NOTICE INVITING DOMESTIC TENDER

Supply and installation of clean room facility in IAP

Instrumentation and Applied Physics,
Indian Institute of Science, Bangalore

JUNE 23, 2023
LANSPE, IAP
Bangalore 560012
This is an invited domestic tender
<p>| | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Section 1 - Bid Schedule</strong></td>
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<tr>
<td>1</td>
<td>Tender No</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Tender Date</td>
<td>23.06.2023</td>
</tr>
<tr>
<td>3</td>
<td>Item Description</td>
<td>Supply and Installation of clean room facility in IAP</td>
</tr>
</tbody>
</table>
| 4 | Tender Type | Two bid system  
     |     | (i) Technical Bid (Part A)  
     |     | (ii) Commercial Bid (Part B) |
| 5 | Place of tender submission | Chairperson Office  
     |     | Ground Floor  
     |     | Instrumentation and Applied Physics  
     |     | Indian Institute of Science, Bangalore 560012 |
| 6 | Last Date & Time for submission of tender | 06.07.2023 |
| 7 | For further clarification | Dr. Tapajyoti Das Gupta  
     |     | Room No: 126  
     |     | Instrumentation and Applied Physics  
     |     | Indian Institute of Science, Bangalore 560012  
     |     | Email: tapajyoti@iisc.ac.in  
     |     | Phone: +91-80-2293-2349 |
Section 2 – Eligibility Criteria

Prequalification criteria:

1. The bidder must have supplied similar systems to at least 10 educational institutes/universities and/or research organizations.
2. 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 and should provide all the required supporting documents.
   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%. (please refer to the attach Public procurement order I annex)
3. Bidders offering imported products will fall under the category of non-local suppliers. They cannot claim themselves as Class-1 local suppliers/Class-2 local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training, and other sales service support like AMC/CMC, etc., as local value addition.
4. Purchase preference as defined by the recent edits to GFR (within the “margin of purchase preference”) will be given to Class-1 supplier.
5. MSME can seek exemption to some qualification criteria. IISc follows GFR2017 for such details
6. The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per -Annexure 4.
7. 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.
8. Original Invoice, Original Warranty Certificate, Original Test Reports should be produced for all imported items from OEM (Original Equipment Manufacturer) at the time of supply of the equipments.
9. System Catalogue should be produced with the Technical Bid.
10. Manufacturer should have ISO or equivalent international standard certificate. Please attach the required certificate with the bid.
11. Supplier will support the user with all the spares for a minimum period of 5 years.
12. Details of experienced service engineer including contact detail should be provided in tender document.
13. Bidder shall have to submit audited accounts (Balance sheet profit and loss account) of last three financial year. Audited statement must be signed and stamped by qualified chartered accounted.
15. Bidder must submit up to date sales tax or GST clearance certificate.
16. CE Certification must be provided for the proposed system. The CE certificate should be provided with the Unit.
17. The Bidder should have supplied similar equipment in Central Universities preferably in centrally Funded Technical Institutes (IITs, IISC, IISER, NIT ). Please provide the details and contact informations.
A) Submission of Tender:

1. All documentations in the tender should be in English.

2. Tender should be submitted in two envelopes (two bid system).
   a. Technical Bid (Part-A) – Technical bid consisting of all technical details and check list for conformance to technical specifications.

   The technical proposal should contain a technical compliance table with 5 columns.
   i. The first column must list the technical requirements, in the order that they are given in the technical requirement below.
   ii. The second column should provide specifications of the instrument against the requirement. Please provide quantitative responses wherever possible with technical details in annexure.
   iii. The third column should describe your compliance with a “Yes” or “No” only. Ensure that the entries in column 2 and column 3 are consistent.
   iv. The fourth column should state the reasons/explanations/context for deviations, if any.
   v. The fifth column can contain additional remarks from the OEM. You can use this opportunity to highlight technical features, qualify response of previous columns, or provide additional details.

   b. Commercial Bid (Part-B) – Indicating item wise price for the items mentioned in the technical bid, as per the format of quotation provided in tender, and other commercial terms and conditions.

