भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

मानव संसाधन विकास मंत्रालय, भारत सरकार द्वारा स्थापित

सैक्टर81,नॉलेजसिटी,प०ओ० मनौली, एस० ए० एस० नगर,मोहाली, पंजाब 140306

INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH MOHALI

(Established by Ministry of Human Resource Development, Govt. of India)

Sector-81, Knowledge city, PO-Manauli, SAS Nagar Mohali-140306, Punjab

PAN No. - AAAAI1781K TAN NO. PTLI10692D

• Phone : +91-172-2240086 & 2240121 • Fax : +91-172-2240124, 2240086 • http://www.iisermohali.ac.in • Email: stores@iisermohali.ac.in

CPPP/Institute Website

IISERM(905)17/18Pur Dated- 22nd November 2017

E-TENDER NOTICE

Online tenders are invited on behalf of Director, IISER Mohali in **TWO BID SYSTEM** {Technical and Commercial} for the supply & installation of **Inert Gas customized Glove Box** as per technical specification given below and BOQ list the original manufacturer/supplier at CPPP i.e. **https://eprocure.gov.in/eprocure/app**. Tender documents may please be downloaded from the E-procurement portal website **https://eprocure.gov.in/eprocure/app**& Institute website **www.iisermohali.ac.in.**

-sd-
(Mukesh Kumar)
Assistant Registrar (S&P)

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E-TENDER NOTICE

Tender Ref.- IISERM(905)17/18 Pur	Dated :- 22nd November 2017

Critical Date Sections

Sr.	Description	Date	Time
1.	Tender Publishing Date and time	22nd November 2017	6:00pm
2.	Tender Document download start Date & Time	22nd November 2017	6:00pm
3.	Bid Submission start Date &Time	22nd November 2017	6:00pm
4.	Bid Submission End date and Time	14th December 2017	Upto 11:00am
5.	Tender opening Date and Time	15th December 2017	At 11.30 am

Online tenders are invited on behalf of Director, IISER Mohali in **TWO BID SYSTEM** {Technical and Commercial separately} for following item(s) from the original manufacturer/supplier at CPPP i.e. **https://eprocure.gov.in/eprocure/app**. Tender documents may please be downloaded from the E-procurement portal website **https://eprocure.gov.in/eprocure/app**& Institute website **www.iisermohali.ac.in.**Tender fee in shape of DD/Banker Cheque of Rs 500/- (Non-refundable) and EMD of Rs. 80,000/- should be submitted by DD /Banker Cheque/FDR/ Bank Guarantee in favour of the Registrar, IISER Mohali payable at Mohali. However, scanned copy of the both tender fee and EMD should be upload on website along with technical bid part. The hard copy of the same in original to be send to the address mentioned below duly superscribing the supply/work name and reference/ tender ID on the envelope and same must reach before opening the bid and if not received within due date the bid will be rejected summarily.

The Original EMD and tender fee should be sent to:

Assistant Registrar (S&P)
Indian Institute of Science Education and Research,
Mohali Sector 81, SAS Nagar, Mohali, Punjab, India,
Pin: 140306

Non-receipt of original EMD and tender fee will lead to rejection of tender.

