

INDIAN INSTITUTE OF TECHNOLOGY GANDHINAGAR

Ground Floor, Block "A", Vishwakarma Government Engineering College Campus

Visat-Gandhinagar Highway, Chandkheda, Ahmedabad-382424. Tel/Fax No. +91 79 2397 2583

Date: 14th September, 2012

Tender No.: IITGN/ME/LTA/2012-13/0216

Last date: 4th October, 2012 on/before 05:00 PM

SUB: Invitation of sealed tender for Supply, Installation, Commissioning and Testing of Industrial Ventilation System” as per specifications shown in the Annexure - I.

Dear Sir,

Indian Institute of Technology Gandhinagar invites sealed tender for “**Supply, Installation, Commissioning and Testing of Industrial Ventilation System”**” as per specifications shown in the Annexure - I on the following terms & conditions:

1. If the supplier/firm is manufacturer/authorized dealer/sole distributor of any item, the Certificate to this effect should be attached.

2. The tender documents are to be in two parts as **Technical Offer and as Financial offer:**

- a.) The Technical offer should include the detailed specifications of main equipment/item and its accessories. All items should be numbered as numbered for each instrument in the **Annexure-I.**
- b.) The financial offer should include the cost of main equipment/item and its accessories numbered as in (a). If there is any separate cost for installation etc. that should be quoted separately. The total cost should be quoted in words as well as figures (typed or printed). Amendment should be avoided. Amendments, if any, should be duly initialed, failing which the offers are liable to be rejected.
- c.) The two parts of the offer should be placed in separate sealed envelopes clearly marked “**Technical Offer**” & “**Financial Offer**”. These two envelopes along with envelope for EMD and Tender Fee marked “**Tender Fee & EMD**” (total three envelopes) must be enclosed in one bigger envelope duly sealed and super scribed with tender number, name of the instrument/item and tender due date must be forwarded to the undersigned so as to reach him on or before the due date.

Incomplete tenders, amendments and additions to tender after opening or late tenders are liable to be ignored and rejected.

3. Fax and Email quotation are not acceptable.

4. Quotations should be valid for **120 days** from the tender due date. The quotation should clearly indicate the period of delivery, warranty terms etc. A minimum of one year warranty is required from the date of commissioning.

5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. The Suppliers should submit copies of suitable documents in support of their reputation, credentials and past performance.

6. The quotations should be given for the items in the same order as in the tender document.

7. The quantity shown against each item is approximate and may vary as per demand of the Institute at the time of placing order.

8. In the event of any dispute or difference(s) between the vendee IIT Gandhinagar and the vendor(s) arising out of non-supply of material or supplies not found according to the specifications or any other cause whatsoever relating to the supply or purchase order before or after the supply has been executed, shall be referred to the concerned authority of IIT Gandhinagar who may decide the matter himself or may appoint arbitrator(s) under the arbitration and conciliation Act 1996. The decision of the arbitrator shall be final and binding on both the parties.

9. The place of arbitration and the language to be used in arbitral proceedings shall be decided by the arbitrator.

10. All disputes shall be subject to Gandhinagar Jurisdiction only.

11. I.I.T. Gandhinagar has the right to accept the whole or any parts of the Tender or portion of the quantity offered or reject it in full without assigning any reason.

12. The Tender/Bid will be open on **05.10.2012** at **03:00 PM**.

- a.) The suppliers or their authorized representative may also be present during the opening of the Technical offer, if they desire so, at their own expenses.
- b) Only those financial offers will be opened whose technical offers are found suitable by the expert committee appointed for the concerned instrument..
- c) No separate information shall be given to individual bidders. In incomparable situation, the committee may negotiate price with the qualified bidder quoting the lowest price before awarding the offer.

16. In case the supplier requires any elucidation regarding the tender documents, they are requested to contact to the Assistant Registrar (M.M.) through e-mail, purchase@iitgn.ac.in on or before **4:00 PM, 04.10.2012**.

17. A demand draft of **Rs. 1,000/- (Rupees One Thousand Only)** towards non-refundable tender fee and a demand draft of **Rs. 30,000/- (Rupees Thirty Thousand Only)** at the rate of 2% of the tender value towards refundable EMD from a Nationalized bank in favour of "IIT Gandhinagar" payable at Ahmedabad placed in a separate envelope marked "**Tender Fee & EMD**" should accompany tender bid documents. Both the demand drafts should be valid for 180 days. Without the Tender Fee and EMD the bid will not be considered.

The EMD of the successful bidder will be returned to them without any interest after completing the successful installation. The earnest money of unsuccessful bidders will be returned to them without any interest within thirty (30) working days after awarding the offer.