3. The technical bid and price bid should each be placed in separate sealed covers, superscripting on both the envelopes the tender no. and the due date. Both these sealed covers are to be placed in a bigger cover which should also be sealed and duly superscripted with the Tender No, Tender Description & Due Date.

4. The SEALED COVER superscripting tender number / due date & should reach Chairperson Office, Instrumentation and Applied Physics, Indian Institute of Science, Bangalore – 560012, India on or before due date mentioned in the tender notice. In case due date happens to be holiday the tender will be accepted and opened on the next working day. If the quotation cover is not sealed, it will be rejected.

5. All queries are to be addressed to the person identified in “Section 1 – Bid Schedule” of the tender notice.

6. The price must be quoted in INR (Indian Rupee). Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor. The quotations should be on FOR-IISc Bangalore basis in INR only.

7. If price is not quoted in Commercial Bid as per the format provided in tender document the bid is liable to be rejected.

8. The Institute reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to the award of contract, without incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders.

9. Incomplete bids will be summarily rejected.

B) Cancellation of Tender:

Notwithstanding anything specified in this tender document, IISc Bangalore, in its sole discretion, unconditionally and without having to assign any reason, reserves the rights:

a. To accept OR reject lowest tender or any other tender or all the tenders.

b. To accept any tender in full or in part.

c. To reject the tender, offer not confirming to the tender terms.

C) Validity of the Offer:

The offer shall be valid at least 90 Days from the date of opening of the commercial bid.
D) Evaluation of Offer:

1. The technical bid (Part A) will be opened first and evaluated.

2. Bidders meeting the required eligibility criteria as stated in Section 2 of this document shall only be considered for Commercial Bid (Part B) opening. Further, agencies not furnishing the documentary evidence as required will not be considered.

3. Pre-qualification of the bidders shall not imply final acceptance of the Commercial Bid. The agency may be rejected at any point during technical evaluation or during commercial evaluation. The decision in regard to acceptance and / or rejection of any offer in part or full shall be the sole discretion of IISc Bangalore, and the decision in this regard shall be binding on the bidders.

4. The award of contract will be subject to acceptance of the terms and conditions stated in this tender.

5. Any offer which deviates from the vital conditions (as illustrated below) of the tender is liable to be rejected:
   
   a. Non-submission of complete offers.
   
   b. Receipt of bids after due date and time and or by email / fax (unless specified otherwise).
   
   c. Receipt of bids in open conditions.

6. In case any BIDDER is silent on any clauses mentioned in these tender documents, IISc Bangalore shall consider that the BIDDER had accepted the clauses as of the tender and no further claim will be entertained. Further if the BIDDER is silent or does not give detail justification of their claim regarding those mentioned in technical specifications, IISc Bangalore reserves the full right to reject the tender due to non-compliance without any further discussion.

7. No revision in the terms and conditions quoted in the offer will be entertained after the last date and time fixed for receipt of tenders.

8. Lowest bid will be calculated based on the total price of all items tendered for Basic equipment along with accessories selected for installation, operation, preprocessing and post processing, optional items, recommended spares, warranty, annual maintenance contract.

E) Pre-requisites:

The bidder will provide the prerequisite installation requirement of the equipment along with the technical bid.

F) Warranty:

The complete system is to be under warranty period of minimum 3 years (yearwise breakup value should be shown in the commercial bid) including free supply of consumables, spare parts and data analysis software from the date of functional installation. If the instrument is found to be defective, it has to be replaced or rectified at the cost of the bidder within 30 days from the date of receipt of written communications from IISc, Bangalore. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.

G) Annual Maintenance Contract:

An annual maintenance contract for a period of at least 3 years post warranty should be provided on completion of warranty period. The AMC costs will not be considered towards classifying the domestic nature (class 1 or class 2) of the vendor (see eligibility criteria in section 2). In the bid AMC charge should also be provided.

H) Purchase Order:

1. The order will be placed on the bidder whose bid is accepted by IISc based on the terms & conditions mentioned in the tender document.
2. The quantity of the items in tender is only indicative. IISc, Bangalore reserves the right to increase /decrease the quantity of the items depending on the requirement.

