

Tender Notification for the Procurement of a Glovebox Work-Station (4 Port)
(Last Date for Submission: Monday, April 11th, 2021)

Best quotations are invited for the procurement of a **Glovebox Work Station (4 Port)** with the following technical specifications on FOR-IISc Bangalore basis in INR only and from domestic vendors only. Your quotation should mention the terms of delivery, delivery schedule, estimated delivery date, and payment terms. The tender should be submitted in two separate sealed envelopes: one containing the technical bid and the other containing the commercial bid, both of which should reach us, duly signed on or before 17:00 hours on 11th April 2021, Monday.

The bids should be addressed to:

The Chairman,

Solid State and Structural Chemistry Unit
Indian Institute of Science (IISc)
Bengaluru, India - 560012.

Kind attention: **Dr. Abhishake Mondal**

email: mondal@iisc.ac.in, chair.sscu@iisc.ac.in

The sealed bids should be sent to:

Dr. Abhishake Mondal

Solid State and Structural Chemistry Unit
Indian Institute of Science (IISc)
Bengaluru, India - 560012.

Ph: +91-9932207177

email: mondal@iisc.ac.in

Please enclose a compliance statement along with the technical bid.

Section 1: Bid Schedule

1.	Tender No	
2.	Tender date	17 th March, 2021
3.	Instrument	Glovebox Work Station (4 Port)
4.	Tender type	i) Technical bid (part A) ii) Commercial bid (part B)
5.	Place of tender submission	The Chairman, Solid State and Structural Chemistry Unit Indian Institute of Science (IISc) Bengaluru, India – 560012 Kind attention: Dr. Abhishake Mondal
6.	Last date and time of tender submission	11 th April 2021, Monday, 17:00 hours
7.	For Further clarification	Dr. Abhishake Mondal Solid State and Structural Chemistry Unit Indian Institute of Science (IISc) Bengaluru, India - 560012. Ph: +91-9932207177 <i>email: mondal@iisc.ac.in</i>

Section 2 - Eligibility Criteria

Prequalification criteria:

1. Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor.
2. The quotations should be on FOR-IISc Bangalore basis in INR only.
3. The Bidder's firm should have existence for a minimum of 3 years (Enclose Company Registration Certificate).
4. The Bidder should belong to either class 1 or class 2 supplier distinguished by their "local content" as defined by recent edits to GFR. They should mention clearly which class they belong to in the cover letter.
 - a) Class 1 supplier: Goods and services should have local content of equal to or more than 50%.
 - b) Class 2 supplier: Goods and services should have local content of equal to or more than 20 % and less than 50%.
5. Purchase preference as defined by the recent edits to GFR (within the "margin of purchase preference") will be given to Class-1 supplier.
6. MSME can seek exemption to some qualification criteria. IISc follows GFR2017 for such details.

7. The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per -Annexure 4.

8. The Bidder must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere. A declaration to this effect has to be given as per Annexure 3.

Section 3 - Technical Specifications for Glovebox Work Station

1. Broad System Requirements and Usage

We are seeking to procure a state-of-the-art Glovebox Work Station (4 Port) to be part of our research group. Therefore, the following technical criteria are to be met by any Glovebox Work Station (4 Port) being quoted under this tender notice:

- 1) Access of the instrument being quoted should be automatic multi-user friendly with an easy-to-use software interface, modular hardware design that allows for rapid user training. It should also be easy to change from one operational mode to another with relative ease so that our students can set-up experiments and handling the instrument.
- 2) We are working in diverse areas of research at the intersection of fundamental chemistry, physics, and new materials synthesis and characterization. Therefore, the Glovebox Work Station being quoted should be an advanced and updated version that can go far beyond the basic instruments with the highest level of accuracy. For example, the instrument should have the ability to measure both the oxygen as well as moisture levels with high precision.
- 3) In addition, the system being quoted should have a modular design providing the flexibility to add any of the above capabilities or other physical property measurement techniques *via* feedthrough either at the time of procurement or at a later date.

2. Glovebox Work Station (4 Port) Requirements

- 1) The system being quoted should have minimum inner Box Dimensions: 900-950mm x 1950-2000mm x 775-800mm [H x L x D] and more
- 2) The system being quoted should have PLC controlled system with Color Touch panel for operation of all Glovebox functions including graphical trend of box pressure, oxygen and moisture levels.
- 3) The system being quoted should have remote monitoring facility of glove parameters and should be able to send alerts and notification regarding upcoming maintenance.
- 4) The system being quoted should be fitted with 4 glove ports, 220 mm diameter.
- 5) The system being quoted should be of polymer type and o ring sealed.
- 6) Front panel of the box should be made of Polycarbonate material. Additional coating for chemical and scratch resistance should be provided.
- 7) The systems inside surface should be brushed finish. Dust filter 0.3 micron, class H13, should be included.