18. All tender documents should have to be forwarded through speed post or registered post, courier to the following address so as to reach the following address on/before **05:00PM,**
04.10.2012.

Assistant Registrar (M.M.)

Indian Institute of Technology Gandhinagar,
Vishwakarma Government Engineering College Campus,
Ground Floor, Block " A " ,
Visat-Gandhinagar Highway, Chandkheda
Ahmedabad 382424
Tele/ Fax No. +91 79 2397 2583

Other Terms & Conditions:

1. Pre – Qualification Criteria:

- a. Bidders should be the manufacturer / authorized dealer. Letter of Authorization from Manufacturer on the same and specific to the tender should be enclosed.
- b. An undertaking from the original Manufacturer is required stating that they would facilitate the bidder on a regular basis with technology/product updates and extend support for the warranty as well.

2. Performance Guarantee Bond:

- a. Performance Guarantee Bond is mandatory.
- b. Successful supplier/ firm should submit performance guarantee as prescribed and to be received in the office of Assistant Registrar, Materials Management Division before the date of commencement of supply or 30 days from the date of acceptance of the purchase order, whichever is earlier. The performance guarantee bond to be furnished in the form of Bank Guarantee as per given proforma of the tender documents, for an amount covering 10% of the value of quantity of material on landed cost basis.
- c. The Performance Guarantee Should be established in favour of “ IIT Gandhinagar” through any Nationalized Bank Situated at Ahmedabad/Gandhinagar with a clause to enforce the same on their local branch at Ahmedabad.
- d. Validity of the performance guarantee bond shall be for a period of five years from the date of issue of installation & commissioning.

3. Delivery: The Equipment should be delivered and installed within the period as specified in the purchase order and be ready for use within one week of delivery unless otherwise prescribed.

4. Penalty: If the suppliers fails to deliver and place any or all the Equipment or perform the service by the specified date, penalty at the rate of 1% per week of the total order value subject to the maximum of 10% of total order value will be deducted.

5. Training: Suppliers need to provide adequate training at IIT Gandhinagar to the nominated person of IIT Gandhinagar at their cost. IIT Gandhinagar will not bear any training or living expenditure in this regard.

6. Installation & Warranty Declaration: Suppliers must give the comprehensive onsite warranty as required from the date of successful installation of Equipment against any manufacturing defects. In the installation report the model number of instrument and all spares parts numbers should be in the line of purchase order. And suppliers must be written in the warranty declaration that “everything to be supplied by us hereunder shall be free from all defects and faults in material, workmanship and shall be of the highest quality and material of

the type ordered, shall be in full conformity with the specification and shall be complete enough to carry out the experiments, as specified in the tender document.”

Any deviation in the material and the specifications from the accepted terms may liable to be rejected and the suppliers need to supply all the goods in the specified form to the satisfaction / specifications specified in the Purchase order and demonstrate at the their own cost.

Sd/-
Assistant Registrar (M.M)

PARTICULARS TO BE FILLED BY THE SUPPLIER

1. Name of the Supplier:
2. Complete Address of the Supplier:
3. Availability for demonstration of instruments at IIT Gandhinagar: Yes / No [Please ✓]
4. Cost of the Tender enclosed: Yes/No [Please ✓] If yes,
 - a.) Name of the Bank _____
 - b.) Amount (₹) _____
 - c.) Demand Draft No. _____
5. Earnest Money Deposit enclosed: Yes / No [Please ✓] if Yes,
 - a.) Name of the Bank _____
 - b.) Amount (₹) _____
 - c.) Demand Draft No. _____
 - d.) Last Validity date of the enclosed DD _____
6. Communication details of the concerned contact person to whom all references shall be made regarding this tender enquiry. [NOTE: Any changes after submission of Tender documents kindly update IIT Gandhinagar]
 - a.) Full Name :
 - b.) Complete Postal Address:
 - c.) Telephone No.:
 - d.) Fax No.:
 - e.) Mobile No.:
 - f.) E-mail:
 - g.) Website Address:

PARTICULARS FOR PERFORMANCE GUARANTEE BOND

(To be typed on Non-judicial stamp paper of the value of Indian Rupees of Two Hundred)
(TO BE ESTABLISHED THROUGH ANY OF THE NATIONALISED BANKS
(WHETHER SITUATED AT AHMEDABAD OR OUTSTATION) WITH A CLAUSE TO
ENFORCE THE SAME ON THEIR LOCAL BRANCH AT AHMEDABAD. BONDS
ISSUED BY CO-OPERATIVE BANKS ARE NOT ACCEPTED.)