3. If the quality of the product and service provided is not found satisfactory, IISc, Bangalore reserves the right to cancel or amend the contract.

I) Delivery, Installation and Training:

The bidder shall provide the lead time to delivery, installation and made functional at IISc, Bangalore from the date of receipt of purchase order. The system should be delivered, installed and made functional within 180 days from the date of receipt of purchase order. The supply of the items will be considered as effected only on satisfactory installation and inspection of the system and inspection of all the items and features/capabilities tested by the IISc, Bangalore. After successful installation and inspection, the date of taking over of entire system by the IISc, Bangalore shall be taken as the start of the warranty period. No partial shipment is allowed. The bidder should also arrange for technical training to the local facility technologists and users.

J) Payment Terms:

100% payments (except AMC) will be released after completion delivery and satisfactory installation subject to TDS as per rules. AMC cost (if ordered), after completion of warranty period) will be released on half-yearly basis at the end of each six months subject to satisfactory services. The AMC will be comprehensive. Price basis must be on FOR-IISc Bangalore basis only. As per GFR no advance payment can be made to domestic vendors, unless an equal amount of bank guarantee is provided.

K) Statutory Variation:

Any statutory increase in the taxes and duties subsequent to bidder’s offer, if it takes place within the original contractual delivery date, will be borne by IISc, Bangalore subject to the claim being supported by documentary evidence. However, if any decrease takes place the advantage will have to be passed on to IISc, Bangalore.

L) Disputes and Jurisdiction:

Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Bangalore, India.

M) General:

1. All amendments, time extension, clarifications etc., within the period of submission of the tender will be communicated electronically. No extension in the bid due date/time shall be considered on account of delay in receipt of any document(s) by mail.

2. The bidder may furnish any additional information, which is necessary to establish capabilities to successfully complete the envisaged work. It is however, advised not to furnish superfluous information.

3. The bidder may visit the installation site before submission of tender, with prior intimation.

4. Any information furnished by the bidder found to be incorrect, either immediately or at a later date, would render the bidder liable to be debarred from tendering/taking up of work in IISc, Bangalore.
# Section 4 – Technical Specifications

## A. Technical Specifications of the Clean Room Facility

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Technical Spec</th>
<th>Details</th>
<th>Essential/Non-essential</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Classification of Cleanroom</td>
<td>Class 10,000 / ISO 7</td>
<td>Essential</td>
</tr>
<tr>
<td>1.1</td>
<td>Desired Operating Temperature</td>
<td>22 +/- 2°C</td>
<td>Essential</td>
</tr>
<tr>
<td>1.2</td>
<td>Desired Relative Humidity</td>
<td>50 +/- 5%</td>
<td>Essential</td>
</tr>
<tr>
<td>1.3</td>
<td>Air re-circulation System</td>
<td>Yes</td>
<td>Essential</td>
</tr>
<tr>
<td>1.4</td>
<td>Filtration level</td>
<td>Details needs to be provided. HEPA filter</td>
<td>Essential</td>
</tr>
<tr>
<td>1.5</td>
<td>Floor to False Ceiling height</td>
<td>2.74 m</td>
<td>Essential</td>
</tr>
<tr>
<td>1.6</td>
<td>Gowning Room</td>
<td>As required. Class must be ISO 8 or 7</td>
<td>Essential</td>
</tr>
<tr>
<td>2</td>
<td>Classification of Cleanroom</td>
<td>Class 1000 / ISO 6</td>
<td>Essential</td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
<td>Requirement</td>
<td>Note</td>
</tr>
<tr>
<td>---------</td>
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</tr>
<tr>
<td>2.1</td>
<td>Desired Operating Temperature</td>
<td>20 +/- 2°C Celsius</td>
<td>Essential</td>
</tr>
<tr>
<td>2.2</td>
<td>Desired Relative Humidity</td>
<td>50 +/- 5%</td>
<td>Essential</td>
</tr>
<tr>
<td>2.3</td>
<td>Air recirculation System</td>
<td>Yes</td>
<td>Essential</td>
</tr>
<tr>
<td>2.4</td>
<td>Floor to False Ceiling height</td>
<td>2.74 m</td>
<td>Essential</td>
</tr>
<tr>
<td>2.5</td>
<td>Gowning Room</td>
<td>As required. ISO 8 or 7</td>
<td>Essential</td>
</tr>
<tr>
<td>3.1</td>
<td>Classification of Softwall Cleanroom</td>
<td>Class 100 / ISO 5</td>
<td>Essential</td>
</tr>
<tr>
<td>3.2</td>
<td>Desired Relative Humidity</td>
<td>50 +/- 5%</td>
<td>Essential</td>
</tr>
<tr>
<td>3.3</td>
<td>Air recirculation System</td>
<td>Yes</td>
<td>Essential</td>
</tr>
<tr>
<td>3.4</td>
<td>Floor to False Ceiling height</td>
<td>2.74 m</td>
<td>Essential or can be discussed</td>
</tr>
<tr>
<td>3.5</td>
<td>Gowning Room</td>
<td>Airlock. / ISO 5</td>
<td>Essential</td>
</tr>
</tbody>
</table>
A detailed list of the works is as mentioned here.

