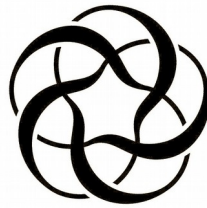


**NOTICE INVITING ENQUIRY FOR SUPPLY, INSTALLATION OF
MODULAR CLEANROOM IN THE IIT PALAKKAD TRANSIT
CAMPUS, KANJIKODE.**

Tender No. IITPKD/CIF/031/2018-19

Date of issue: 08.10.2018

Date of closing: 29.10.2018 at 3.30 pm



IIT PALAKKAD

**Indian Institute of Technology Palakkad
Ahalia Integrated Campus,
Kozhipara, Palakkad – 678 557**

Pre bid meeting : Pre bid Meeting will be held on **17.10.2018 at 10.00 AM** in the Conference Room, Academic Block, IIT Palakkad (Temporary Campus). Site visit will also be arranged on this day.

Indian Institute of Technology Palakkad invites sealed Tender under Two-Bid System for **“Supply and Installation of Modular Cleanroom”** as per the specifications given in **Annexure - I**. The tender documents may be obtained from the Office of the **Registrar, IIT Palakkad, Ahalia Integrated Campus, Kozhipara, Palakkad - 678 557** or downloaded from The <https://iitpkd.ac.in/tenders> and <https://eprocure.gov.in/cppp/> supply of tender documents will close on the last working day at **15:30 hours** before the last date for submission of the tenders.

The Technical Bid and the Commercial Bid shall be sealed by the bidder in separate covers duly superscribed as **Supply and Installation of Modular Cleanroom Technical Bid** a **Supply and Installation of Modular Cleanroom Financial bid** respectively and both these sealed covers are to be put in a bigger cover which should also be sealed and duly superscribed as **Tender for Supply and Installation of Modular Cleanroom - Tender No. IITPKD/CIF/031/2018-19**. The technical details of the equipment along with the filled-in format (Annexure-II) should be kept inside the Technical Bid envelope and sealed. The tender must reach **Registrar, IIT Palakkad, Ahalia Integrated Campus, Kozhipara, Palakkad -678 557** by post or by hand on or before **29.10.2018 at 3.30 pm**.

Tenders received after due date/time will not be considered under any circumstances. Canvassing in any form will result in the disqualification of the bidder. Tenders sent by fax/email will not be considered. To avoid any complications with regard to Late Receipt/Non Receipt of Tenders, it may please be noted that responsibility rests with the bidder to ensure that the tenders reach the above mentioned address on or before the due date.

Instructions to Bidders including Terms and Conditions

1. Scope of Bid

1.1. Indian Institute of Technology Palakkad hereinafter called “Purchaser”, invites bid for **Supply and Installation of Modular Cleanroom in the Transit Campus, IIT Palakkad.**

2. Cost of Bidding

2.1. The Bidder shall bear all costs associated with the preparation and submission of its bid and the Purchaser shall in no case be responsible or liable for those costs regardless of the conduct or outcome of the bidding.

3. Tender Document

3.1. The Tender Document is not transferable.

3.2. The bidder shall make a copy of the tender document before submitting the same to the concerned office. No requests will be entertained for making a copy after the submission of the document.

4. Clarifications in Tender Document

4.1. The Purchaser will respond to any request for clarification or modification of the Tender Document that are received up to **FIVE (05) days** prior to the deadline for submission of bids prescribed by the Purchaser. For this purpose, the prospective Bidder(s) requiring clarification in the Tender Document shall notify the Purchaser in writing at the Purchaser’s address.

4.2. Written copies of the Purchaser’s response including the explanation of the query raised by the Bidders will be sent to all the Bidders who have purchased the Tender Document. Further, it will be assumed that the Bidder has taken into account such clarifications/explanations while submitting the bid.

5. Amendment of Tender Document

5.1. At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Tender Document by way of amendment(s).

5.2. Amendments will be intimated in writing to all Bidders who have received the Tender Document and shall be binding on them. Further, it will be assumed that the Bidder has taken into account such amendments while submitting the bid.

6. Language of Bid

6.1. The bid prepared by the Bidder and all correspondence and documents related to the tender exchanged by the Bidder and the Purchaser shall be in English and the Contract shall be construed and interpreted in accordance with that language.

6.2. If any of the brochures, leaflets or communication is prepared in any language other than English, a translation of such document, correspondence or communication shall also be provided at the cost and risk of the bidder. The translation so provided shall prevail in matters of interpretation. The bidder, with respect to such documents, correspondence, and communications, shall bear the costs and risks of such translation.

7. Documents Comprising the Bid

7.1. All bids must be substantially responsive and shall comprise the following:

- a. Earnest Money Deposit (EMD) put in a sealed cover.

- b. Separate envelopes for technical as well as commercial bid sealed and put together in a sealed cover. **EMD should be in a sealed envelope.**
- c. Documents establishing conformity of the Equipment to the Tender Document;
- d. Bidder's company related information. The bidder should furnish photocopies of the PAN, GST and TIN.
- e. Copy of Tender Document marked "Original" with each page signed and stamped to acknowledge acceptance of the same;
- f. Any other information, which the Bidder wishes to provide.

8. Format and Signing of Bid

8.1. The bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons authorized. All pages of the bid shall be numbered and except for unamendable printed literature, shall be initialised by the person or persons signing the bid.

8.2. The bid shall not contain any internalisations, erasures, or overwriting, except to correct errors made by the Bidder, in which case the person or persons signing the bid shall initial such corrections.

9. Sealing and Marking of Bids

9.1. The Bidder shall seal the bid in an envelope.

9.2. The envelope shall be addressed to **The Registrar, IIT Palakkad, Ahalia Integrated Campus, Kozhipara, Palakkad – 678 557.**

(a) bear the reference number, the title of the Tender Document and

(b) bear the name and address of the Bidder so that the bid can be returned unopened in case it is declared late.

9.3. If the outer envelope is not sealed and marked as required above, the Purchaser will assume no responsibility for the bid's misplacement or premature opening.

