for this purpose.
25. The bidder from within India shall obtain the requisite approval for Imports etc., if required.
26. Additional terms and conditions can be incorporated by the University, if necessary, in the purchase order to safe guard the interests of the University.
27. Tender is not transferable.
28. 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.
29.
  - i) Either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself bid for this tender advertisement but both cannot bid simultaneously for the same item/product in the same tender.
  - ii) If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.
30. **Warranty:** The material 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 from the date of putting the system into operation** at the Pondicherry University, or at least 30 months from the date of receipt of the last lot of the consignment in India.  
  
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.
31. **Payments terms:** Normally a letter of Credit will be opened for 100% FOB price on receipt of order acknowledgement, however, 90% of the LC amount will be paid on proof of the shipment of the consignment with necessary documents to be detailed at the time of placing of the purchase order.

Balance of 10% of the LC amount shall be made after satisfactory installation and commissioning and against submission of the Installation & Commissioning certificate, duly accepted by the purchaser, and **a performance bond of 10% of the total contract / purchase value in the form of bank guarantee (obtained from Nationalized Bank of India) for the duration of the Warranty period.**

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

32. In case of any dispute in respect of the tender, all legal matters shall be instituted within the jurisdiction of Puducherry.
33. No Agency commission will be paid to any authorized agent in India.
34. 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.
35. For any clarification with respect to technical specifications, please contact the PI at Department of Chemistry, Pondicherry University.

Dr. C. Sivasankar, Associate Professor

## **Annexure I**

**PONDICHERY UNIVERSITY**  
**(R.V.NAGAR, KALAPET, PUDUCHERRY – 605 014)**

**Sub:** Supply of Research Laboratory GLOVE BOX – One number for the SERB sponsored project, Dr. C. Sivasankar, Department of Chemistry

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### **Schedule of Requirements**

**Sealed tenders** are invited under **two bid systems** for Glove Box as per the technical details and specifications given below: -

### **Technical Specifications – GLOVE BOX**

#### **Glove Box 01 No**

##### **Internal Dimensions**

Inner Box Dimensions: 920mm x 1200mm x 780mm [H x L x D] and above

Bolted side panels, material stainless steel

Box Windows inclined panel lexan: thickness of 10mm

Special sapphire coating chemical and scratch resistance

Dust filter 0.3 micron, class H13,

One gas inlet/One gas outlet filter

Glove ports (2 )220mm dia , O ring sealed

Type polyoxymethylen, (polymer)

Gloves Butyl, Thickness 0.4mm

Shelves 3, heightadjustable,L1000mm,depth 220mm

2DN 40KF flanges (Electrical feed through 1piece+ One blank)

Automatic Box Pressure Control (+15 mbar to -15mbar)

Stand,including castors+leveling feet

Footpedal, water proof

#### **Antechamber**

Type Cylindrical, 390mm diameter,

Length 600mm (inside dimensions)

Material stainless steel, thickness 2.5mm

Sliding tray stainless steel

Doors Aluminium, anodized, thickness 10mm, 1/4"flat

Inside surface brushed finish

Outside surface coated grey

Door lock easy to operate, spindle lock

Pressure gauge, monometer: analog display

Vacuum/ Refill process

Handling: Manual operation via hand valves

Hand Valves (DN 40vacuum line/DN 10 refill line)

### **Gas purification Re-generable**

Closed loop gas re-circulation  
Attainable purity moisture <1ppm, O<sub>2</sub> <1ppm  
at complete pressure range  
1 H<sub>2</sub>O/ O<sub>2</sub> purifier column  
@ Oxygen removal: 20l to 36l  
@ Moisture removal: 900g to 1300g  
Material : Stainless steel  
Heater : Integrated

### **Regeneration**

Fully Automatic regeneration program controlled  
With automatic switching mode –auto circulation off and on  
Regeneration gas 95% N<sub>2</sub>/Ar and 5% H<sub>2</sub>

### **Circulation unit**

Integrated blower, vacuum tight, Oil free  
Flow rate 22m<sup>3</sup>/h - 88m<sup>3</sup>/h at Δ 60mbar(60Hz)  
Optimum system tuning by frequency pre selection for blower

### **Vacuum pump**

Type rotary vane pump  
Oil mist filter, Oil re-circulation  
Automatic gas ballast control  
12m<sup>3</sup>/h, dual stage

### **Valves and Piping**

Main valves: Electro-pneumatic, valves  
Control valves: magnetic valve system DN 6/10  
Main piping: Stainless steel DN40 KF-flange system  
Control pipework: DN 4/10

### **Box Light**

Fluorescent lamp front mounted or better than this

### **System Control:**

Controller w/ 7" Color Touch  
Screen Monitor. Display and control

### **Mini- Antechamber**

Diameter: 150 mm, Length 400 mm  
Cover: Hinged cover inside and outside  
Operation: Manual, 3 – way valve  
Inc. Sliding tray  
Mounted on right end panel

## **SENSOR SET**

1 set containing

**SOLID STATE Oxygen Sensor**, 0- 1000 ppm (1 No)

0 to 10 output, 3m cable included

and

**SOLID STATE Moisturesensor**, 0-500 ppm (1 No)

0 to 10V output, 3m cable included

## **Filter System**

Charcoal filter

Inline solvent adsorber

## **EcoMode**

for an economical and power saving operation of  
all glovebox workstations and gas purifiers

Including:

-The vacuum pump can be switched off, when the  
Vacuum antechamber are not used for a longer time.

-Positive Pressure regulation without vacuum pump

-Optimized blower speed with reduced power  
consumption

-Automatic box light switch off

-Semiautomatic system for purging the  
workspace with inert gas

with this option the power consumption of the  
system can be reduced by up to 90% and the noise  
level in the laboratory is minimized.

## **AND**

Unit for removal of solvent contaminations  
from the glovebox atmosphere (using a chamber)

Principle : adsorption

Adsorber : activated charcoal

Loading : approx. **5 kg**

Operation modes:

a) Inline : circulation of the atmosphere via  
the chamber with continuous removal

b) Bypass : with manual hand valves: a system to exchange  
of the adsorber, without breaking the circulation  
of the gas purifier