<table>
<thead>
<tr>
<th>Standard Works / Items</th>
<th>Essential/Non-essential</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Room Preparatory Works</strong></td>
<td><strong>Essential</strong></td>
</tr>
<tr>
<td>• Surface Treatment in the internal walls to prevent seepage etc</td>
<td></td>
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<tr>
<td>• Waterproofing: Arresting the water seepage by application of water-proofing compound to avoid further wear down of the civil walls.</td>
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<tr>
<td>• Removal of all existing sockets, lights, switches, fans.</td>
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<tr>
<td>• Civil works: As required.</td>
<td></td>
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<tr>
<td>• Plumbing Works: Raw water pipeline (PVC) and drain line shall be laid for Safety shower station. Raw water pipeline and drain line will be laid for DI water plant (PVC) inside the central facility laboratory. Pipelines for chiller facility etc must be also laid. Drain line (PVC) for wet chemical station drain will be laid.</td>
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<tr>
<th><strong>Electrical Arrangement</strong></th>
<th><strong>Essential: Quantity and type should be provided as per requirement</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Raw Power 16/6 A socket and switches – As per requirement</td>
<td></td>
</tr>
<tr>
<td>• Raw Power/UPS 6A socket and switches – As per requirement</td>
<td></td>
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<tr>
<td>• Industrial ports 32A – As per requirement</td>
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</tr>
<tr>
<td>• 4.0 Sq.mm wiring for industrial ports.</td>
<td></td>
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<tr>
<td>• 2.5 Sq.mm wiring for sockets.</td>
<td></td>
</tr>
<tr>
<td>• 1.5 Sq.mm wiring for light fixtures.</td>
<td></td>
</tr>
<tr>
<td>• Class 10K Cleanroom compatible LED Light Fixtures with wishbone arrangement - Conforms to IS10322/Part 5/Sec.1:1987.</td>
<td></td>
</tr>
<tr>
<td>• Class 1000 and 100 Cleanroom compatible light fixtures.</td>
<td></td>
</tr>
<tr>
<td>• Conduit pipes and cable trays for laying wire.</td>
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<tr>
<td>• GI Cable tray 100 x 100 &amp; 50 x 50 mm.</td>
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**Earthing for Equipment** - Copper earthing strip 25x6mm with earthing pit.
## Floor Covering + Cove (floor to wall joints)

**Epoxy Floor**  
All surface should be primed by brush or roller using Primer at a rate of 150-250 grams per Sqm. Allow the primer to dry for 4 to 6 hours till it is touch dry. Mix Primer Component A & B thoroughly and apply. Self Leveling Epoxy Flooring (3mm) EPU with necessary floor preparation works. All the joints craks will be filled with silica sand, One 1mm water base Primer Coat, 1mm Screed and Top Coat. RAL Color Customer choice. Static Earthing with copper strip and pit.

