



# भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

मानव संसाधन विकास मंत्रालय, भारत सरकार द्वारा स्थापित  
सैक्टर 81, नॉलेज सिटी, प.ओ. मनोली, एस. ए. एस. 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, 2240266 • <http://www.iisermohali.ac.in> • Email: [stores@iisermohali.ac.in](mailto:stores@iisermohali.ac.in)

### E- NOTICE (EOI)

Tender Ref.- IISERM(781)17/18Pur	Dated :- 28 <sup>th</sup> June 2017
----------------------------------	-------------------------------------

#### Critical Date Sections

Sr.	Description	Date	Time
1.	Tender Publishing Date and time	28 <sup>th</sup> June 2017	6:00pm
2.	Tender Document download start Date & Time	28 <sup>th</sup> June 2017	6:00pm
3.	Bid Submission start Date & Time	28 <sup>th</sup> June 2017	6:00pm
4.	Pre-Bid meeting	10 <sup>th</sup> July 2017	11:30 am
5.	Bid Submission End date and Time	18 <sup>th</sup> July 2017	Upto 11:00am
6.	Tender opening Date and Time	19 <sup>th</sup> July 2017	At 11:30am

Online tenders (EOI) 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](http://www.iisermohali.ac.in). Tender fee in shape of DD/Banker Cheque of Rs 1000/- (Non-refundable) and EMD of Rs 1,00,000/- 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 sumerly.

#### **The Original EMD and tender fee should be sent to:**

Assistant Registrar (S&P)

Indian Institute of Science Education and Research Mohali

Sector-81, Knowledge City, SAS Nagar, Mohali, Punjab,

India, Pin: 140306

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

**Item Details: -**

<b>Sr.</b>	<b>Description</b>	<b>Qty.</b>
01	Setting up of cleanroom of class 10000( Temperature 21C, RH 30-40%) for EHEP lab in approximately 850 sq. ft. area as per specification of clean room and equipment's along with the drawing attached.	1 job
02	Third party testing/certification of clean room for all the parameters to the entire satisfaction of the Institute after setting up of clean room.	1 job

**Specification of Clean Room**

1. Supplying and Commissioning Clean-room Class 10,000
2. The supply, installation and verification should be done by a single vendor
3. The red outlines are brick walls. The blue walls are partitions are done using PUF/GPS panel (GPSP wall panels already installed, vendor to installed GPSP ceiling & walls to cover ordinary brick wall).
4. Room should be maintained at 21 Deg C considering 8 users working in the area. Kindly note that this must be year round in Mohali where the lowest temp may be 0-2 deg C and highest around 48 deg C
5. Air Handling Unit (AHU): AHU (8000 CFM) should be double skin type consisting of Aluminum Framework, three way corner having pre-coated outer wall insulated with injected PUF;
6. Air Conditioning Unit: Appropriate and compatible air condensing unit with scroll compressor
7. Humidity should be between 30-40%
8. Magnahelic pressure gauges must be provided at appropriate points to monitor differential flow.
9. Digital Pressure, Humidity and Temperature gauges in various points along with air flow meter for monitoring
10. Mobile particle Counter/air flow meter
11. Cleanroom Monitoring and warning system in form of display unit should be provided and installed by vendor.
12. Ducting: G.S.S. Square/rectangular/triangular ducting should be complete in all respect along with silicon sealant. Ducting should be routed inside the ceiling and shouldn't expose to the clean room active area.
13. Flooring: Provide self-leveling antistatic epoxy flooring (at-least 3 coats). The epoxy must be dissipative and antistatic (Should sustain scratches and heavy equipment upto 1 ton). (Current flooring is concrete)