9.4. Cable/Facsimile or Fax/conditional Bids shall be rejected.

10. Bid Prices

10.1. Prices must be quoted separately for each equipment/item identified.

10.2. Price quoted for equipment must include all costs associated with packing, transportation, insurance, delivery of equipment, loading and unloading on DOOR DELIVERY basis to the institute including its installation, commissioning, integration and validation.

10.3. In case of equipment originating in other countries, prices shall be quoted both on FOB (port of shipment) and CIF (Port of Destination) and CIP (Carriage and Insurance Paid). The comparable prices will be arrived at based on CIP Cochin basis.

In the case equipment originating in other countries, the bidder shall provide the following at the time of supply, within 24 hours of despatch:

- a) Supplier's Invoice giving full details of the goods including quantity, value, etc.;
- b) Packing list;
- c) Certificate of country of origin;
- d) Manufacturer's guarantee and Inspection certificate;
- e) Inspection certificate issued by the Purchaser's Inspector;
- f) Insurance Certificate;
- g) Name of the Vessel/Carrier;
- h) Bill of Lading/Airway Bill;
- i) Port of Loading;
- j) Date of Shipment;
- k) Port of Discharge & expected date of arrival of goods and

l) Any other document(s) as and if required in terms of the contract.

10.4. Prices quoted by the Bidder shall be firm during the validity of the bid.

11. Bid Currency

11.1. Prices of indigenous equipment/items shall be quoted in Indian Rupees.

11.2. Prices of equipment/items originating in other countries shall be quoted in the currency of country of origin and the portion of allied work and services, which are to be undertaken in India, are to be quoted in the Indian Currency. The comparison of financial bids would be done after converting the currency value in INR based on RBI rates applicable on the date of opening of the tender.

12. Conformity of the Tender Document

12.1. The Bidder shall furnish, as part of its bid, documents establishing the conformity of the Equipment that the Bidder proposes to supply under the Contract to the requirements of the Purchaser, as given in the Tender Document.

12.2. The documentary evidence of conformity of the Equipment to the Tender Document may be in the form of written descriptions supported by literature/diagrams/certifications, including:

(a) A detailed description of the essential technical, functional and performance characteristics of the Equipment that the Bidder is proposing to supply;

(b) Technical details of the major subsystems/components of the Equipment;

13. Earnest Money Deposit (EMD)

13.1. The Bidder shall furnish, as part of its bid, an **EMD @ 2%** on estimated value and that shall be interest free.

13.2 The firms who are registered with National Small Industries Corporation (NSIC) / or Small Scale Industrial (SSI)/ Micro & Small Enterprises (MSEs) are exempted to furnishing the EMD. Self-attested photocopy of valid registration certificate issued by competent authority for supply of laboratory equipment must be enclosed with the technical bid.

13.3. The EMD shall be in the form of a demand draft drawn in favour of **INDIAN INSTITUTE OF TECHNOLOGY PALAKKAD** and payable at **PALAKKAD**

13.4. Any bid not accompanied with the EMD shall be rejected by the Purchaser as non-responsive.

13.5. The successful bidder's bid security will be returned as promptly as possible, but not earlier than fifteen (15) days after the successful Bidder has furnished the required performance security.

13.6. The EMD may be forfeited under the following circumstances:

(a) If a Bidder:

(i) Withdraws its bid during the period of bid validity specified on the Bid Form or

(b) In the case of the successful Bidder, if the Bidder fails to:

(i) Sign the Contract or

(ii) Furnish performance security.

14. Period of Validity of Bids: Bids shall remain valid for a period of 180 days after the date of deadline for submission of bids prescribed by the Purchaser.

15. Deadline for Submission of Bids

15.1. Bids must be received by the Purchaser at the address specified not later than the time and date as stated. In case this date happens to be a declared holiday for the office of the Purchaser or happens to be a holiday declared incidentally, the Bids shall be received up to the appointed time on the next working day.

15.2. The Purchaser may, at its discretion, extend this deadline for submission of bids in which case all rights of the Purchaser and all obligations of the Bidders will thereafter be subject to the deadline as extended.

16. Late Bids: Any bid received by the Purchaser after the bid submission deadline prescribed by the Purchaser, shall be rejected and returned unopened to the Bidder.

17. Modification and Withdrawal of Bids

17.1. The Bidder may modify or withdraw the bid after submission, provided a written notice of the modification or withdrawal is received by the Purchaser prior to the deadline prescribed for bid submission.

17.2. The Bidder's modifications shall be prepared, sealed, marked and dispatched as follows:

(a) The Bidders shall provide the modification to its bid, clearly identified as such, in an envelope duly marked **BID MODIFICATION**.

17.3. A Bidder wishing to withdraw the bid shall notify the Purchaser in writing prior to the deadline prescribed for bid submission. The withdrawal notice shall:

(a) be addressed to the Purchaser at the specified address and

(b) bear the reference number and the title of the project, and the words **BID WITHDRAWAL NOTICE**. Bid withdrawal notices received after the bid submission deadline will be ignored and the bid submitted prior to that will be deemed to be a valid bid.

17.4. No Bid may be modified subsequent to the deadline for submission of Bids.

17.5. No bid may be withdrawn in the interval between the bid submission deadline and the expiration of the bid validity period. Withdrawal of a bid during this interval may result in the forfeiture of the Bidder's EMD.

18. Opening and Examination of Bids

18.1. The Technical bids will be opened on the prescribed date and time as mentioned in the Bid document. Bidders or their representative may be present during the opening of technical bid, if they wish to be present.

18.2. The purchaser will evaluate the technical bids. Those bids, whose technical bids fulfill the technical requirements and responsive to the tender requirements will be considered. Those bids which found to be either non-responsive, not satisfying the technical requirements or both will not be considered and will be rejected.

18.3. The Price bids of the successful bidders on the basis of evaluation as mentioned in will be considered for the next stage for opening.

18.4. The Purchaser will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required security has been furnished, whether the documents have been properly signed and whether the bids are generally in order.

18.5. Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price, which is obtained by multiplying the unit price and quantity, or between subtotals and the total price, *the unit or subtotal price shall prevail* and the total price shall be corrected. If there is a discrepancy between words and figures, *the amount in words shall prevail*. If a Bidder does not accept the correction of errors, the bid will be rejected and its EMD may be forfeited.