## Cleanroom Shell

- **Double skin modular wall panel 100mm thick with PUF as infill, material density 40Kg/Cu.m with both side powder coated GI of 0.8mm thickness including bottom track and silicone sealant.**
- **Double skin modular ceiling panel 50 mm thick with PUF as infill, material density 40Kg/Cu.m with both side powder coated GI of 0.8mm thickness including grid and silicone sealant.**
- **Double skin modular wall panel 30 mm thick with PUF as infill, material density 40Kg/Cu.m with both side powder coated GI of 0.8mm thickness including grid and silicone sealant.**

**Vision Panels**
- Double Glazed Toughened Glass 5 MM Thk, View Panel Flush From Both Side of Wall Fixed With 3M or Equivalent Make Both Side
- Adhesive Tape Over G.I. Polyester Power Coated Frame Width to Match Wall Thickness With Silica Gel Desiccant Arrangement and
- Made Air Tight With Sealant Including G.I. Polyester Power Coate Wall Panel Below and Above it in Specified Wall Module

**Cleanroom Door** with paper honeycomb infill, double glazed vision panel, SS 304 handles, soft door closer, lock a pair of keys.
- Gowning/Donning Room – 1.2x 2.1m – Hinged Type
- Class 10K Cleanroom – 1.5x2.1m – Sliding Type
- Class 1K Air Lock Cleanroom – 1.5x2.1m – Sliding type
- Class 1K Air Lock Cleanroom – 1.5x2.1m – Hinged Type
- Emergency Exit/Equipment Entry with a panic bar – 1.7x2.1m – hinged type
- External Door – 1.7x2.1m – hinged type.

**METALLIC DOORS**

Clean Room Doors With Shutter 44 MM PUF Insulation of Density 40+2 Kg/m³, 0.8 MM Thick PCGI Panels. Door Frame 1.2 mm Thick

- PCGI. Double Glazed Toughened Glass 5 MM Thick, Door closer of Dormakaba or Dorset Std Ram Make, 300 mm Hight SS kick Plate,
- Dorset Make SS Ball Bearing Hinges, Dorset Make SS ‘D’ Type One Side Handle, SS 304 Push Plate, Dorset Make Dead Lock Both Side

**Essential**

<table>
<thead>
<tr>
<th>Cleanroom Shell</th>
<th>10 Nos</th>
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<tbody>
<tr>
<td>Vision Panels</td>
<td></td>
</tr>
<tr>
<td>Cleanroom Door</td>
<td></td>
</tr>
<tr>
<td>METALLIC DOORS</td>
<td></td>
</tr>
</tbody>
</table>
Aluminium coving for ceiling to wall joints.
Extruded aluminium powder coated external corner profile.
Aluminium powder coated 3 dimensional internal and external coves.

Air Shower – As required
This air shower shall be ISO 5 compatible for two-person entry/exit option complete with interlocking doors, control panel, emergency stop button, LED light fixture and in-built motor-blower assembly, nozzles, indicator lights to signal the end of cleaning cycle.
MOC: GI epoxy polyester powder coated to 80micron thickness.

Air Management System

AHU-01
Floor Mounted type AHU-01 for Class 10,000 Cleanroom – 7000 CFM.
Electric Strip Heater – 5 kW
Dx type 12 TR Condensing Unit with R410 refrigerant and scroll compressor (6TR x 3 Nos).
Details of AHU
Make of Coil, materials, Tube diameter, No of Fins must be provided.
This package includes copper piping, insulation, drain pan in SS 304 construction with nitrile rubber insulation, flange type washable fine filter with F7 grade and GSS frame. Motor will be non-flame proof type and fan will be non-spark proof type.

AHU-02
Floor Mounted type AHU-02 for Class 1000 Cleanroom – 15000 CFM.
Electric Strip Heater – 2.5 kW

Essential: Total CFM, Occupant CFM, machine CFM details must be provided
**Dx type 12 TR Condensing Unit with R410 refrigerant and scroll compressor (3TR x 3 Nos ).**

This package includes copper piping, insulation, drain pan in SS 304 construction with nitrile rubber insulation, flange type washable fine filter with F7 grade and GSS frame. Motor will be non-flame proof type and fan will be non-spark proof type.