- 8) The system being quoted should have three Height Adjustable, Stainless Steel shelves, Optional extendable shelves for easy access.
- 9) The system being quoted should have Automatic Box pressure range from -15 mbar to +15 mbar.
- 10) The system being quoted should include oil free based pressure relief valve. Positive Pressure regulation without vacuum pump should be possible.
- 11) The system being quoted should include Water proof Foot pedal for manual pressure manipulation.
- 12) The system must have 5 DN 40 feed through, one should be electrical, one BNC, one banana feed through, SUS or vacuum feedthrough, USB feedthrough.
- 13) The system being quoted should include Front mounted Fluorescent lamp with Automatic switch off facility.
- 14) The system being quoted should come with Stand, height 1000 mm, with castors and machine feet.
- 15) The system being quoted should be integrated with heat exchanger, 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.
- 16) Cylindrical Antechamber with min 390 mm diameter, Length 600mm, should include Sliding tray stainless steel, inside should be Brushed Finish. Door lock easy to operate, spindle lock.
- 17) The system being quoted should have Single filter Purifier Re-generable, Attainable purity should be less than 1 ppm H₂O and O₂ (at complete pressure range), Removable capacity, oxygen minimum 35 L and moisture minimum 1300 g or more, Integrated blower, Circulation rate more than 85 m³/h, Rotary vane pump with Oil mist filter, Oil re-circulation.
- 18) The system being quoted should have Automatic gas ballast control, 17 m³/h, dual stage.
- 19) The system being quoted should have Automated Switch off of Vacuum pump should be possible (ECO mode).
- 20) The system being quoted should have Automatic Blower speed reduction / increase based on O₂ and H₂O level. Activation should be possible at a user Set Time and should have Automatic PLC controlled regeneration.
- 21) The system being quoted should have Mini- Antechamber -150 (D) x 400 (L) mm, Hinged doors, with sliding tray, fitted with manually, 3-way-valve for evacuation and venting of the antechamber.
- 22) The system being quoted should have solid state oxygen sensor, 0- 1000 ppm, PLC controlled.
- 23) The system being quoted should have solid state moisture sensor, 0-500 ppm, PLC controlled.

- 24) The system being quoted should have solvent adsorption unit with min 5 kg adsorbent (**Both Charcoal and molecular sieve needed**) with inline and bypass modes.
- 25) The system being quoted should be integrated with Refrigerator -35 °C on the left panel, min 18 L volume, with 3 shelves.
- 26) The system being quoted should be included internal glove port cover
- 27) The system being quoted should have an extra Flange; Single-sided, Bolt flange.
- 28) The system being quoted should be included following:
 - a) Two pairs of extra Butyl Gloves to be supplied with the system.
 - b) 4-digit analytical balance (Make: Sartorius / Mettler Toledo / Shimadzu; Readability: 0.0001, Weighing capacity: 220 g, Pan size: 90 mm (dia), calibration and adjustment: internal): **1 No**
 - c) Static Eliminators (Make: Plas-Labs; dimension (appx.): 10.8 cm x 6.35 cm x 12.7 cm [L x D x H]; 220 V, 50-60 Hz): **1 No**
 - d) Magnetic Stirrer with Heating including Temperature Sensor, Clamping System, digital display with Silicone cover, Hot plate temperature: 20 - 300°C (Make: Heidolph / KIA): **2 No**
 - e) Rotary Vane Vacuum Pump: Make: Edwards, Model: RV12, Code: A65501903, Serial No: 180012725: **1 No**

Section 4 - Terms and Conditions

- 1) 3 years on-site warranty on all parts and labor from the date of successful installation should be quoted.
- 2) The tender document should also indicate what kind of service/maintenance is required for the system. Also mention that whether the service has to be carried out by a company engineer or it can be carried by trained service personnel within India.
- 3) The vendor must quote for a non-comprehensive AMC price beyond the 3-year warranty, with a price lock in for 3 years beyond the standard 3-year warranty period, 2/3 services per year should be included in the AMC. Annual Maintenance Contract should be clearly mentioned after warranty period.**
- 4) Power requirement: 220/240 Volts AC with frequency 50 Hz.
- 5) Operation and service manual in English (electronic and hard copy) with complete circuit diagram and PCB layout for all equipment should be provided with the instrument.
- 6) Standard samples (if required) to be provided by the company for testing the instruments at the time of installation on site to the quoted accuracy in the given technical specification for the demonstration of the performance of equipment.
- 7) Pre-installation site preparation requirements to be indicated and specified along with the bid.
- 8) Installation and on-site training of our staff in operation and maintenance is essential by factory trained personal in free of cost.