14. Coving: Floor and Ceiling (All possible corners)
15. Walls: The walls marked blue indicate are available as a GPSP panels. The vendor must make its own partitions wherever it is required. The existing brick walls have ordinary paint and tiles. These also must be covered with clean-room compatible materials (GI-PUF-GI panels powder coated).
16. Doors: All the existing doors, which are not clean-room compatible indicated in the drawing, will be removed. Vendor should provide clean-room compatible doors
17. Ceiling: The vendor must also provide a false ceiling so that the reduced ceiling height is not lower than 2.4 m. The lowest beam height is 2.85 m in the room and the ceiling around 3.41 m. The framework for the false ceiling is also in the scope of work and supply of the vendor. All Ducting should be inside this ceiling.
18. Lighting: LED and UV filtered light.
19. An appropriate clean-room compatible cable tray has to hang from ceiling throughout the Lab (plan will be provided during pre-measurement schedules) or internal electrical connection has to done by vendor wherever required.
20. There should be an air-shower and garment storage rack provided by vendor
21. Accessories: vendor should be provided six cleanroom compatible seating-stools,10 set of cleanroom clothes (aprons) and hangers, shoes, gloves, safely glasses and cleaning tools.
22. AHU and HAVC should be kept outside of the building to reduce noises and to get as much as clear height from the ground.
23. Vendor should provide detail Power (cleanroom machinery + Lighting) Requirement for the Clean Room Operation.
24. Vendor must agree to visit the site at their own cost to take all the measurements and to see the site themselves, so as to acquaint themselves of the requirement for bidding purpose.
25. Vendor must agree for the third party testing/certifications arrange by IISER Mohali, if required. Payment for the same will be released only after satisfactory testing.

### **Equipment specifications**

1. **Air Handling unit (AHU)** Capacity: 8000 CFM with 4RD DX cooling coil, consisting of double skin panels with thermal break profile, Imported Backward curved blower, DX cooling coil, shall be as per following details:

Panel: 46±2 mm thick CFC free PUF injected (Density: 40+ 2 kg/ Cu. m.)

Outer Skin -- 0.6 mm pre-coated GI

Inner Skin -- 0.6 mm plain GI

Unit Base -- Heavy Duty G.S.S.

Profile -- Thermal Break Aluminum Profile

DX COOLING COIL : 6 row deep cooling coil in multi circuit partition

Condensing tray -- 20G SS with 13mm thick close cell Nitrile Rubber

FILTERS:

Type -- Box Type Pre-Filters (EU-4) Type -- Rigid Media Type Fine Filters (EU-6)

Blower DIDW Backward curved @125mm SP with drive arrangement

MOTOR

Efficiency Factor -- IE-1

Winter Heating system with heating bank of cap. 18KW complete factory fitted & tested suitable to fit in the AHU chamber

(Make Rapidcool/ KEPL) The above unit shall be inclusive of RA & RA volume control dampers of Aluminium extruded profile & anodised.

2. **Condensing unit** (25-26 TR) consisting of condensing coil, blower, motor, housed in a GI powder coated factory fitted & tested cabinet with necessary controls, Electricals, valves, MS angle cond frame, VI pads etc complete in all respects.

3. **Dehumidifier** suitable for 500 cfm fresh air complete as per design & site conditions

4. **Copper piping** hard drawn heavy duty 16/18 Gauge along with copper fittings, R-407C Gas charging, 13mm thk Nitrile insulation with fibre cloth & Encoat paint, suitable sized GI cable tray with clamps & supports, cabling in PVC conduit complete in all respects suitable for one circuit. The controls like expansion valve, drier shall be incorporated in it.

5. **Display unit** consisting of Digital Pressure, RH, Temp etc with controls and AV system for faults with set points and interface connections as per BMS requirements.

6. **GSS ducting** pre fabricated of following sizes as per IS specs:

24 G (0.63mm)

22 G (0.80mm)

7. **Nitrile Insulation** 9mm & 13mm thick, Class O fire retardant with suitable adhesive & jointing tape, fiber cloth and encoat paint of suitable thickness complete in all respects

#### **8. HEPA Filters**

HEPA filters with the MS powder coated HEPA housing complete with pressure plates, vol control dampers, perforated grills in SS etc suitable for 2000 cfm

9. **Gauges**- Magnahelic gauges complete wd probes mounted on the wall as reqd

10. **GPSP Wall Panels**- Double skin Modular Wall panels, made of 0.8 mm thick GPSP GI Sheet. Pure polyester powder coating of 70-90 microns. Infill as PUF of density 40±2 Kg /M3. Panel thickness is 80 mm.