**Details of AHU**

- **Make of Coil**, materials, Tube diameter, No of Fins must be provided.

**Floor Mounted type AHU-01 for Class 10,000 Cleanroom – 7000 CFM.**

**Electric Strip Heater** – 1 kW

**Dx type 12 TR Condensing Unit with R410 refrigerant and scroll compressor (6TR x 3 Nos ).**

This package includes copper piping, insulation, drain pan in SS 304 construction with nitrile rubber insulation, flange type washable fine filter with F7 grade and GSS frame. Motor will be non-flame proof type and fan will be non-spark proof type.

**Details of AHU**

- **Make of Coil**, materials, Tube diameter, No of Fins must be provided.

**Air Distribution System**

- GI sheet metal ducting complete with sealant, MS angle flanges, elbows, blind flanges etc. 24G, 22G, 20G, 18G thickness.

- Supply air duct - Thermal Insulation with 19mm thick class ‘O’ cross-linked Polyethylene/polyolefin insulation with suitable adhesive and aluminium foil meeting Class O as per BS 476 Part 7. **All details must be provided with supporting documents**

- Return air duct – 13mm thick class ‘O’ cross-linked Polyethylene/polyolefin insulation with suitable adhesive and aluminium foil meeting Class O as per BS 476 Part 7. **All details must be provided with supporting documents**

**HEPA filter housing**

- Terminal Boxes for mounting HEPA filter in extruded Aluminium construction

**Gel seal arrangement** with all accessories like diffusion sheet, minipleat H14 Filter with 0.3 Micron down to 99.97% Efficiency with Gel, dome nut, HEPA filters of following sizes. Boxes shall be provided with Top connection and complete with room operated volume control dampers.

**Fire Damper**

- Fusible link (2 Nos) type fire control damper in 18 G GI construction rated for 90 minutes. **All details must be provided with supporting documents**

**Electrical Panel for AHUs**

- Electrical panel with RYB indicators, the panel shall consist incomer MCCB, contactors, DOL/Star-Delta starters, VFD, relays, push-button (ON/OFF), indicating lamps etc. for AHU motor and heaters.

Panel shall have control logic for following:

1. Heater Operation
2. Control Valve Modulation.
Panel for AHU with VFD shall be totally enclosed with hinged doors, neoprene gasket and suitable locking arrangement.

**Automation**

SITC of duct mounted combined T&Rh sensor.

Temperature and Humidity Display unit with PLC and Touch Screen display). This will give AHU and Condensing unit status as well as have programming capability.

Gas Sensors for Oxygen or Nitrogen inside the Cleanroom areas.

Motorised Dampers for Bleed and Fresh air to operate the AHU in case of decrease in Oxygen concentration.

**Laboratory Furniture**

IS 304 grade (Stainless Steel 304 grade) cleanroom lab tables.
Dimension: 1524 x 762 x 900 mm.
Quantity: As per requirement.

**Dynamic Pass-Through Box (with HEPA filter) and inter-locked doors.**

IS 304 grade (Stainless Steel 304 grade) cleanroom lab tables.
Dimension: 575 x 575x 575 mm (internal dimension – work zone).
Quantity: 01 Nos.

**Cleanroom Garment Cabinets with HEPA filters.**

MOC: GI powder coated cabinet with shutters. Dimension: 1000 x 508 x 2150 mm (external)
Quantity: 01 Nos.

**Raiser Panels**

Panels are made up of 80 mm thick with PUF insulation, with both sides coated with 60 mic. Thick pre powder coated GI Sheet. In Built Return Duct and damper connection with the duct, return section will be with Return Grill of 0% deflection.

**Cross-Over Bench**

MOC: IS 304G stainless steel.

