

भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

(मानव संसाधन एवं विकास मंत्रालय, भारत सरकार के अधीन एक राष्ट्रीय महत्त्व का 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@ismdhanbad.ac.in || Website : www.iitism.ac.in

No. Mech-INS-270-18-19

Date: 30 October 2018

NOTICE INVITING TENDER

Subject: NIT No. Mech-INS-270-18-19 for Supply & Installation of Vapour absorption refrigeration test rig.

Indian Institute of Technology (Indian School of Mines), Dhanbad invites tenders/ quotations for **Supply & Installation of Vapour absorption refrigeration test rig.-01 No** in our Mech. Engg. Department. *Particulars of tender cost, earnest money deposit and date and time of submission and opening of tenders are as under:*

S No	Items	Particulars
1.	Tender cost	Rs 1180.00 (Rupees One Thousand One
		Hundred Eighty Only) Pl. see the Terms &
		Condition No. 04
2.	Earnest money deposit	Rs. 20,000.00 (Rupees Twenty Thousand
		Only)
3.	Date and time for submission of tenders	19.11.2018 at 3:00 P.M.
4.	Date and time of opening of tenders	
		19.11.2018 at 4.00 P.M.

Tender document containing following document is available on the websites of https://eprocure.gov.in/cppp & www.iitism.ac.in/tender_page), which may kindly be referred.

- 1. Technical specifications as per Annexure-'I'
- 2. General terms & condition as per Annexure-II
- 3. Particular of Bank Guarantee towards EMD as per Annexure –III
- 4. Compliance Statement as per Annexure –IV
- 5. Financial Bid Annexure V)

Those firms who do not want to quote may please intimate us along with reasons for same as it will help us to update our suppliers list.

Encl: As above



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No. Mech-INS-270-18-19

Annexure-1

Date: 30 October 2018

Specification for Vapor absorption refrigeration system

• Vapor absorption refrigeration system

- Main system components: evaporator, absorber, boiler with bubble pump, condenser.
- o Working medium: Ammonia-water solution.
- Auxiliary gas: Hydrogen.
- Suitable boiler to separate ammonia.
- o Suitable **bubble pump** for transportation in the circuit.
- o Adjustable **heater** at the evaporator to control the cooling load.
- Alternate arrangement for heating the boiler.
- o Piezoelectric **igniter** for gas operation.
- The **load needs to be varied over a wide range**, to monitor the operating of the equipment.
- Electric heater: at least 125 W
- Gas burner
- Evaporator heater: adjustable, at least 50W
- Measuring ranges: temperature: 60 to 150 °C or wider.
- o Digital displays at least for temperature and power.
- o Should have the display of at least the inlet temperatures of

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No. Mech-INS-270-18-19

- Condenser,
- Evaporator,
- Absorber,
- Boiler.
- All <u>necessary accessories</u>, <u>cables</u>, <u>hose</u>, <u>pressure reducer</u>, <u>operating manual</u>, <u>etc.</u> should be provided.
- <u>Computers</u> (2 nos) with below specification should be provided for the recording of data and performance evaluation of the equipment.
 - Desktop and Tower PC
 - Make: Dell/HP/Toshiba
 - **Processor:** 7th Gen. I7-7700.
 - **RAM:** Minimum 8 GB,
 - **Hard disk:** Minimum 500 GB,
 - Windows 8 or higher,
 - LAN connectivity,
 - Suitable UPS,
 - Monitor: 22 inch or larger,
 - Keyboard,
 - Optical mouse
- Thermometer (2 nos) for measuring wet bulb and dry bulb temperature (Range: 10 to 40 °C or wider).
- Anemometer (2 nos, hand held) for the air velocity measurement (Range: 0 to 20 m/s or wider, with maximum 1 m/s accuracy).



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• <u>Hygrometer</u> (1 nos, hand held, with maximum 2% accuracy) for the relative humidity measurement.

- A <u>table</u> (1 nos) of 2.5 feet height (from ground) × 2.5 feet wide (minimum) × 5 feet long (minimum) should be provided for placing the equipment and related accessories.
- <u>Charts</u> (1 nos each): Relevant pressure enthalpy chart, and temperature entropy chart.
- <u>Tool box</u> (1 nos) with at least 4 types of screw drivers, spanner set (consist of at least 7 spanners), hammer, measuring tape (2 types), spirit level, adjustable spanner (2 types), hand saw, at least 3 types of files, pliers, etc.
- It is the seller's responsibility to provide transportation up to the 2nd floor of the department, setup, commissioning, erection, installation, and demonstration of the equipment. *No manpower / logistics support will be provided from the institute* for the above purpose.



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Annexure-II

GENERAL TERMS & CONDITIONS

NIT No- Mech-INS-270-18-19

Sealed tenders under two-bid system are invited from manufacturers/ their authorized dealers/ agents for supply and installation in IIT (ISM) Dhanbad of items specified in *Annexure-1*.