18.6. The Purchaser may waive any minor nonconformity or irregularity in a bid that does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.

18.7. Prior to the detailed evaluation, the Purchaser will determine whether each bid is complete and is substantially responsive to the Tender Document. For purposes of this determination, a substantially responsive bid is one that conforms to all the terms, conditions and specifications of the Tender Document without material deviations, exceptions, objections, conditionality or reservations. A material deviation, exception, objection, conditionality, or reservation is:

(a) One that limits in any substantial way the scope, quality, or performance of the Equipment;

OR

(b) One that limits, in any substantial way that is inconsistent with the Tender Document, the Purchaser's rights or the successful Bidder's obligations under the Contract: and

(c) One that the acceptance of which would unfairly affect the competitive position of other Bidders who have submitted substantially responsive bids.

18.8. If a bid is not substantially responsive, it shall be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the nonconformity.

The Purchaser's determination of bid responsiveness will be based on the contents of the bid itself and any written clarifications submitted by the Bidder.

19. Clarification of Bids: During the bid evaluation, the Purchaser may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing, and no change in the price or substance of the bid shall be sought, offered or permitted.

20. Evaluation of Responsive Bids: The Purchaser will evaluate the bids that have been determined to be substantially responsive.

21. Contacting the Purchaser

21.1. From the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Purchaser on any matter related to the bid, it shall do so in writing.

21.2. If a Bidder tries to directly influence the Purchaser or otherwise interfere in the bid evaluation process and the Contract award decision, his bid shall be rejected.

22. Award Criteria

22.1 Purchaser will award the Contract to the Bidder whose bid has been determined to be substantially responsive and the Lowest Quote Evaluated Bid.

22.2 The Institute reserves the right to buy different items/quantity from different bidders considering price of individual/group of equipment or any other factors as decided by the committee.

23. Purchaser's Right to Accept/Reject/Modify Bids

23.1. The Purchaser reserves the right to accept or reject any bid or to annul the bidding process and reject all bids at any time prior to Contract award, without thereby incurring any liability to the Bidders.

23.2. The Purchaser reserves the right to negotiate with the Bidder having the Lowest Evaluated Bid.

24. Award of Purchase Order

24.1. Prior to the expiration of the period of bid validity, the Purchaser will issue the Letter of Intent / Purchase Order to the successful Bidder in writing.

24.2. The Purchase Order will constitute the foundation of the Contract.

24.3. Upon the successful Bidder's furnishing of the copy of the Purchase Order duly signed on each page and the Performance Security, for the equipments ordered in foreign currency, the Purchaser will open a letter of credit (LC) in a convenient Nationalized Bank in

India. For opening of LC necessary arrangements shall be provided by the supplier or its authorized agents.

25. Contract Agreement

25.1. Within fifteen (15) days of receipt of the Purchase Order, the successful Bidder shall sign and date its copy on each page and return it to the Purchaser, along with the Performance Security.

25.2. Copy of Purchase Order duly signed and dated by the successful Bidder on each page shall constitute the Contract Agreement.

26. Performance Security

26.1. Within fifteen (15) days of receipt of notification of award from the Purchaser, the successful Bidder shall furnish the performance security equal to 5% of the Contract value (excluding the value of annual maintenance charges). **The Performance Security will be valid all along the warranty period and shall extend upto sixty (60) days after the date of completion of warranty period.**

26.2. The security shall be in one of the following forms:

(a) A bank guarantee (in the format as provided in **Annexure-V** of the bidding documents) issued by the Indian Scheduled bank acceptable to the Purchaser.

(b) A Demand Draft favouring, **INDIAN INSTITUTE OF TECHNOLOGY PALAKKAD** payable at PALAKKAD.

26.3. The security shall automatically become null and void once all the obligations of the Supplier under the Contract have been fulfilled, including, but not limited to, any obligations during the Warranty Period and any extensions to the period. The security shall be returned to the Supplier not later than fifteen (15) days after its expiration.

26.4. Failure of the successful Bidder to comply with the requirements shall constitute sufficient grounds for the annulment of the award and forfeiture of the EMD, in which event the Purchaser may make the award to the next lowest evaluated bid submitted by a qualified Bidder or call for new bids.

27. Contract Documents

27.1. All documents forming part of the Contract (and all parts of these documents) are intended to be correlative, complementary and mutually explanatory. The Contract shall be read as a whole.

27.2. The order of precedence of the Contract documents will be as follows:

- (i) Contract Agreement
- (ii) All other Forms
- (iii) Equipment and their Requirements
- (iv) Supplier's Bid
- (v) Tender Document

28. Amendment to Contract: No amendment or other variation of the Contract shall be effective unless it is in writing, is dated, expressly refers to the Contract and is signed by a duly authorized representative of each party to the Contract.

29. Supplier's Responsibilities

29.1. The Supplier's obligations involve:

- (a) Supply of Equipment/items given in Tender Document.
- (b) Making operational the Equipment (installation, commissioning & validation of Equipment).
- (c) Development of test methods & applications.

(d) Training, at the cost of Supplier, of personnel in operation, day-to-day maintenance and troubleshooting of the Equipment.

(e) Supply of Material (instruction/operation/service/maintenance manuals including drawings & circuit diagrams and application notes), Calibration Certificates (where applicable, traceable to national/international standards) and any other documents specified in the Contract.

29.2. The Supplier shall, unless specifically excluded in the Contract, perform all such work and/or supply all such items, services and materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for installation & commissioning, integration & validation of Equipment as if such work and/or items and Materials were expressly mentioned in the Contract.

29.3. The Supplier shall comply with all laws in force in India. The laws will include all national, provincial, municipal or other laws that affect the performance of the Contract and are binding upon the Supplier. The Supplier shall indemnify and hold harmless, the Purchaser from and against any and all liabilities, damages, claims, fines, penalties and expenses of whatever nature arising or resulting from the violation of such laws by the Supplier.

30. Time for Supply, Installation, Commissioning and Validation of the Equipment

30.1. The Supplier shall supply the Equipment within the period specified in the tender document i.e. within FOUR weeks of signing the purchase order or within the period mutually agreed between purchaser and supplier.