**Smoke Detectors with fire alarm panel and hooter.**

Essential: to be installed after discussion with safety department of IISc as per requirement

Essential
<table>
<thead>
<tr>
<th><strong>Wet Chemical Station</strong></th>
<th><strong>Essential</strong></th>
</tr>
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| MOC: Natural White Polypropylene (non-metal ).  
Dimension: 1600 x 800 x 2280 mm.  
Quantity: 01 Nos. |              |

<table>
<thead>
<tr>
<th><strong>Access Ramp for Equipment / Machine entry and exit.</strong></th>
<th><strong>Essential: to be installed after discussion with CCMD office as per their requirement</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The access ramp will be constructed using Reinforced cement concrete with heavy-duty MS railings on either side. This ramp will also comprise a covered enclosure with double leaf door to avoid direct exposure of the cleanroom to the surrounding.</td>
<td></td>
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</tbody>
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<tr>
<th><strong>RCC pedestals for AHUs and ODUs</strong></th>
<th><strong>Essential</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Galvanized Sheet Shelter for AHUs and ODUs Size: 2.5W x 18L x 3H m.</td>
<td></td>
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<thead>
<tr>
<th><strong>CCTV Camera Setup</strong></th>
<th><strong>As per requirement after discussion with IISc OLSEH team and security</strong></th>
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<tbody>
<tr>
<td>Night vision HD cameras with necessary cabling and hardware complete with a 40 inch display fixed on the LHS wall of the passage leading to the cleanroom.</td>
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<thead>
<tr>
<th><strong>Safety Shower and Eye Wash Station with a drain pan – to be fixed inside the cleanroom.</strong></th>
<th><strong>As per requirement after discussion with IISc OLSEH team</strong></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>POSTERS &amp; LABELS</strong></th>
<th><strong>Essential</strong></th>
</tr>
</thead>
</table>
| Waterproof Printed vinyl  
1. SOPs.  
2. Gowning Procedure  
3. Restricted Materials  
4. Lab Name on all doors of the cleanroom.  
5. Labels for Electrical Sockets,  
6. Labels for Lights, Filters etc. | |

<table>
<thead>
<tr>
<th><strong>Testing, Commissioning and validation below test as per ISO-14644-3</strong></th>
<th><strong>Essential</strong></th>
</tr>
</thead>
</table>
| 1. AHU commisioning  
2. Particle count  
3. Air balancing  
4. Temperature and RH Measurements with data loggers for 24 hrs (or more)  
5. Qualification Documentation and Execution | |

<table>
<thead>
<tr>
<th><strong>Volume controlled dampers</strong></th>
<th><strong>Essential</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply, installation and testing of Zero Leakage Duct Dampers Opposed 20G GI blade aerofoil construction of extruded Al. for SA &amp; RA duct branches Housing &amp; blades both should be of Al. construction. Volume control damper with extended shaft, Frame: 24 G 3 Sqmtr</td>
<td></td>
</tr>
</tbody>
</table>
B. Training and demonstration
- Complete installation of clean room needs to be provided
- Training for users by the company personnel present ‘on site’ immediately after the installation.
- All pre-installation requirements to have the system installed in ideal room conditions should be included in the quote.

C. Others
- The system with similar specifications must submit references from previous installations.
- The names and contact addresses of the referees must be submitted with the proposal, so the purchase committee can contact them independently.
- The system should require minimal maintenance.
- Mention the recommended preventive maintenance schedule for the system. Any accessories needed for periodic preventive maintenance for 3 years, should be mentioned in separately the itemized quote.
- Can the preventive maintenance be done by a trained on-site engineer or requires a specialist from the OEM? If the latter, please provide cost of a 3 year AMC with required kit/consumables.
- CE Certification must be provided for the proposed system. The CE certificate should be provided with the Unit.
- Operation Manual to be given after installation and acceptance of equipment
- The system should be supported by a trained local representative and should have a minimum of 72 hour window of response.
Section 5 - Technical Bid

The technical bid should furnish all requirements of the tender along with all annexures in this section and submitted to

The Chairperson,
Attn: Dr. Tapajyoti Das Gupta
Instrumentation and Applied Physics,
Indian Institute of Science
Bangalore – 560012, India
Annexure-1:
Details of the Bidder
The bidder must provide the following mandatory information & attach supporting documents wherever mentioned:

Details of the Bidder

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

Signature of the Bidder

Name  
Designation, Seal  
Date:
Annexure-2: 
Declaration regarding experience

To,
The Chairperson,
Instrumentation and Applied Physics,
Indian Institute of Science
Bangalore – 560012, India

Ref: Tender No: XXXXXXXX
Dated: XXXXX

Supply and installation of clean room facility in IAP IISC Bangalore

Sir,

I’ve 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 cleanroom/HVAC systems.