- 1. Offer should be submitted under **TWO-BID** system in two separate sealed covers i.e. "*Techno-commercial bid*" and "*Price bid*".
- 2. a) In a tender, either the Indian agent on behalf of the principle/ OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.
 b) If an agent submit bid on behalf of the principle/ OEM, the same agent shall not submit a bid on behalf of another principle/ OEM in the same tender for the same item/product.
- 3. **Techno-commercial Bid**: should contain the following documents/information:
- 4. **Tender Cost:** Tender cost shall be paid through SB collect only, tender cost payments through other modes viz Cash/DD/MEFT/RTGS etc, shall not be accepted. Tender cost is non-refundable and non-transferable. Venders/contractors/suppliers can pay the Tender Cost through the link: https://www.onlinesbi.com/prelogin/icollecthome.htm?corpID=272342 the receipt of tender cost must be attached with the Tender documents, without receipt tender will be rejected.
- **a.** Earnest Money Deposit (EMD): Should be submitted in form of A/C payee demand draft drawn in favor of Registrar, IIT(ISM) and payable at Dhanbad, Jharkhand.
- **b.** Tenders without payment of tender cost and EMD will not be considered, unless the tenderer is exempt from such payment under Govt. Rules/ Regulations as amended from time to time and claims such exemption along with relevant and valid supporting documents.
- c. All relevant technical specifications/details of offered items, drawings, printed technical leaflets, and commercial details which are necessary to ensure that offer is complete in all respects should be attached with the technical bid documents.
- d. A 'Compliance Statement' along with a certificate and duly signed that the tenderer satisfies the technical requirements given in **Annexure-I**. The said statement should be in a tabular form with the columns: sl. no., (2) technical requirement as per NIT; (3) what is offered by the tenderer; and (4) status of compliance: Complied/Not complied).
- e. IIT(ISM) does not bind itself to offer any explanation to those bidders whose Technical Bids have not been found acceptable by the Evaluation Committee of the Institute.
- 5. Further the following documents have to be furnished by the tenderers:
 - a) Self attested copies of credentials in support of capability to undertake the supply/work.
 - b) Technical literature/catalogue with the detail specification of the material
 - c) Satisfactory performance certificate from their customers for same/similar supply/service must be enclosed along with the technical bid.
 - d) Income tax PAN, Sales tax regn. Nos. GST, & Bank A/c no., name of bank & branch.
- 6. **Price should be quoted on FOR, IIT(ISM) Dhanbad basis**. The packing, forwarding, freight and transit insurance charges, if any must be included in the price and should not be claimed separately. Duties & taxes, if applicable, are to be shown separately clarifying whether those are extra or included in the price. **Price bids of only technically qualified tenderers shall be opened in their presence on a pre-notified date and time**.
- 7. Educational discount, if any, should be clearly mentioned.
- 8. IIT(ISM) is entitled for Excise Duty Exemption under Govt. of India notifications and is registered with DSIR, Govt. of India for this purpose. This may be taken into consideration while quoting minimum possible rate. *Exemption Certificates* can be issued in favour of manufacturers only. It will not be issued any Indian Agent/dealer or distributor at any circumstances. IIT(ISM) will provide only custom duty exemption certificate for availing concessional custom duty. IIT(ISM) will not pay any extra custom duty other than duty exemption certificate.