To,

The Asst. Registrar (MM),
Indian Institute of Technology Gandhinagar
VGEC Campus, Chandkheda,
Ahmedabad – 382424

LETTER OF GUARANTEE

WHEREAS Indian Institute of Technology Gandhinagar (Buyer) have invited Tenders vide Tender No..... Dt. for purchase of AND WHEREAS the said tender document requires the supplier/firm (seller) whose tender is accepted for the supply of instrument / machinery, etc. in response thereto shall establish an irrevocable Performance Guarantee Bond in favour of “**Indian Institute of Technology Gandhinagar**” in the form of Bank Guarantee for Rs [10% (ten percent) of the purchase value] which will be valid for five years from the date of installation & commissioning, the said Performance Guarantee Bond is to be submitted within 30 (Thirty) days from the date of Acceptance of the Purchase Order.

NOW THIS BANK HEREBY GUARANTEES that in the event of the said supplier/firm (seller) failing to abide by any of the conditions referred to in tender document / purchase order / performance of the instrument / machinery, etc. this Bank shall pay to Indian Institute of Technology Gandhinagar on demand and without protest or demur Rs (Rupees.....).

This Bank further agrees that the decision of Indian Institute of Technology Gandhinagar (Buyer) as to whether the said supplier/firm (Seller) has committed a breach of any of the conditions referred in tender document / purchase order shall be final and binding.

We, (name of the Bank & branch) hereby further agree that the Guarantee herein contained shall not be affected by any change in the constitution of the supplier/firm (Seller) and/ or Indian Institute of Technology Gandhinagar (Buyer).

Notwithstanding anything contained herein:

a. Our liability under this Bank Guarantee shall not exceed Rs.
(Indian Rupees only).

a. This Bank Guarantee shall be valid up to(date) and

c. We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if IIT Gandhinagar serve upon us a written claim or demand on or before(date).

This Bank further agrees that the claims if any, against this Bank Guarantee shall be enforceable at our branch office at situated at

.....
.....
.....

(Address of local branch).

Yours truly,

Signature and seal of the guarantor:

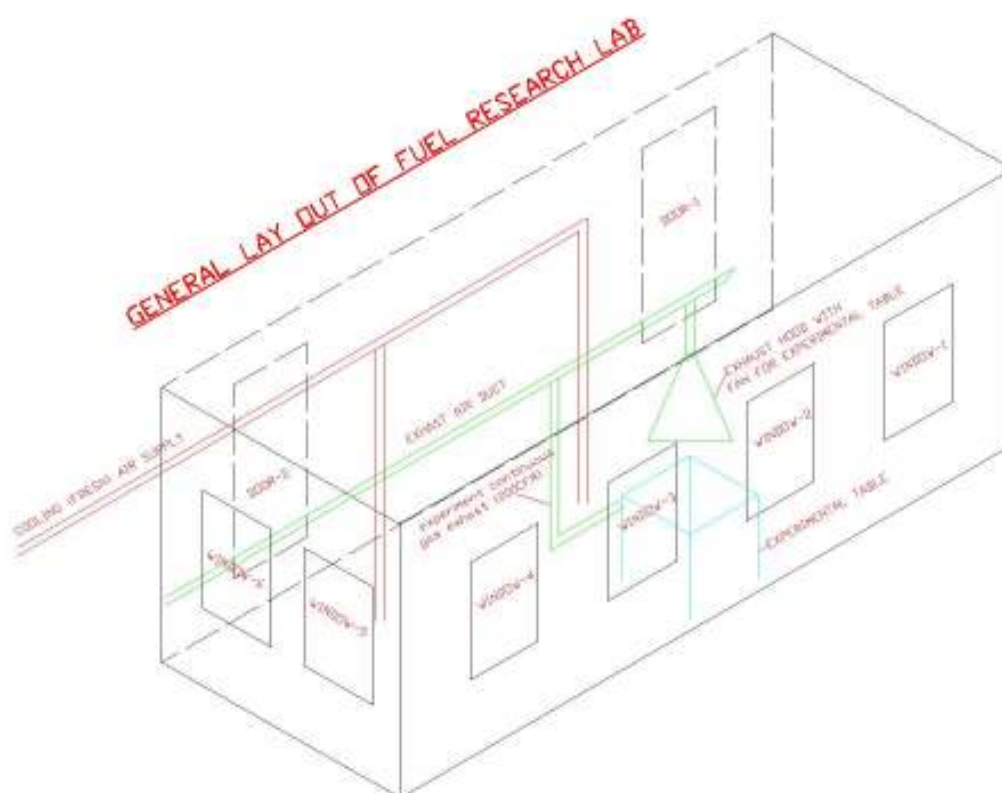
Name of the Bank:

