



# भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

(मानव संसाधन विकास मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्व का एक संस्थान)

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD

DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of H.R.D., Govt. of India)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : purchase@iitism.ac.in || Website : www.iitism.ac.in

No. App Chem- INS-179-19

Date 13.08.2018

## NOTICE INVITING TENDER

### Subject: Supply & Installation of Fume Hood.

Indian Institute of Technology (Indian School of Mines), Dhanbad invites quotations for the following to be supplied and delivered in Applied Chemistry Department.

S No	Full Description of items/ store	Qty	Delivery
1	Supply & Installation of Fume Hood. (Detailed Specification is given in Annexure – I)	06 Nos.	At the Earliest

### Tender Schedule

Particulars	Date & Time
Tender Cost	Rs. 500.00 (Rupees Five Hundred Only)
Bid Security or Earnest money deposit	Rs 20,000.00 (Rupees Twenty Thousand Only)
Last date and time for submission of tenders	03.09.2018 at 1:00 P.M.
Date and time of opening of tenders	03.09.2018 at 4.00 P.M.

1. You are requested to quote your lowest rates for the supply of above items in the attached format for Financial Bid (Annexure – II)
2. You may send your representative in the office of the undersigned at the scheduled date and time of opening of tender.
3. Tender should be submitted in sealed cover only super scribed with Enquiry No. and due date at the following address only:

*The Deputy Registrar (P&S)*

*Indian Institute of Technology (Indian School of Mines),*

*Dhanbad – 826 004 Jharkhand*



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## Terms & Conditions

- 1) The rates should be quoted for each item separately.
- 2) Conditional offer will not be accepted.
- 3) IIT (ISM) does not issue any Form 'C' or 'D' towards sales tax concessional rate. Hence, full rate of GST applicable should be quoted.
- 4) **Tender Cost of Rs. 500/- (nonrefundable) is to be paid by way of Demand Draft drawn in favor of Registrar, IIT(ISM),Dhanbad payable at Dhanbad. Non-submission will lead to rejection of your bid.**
- 5) **Bid Security or Earnest money deposit (EMD):** should be submitted in form of A/c payee demand draft drawn in favor of **Registrar, IIT (ISM) Dhanbad** and payable at any other bank/branch located in Dhanbad.
- 6) **Educational discount**, if any, should be clearly mentioned.
- 7) You are requested to submit your quotation strictly as per the specifications mentioned in the NIT.
- 8) Your tender must be valid for **minimum 90 days** from the date of opening of tender.
- 9) Please mention warranty/ guarantee in your offer clearly. Material/ equipment to be supplied must have minimum warranty/guarantee of **12 months**.
- 10) *Each page in the bid document must be numbered properly* and duly signed & sealed by the bidder on every page of the bid.
- 11) **Performance Bank Guarantee:** Performance Security/Performance Bank Guarantee: Performance Security has to be submitted from the successful bidder. Performance Security should be 10% of the ordered value. Performance Security may be furnished in the form of Bank Guarantee/Demand Draft from any Nationalized Bank only and. Performance security should remain valid for a period of two months beyond the date of completion of all contractual obligations of the successful bidder(s). No interest will be payable by IIT (ISM) Dhanbad on the Performance Security deposited. In case the contractor fails to provide satisfactory service, the Performance Security submitted by the bidder(s) is liable to be forfeited. An undertaking to this is to be submitted
- 12) **The items/ materials shall be required to be delivered at App Chem Department of IIT (ISM) Dhanbad** at the risk and cost of the tenderer.
- 13) Unloading and installation shall be the complete responsibility of the supplier.
- 14) The stores are required to be delivered within 30 days. Late delivery may not be accepted.
- 15) The items offered should be of good quality confirming to BIS standards, wherever applicable.
- 16) **Advance payment is not admissible.** Payment shall normally be made within 3-4 weeks subject to receipt and acceptance & installation (as per Purchase Order Terms) of the ordered materials/items.
- 17) In the event date on which the tender is opened for acceptance is declared to be a holiday, the tenders shall be deemed to remain open for acceptance till the next working day.
- 18) Please send your offer by Regd.Post/ Speed Post/ Courier along with Courier receipt. Tender/ quotation will be received during IIT (ISM) working hours only (i.e. Monday to Friday). *Late or delayed tenders shall be summarily rejected.*
- 19) Any other information that you may like to obtain, you are free to contact IIT (ISM) before submission of tender.
- 20) IIT (ISM) reserves the right to accept and/or to reject any/ all tenders without assigning any reason.