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- 9. IIT (ISM) does not issue form 'C' or 'D' for concessional Sales tax/VAT. Hence, full rate of sales tax as applicable to educational institutions against the form of certificate should be indicated.
- 10. Warranty: Minimum 01 year from the date of installation and commissioning at the site.
- 11. Validity: Offer must be valid for a period of 180 days from the date of opening of tender
- 12. **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/Demance 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.
- 13. **Delivery Period and Liquidated Damage**: The ordered materials/work complete in all respects are required to be delivered and installed within the period stipulated in the purchase order failing which liquidated damages of 1% per week for the delayed period subject to maximum of 5% of the total basic value of the order shall be deducted from the invoice of the supplier.
- 14. **Inspection:** Inspection shall be carried out at IIT (ISM), Dhanbad after arrival of the materials and decision of the Institute in this regard shall be final.
- 15. **Rejection and Replacement**: Rejection, if any, shall be notified to the supplier within 30 days of receipt and inspection of the material/workmanship. Rejected materials/work is to be removed by the supplier at his own risk and cost from IIT (ISM). Campus within 14 days of intimation of rejection. Defective Supplies are required to be replaced within 15 days of the removal of the rejected materials/work.
- 16. **Risk Purchase:** IIT (ISM) shall be at liberty to realize from the supplier the differential amount, if any, which it shall have to incur on purchase of the material/work at higher price(s) from elsewhere in the market, if the supplier, due to their fault, fails to supply the ordered quality and quantity of the material/work within the stipulated time.
- 17. Conditional offer will not be accepted.
- 18. **Payment**: Payment will be released within 30 days (In case of inside in India)/ outside India through LC only) after satisfactory supply, inspection, installation/commissioning & acceptance and on submission of pre-receipted tax invoice, delivery challan, warranty certificate and installation report in triplicate and Performance Bank Guarantee. The invoice should be duly certified by the Head of Dept to which supply is made or any other IIT (ISM) official authorized for this purpose.
- 19. Your full address for correspondence and name address of the beneficiary's banker should be clearly indicated in the offer. **Institute does not make any advance payment**. However, as a special case 90% Letter of Credit Payment term is accepted only in case of foreign supplier and balance 10% through wire transfer after satisfactory, installation report received from the user department.
- 20. Last date for receipt of tenders and date & time for opening of the same is given in page- 01. The tenders will be opened in the presence of representatives of tenderers present. In the event last date is a holiday/declared as a holiday, next working date will be the last date for submission/opening of tender.
- 21. Tender should be submitted in a sealed cover/envelope and must be superscribed as under:
- "Tender No. NIT No. Mech-INS-270-18-19 (Supply & Installation of Vapour absorption refrigeration test rig. as per attached specification (19.11.2018at 1.00 p.m.).
 - i) All tender shall be received upto to the time and date as stated in the tender notice, after which no tender shall be accepted in any circumstances.
 - ii) All tender must be sent by Registered Post/Speed Post/Courier along with Courier receipt, during IIT (ISM) working days only (i.e. Monday to Friday). Please note that no hand delivery of tender will be received at any circumstances.
- 22. The Institute at its discretion may change the quantity/quality/parameters/upgrade the criteria/drop any item(s) or part thereof at any time before placing the order. In case of any dispute, the decision of IIT(ISM) shall be final and binding on the bidders/tenderers.

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23. The Institute reserves the right to accept or reject any or all the bids in part or in full without assigning any reason and does not bind himself to accept the lowest bid.

ABOVE TERMS AND CONDITIONS OF THE NIT ARE ACCEPTED

1	Name and address of the tenderer	
2	Telecom nos. of the tenderer i.e. phone fax, & email id.	
	Signature, name & designation of the person signing on behalf of the tenderer & his/her office seal	
4.	Name & designation of the contact person & his phone/mobile no.	



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Annexure-III

	FORM	AT OF BA	ANK GUAR	ANTEE TOW	VARDS E	<u>MD</u>	
Whereas (he (date of submission of bid description of the goods) (lof the Indian School of Min	d) for the Hereinafter	supply of called "the		abmitted its bio			(name and/or
KNOW ALL PEOPLI	E by these	presents th	nat WE				(name of bank) of
	(name	of	country),	having	our (a	registered	office at (hereinafter called
"the Bank") are bound unt					(name of	Purchaser) (her	einafter called "the
"the Bank"), are bound unt Purchaser") in the sum of _			for which n	ormont will or	d truly to	ha mada ta tha	goid Durchagar tha
Bank binds itself, its succ	essors, and	assigns b	y these prese	nts. Sealed w	ith the Co	ommon Seal of	the said Bank this
 If the Bidder withdraws If the Bidder, having beed fails or refuses to execute (b) fails or refuses to furnisty We undertake to pay Purchaser having to substate by it is due to it, owing to conditions. This guarantee will remain whichever is later and any of the property of the pro	te the Conti the the perform the Purchase ntiate its despondent of the occur	of the acceptant form is rmance sections for the section of the se	ptance of its befrequired; or curity, in according to above amovided that in inne or both of the onths from the	rdance with the ount upon receits demand the fine two concept date of opening	haser during the Instruction eight of its Purchaser ditions, specing of tending of tending the second secon	on to Bidders; first written de will note that tecifying the occurrence or the period	emand, without the the amount claimed curred condition or

Signature of the Bank



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Annexure-IV

Compliance Statement

Sl.	Technical requirement as per NIT	What is offered by the tenderer	Status of Compliance Complied/Not Complied
110	NII		Complied/Not Complied



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Annexure - V

Format for Financial Bid

NIT No.: No. Mech-INS-270-18-19 Bidders Ref: No.	D .
	Date:
Bidders Ref: No.	Date:
GSTIN No.:	
~	/

Subject: Supply & Installation of Vapour absorption refrigeration test rig.-01 No.

Sl. No.	Full Description of Items with (HSN Code/SAC Code)	Qty.	Rate	Amount
		Packing &	Packing & Forwarding	
		(if any) Total GST		
		Fre	ight (if any)	
		Installa	tion (if any)	
Amount should be in figure as well as word		Grand Total		

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