Complete Postal Address:

Date:

Annexure-I

- **Name of the Equipment/Item: Supply, Installation, Commissioning and Testing of “Industrial Ventilation System”**
- **Technical Specifications for Supply, Installation, Commissioning and Testing of “Industrial Ventilation System :-**
 - I. A line sketch of the proposed laboratory with intake, exhaust, doors, lab bench and other major details indicated
 - II. Technical specifications for continuous operation industrial exhaust, industrial fresh air supply and lab bench fume exhaust systems
 - III. Technical Scope of work, terms and conditions, etc.
- I. A line sketch of the proposed laboratory with intake, exhaust, doors, lab bench and other major details indicated (please see below)



II. Technical specifications for continuous operation industrial exhaust, industrial fresh air supply and lab bench fume exhaust systems

1	BASIC DETAILS		
	Details	Required Specifications	Supplier Specifications
	ROOM SIZE	32' X 20' (L X B)640 Sq Ft.	
	HEIGHT	8.85 ft	
	Volume	5664 Ft ³	
	NO. OF DOOR	2	
	NO. OF WINDOW	6	
	LAB BENCH AREA	8' x 6'	
	SUPPLY AIR	5000 CFM with fan having 50mm WG	
	AIR QUANTITY EXHAUST FROM ROOM	2000 CFM Normal and 5000 CFM in case of gas leakage (5/24 VDC signal will be provided when 5000 CFM flow rate is required)	

2	TECHNICAL DATA FOR SUPPLY AIR UNIT		
	Details	Required Specifications	Supplier Specifications
	FAN DETAIL		
	MAKE		
	MODEL		
	AIR HANDLING CAPACITY (CFM)	MIN-2000, MAX-5000 CFM	
	PRESSURE		
	HP		
	TYPE OF DRIVE	DIRECT DRIVE	
	SPEED	Less than 2000 RPM	
	RATING	Less than 3.5 KW	
	POLE		
	PUMP DETAIL		
	PUMP H.P.	Less than 2 HP	
	POLE		
	QTY.		
	PAD DETAIL		
	AREA		
	PAD DEPTH		
	EFFICIENCY	ABOVE 85%	
	AREA		

	PASS		
	FILTER DETAIL		
	MIC - FILTER		
	AHU DIMENSION IN mm		
	LENGTH		
	WIDTH		
	HEIGHT		

3	FILTER		
	Details	Required Specifications	Supplier Specifications
	Filter Type		
	Media Of Filters		
	Pressure Drop Across Filter (with Test method)		
	Efficiency of filters	Above 90%	
	Filter make		

4	FILL DEK SECTION		
	Details	Required Specifications	Supplier Specifications
	Make of Pad		
	Evaporation System		
	Type of Pad		
	Flute Height		
	Depth of Pad		
	Spray system / Piping		
	Air washer sump Eliminator		

5	CASING		
	Details	Required Specifications	Supplier Specifications
	Outer Skin	24 G Pre Coated G.I. or better	
	Inner Skin	24 G Plain G I or better	
	Frame Work		
	Thickness of Insulated Panels		
	Frame Work		
	Fan Motor Base Channel		
	Material of Latches & Hinges	Nylon or better	
	Unit Base		

6	Supply air diffusers / Grills		
	Details	Required Specifications	Supplier Specifications
	Alu. Extruded Powder Coated supply and exhaust air Diffusers/Grills with volume control dampers		

7	DETAIL OF EXHAUST SYSTEM FAN FOR ROOM-		
	Details	Required Specifications	Supplier Specifications
	MAKE	SISW, CENTRIFUGAL FAN	
	FAN MODEL		
	CAPACITY	5000 to 6000 CFM	
	ST.PRESSURE	60 TO 70MM	
	SPEED	1500 - 2000 RPM	
	FAN MOTOR	LESS THAN 5HP	
	DRIVE	DIRECT DRIVE FIRE PROOF	
	RATING AT SHAFT	Approx 2.5 kW	
	POLE		
	CONSTRUCTION		
	FAN CASING		
	IMPELLER B.P.- ALUMINUM		
	IMPELLER BLADE - ALUMINUM		
	IMPELLER F.P. - ALUMINUM		
	SUPPORT STRUCTURE		
	BASE FRAME		
	MOC OF SHAFT		
	PULLEY	B/3 SECTION : 2 NOS.	
	VARIABLE FREQUENCY DRIVE MAKE		
	FRP LINING	ALL CONTACT PART i.e. IMPELLER & AIR PATH OF FAN SHALL HAVE 3mm FRP LINING or better	
	LENTH		
	WIDTH		
	HEIGHT		

