



DEPARTMENT OF CHEMISTRY

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Dr. Arnab Rit

Assistant Professor and principle investigator

Date: 17.06.2016

Ref: CHY/ARR/2016/017/GLBOX

Dt. 17.06.2016

Due Dt. 7.07.2016

1. Quotations are invited in duplicate for the various items shown below/overleaf/ enclosed list.
2. The quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS & D Rate Contract, Rate Contract Number and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the rate contract price. If so, please send copy of the R.C. (Please note that we are not Direct Demanding Officers).
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for should be submitted free of charges and collected back at the supplier's expenses.
6. **Local Firms:** Quotations should be for free delivery to this Institute. If quotations are for Ex-Godown, delivery charges should be indicated separately.

7. Firms outside Chennai: Quotations should be for F.O.R Chennai. If F.O.R. Consigner stationer freight charges by passenger train/lorry transport must be indicated. If Ex-Godown, Packing, forwarding and freight charges must be indicated.

8. The rates of Sales/General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales/General Taxes will be admitted at any stage and on any ground whatsoever. **The taxes leviable should take into consideration that we are entitled to have concessional sales tax applicable to non-government educational institutions run with no profit motive for which a Concession. Sales tax certificates will be issued at the time of final settlement of the bill.**

9. Goods should be supplied carriage paid and insured.

10. Goods shall not be supplied without an official supply order.

11. Payment: Every attempt will be made to make payment within 30 days from the date of receipt of bill/acceptance of goods, whichever is later.

SPECIFICATIONS FOR GLOVE BOX WORK STATION

INSTRUMENT SPECIFICATIONS:

Stainless steel, brushed finished inside surface,
900-950 mm x 1200-1250 mm x 775-800 mm [H x L x D] Inner Box Dimensions:
2 Teflon glove ports, 220mm dia, should be O ring sealed, Gloves Butyl,
Polycarbonate window sapphire coating for chemical and scratch resistance.
Dust filter 0.3 micron, class H13,
3 x Height Adjustable, Stainless Steel shelves
Automatic Box pressure from -15 mbar to +15 mbar
Positive Pressure regulation without vacuum pump
Water proof Foot pedal for Box Pressure adjustments,
2 DN 40 feed through, one should be electrical.
Fluorescent lamp should be front mounted. Automatic switch off.
Stand, height 1000 mm, with castors and machine feet (height adjustable)
Glove Box should be integrated with heat exchanger
Cylindrical Antechamber, 390 mm diameter, Length 600 mm
Material stainless steel, Brushed finish
Thickness 2.5 mm, sliding tray stainless steel
Door lock easy to operate, spindle lock

Single filter Purifier Re-generable
Attainable purity should be less than 1 ppm H₂O and O₂ (at complete pressure range)
Removable capacity, oxygen minimum 35L and moisture minimum 1300 g
Integrated blower, Flow rate more than 85 m³/h,
Automatic Blower speed reduction / increase back to 100%, based on O₂ and H₂O level
Rotary vane pump with Oil mist filter, Oil re-circulation
Automatic gas ballast control, 17 m³/h, dual stage
Automated Switch off of Vacuum pump
Activation at a user Set Time
Automatic PLC controlled regeneration
Smaller- Antechamber -150 (D) x 400 (L) mm,Hinged doors, with sliding tray
Should be 1/3rd inside and 2/3rd outside.
Solid state oxygen sensor, 0- 500 ppm
Solid state moisture sensor, 0-500 ppm
Solvent adsorption chamber, 5 kg activated carbon, with inline and bypass modes
Refrigerator -35 °C with 3 stainless steel shelves.
Re circulation chiller, Temperature range +5 to +30 °C (Setting range)
Cooling capacity: 1000 W @ 30 °C
Flow rate (cooling fluid) up to 12 l/min
PLC Controller with Color Touch panel for operation of all Glove box functions
Spare one pair gloves
Local service is mandatory.
Upgrade with remote monitoring of glove box parameters.

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