30.2. The Supplier shall thereafter proceed with the installation & commissioning, integration and validation and demonstrate operational acceptance of the Equipment within the period specified, unless it is mutually agreed.

31. Terms of Payment

31.1. For **indigenous equipment**, 90% payment will be released after satisfactory delivery, installation of the equipment and remaining 10% will be released on submission of a Bank Guarantee for equivalent value **(5%) as performance security to cover the warranty period and installation, testing , commissioning and certification by the end user.**

31.2. For **imported equipment**, normally a letter of Credit will be opened for 100% CIP price on receipt of order of acknowledgement. However, 50% of the LC amount **only** will be paid on proof of the shipment of the consignment with necessary documents to be detailed at the time of placing of the purchase order. **Balance of 50% of the LC amount shall be released after receipt of a performance bond of 5% of the total contract/purchase value in the form of bank guarantee covering the warranty period, obtained from a bank which has its office in India & Installation, testing and commissioning and certification by the end user.**

31.3. For equipment ordered in foreign currency, opening of LC, Payment of Customs Duty and clearance of goods shall be done/assisted by the supplier or its authorized Indian agent. The custom duty as applicable after considering eligible concessions based on DSIR exemption etc will only be paid by the purchaser. The Institute can provide the copy of the DSIR customs and excise duty exemption certificate upon request.

31.4. Payment for annual maintenance contract after the warranty period shall be released at the end of six month/1 year after the expiry of warranty period, subject to Government of India norms.

31.5. If any time before the delivery of the equipment, it is found that the same equipment have been offered to another party in India at a lower rate, payment shall be restricted to

the extent of such lower rate and the Supplier shall be liable to pay the Purchaser the difference in two rates i.e. excess charged over such lower rate, if payment had been made by the purchaser. The Institute will look into a reasonable past period to ensure this.

32. Taxes and Duties: The Supplier should ensure payment of all taxes, duties, levies and charges assessed by all municipal, state or national government authorities, in connection with the Goods and Services supplied under the Contract.

33. Product Upgrades: The Supplier shall continue to support and maintain the version/model of the Equipment supplied by upgrading the software and the hardware as and when amendments are carried out in the existing version or the product is upgraded. Whereas upgrades to the software shall be supplied free of cost, the Supplier may charge for upgrade in hardware provided it is of major nature. An upgraded higher version of the instrument and software related with the instrument shall be supplied.

34. Penalties

34.1. If the Supplier fails to complete any of the activities in accordance with the time specified for it, or any extension of the time granted by the Purchaser, the Supplier shall pay to the Purchaser penalties at the rate specified in the Tender document.

34.2. The Purchaser reserves the right to terminate the contract if the Supplier defaults on any of the time limits by more than **FOUR** weeks.

35. Defect Liability

35.1. The Supplier warrants that the Equipment, including all subassemblies and components provided, shall be free from defects in the design, engineering/manufacturing, workmanship and performance that prevent the Equipment and/or any of its subassemblies and components from fulfilling the Equipment Requirements or that limit in a material fashion the operation, reliability, accuracy, sensitivity and precision of the Equipment, its subassemblies and components. Commercial warranty provisions of products supplied under the Contract shall apply to the extent that they do not conflict with the provisions of this Contract.

35.2. The Warranty Period shall commence from the date of validation of the Equipment and shall extend for the length of time specified in the tender document supra.

35.3. If during the Warranty Period any defect found in the Equipment, the Supplier shall promptly, at its sole cost, repair or otherwise make good such defect as well as any damage to the Equipment caused by such defect. Any defective Equipment, Subassembly or component that has been replaced by the Supplier shall become the property of the Supplier and the new substituted/replaced equipment in good condition shall become the property of the purchaser.

35.4. Validation of the Equipment shall be carried out by the Supplier each time a major repair is carried out in the Equipment during the warranty period.

35.5. Response time for attending to defects shall be 24 - 48 hours after they are reported to the Supplier or its designated service agent. If the Equipment cannot be used for more than TWO working days by reason of such defect and/or making good of such defect, the warranty period for the Equipment shall be extended by a period equal to the period during which the Equipment could not be used by the Purchaser because of such defect and/or making good of such defect.

36. Intellectual Property Rights Warranty and Indemnity

36.1. The Supplier hereby represents and warrants that the Equipment as supplied, installed & commissioned along with its Application Software and copying of Manuals &

other documents provided to the Purchaser in accordance with the Contract does not and will not infringe any Intellectual Property Rights held by any third party.

36.2. The Supplier shall indemnify and hold harmless the Purchaser from and against any and all losses, liabilities and costs (including losses, liabilities and costs incurred in defending a claim alleging such a liability), that the Purchaser may suffer as a result of any infringement or alleged infringement of any Intellectual Property Rights.

37. Effect of Force Majeure

37.1. If the Supplier is prevented, hindered, or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the Purchaser in writing of the occurrence of such event and the circumstances of the event of Force Majeure within fifteen (15) days after the occurrence of such event.

37.2. The Supplier, when affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect of the event of Force Majeure upon its performance of the Contract and to fulfill its obligations under the Contract, but without prejudice to Purchaser's right to terminate the Contract.

37.3. No delay or non-performance by the Supplier caused by the occurrence of any event of Force Majeure shall:

- (a) Constitute a default or breach of the Contract;
- (b) Give rise to any claim for damages or additional cost or expense occasioned by the delay or non-performance.

37.4. If the performance of the Contract is substantially prevented, hindered, or delayed for a single period of more than THIRTY days or an aggregate period of more than sixty days on account of one or more events of Force Majeure, the Purchaser shall have the right to terminate the Contract by giving a notice to the Supplier.

38. Extension of Time Limits for supply & making operational the Equipment

The time limit for supply, installation & commissioning, integration & validation shall be extended if the Supplier is delayed or impeded in the performance of any of its obligations under the Contract by reason of any of the following:

- (a) Any occurrence of Force Majeure;
- (b) Any other matter specifically mentioned in the Contract;

By such period as shall be fair and reasonable in all the circumstances and as shall fairly reflect the delay or impediment sustained by the Supplier.