11. **GPSP ceiling** - Double skin Modular Walkable ceiling panels, made of 0.8 mm thick GPSP GI Sheet. Pure polyester powder coating of 70-90 microns. Infill as PUF of density 40±2 Kg /M3. Panel thickness is 60 mm.

12. **GPSP Doors**- GI Powder Coated double skin door with 44 mm leaf thickness made of 0.80 mm GI sheet for door leaf with PUF infill and door frame made out of 1.20mm thick GI profile.

13. **Double glazed View Panels** Double glazed flushed view panel using Toughened Glass of 5 mm thickness and View panel size: 900 (W) x 1100 (H) mm

14. **GI Double glazed Windows**- GI Powder Coated window made out of 1.2mm thick GI sheet and powder coated with pure polyester powder. 5mm thick toughened glass on the both sides and silica gel for moisture absorption including sealing and fixing

arrangement. The glasses will be vacuum sealed and fitted in factory.

**15.Coving-** Aluminium Coving with Aluminum Backing (wall to wall, wall to ceiling considered).

**16Return Air Riser Duct Along with perforated Grill-** Inbuilt return Air Riser Duct in the Panels along with perforated Detachable Grill Duct size Considering: - 600\*3000 mtr

17 **Epoxy flooring** –Self levelling epoxy 3 coats etc

18 UV filtered light & General lighting (LED) for the clean room areas

20 **Air shower** cabinets factory assemble in GI sheet metal duly powder coated complete in all respects for single person entry

21 **Cleanroom consumables** Vendor should be provided six cleanroom compatible seating-stools,10 set of blue colour cleanroom clothes (aprons) and hangers, shoes, gloves, safely glasses and cleaning tools.

## **22 Civil Work**

a) Base foundations of reinforced cement concrete with gatka base, MS iron rods of suitable size & them concrete mixture in 1:2:4 ratio as per the site levels.

b)MS structure made of MS hollow conduit of size 80x40 mm in 16 gauge duly primer coated & painted as per selected colour shade

c)GI pre coated corrugated stepped sheets of 24 gauge for the roof structure of suitable size complete with fixing with hardened bolts & washers as per site structure with gutter for rain water along with 50 mm dia GI drain pipe upto the drain point.

d)GI Cable tray of 16Gin a size of 50x150x50 mm with suitable harware & supports

## **EXPRESSION OF INTEREST FOR CLEAN ROOM OF CLASS 10,000 FOR EHEP LAB AT IISER MOHALI, SECTOR 81-SAS NAGAR, PUNJAB.**

- 1.1 The work should be executed as per specification(s)/BOQ enclosed entailing class 10,000 clean room, Temperature-21+2 C, Rh 30-40, 4 Nos of Hepa filters 2000 CFM each, terminal end filtration of 0.3 micron with AHU 8000 CFM having 10 micron prefilter, 5 micron fine filter at 125 mm SP to achieve class 10000 filtration level with all necessary display/controls like Temperature, RH press & AV alarms, etc.
- 2.1 The system should be capable of continuous operation for 24x7.
- 2.2 The intending supplier should have successfully completed atleast one clean room installation work of class 10,000 or less, directly (not back to back) in any Research/Pharmaceutical & Hospitals/Biological lab in Govt/PSU/Autonomous bodies, of 22 TR in the past seven financial years (Certificate of completion should be attached).
- 3.0 The Institute will provide the following:
  - 3.1 A temporary three phase power supply.
  - 3.2 Storage space for equipment's.
  - 3.3 Associated civil work, if required.
  - 3.4 Access to worker and equipment to site.
- 4.0 Other than the above, all equipment electrical, mechanical, and ladders and anything else required to make the system complete and workable should all be part of the work in the scope of the supplier.
- 5.0 Notwithstanding, the approvals of the Institute, the safety and serviceability of the system is the sole responsibility of the suppliers.
- 6.0 The supplier should unconditionally indemnify the Institute from any legal proceeding by any persons or Body, National or International arising out of any patented process that may be employed in manufacture/supply by this equipment.

