

S. N. Bose National Centre for Basic Sciences

Block JD, Sector III, Salt Lake, Kolkata – 700098

(An autonomous national centre funded by the Department of Science & Technology, Government of India)

NOTICE INVITING TENDER

Tender No.SNB/PUR/OT/29/024

Dated: 13/11/2014

Sealed tenders are invited for the equipment as per the details enclosed from the reputed, established and competent manufacturers / suppliers in two bids – technical and financial. The details of tender documents are as follows:-

1.	<i>Name of office inviting tender</i>	S.N. Bose National Centre for Basic Sciences Block JD, Sector III, Salt Lake, Kolkata – 700098
2.	<i>Name of equipments</i>	Glove Box & Accessories
3.	<i>Specifications of the equipments</i>	Can be obtained / downloaded from our website address: www.bose.res.in
4.	<i>Separate bid for Part-A: Technical and Part-B: Commercial</i>	One large envelope having two smaller envelopes containing separately – Part-A: Technical bid and Part-B: Commercial bid need to be submitted. Tender ref. no. and item name should be mentioned on top of the large envelope. Two smaller envelopes should be superscribed Technical bid / Commercial bid as the case may be.
5.	<i>Submission of Tender</i>	The tender documents duly filled in arranged and sealed in aforesaid manner should be sent to: The Director, at the address given under SI.No.1 above so as to reach him within 12.12.2014. The envelope should be superscribed “Tender for Item no..... Item Name..... Against Advt. No..... dtd:.....” The commercial bid of only technical qualified tenders will be opened.
6.	<i>Opening of Commercial bid</i>	The Commercial bid will be opened in the presence of Tenderers / their representatives. The tenderer who will qualify for above will be notified in due course after technical selection.
7.	<i>Documents to be attached along with the tender</i>	A list showing names and address of the National Research Institutes / Universities / Centre of Higher Learning around the world to whom similar equipments have been sold mentioning Model number and year of manufacture / supply, including those sold in India.

This Centre will not be responsible for postal or any other delay and the **Authority of the Centre reserves the right to accept or reject any or all tenders without assigning any reason.** Tenders / offers sent by fax / email will not be entertained and would be rejected.

Registrar

S.N. BOSE NATIONAL CENTRE FOR BASIC SCIENCES

General Terms & Conditions:

- 1) The bid should be submitted in two bid system each of which is to be submitted in separate envelope. One envelope should contain “techno commercial bid” i.e., technical specifications, terms and condition, terms of payment except price and another envelope should contain price of the quoted item. Both the envelopes should be separately sealed and kept in another large envelope which should be marked with tender reference number, name of the equipment and tender opening date. Separate bid should be submitted for each of the items. Combined bids will not be entertained.
- 2) The tenderer should have high technical, financial reputation with sufficient experience and capable enough for supply, installation & commissioning of similar type of equipment to actual users. Documentary evidence should be submitted in this respect.
- 3) Against such offers, if statutory requirement demands clearance from concerned Governments the tenderers should confirm in their offer that “Export License” in that respect would be arranged by them at their cost.
- 4) Offers should be complete in all respect indicating therein the unit price(s) including manuals, make, model, duties and taxes, delivery period, gross and net weight of the consignment, terms of payment, together with the descriptive leaflet/catalogue/pamphlet/manufacturer’s brochure.
- 5) The offers shall remain valid at least for a period of **90 days. The period starts from the date of closing of tender submission.**
- 6) The Institute shall not be responsible for delay, loss or non-receipt of the tender through post/Air Mail
- 7) The aforesaid Open Tender is being issued with no financial commitment and purchaser reserves the right to change / vary any items or items thereof at any stage.
- 8) No tenderer shall be entitled for any compensation what so ever for rejection/non consideration of their tender.
- 9) Invitation of tender does not constitute any right or claim for issue of purchase order to the tenderer.
- 10) Only Price Bids will be opened in presence of the technically qualified bidders or their authorized representative who choose to attend on the date and time informed to them after opening of technical bids and its evaluation.
- 11) The Centre will not be responsible for any misprinting by the news papers concerned and inaccessibility of the downloading facility for any reason whatsoever and in that case the tenderer(s) should contact to the tendering authority to verify the fact in case of confusion.
- 12) If any information furnished by the tenderer is found incorrect or false at a later stage he shall be liable to be debarred from ordering / tendering
- 13) For items originating from abroad 80% payment shall be made by letter of credit and the balance 20% payment will be released after successful completion of installation & commissioning at site.
- 14) For indigenous item, payment will be made after satisfactory installation & commissioning of the equipment / instrument at site.

Technical Specification for Glove Box

1. Glove box:

- Constructed using non corrosive material.
- Box dimensions (excluding the stand) should be >900 mm X 1150 mm X 750 mm [H X L X D].
- Possess stand with leveling feet and castors.
- Operating gas should be Ar or N₂ and operation pressure varies between -15mbar to +15mbar with sensor.
- Three shelves with approximate dimensions of 1000 mm in length and 200 mm in depth.
- Special coating for chemical and scratch resistance.
- Box light: Fluorescent lamp, front mounted, automatic light switch off when not in use.

2. Two SS cylindrical antechambers:

- One large with ≥ 400 mm diameter and 600 mm length
- One small with ≥ 150 mm diameter and 400 mm length
- Sliding tray, pressure and vacuum gauge and spindle lock tray. Special coating inside the antechamber is required.
- Vacuum/Refill through manual operation.

3. Gas circulator:

- Integrated blower, vacuum tight, oil free
- Flow rate ≥ 80 m³/h, 60 mbar (60Hz).
- Ability to reduce speed when levels of oxygen and moisture are within the specified limits and increase speed when the levels of oxygen and moisture are beyond the specified limits. Purifier valves should be electro pneumatic.

4. Dust filter:

- One Dust filter and one gas inlet/one gas outlet filter (Hepa filter)

5. Gas purifier

- H₂O/O₂ purifier column with fully automatic regeneration capability
- Purity range: ≤ 1 ppm H₂O and O₂
- Moisture removal capability > 1200 g at positive and negative pressures
- Oxygen removal capacity >30 L at positive and negative pressures

6. Glove ports:

- Diameter >200 mm
- Two Glove ports for the gloves (polymer type, solvent and rust resistance)
- Butyl gloves with thickness of ≥ 0.4 mm

7. Water proof foot pedal:

- To adjust box pressure when hands are in the box

8. Programmable digital controller:

- To control all box parameter

9. H₂O and O₂ analyzer:

- Oxygen probe range: varies with in 0-1000 ppm
- Moisture probe range: 0 - 500 ppm

10. Freezer for storage:

- Minimum temperature of $\sim -35^{\circ}\text{C}$ with three shelves

11. Heat exchanger:

- Integrated with glove box
- Recirculating chiller to connect to the heat exchanger

12. Highly efficient rotary vane pump:

- With oil mist filter
- Oil re-circulation
- Automatic gas ballast control
- $12\text{m}^3/\text{h}$, dual stage

13. Replaceable solvent absorber:

- Activated charcoal
- Should absorb ≥ 500 mL of solvent
- Inline Solvent trap with capable of refilling charcoal

14. Monitoring probes

- PLC controlled Oxygen probe and Moisture probe

Additional accessories

- Extra pair of Butyl gloves including the necessary O-rings to fix them.
- Additional solvent absorber

 Quantity Required: 01 no.