- 9) Please provide the segmented quotation for each optional measurement capabilities. Depending upon the budgetary provision and priority, the items to be purchased will be decided.
- 10) Bid should include all other essential auxiliary equipment and spares for its operation, even which are not explicitly specified above (please provide list with details).
- 11) All sample handling kits/consumables should also be provided.
- 12) The vendor is responsible for the installation of the system at the institute.
- 13) The price quotation should include the cost of installation and training of potential users.
- 14) GST must be not more than 5% (Institute will provide you GST exemption certificate).
- 15) The vendor should have a track record of having previously supplied at least five identical instruments in JNCASR, IITs, IISERs, NITs with above mentioned specifications. Details of such systems should be provided.
- 16) The vendor should have qualified technical service personnel for the equipment based in India and should assure a response time of <48 hours.
- 17) Vendor must provide a user list (with contact details including emails and phone numbers) of at least 5 customers from Indian Institutes/Labs where similar measurement systems are installed.
- 18) The lead-time for the delivery of the equipment should not be more than 6 months from the date of receipt of our purchase order.
- 19) The indenter reserves the right to withhold placement of final order. The right to reject all or any of the quotations and to split up the requirements or relax any or all of the above conditions without assigning any reason is reserved.
- 20) Wherever requested data must be supplied along with technical compliance documents. Technical bids without supporting data will be deemed as technically non-compliant.
- 21) All guaranteed specifications may have to be demonstrated at the time of installation. Any necessary standard samples for that purpose should be brought by the service engineers.
- 22) The vendor must provide a compliance statement in a tabular form concerning each technical specification in the tender document duly supported by the manufacturer's literature and published papers. Any other claim will not be accepted and may lead to rejection of the bid.
- 23) Technical evaluation by the institute may include a demonstration to verify functionalities and capabilities of the system quoted. The institute reserves the right to provide samples after opening the technical bids for verification of promised specifications. Any discrepancy between the promised specifications and measurements will be deemed as technical non-compliance.
- 24) The quote should also include additional spares sufficient for 3-years.

Annexure 1:

Details of the Bidder: The bidder must provide the following mandatory information & attach supporting documents wherever mentioned:

Sr. No.	Type	Details
1.	Name of the Bidder	
2.	Nature of Bidder (Attach attested copy of Certificate of Incorporation/ Partnership Deed)	
3.	Registration No/ Trade License, (attach attested copy)	
4.	Registered Office Address	
5.	Address for communication	
6.	Contact person- Name and Designation	
7.	Telephone No	
8.	Email ID	
9.	Website	
10.	PAN No. (attach copy)	
11.	GST No. (attach copy)	

Signature of the Bidder

Name:
Designation, Seal

Date:

Annexure 2:

Declaration regarding experience

To,

The Chairman,
Solid State and Structural Chemistry Unit,
Indian Institute of Science,
Bangalore – 560012,
India

Kind attention: **Dr. Abhishake Mondal**

Ref: Tender No: XXXXXXXXXX

Dated: XXXXX

Supply and installation of Glovebox Work Station (4 Port)

Sir,

I have carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company / firm has ---- years of experience in supplying and installing Glovebox Work Station (4 Port).

(Signature of the Bidder)

Printed Name Designation, Seal

Date:

Annexure 3:

Declaration of track record

To,

The Chairman,
Solid State and Structural Chemistry Unit,
Indian Institute of Science,
Bangalore – 560012,
India

Kind attention: **Dr. Abhishake Mondal**

Ref: Tender No: XXXXXXXXXX

Dated: XXXXX

Supply and installation of Glovebox Work Station (4 Port)

Sir,

I have carefully gone through the Terms & Conditions contained in the above referred tender.

I hereby declare that my company / firm is not currently debarred / blacklisted by any Government / Semi-Government organizations / institutions in India or abroad. I further certify that I am competent officer in my company / firm to make this declaration.

OR

I declare the following:

Sr. No.	Country in which the company is debarred/ blacklisted / having pending case	Blacklisted / debarred by Government / Semi Government Organizations or Institutions / having pending case	Reason	Time Period

(Note: In case the company / firm was blacklisted previously, please provide the details regarding period for which the company / firm was blacklisted and the reason/s for the same).

(Signature of the Bidder)

Printed Name Designation, Seal

Date:

Annexure 4:

Declaration of acceptance of terms and conditions

To,

The Chairman,
Solid State and Structural Chemistry Unit,
Indian Institute of Science,
Bangalore – 560012,
India

Kind attention: **Dr. Abhishake Mondal**

Ref: Tender No: XXXXXXXXX

Dated: XXXXX

Supply and installation of Glovebox Work Station (4 Port)

Sir,

I have carefully gone through the Terms & Conditions contained in the above referred tender document. I declare that all the provisions of this tender document are acceptable to my company. I further certify that I am an authorized signatory of my company and am, therefore, competent to make this declaration.

Yours faithfully

(Signature of the Bidder)

Name:

Designation, Seal:

Date:

Section 5 - Checklist

The following items must be checked before the bid is submitted.

1. Sealed Envelope "A": Technical Bid
Technical bid (each page signed by the authorized signatory and sealed) with the below annexures:
 - a. Annexure 1: Bidders details
 - b. Annexure 2: Declaration regarding experience
 - c. Annexure 3: Declaration of track record
 - d. Annexure 4: Declaration of acceptance of terms and conditions
 - e. Annexure 5: Details of item quoted.

2. Sealed Envelope "B": Commercial Bid

Your quotation must be submitted in two separate sealed envelopes: Technical Bid (Envelope A) and Commercial Bid (Envelope B) super scribing on both the envelopes with Tender No. and due date and both in sealed covers and put in a bigger cover which should also be sealed and duly super scribed with Tender No., Tender description & Due Date.