Item Details:-

Sr.	Details of Specifications	Qty.
1	**Inert Gas customized Glove Box**, **Specification** 1. Stainless steel glove box, quality not less than US304L (1.4306) thickness 3 mm with internal dimensions: L/H/P 1800 x 900 x 725 mm (for 4 port glove box) 2. Real **modular glove box** with dismountable side panels; tightness of side panels imperatively secured through O-ring sealings (no silicon admitted). The glove box must have possibility to dismount a side panel to connect a second module of glove box for expandable working area. 3. Stand in stainless steel with rolls and jacks. 4. Front panel in saphire coated polycarbonate with glove rings in diam.approx.220 mm. 5. Butyl gloves 6. At least 1 leak light electrical feedthrough Bi + T 220V and at least 2 blanked leak tight feedthroughs. 7. Lightning of the working area of the glove box through Led light spots from the ceiling 8. Automatic vacuum chamber diam.400 length 600 mm. Mode for automatic adjustable cycles (emptying, filling and number of cycles). Leak rate < 10-5 mbar.l/s Fitted with analog vacuum gauge. Both doors having external lifting mechanism. [option to be proposed with automatic control depending on vacuum quality] 9. Optional mini vacuum chamber diam.150 mm Length 400 mm. 10. Dual stage vacuum pump, flow not less than 17m3/h – The vacuum pump has to stop automatically after cycle in the large vacuum chamber and to be used only if it is required for the next step. 11. **Double Parallel column Purification unit** < 1 ppm 02 and H20 with minimal capacity of : 02 = 60L and H20 = 2880 g. . Maximal gas pressure required 3 bar. . All piping and components must be in stainless steel (US304L). . Recirculation blower, type brushless motor mounted inside a stainless-steel housing, with minimal flow 40-100m3/h (Pressure drop minimum < ΔP: 20mbar) . Automatic recirculation flow adjustment depending on concentrations H20 and/or O2. Possibility of manual adjustment of recirculation flow. . Regeneration Process: Automatic process, Inlet and outlet regeneration gas through electrovalves (solenoid valves) (ENERGY SAVING mode). . Heating of reactor: Integrated temperature regulation controlled through automatic and temperature cut out. Tightness: Leak rate < 10 -5 mbar.L/ sec. Regenerating gas : 95% N2 or Ar + 5% H2. . No water chiller needed (ENERGY SAVING mode) 12. Warning display in case of recirculation blower stop. **Independent analysis circuit** in the purification unit for easy maintenance, calibration without pollution. **O_2 analyzer**, electrochemical sensor type, multiscale, Ranges in ppm: (0-10/ 0-100/0-500/1-1000/0-10000). In laboratory air calibration procedure must be possible. Dual display of values, i.e. touch screen and inline sensor display with keypad. on the analyzer to verification of values in the touch screen. **H_2O analyzer**: capacitive sensor type.	01

	Measuring Range: 0 – 23000 ppm & -100/+20 ºC (Dew Point), should be delivered with calibration certificate traceable to international standards NPL & NIST. Technology requiring no maintenance with phosphoric acid or similar. 13. Automatic adjustable pressure regulation, never connected, never linked to the vacuum pump. Pressure regulation requires no foot pedal and the vacuum pump has to be switched-off when vacuum chamber(s) are not in use. 14. **One pressure safety release valve** with special filter for automatic mechanical discharge of exceeded gases in the glove box allowing full automatic pressure adjustment with no need for foot pedal, most reactive pressure adjustment, increased comfort in handlings, excess gas discharge possible even in case of power break. 15. Glove box controlled through PLC – Display on 7''colour touch screen, internal memory and SD of at least 4 Go memory card to be supplied with the screen. Continuous control, graphic seeing of data (H_2O, O_2, Pressure, Temperature..) and automatic recording each 2 minutes. Historical period 2 months. Data export of the different sensors through **USB port** (data saving and transfer to laptop). **Ethernet port** : for remote additional display of the glove box touchscreen (distance up to 300m) and ethernet checking diagnosis. Display: O_2, H_2O, Pressure Control: Purging, Regeneration & Purification i. **Probe Station Integration:** One extension box for integration of Probe Station. The model and design of probe station will be informed to the glove box supplier. The glove box supplier will coordinate with probe station supplier to correctly make all the integration possibilities. a. The integration of probe station should have all necessary feedthrough b. USB Feedthrough, Optical Fibre feedthrough, 3 Pin feedthroughs, 4 No. Isolated Triaxial feedthroughs, 4 No. Isolated Coaxial feedthroughs and 4 number blank feedthrough. ii. Glove box flushing mode available from touchscreen with adjustable time and automatic stop at the end of elapsed time. iii. SOLVENT TRAPPING High capacity external module, Activated charcoal load : more than 7kg, Back connection KF40 for easy replacement, Zero pollution swap charges of the purification/conditioning system under vacuum conditions. Engine, piping, by-pass and 3 way valves in Stainless Steel 304L. Efficiency & Autonomy. iv. **Spin coater** - -In deck version, Material/ NPP, Mas Substrate diameter 160 mm round or 4" x 4" square, Speed from 1 to 12000 trs/min, Acceleration from 1 to 30000trs/min/sec, Electrical feedthrough for spin-coater feeding, Valve feedthrough for vacuum pump connection, Solvent recovering system (including all necessary feedthroughs), Control panel outside and foot switch control operation, Spin coater integration in the glove box v. Low noise level **50 dB(A)** under purification and pressure regulation (ENERGY SAVING mode) vi. **ENERGY SAVING mode** required ensuring low power consumption features. - At least 10 satisfied glove boxes installations in India with details to be provided. - Importance will be given to companies having Indian local structured technical and sales organization, for safe communication sharing, high quality technical advice, reactive direct technical service and maintenance for non-stop high glove box performing.	