7.0 After installation and Commissioning the supplier will validate the clean room for the appropriate class including temperature & Rh. The supplier should warrant to maintain (including spares and consumables, if any) the system for a period of 1 year, under warranty. During this one year Institute personnel should be trained by the agency. The Institute may get the third party inspection of the cleanroom installed by the bidder, if required.

8.0 Expression of Interest should be submitted in the following manner:

8.1 Technical part- should uploaded on website contain the Technical particulars of the clean room system like EMD flow diagram physical sizes of equipments and list of electrical and mechanical components, testing/validation details, load requirement and any other details the supplier would like to include, like time required for installation and commissioning detail of similar type of clean room system, atleast of class 10,000 having AC load of atleast 22 TR installed by the agency should be given.

8.2 Financial part- should uploaded on website as per BOQ, contain the details of the financial offer (including all applicable taxes and levies).

8.3 Price quoted should include VAT/Service tax/Any other tax/Transport up to the erection site in the Institute campus including unloading, and also transit insurance.

8.4 EMD should contain the earnest money of Rs. 1,00,000/- in the form of demand draft in favour of Registrar, IISER Mohali, payable at Chandigarh to be uploaded on website and hard copy send by post before the date of opening the tender/EOI.

8.5 All the above three(8.1,8.2,8.4) documents to be loaded on e-portal

8.6 Hard copy of EMD to be submitted in sealed envelope subscribing "Expression of Interest for clean room of class 10,000 for EHEP Lab", so as to reach the undersigned on or before 11 am on 18/07/2017" ( However soft copy uploaded on website)

9. Method of selection :

9.1 The bidders would be invited for pre bid meeting by the committee on dated 10/07/2017 at 11.30am to discuss, technical issues & special conditions if any. Thereafter, after clarification, they can upload their documents as notified at 8.1,8.2 & 8.4

9.2 After due date and time, the technical bids would be scrutinized and evaluated by a committee constituted by Director.

9.3 The committee will visit the site, if required where the shortlisted vendors selected have installed clean room.

9.4 Based on the above the vendors will be finally selected for the purpose of opening of financial bids.

9.5 The Agency/contractor who are L-1 among technically qualified would be awarded the said work who should sign an agreement with the Institute and undertake the assignment immediately.

9.6 The Director IISER Mohali reserves the right to reject any or all the offers based on Technical Evaluation Report.

9.7 If the Financial offers of the successful applicant is considered by the Institute committee to be unreasonably high the Institute reserves the right to negotiate for the price to be reduced. If there is no agreement reached, the Institute reserves the right to cancel this invitation for Expression of Interest and decide further course of action by a fresh invitation or otherwise.

10. **General Conditions:**

10.0 Time for supply at the Institute's campus:3 months from the date of order.

10.1 **Payments**

70% after supplying of all equipments

15% erection & commissioning

- 15% after validation of clean room & third party inspection, if required
- 10.2 Performance guarantee: 5% of the quoted price to be furnished within 10 days of the placing of the order and must be valid for the time required for completing the work plus 60 days.
- 10.3 Security @ 5% will be deducted and will be released after completion of the defect liability period of one year from the date of handing over of the plant. Other taxes as applicable will be deducted.
- 10.4 GST, as applicable shall be paid separately on production of proof of depositing the same with the Govt.
11. Dispute:
- 11.1 Any dispute arising out of this work would be referred to the sole Arbitrator to be appointed by the Director of the Institute.
- 11.2. If the dispute remains unresolved even after that, legal remedy may be sought, subject to the jurisdiction of the Hon'ble High Court of Punjab & Haryana, Chandigarh.

### **SUBMISSION OF Tender (EOI)**

- 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. Technical bid and financial bid shall be submitted in the designated online cover/part 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 TIN number, PAN Card, VAT registration certificate/VAT return, Service tax registration 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)/2011 DT. 02/09/2011 / EXCISE NOTIFICATION NO. 10/97- CENTRAL EXCISE DT. 01.03.1997.
6. Tax: This Institute is not exempted from the payment of Sales Tax/Service Tax/VAT. 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, TIN number, Service tax number, Sales tax number dulyself-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-  
(Mukeshkumar)  
Assistant Registrar (S&P)