39. Assignment: The Supplier shall not, without the prior written consent of the Purchaser, assign to any third party, the Contract or any part thereof.

40. Governing Law: The Contract shall be governed by and interpreted in accordance with the laws of India.

41. Settlement of Disputes : Any dispute or claim arising out of/relating to this Contract or the breach, termination or the invalidity thereof, shall be settled by the Hon'ble Courts of Justice at Palakkad.

42. The page number should be marked in all pages serially (including all supporting documents enclosed with the tender document) and the declaration for the same shall be submitted by the bidder as **Annexure-VI**

43. Indian Institute of Technology Palakkad reserves the right to accept or reject any or all the tenders in part or whole or may cancel the tender at its sole discretion without assigning any reason whatsoever. No further correspondence in this regard will be entertained.

Technical Specifications**Supply and Installation of Modular Cleanroom at IIT Palakkad (Transit Campus)****A. Overview:**

IIT Palakkad wishes to procure and setup a **Modular Cleanroom** that is housed in the ground floor of the Workshop Building in its transit campus. An area of about 4m×12m in Workshop 3 is to be converted into a cleanspace, comprising of two regions: (i) class 10000, for about 4m×3m; and (ii) class 1 lakh, for the remaining 4m×9m portion. The floorplan (Fig. 1) of the cleanroom is provided. The workshop already has two numbers of 11 TR ducted air-conditioning systems. The duct diagram and position of openings is also shown in the floorplan. Each of the duct openings has been designed to provide 600 cfm of air. The grille temperature is designed to be 18 C.

1. Modular panels to be provided and installed, as shown in Fig. 1, to create two areas: one that is class 10000, and another that is class 1 lakh.
2. Modular panels to be installed as lining for the existing walls of room. Prior to installation, note that three existing windows and one door which will need to be sealed with cement fiber board of greater than 8mm thickness, such that after finishing it is flush with the inner surface of existing inner wall.
3. False ceiling to be fitted below the air-conditioning duct. This will create a plenum. Fan filter units of appropriate spec and number to be fitted within this plenum.
4. Existing duct openings (G1, G2, G3, G4) have been shown in Fig. 1. The duct openings have to be extended into the fan-filter units housed within the plenum. It may be necessary to move opening G2 into the class 10000 space.
5. Filter-boxes with suitable blowers need to be supplied and installed as shown in Fig. 1 since there is limited space above false ceiling. These filter boxes should house the pre-filters suitable for the fan-filter units installed in the plenum. The pre-filters should be easily cleanable and replaceable.
6. Volume control dampers / Grilles to be supplied and installed to transfer air from the Class 10000 to Class 1 lakh and from Class 1 lakh to the outside. This serves as the return air path.
7. Light fixtures to be supplied and installed in the false ceiling with yellow filter. Light fixtures must be included in the quotation. Lighting requirement is at least 300 lux at 1m height from floor.
8. ESD proof floor to be supplied and installed for the entire cleanroom. Earth pit will be provided by IIT Palakkad and suitable busbar will be brought to the room. Connection of the ESD proof floor to this busbar is the responsibility of the bidder.
9. Fig. 2 shows the electrical wiring plan for the cleanroom. As shown in the figure, some plug-sockets and fixtures have already been fixed within a cable management system on the existing walls. This cable management system with socket and metallic plug should be removed and refixed on the modular panel. Fig 2 also shows the additional sockets and fixtures that need to be supplied and installed.

B. Detailed Specifications :

	Modular, EPS Insulated Clean Room Wall Panels with both sides galvanized iron sheet.	
	(i)	Double-skin type. Total thickness at least 60-mm.
	(ii)	(Expanded Polystyrene) EPS foam of min 16 kg/m ³ density.
	(iii)	Inner and outer skin should be made out of powder coated iron sheet with thickness not less than 0.6 mm.
	(iv)	The sheets should galvanized with zinc coating
	(v)	Smooth-finished with white colour.
	(vi)	Tongue and groove panels are not preferred.
	(vii)	All the wall-joints should be filled with suitable sealant material.
1.	(viii)	The mounting of the wall should be sturdy and should be fixed with necessary bottom flow track and top runner U channels.
	(ix)	Wall panels should include bottom and top runner, interconnecting profiles made of aluminium or mirror-finished stainless steel.
	(x)	For fixing the doors, suitable L and C sections should be used.
	(xi)	Suitable coving of radius 50 mm/75 mm made out of anodized or powder coated aluminium should be fixed along the joints between wall & the floor, wall & the false ceiling. 3D covings must be fixed at the corners.
	(xii)	Cable management system from Legrand must be used to house all electrical wiring outside the wall panel.
	(xiii)	Suitable factory-made cutouts, wherever required, should be provided in the wall panel as applicable for light fixtures, return air grilles, power sockets, cables, pipes, exhaust ducts, magnehelic gauge, smoke sensors, utilities, etc,
	(xiv)	Access door to plenum area (see Item 2) from outside the cleanroom. One each for the class 10000 area and class 1Lakh area.
	Modular, EPS Insulated, Walkable Clean Room Ceiling Panels to create plenum	
	(i)	Structural frame work should be of aluminium extruded sections or any other suitable material along with internal coving on both side of the panel
2.	(ii)	Total thickness of panel should be atleast 60-mm. Expanded Polystyrene (EPS) must be of min 16 kg/m ³ density
	(iii)	Panel should be sandwiched in between powder-coated galvanized iron sheet not less than 0.6 mm thick.
	(iv)	Suitable factory-made cutouts, wherever required, should be provided in the panel as applicable for HEPA filters, light fixtures, power sockets, cables, pipes, exhaust ducts, magnehelic gauge, smoke sensors, utilities, etc,.
	Fan Filter Units with Room-side Replaceable HEPA filter, thermal & acoustic insulated walls, provision for duct connection Quantity for Class 10000 : 2 Nos. Quantity for Class 100000 : 2 Nos.	
3.	(i)	At least 650 cfm each
	(ii)	Speed control should be possible from cleanroom-side.
	(iii)	Total height must be such that the FFU can be housed within plenum.
	(iv)	Should have an efficiency of atleast 99.995% (or higher) in removing particles with dimensions of 0.3 µm or larger.
	(v)	No prefilter to be installed in the Fan-Filter unit. Suitable prefilter will installed in Filter Box (see Item 6).
	(vi)	The HEPA filter should be factory-sealed for leak-proof operation and should be easy to be replaced at site from cleanroom side.