(Signature of the Bidder)
Printed Name
Designation, Seal Date:
Annexure-3:

Declaration regarding track record

To,
The Chairperson,  
Instrumentation and Applied Physics,  
Indian Institute of Science,  
Bangalore – 560012, India

Ref: Tender No: XXXXXXX  
Dated: XXXXX

Supply and installation of clean room facility in IAP IISC Bangalore

Sir,
I’ve 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’m competent officer in my company / firm to make this declaration.

Or

I declare the following

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Country in which the company is Debarred /blacklisted / case is Pending</th>
<th>Blacklisted / debarred by Government / Semi Government/Organizations /Institutions</th>
<th>Reason</th>
<th>Since when and for how long</th>
</tr>
</thead>
</table>

(Yours faithfully)

(Signature of the Bidder)

Name  
Designation, Seal  
Date:
Annexure – 4:

Declaration for acceptance of terms and conditions

To,
The Chairperson,
Instrumentation and Applied Physics,
Indian Institute of Science
Bangalore – 560012, India

Ref: Tender No: XXXXXX
Dated: XXXX

Supply and installation of clean room facility in IAP IISC Bangalore

Sir,

I’ve carefully gone through the Terms & Conditions as mentioned 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’m an authorized signatory of my company and am, therefore, competent to make this declaration.

Yours faithfully,

(Signature of the Bidder)
Name
Designation, Seal

Date:
Annexure – 5:
Details of items quoted:

a. Company Name
b. Product Name
c. Part / Catalogue number
d. Product description / main features
e. Detailed technical specifications
f. Remarks

Instructions to bidders:
1. Bidder should provide technical specifications of the quoted product/s in detail.
2. Bidder should attach product brochures along with technical bid.
3. Bidders should clearly indicate compliance or non-compliance of the technical specifications provided in the tender document.

Section 6 – Commercial Bid

The commercial bid should be furnished with all requirements of the tender with supporting documents as mentioned under:

<table>
<thead>
<tr>
<th>S.No</th>
<th>Description</th>
<th>Cat. Number</th>
<th>Quantity</th>
<th>Unit Price</th>
<th>Sub total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.a</td>
<td>Essential items noted in the technical specification</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.b</td>
<td>... (details of essential items)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.c</td>
<td>...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


2. Optional items noted in the technical specification

2.a ... (details of essential items)

2.b ... 

3. Accessories for operation and installation

4. All Consumables, spares and software to be supplied locally

5. Warranty (1 year)

6. AMC 2 years beyond warranty

7. Cost of Insurance and Airfreight

8. CIP/CIF IISc, Bengaluru

Any additional items

<table>
<thead>
<tr>
<th>S.No</th>
<th>Description</th>
<th>Cat. Number</th>
<th>Quantity</th>
<th>Unit Price</th>
<th>Sub total</th>
</tr>
</thead>
</table>

Addressed to

The Chairperson,
Attn: Dr. Tapajyoti Das Gupta
Instrumentation and Applied Physics,
Indian Institute of Science
Bangalore – 560012, India
Section 7 – Checklist

(This should be enclosed with technical bid- Part A)
The following items must be checked before the Bid is submitted:

1. Sealed Envelope “A”: Technical Bid
   1. Section 5- 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 regarding clean track record
      d. Annexure 4: Declaration for acceptance of terms and conditions
      e. Annexure 5: Details of items quoted
   2. Copy of this tender document duly signed by the authorized signatory on every page and sealed.

2. Sealed Envelop “B”: Commercial Bid

Section 6: Commercial Bid

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