8	DETAIL OF FUME EXTRACTION SYSTEM (FOR LAB BENCH) FAN.		
	Details	Required Specifications	Supplier Specifications
	FAN	SISW, CENTRIFUGAL FAN	
	CAPACITY	1000 CFM or better	
	FAN BHP		
	FAN MOTOR		
	DRIVE	DIRECT DRIVE (FIRE PROOF MOTOR)	
	CONSTRUCTION		
	FAN CASING		
	IMPELLER B.P. - ALUMINUM		
	IMPELLER BLADE - ALUMINUM		
	IMPELLER F.P. - ALUMINUM	3mm MS or better suggested	
	SUPPORT STRUCTURE		
	BASE FRAME		
	MOC OF SHAFT		
	VARIABLE FREQUENCY DRIVE	MAKE	
	FRP LINING	ALL CONTACT PART i.e. IMPELLER & AIR PATH OF FAN SHOULD HAVE 3mm or better FRP lining	

9	CASING (LAB BENCH FAN)		
	Details	Required Specifications	Supplier Specifications
	Outer Skin	24 G or better pre-coated GI	
	Inner Skin	24 G or better pre-coated GI	
	Frame Work	Extruded Aluminum Profile with injected PUF (density : 40 +/- 2 Kg./Cu.M) suggested	
	Thickness of Insulated Panels	25mm, CFC Free Puff injected suggested	
	Frame Work	Extruded Aluminum Profile suggested	
	Fan Motor Base Channel	Extruded Al. Channel Base suggested	
	Material of Latches & Hinges	Nylon suggested	

III. Technical Scope of Work

General

1. All necessary arrangements for working at heights above the floor level like scaffolding(rope etc.) shall be arranged by the Vendor. All materials, equipment, tools & tackle, shifting and lifting arrangement and other necessary items required to carry out the work shall be arranged by the Vendor. All other necessary equipment, arrangements like welding machine, gas cutter, welding rods, drill bits, drilling machine, grinder, gas cylinders for gas cutting etc. shall be arranged by the Vendor.
2. The Vendor shall make arrangements to store their tools, equipment etc. in their own tool box having proper locking arrangements. Material required for carrying out the work such as flanges, nuts and bolts, rubber gasket, pipes etc. shall be provided by the Vendor. All the above material shall be of high standards and subjected to the approval of the Engineer In-Charge.

Performance & Testing

The noise and power consumption of the installed units shall be explicitly mentioned by the Vendor in the tender documents, and these will be verified at the time of commissioning. The noise levels should be appropriate for a single human being to work inside the laboratory for 10 hours continuously. Along with the design noise levels, the vendor should also mention the reference industrial standards. These technical test results shall be furnished during commissioning in the presence of the Engineer-in-charge.

Painting:

All painting work shall be done with approved Epoxy paint (minimum two coats).

Installation:

- The duct fabrication & installation shall generally conform to I.S. 655-1963 or suitable IS standard.
- The vendor shall provide and neatly erect all sheet metal work or as may be required to carry out the intent of these specifications and this shall meet with the approval of the Engineer in all its parts and details.
- All necessary allowances and provisions shall be made by the vendor for beams, pipes or other obstructions in the building. Where necessary to avoid beams or other structural work or plumbing or other pipes or conduits the ducts shall be transformed, divided or curved to one side, as approved or directed by the Engineer. Vendors are encouraged to visit the site to get them familiarized with the conditions before submitting their tenders.
- All metal work in dead or furred down spaces shall be erected in time so that no delay or inconvenience is caused to other vendors, contractors, guests and users of the building.

- Ducting over furred ceiling shall be supported from the slab above, or from beams. In no case shall a duct be supported from the ceiling hangers or be permitted to rest on a hung ceiling.
- If a duct cannot be run as decided, the Vendor shall install the duct between the required points by a path approved by the Engineer-in-charge.
- All ducts shall be rigid and shall be adequately supported and braced where required with standing beams, tees or angles of ample size to keep the ducts true to shape and to prevent buckling, vibration or breathing.
- All joints shall be made tight and all interior surfaces shall be smooth. Bends shall be made with radius not less than one-half the width of the duct or with scientifically designed interior curved vanes, as approved. The vanes shall be so spaced that the aspect ratio of each of the individual elbow formed by the vanes will be about five.
- Where metal ducts or sleeves terminate in wood work, brick or masonry openings, and tight joints shall be made by means of closely fitted heavy flanged collars.

Quote must have a compliance report on all the above points.