4.	Duct Extension/Modification: extension of existing air-conditioning duct upto FFUs – GI 24Gauge including at least 10mm thick Nitrile Foam Insulation for all FFUs.	
5.	Filter Box with Blower & Prefilter: Quantity : 2	
	(i)	Single skin with (at least) 10mm Nitrile foam insulated GI, powder coated Box with 5micron Prefilter & Blower of capacity at least 1400cfm @ 20mm Static Pressure. Must be fitted with at least 0.5 HP Motor. To be installed in the existing duct outside the Clean Room.
	(ii)	Prefilter should be a cleanable filter that blocks 5 micron & larger particles at more than 90% efficiency
	(iii)	One filter box for the class 10000 space and one for the class 100000 space. See Fig. 1 for details regarding placement.
	(iv)	Prefilter must be easily replaceable.
6.	Clean Room Hinged Double Doors: Metallic with panel window; door closer, SS handle. Main door size: 1.5m width X 2.4 m height Class 10000 door size : 1.5m width x 2.1 m height Panel window must be made of toughened glass, covered with yellow films (having wavelength 350nm cutoff) to avoid the interference of white light.	
7.	View-panel (excluding those in item 6) : Positions are provided in Fig. 1. Dimension of each panel at least 1.0m x 0.9m.	
	Quantity : 3	
	(i)	Have thickness not less than 5 mm.
	(ii)	Covered with yellow films (having wavelength 350nm cutoff) to avoid the interference of white light
8.	Lighting fixtures: Yellow diffuser with appropriate wiring. Quantity : At least 10 Nos.	
	(i)	Light fixtures should be flat panel type suitable for housing in the false ceiling grid.
	(ii)	Yellow cleanroom-compatible flat panel lights should be provided for main assembly with LUX level at least 300 LUX at height of 1m above the floor.
9.	ESD flooring :	
	(i)	Required thickness: At least 2-mm-thick
	(ii)	The required size of the tile is at least 600 mm × 600 mm.
	(iii)	Conductive / antistatic homogeneous vinyl tiles (10^3 to $10^6 \Omega$), to be glued to the concrete floor & the joints to be welded using same vinyl welding material for monolithic construction.
	(iv)	Necessary grounding using suitable thick copper strips/shims also to be done.
10.	Electrical Connections	
	(i)	Some plug-sockets and fixtures have already been fixed within a cable management system on the existing walls. This cable management system with socket and metallic plug should be removed and refixed on the modular panel. Existing smoke detectors on the ceiling also need to be shifted below the false ceiling. Existing lighting and fans need to be removed and handed over to IIT.
	(ii)	Fixtures that need to be installed on the new partitions shown in Fig 2. Cable management system must be used. All fixtures and cable management must be sourced from Legrand to maintain compatibility with existing items. Bends, Elbows, Tees, Endcaps for the cable management system must be of suitable

		size, based on the site condition. All wiring must be Finolex/Polycab/L&T brand FRLSH copper. All connections must be made using copper/aluminum legs of appropriate size.
11.		Grille with Louvres OR Gravity/Volume control Dampers for Return Air From the Class 10000 into class 100000 and from Class 100000 into the remaining portion of workshop 3. These need to be positioned about 1foot above the floor (see Fig 1 for indicative positions). Exact number and position of these to be decided by bidder based on air flow caculations.
12.	Sensors	
	(i)	Magnehelic Gauge to read positive pressure of the Clean Room in mm wG or in Pascals The gauge should be cleanroom-compatible type. The gauge should be supplied with necessary SS mounting box, PVC tubing etc
	(ii)	Appropriate sensors to indicate temperature and humidity of both the class 10000 and class 1Lakh spaces with digital readout.
13.	Clean room stools :	
	Quantity : 3	
	(i)	These shall be designed for use in class 10000 cleanroom, preventing attraction and accumulation of dust.
	(ii)	The stool frames shall be made of stainless steel.
	(iii)	If castors are present, they must be of thermoplastic rubber and of non-marring type.
14.	Warranty : At least 1 year warranty for all items must be quoted in price bid.	
15.	Annual Maintenance Contract : AMC for three years after end of warranty must be quoted as a separate item on a per-year basis. The AMC cost will be considered while determining the lowest price bidder.	
16.	Certification & Validation : The bidder must demonstrate that the installed cleanrooms meet the requirements for class 10000 and class 1Lakh as per ISO norms.	

Qualifying Criteria

Only those bidders fulfilling the following criteria should respond to the tender.

1. The bidder should be either an Original Equipment Manufacturer (OEM) of Modular Cleanrooms or should be an authorized representative (provide documentary proof) of such an OEM.
2. The bidder should be a company registered under the Companies Act, 1956/2013 OR a Limited Liability Partnership/ a registered partnership firm OR a sole-proprietorship entity. Appropriate Registration incorporation certificate must be submitted.
3. The bidder must have a registered office in Karnataka/TamilNadu/Telangana/AndhraPradesh/ Kerala. Certificate of registration for the offices to be provided.
4. The bidder must also have a service center in Karnataka/Tamil Nadu/Telangana/AndhraPradesh/Kerala. Certificate of registration for the centers to be provided. Details about scope of service activities provided by the service centres must be provided. The contact details of the service engineers must be provided.
5. The bidder must be in existence in the business of modular cleanrooms for a minimum period of 3 previous financial years (01 April 2015 – 31 March 2018). Documentary evidences of experience must be provided.
6. The bidder should have implemented orders of modular cleanrooms or allied systems worth exceeding INR 25 Lakh during each of the previous three financial years (01 April 2015 – 31 March 2018). Copies of the most recent purchase orders and certificates of successful implementation must be included. Copies of financial statements or evidence of turnover must be furnished.
7. The bidder should have documentary evidence of having supplied and installed at least three Nos. of modular cleanroom systems of Class 10000 or better, for semiconductor or allied application, to a Centrally Funded Technical Institution (e.g., IIT, NIT, IISc, IISER, NISER, RRI, JNCASR etc.) in the recent past. The bidder must provide a certificate of satisfactory performance of the installed cleanroom. Contact details of the faculty-in-charge of the installed setup must also be provided.
8. The bidder must be capable of certifying and validating the performance of cleanrooms. Proof of cleanroom validation performed by the bidder needs to be attached.
9. The bidder must be capable of carrying out Annual Maintenance Contract for cleanrooms. Proof of satisfactorily performing AMC for at least two modular cleanroom systems of Class 10000 or better in a Centrally Funded Technical Institution needs to be provided.
10. The purchase committee at IIT Palakkad reserves the right to ask for photographs/CAD drawings/design proofs to satisfy themselves of the proven capabilities of the bidder in setting up cleanrooms similar to the one that is being specified in this tender. The bidder must provide these details within two working days of receiving such a request via email. Decision regarding technical compliance of the bidder can be taken on the basis of this information
11. Compliance sheet for the technical specification and OEM Brochure have to be attached along with the Technical bid. Vendor has to fill the compliance sheet and mention page number or reference number in OEM brochure. Unfilled / partially filled sheets lead to disqualification.