Assistant Registrar



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## Annexure – I

Sr. No.	Specification	Description
1	Dimensions (as specified or better)	Overall Dimensions (with base cabinet): Minimum. 1500 mm W × 900 mm D × 2400 mm H Fume Hood dimensions: Minimum. 1500 mm W × 900 mm D × 1500 mm H Base Cabinet dimensions: Minimum 700 mm W × 600 mm D × 650 mm H Inside Fume Hood working volume: Minimum 1200 mm W × 650 mm D × 1150 mm H Bed size: 1200 mm W × 650 mm D
2	Design basis	Must pass American Design Standard: ASHRAE110-2016 (All tests including "Tracer gas containment test"). and/or European Design Standard: EN-14175- 2003 „Inner Plane Containment test" passed.
3	Design structure	Floor mounted
4	Powder coating	Should be pre-treated with 8 tank chemical processes and powder coated with highly chemical resistant epoxy colors having dry film thickness of 70-80 microns. Should pass all conformity performance tests as per IS standards.
5	Material of construction of superstructure	<ul style="list-style-type: none"> <li>Galvanized Iron (GI) as per IS 277: 2003 standard of minimum 1.0-1.2 mm thickness for all sheet metal.</li> <li>Same panel converted as corner post and panel as single piece.</li> </ul>
6	Front Top Panel	Hinged Top Panel
7	Construction (Interior)	Chemical & Heat Resistant, Fire Retardant, Smooth Finish (Minimum 6 mm thick). ASTM flame spread index 25 or better. Boltless internal structure fixed with premium quality adhesive.
8	Exhaust system	Active kinetic exhaust system (for light, normal & heavy fumes).
9	Airfoil	Aerodynamic design, horizontally fixed airfoil mounted on the worktop made of SS 304 (minimum 1.2 mm thick).
10	Worktop	Chemical resistant splash & spillage proof dished ' <b>Jet Black Granite</b> ' worktop (minimum. 18 mm thick). Skirting of 15 mm from all sides.
11	Sink, Water tap with drain arrangement	Worktop fitted with minimum.100 mm × 200 mm sized, oval shaped sink, sealed with silicon sealant for drainage with water tap on left & right back side of worktop. Sink should be fitted with a trap for waste collection.
12	Sash (Shutter)	Vertical rising sash, counter-balanced with pulley and counter-weight system. Toughened Float Glass sash (4-6 mm thick). Smooth and light sash operation with a minimum openable height of 750 mm.
13	Wet & Dry Service valves	Color-coded valves for fine control (as per DIN 12920 norms). Minimum 4 nos. with SS braided hose with 6 mm internal diameter, capable of withstanding upto 5kgf pressure (2 LHS + 2 RHS) <ul style="list-style-type: none"> <li>2 for Raw water</li> <li>1 for Nitrogen</li> <li>1 for Vacuum</li> </ul>
14	Maintenance ports	<ul style="list-style-type: none"> <li>Openable top panel for easy maintenance of lights and flow control valve</li> <li>Service panel for maintenance of utility valves and tubing.</li> <li>To avoid corrosion, it should not be screwed to the liner.</li> </ul>



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15	Internal nozzles	Brass, powder coated fittings. Taps should be tapered in shape to use with flexible tubing of sizes from 1/4" - 1/2" in diameter.
16	Lighting	Fluorescent/LED light with vapour-proof fitting and of minimum 400 lux intensity at worktop level.
17	Electrical Utilities	Minimum 4 nos. electrical sockets of reputed make (230 V, 6/16 A, 50 Hz), Minimum 4 nos. of reputed make MCBs with blower NO/NC switch with built-in starter & light switch on front fascia. Cables & wires should be of 'Fire Retardant' grade. (2 RHS + 2 LHS)
18	Built-in Starter	The electrical wiring should have built-in starter of reputed make, suitable to blower motor capacity. Starter should not be mounted on the wall and it should be part of the fume hood wiring itself.
19	Cable entering port	Easy access of cables from fume hood to electrical sockets is desired.
20	Chemical Storage Base Cabinet (Ventilated & on castors)	<ol style="list-style-type: none"> <li>1) Completely made from 1 mm thick GI sheet with highly corrosion resistant epoxy powder coating, 60-80 microns thickness.</li> <li>2) Cabinet integral work walls should be of special chemical &amp; heat resistant, smooth finish, easily cleanable panels made out of durable PRL sheets.</li> <li>3) Two exhaust ports connected to the fume hood exhaust system internally.</li> <li>4) One removable horizontal partition to store chemicals.</li> <li>5) PP Trays for chemical storage.</li> <li>6) Cabinets on castors.</li> <li>7) Roller catch for the base cabinet doors.</li> <li>8) Polyamide Hinges from outside of Base Cabinet.</li> </ol> <p>Overall Dimensions: Minimum 700 mm W X 600 mm D X 650 mm H – 2 nos.</p>
21	Apparatus holding grid	A grid made up of Duralumin Powder coated rod (with a minimum diameter of 12.7 mm) to hold the apparatus. It should cover the entire length of the fume hood and should be built-in at fume hood backside. It should be installed at a distance of 150 mm from backside of fume hood.
22	Level adjusting screws	Made of SS Bolts to adjust the fume hood level by $\pm 10$ mm.
23	Exhaust port	Exhaust port that ensures that the fumes will be exhausted smoothly without any turbulence at the exhaust port. Also it should ensure low noise level.
24	Flow control valve	Should be present to regulate airflow.
25	Noise level	< 70db
26	Centrifugal blower with exhaust duct	High-efficiency blower (minimum 1/4 HP) with flexible duct (minimum 200 mm diameter) of minimum 5 m length. <b>Minimum length to be provided and the rate for additional length should be quoted.</b>

\*Vendor must have supplied in earlier instances minimum three working models either at IITs or reputed government laboratories. The purchase order of the same must be submitted with the bid.

\* Technical compliance statement of the quoted equipment with the indented specifications should be submitted with the bid.

\* Claims regarding specifications made in the bid should be supported by printed catalogue or signed declaration from the supplier.

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## Annexure -II

### Format for Financial Bid

NIT No.: App Chem- INS-179-18-19

Date:

Bidders Ref: No.

Date:

GSTIN No.:

**Subject: Supply & Installation of Fume Hood**

Sl. No.	Full Description of Items with (HSN Code/SAC Code)	Qty.	Rate	Amount
			Packing & Forwarding (if any)	
			<b>Total</b>	
			GST	
			Freight (if any)	
			Installation (if any)	
Amount should be in figure as well as word			<b>Grand Total</b>	

#### **Note:**

- 1) All the details must be provided as per prescribed format only
- 2) Prices quoted by the bidders should include GST, HSN Code, SAC Code, duties, livies, transportation cost and insurance costs etc. if any
- 3) All the rates must be quoted in Indian Rupees.