NB:- The online updated Price BOQ is in INR format. If bidder want to quote other than INR please specify the quoted currency in the technical bid/part and fill the amount in same updated BOQ.

SUBMISSION OF TENDER

I. All bid/ tender documents are to be uploaded online at Central Public Procurement portal i.e. **https://eprocure.gov.in/eprocure/app** only and in the designated cover/ part on the website against tender ID. Tenders/ bids shall be accepted only through online mode and no manual submission of the same shall be entertained except tender fee and EMD. Late tenders will not be accepted.

II. The online bids shall be opened at the office of the Assistant Registrar (P&S), IISER Mohali, on above given date and time. If the tender opening date happens to be on a holiday or non-working day due to any other valid reason, the tender opening process will be attended on the next working day at same time and place. IISER Mohali will not be responsible for any error like missing of schedule data while downloading by the Bidder.

III. The bidder shall upload the tender documents duly filled in and stamped by the authorized signatory on each and every page. Tender not submitted/uploaded in the prescribed form and as per the tender terms and conditions shall be liable for rejection.

IV. The bidder shall upload scanned copy of the PAN Card, GST number duly signed and stamped.

V. E-procurement system ensures locking on the scheduled date and time. The system will not accept any bid after the scheduled date and time of submission of bid.

INSTRUCTIONS

1. The Online bids should be submitted directly by the original manufacturer/supplier, If quotation is submitted/filled by any representative/agent/dealer then they must upload a authority certificate from the principal company for quoting the price otherwise such quotation will be rejected.

2. The quantity mentioned in this inquiry is and shall be deemed to be only approximate and will not in any manner be binding on the Institute. Before the deadline for submission of the online bid, IISER Mohali reserves the right to modify the tender document terms and conditions. Such amendment/modification will be notified on website against said tender ID

3. The rates offered should be FOR Chandigarh/Mohali in case of firms situated outside Chandigarh/Mohali, and free delivery at the Institute premises in case of local firms. Supplier from outside India should mention the Ex-works/FOB/FCA/CIF/CIP price clearly. Conditional tenders will be summarily rejected.

4. In case of Ex-godown terms the amount of packaging forwarding freight etc. should clearly be indicated by percentage or lump sum amount. Institute has policy not to make any advance payments towards any purchase, Letter of credit can be opened if required.

5. THE INSTITUTE IS EXEMPTED FROM EXCISE AND CUSTOM DUTY under notification no- 51/96 – CUSTOM DATED 23/7/1996 AND DSIR REGISTRATION NO TU/V/RG/-CDE(1062)/2016 DT. 30/08/2016 / EXCISE NOTIFICATION NO. 10/97- CENTRAL EXCISE DT. 01.03.1997.

6. Tax: This Institute is not exempted from the payment of GST. The current rate (i.e. percentage of Sales Tax should be clearly indicated included or excluded) wherever chargeable. Please also provide/upload the copy of PAN card, GST number duly self-attested.

7. The delivery period should be specifically stated. Earlier delivery will be preferred.

8. The firms are requested to provide/upload detailed description and specifications together with the detailed drawings, printed leaflets and literature of the article quoted. The name of the manufactures and country of manufacture should also invariably be stated. In the absence of these particulars, the quotation is liable for rejection.

9. Validity of offer: 90 days. The warranty period after satisfactory installation should be mentioned and firm should replace all manufacturing defect parts/ whole item under warranty without any extra cost including clearance, freight, taxes. Security deposit/ Bank Performance Guarantee @ 10 % of the value of supply order as per norms may be sought from the firms.

10. The right to reject all or any of the quotation and to split up the requirements or relax any or all the above conditions without assigning any reason is reserved by the IISER Mohali. For any corrigendum and addendum please be checked the website https://eprocure.gov.in/eprocure/app and http:/www.iisermohali.ac.in

11. Disputes, if any, shall be subject to jurisdiction in the court of Mohali only.

–sd/-
(Mukesh Kumar)
Assistant Registrar (S&P)