Technical Bid**(To be enclosed in a separate sealed cover)**

Company Profile	
Name	
Address of the registered office	
Name & Designation of CEO	
Nature of Business Email ID & Contact numbers of CEO	
Years of operations in India Years of Established	
Location of offices in India	
Alliances for the purpose of this Bid	
Details of alliance(s)	
Type of alliance(s)	
Experience/Credentials	
Number of similar units installed in India	
Number of similar units installed in Karnataka/Tamil Nadu/ Telangana/Andhra Pradesh or Kerala or any other nearby city/town	
*List of satisfied customers in India	
Service Support in India	
Track record of service provided to clients with supporting documents for past three years	
Location of service centers	
Number of trained service engineers	
Number of trained service engineers exclusively dedicated to each equipment offered	
Number of trained service engineers for the equipments offered stationed in Karnataka/Tamil Nadu/ Telangana/Andhra Pradesh or Kerala.	
Number of application specialists	
Whether the OEM makes available any service support in India	
Availability of spares in India	
Whether the service set up maintains stock of essential spares in India	
Lead time for supply of essential spares	

***Testimonials from three satisfied customers may be attached**

Compliance Statement to specifications of the equipment to be provided by the tenderer as in Annexure-IV.

All equipment must operate at 230V/50 Hz single phase and/or equivalent three phase electrical power.

Quoted model shall be in accordance to the geographical location.

Signature _____

Name _____

Designation _____

Date: _____ Place: _____

Seal of Company _____

Annexure-III
Commercial Bid

(To be enclosed in separate sealed cover)

1. The price of the Lab Equipment in the **Annexure- I** is to be given individually in the format mentioned below:

Sl. No.	Name of the Equipment	No. of Units/ Sets	Cost per Unit/Set	Total Cost (Duties and taxes must be mentioned separately)
1.				
Grand Total (Inclusive of all taxes)			(In Figures)	
(In Words)				

Note :

2. Maximum educational discount as could be offered should be mentioned.
3. Price quoted for equipment must include all costs associated with packing, transportation, transit insurance, delivery of equipment, loading and unloading on **DOOR DELIVERY** basis to the Transit Campus of **IIT Palakkad** including its installation, commissioning, integration and validation.

Signature and seal of the bidder

Date:

ANNEXURE IV : COMPLIANCE STATEMENT OF SPECIFICATIONS

Instructions for filling the Compliance Statement of Specification

The vendor should prepare, sign and submit the Compliance Statement of Specification **in the given format** along with the technical bid.

submit separate Compliance Statement of Specification sheets for each item/ equipment.

Ensure that the component number and heading in the Technical Specifications is clearly mentioned in the document. If there are any deviations from the specifications mentioned by IIT Palakkad, the vendor should clearly indicate the deviations and give reasons for the deviation with proper justification.

Technical leaflet/literature/catalogue or any relevant document for all the quoted equipment should be provided to IIT Palakkad. The information provided in the compliance statement without supporting documents may not be considered for the evaluation of the technical bid.

If the supporting documents are not available for any information provided in the compliance sheet, it may be treated as non-compliance and may lead to the disqualification of the technical bid.

The vendor should clearly respond to every requirement given in the technical specification. Lack of clarity may be considered as lack of information and may subsequently lead to disqualification of the technical bid.

Item No.	IIT Palakkad's technical specification of components as given in Annexure II	Specifications of model quoted by the vendor	Vendor's specification complies with IIT Palakkad's technical specification? (YES/ NO)	Deviation, if any, to be indicated in unambiguous terms	Page no. of relevant specification for the quoted model in the technical manual/leaflet

FORM OF PERFORMANCE SECURITY (GUARANTEE) BY BANK

1. This deed of Guarantee made this day of _____ between Bank of _____ (hereinafter called the “Bank”) of the one part, and Indian Institute of Technology Palakkad (hereinafter called “the Purchaser”) of the other part.
2. Whereas the Purchaser has awarded the contract for Supply, Installation, Commissioning, Integration and Validation of _____ (name of the equipment) (hereinafter called the contract) to _____ (hereinafter called the Supplier); (Name of the Supplier)
3. AND WHEREAS the Supplier is bound by the said Contract to submit to the Purchaser a Performance Security for a total amount of Rs. _____ (Amount in figures and words).
4. Now, I/we the undersigned, being fully authorized to sign and to incur obligations for and on behalf of and in the name of _____ (Full name of Bank), hereby declare that the said Bank will guarantee the Purchaser the full amount of Rs. _____ (Amount in figures and words) as stated above.
5. After the Supplier has signed the aforementioned Contract with the Purchaser, the Bank is engaged to pay the Purchaser, any amount up to and inclusive of the aforementioned full amount upon written order from the Purchaser to indemnify the Purchaser for any liability of damage resulting from any defects or shortcomings of the Supplier under the Contract mentioned above, whether these defects or shortcomings are actual or estimated. The Bank will deliver the money required by the Purchaser immediately on demand without delay without reference to the Supplier and without the necessity of a previous notice or of judicial or administrative procedures and without it being necessary to prove to the Bank the liability or damages resulting from any defects or shortcomings of the Supplier. The Bank shall pay to the Purchaser any money so demanded notwithstanding any dispute/disputes raised by the Supplier in any suit or proceedings pending before any Court relating thereto and the liability under this guarantee shall be absolute and unequivocal.
6. This Guarantee is valid for a period of thirty six months from the date of signing. (Initial period for which this Guarantee will be valid must be for at least thirty (30) days longer than the anticipated expiry date of warranty period).
7. At any time during the period in which this Guarantee is still valid, if the Purchaser agrees to grant a time extension to the Supplier or if the Supplier fails to complete the work within the time of completion as stated in the Contract, or fails to discharge himself of the liability or damages as stated under Para 5 above, the Bank shall extend this Guarantee under the same conditions for the required time on demand by the Purchaser and at the cost of the Supplier.
8. The Guarantee herein before contained shall not be affected by any change in the Constitution of the Bank or of the Supplier.

9. The neglect or forbearance of the Purchaser in enforcement of payment of any moneys, the payment whereof is intended to be hereby secured or the giving of time by the Purchaser for the payment hereof shall in no way relieve the bank of its liability under this deed.

10. The expressions "the Purchaser", "the Bank" and "the Supplier" herein before used shall include their respective successors and assigns.

In witness whereof I/We of the bank have signed and sealed this guarantee on the _____ day of _____(Month & Year) being herewith duly authorized.

For and on behalf of the _____ Bank.

Signature of Authority

Bank official Name: Designation:

Stamp/Seal of the Bank:

Signed, sealed and delivered for and on behalf of the Bank by the above named _____ in the presence of:

Witness 1

Signature

Name

Address

Witness 2

Signature

Name

Address

Annexure - VI**Declaration**

We hereby undertake that there are _____ pages, serially numbered, in the submitted tender including the supporting documents. (Please serially number all the pages including blank page, if any).

We have submitted our principal's exclusive authorization letter which is specific for this tender No. _____ dated _____.

Signature and seal of the bidder

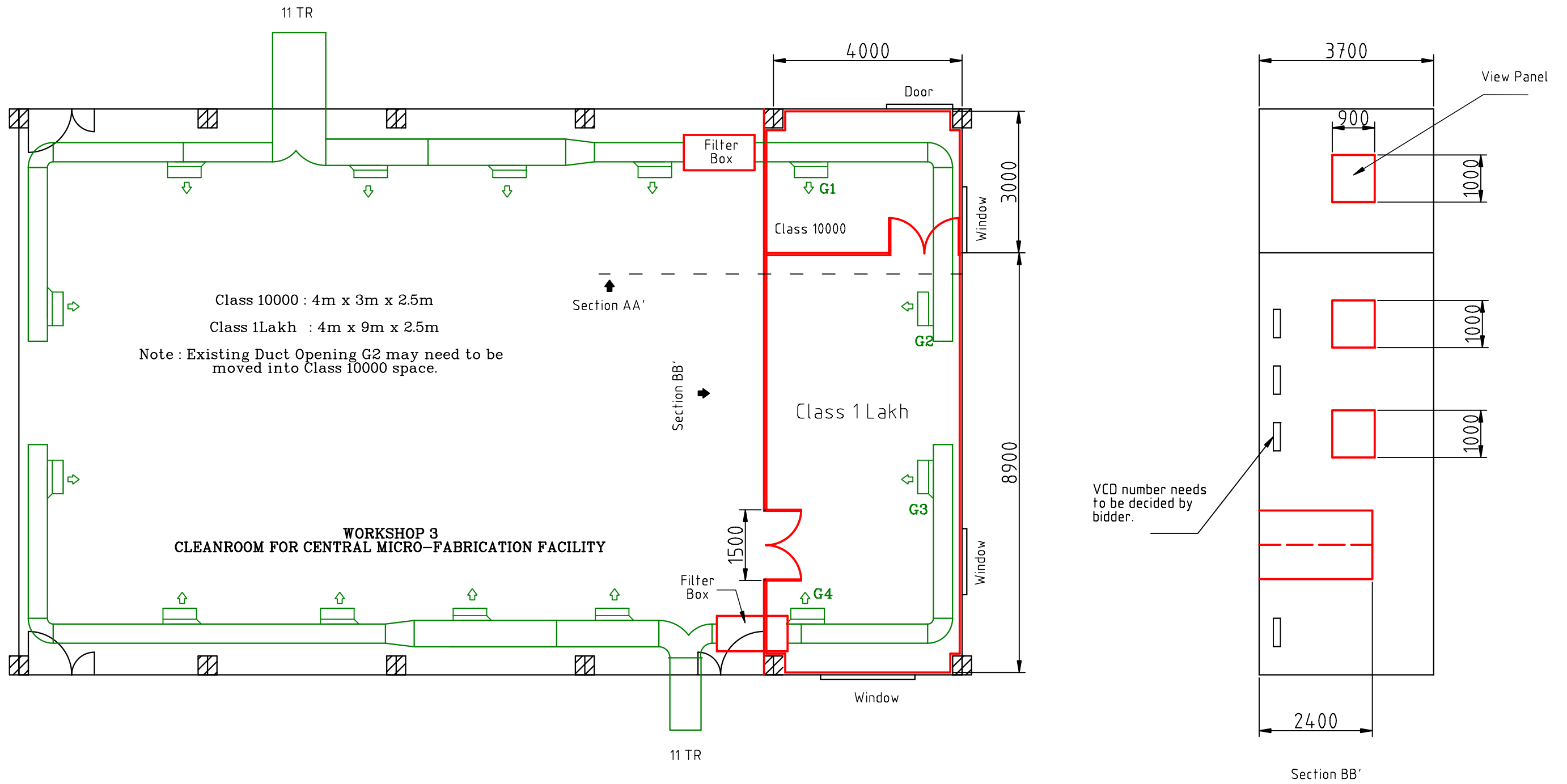


Figure 1

