



# 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.: Mech/PRJ/052/18-19

Date: 04-06-2018

## NOTICE INVITING TENDER

### Subject: Supply and installation of Thermal Properties Analyzer

Sir,

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

S No	Full Description of items/ store	Qty	Delivery
1	<b>Supply &amp; Installation of Thermal Properties Analyzer</b> (Detailed Specification is given in Annexure – I)	1	At the Earliest

### Tender Schedule

Particulars	Date & Time
<b>Tender Fee</b>	<b>Rs. 500/- (Rs. Five Hundred only)</b>
<b>Bid Security or Earnest money deposit</b>	<b>Rs 14,000 (Fourteen Thousand Only)</b>
<b>Last date and time for submission of tenders</b>	<b>04.07.2018 at 1:00 P.M.</b>
<b>Date and time of opening of tenders</b>	<b>04.07.2018 at 3.00 P.M.</b>

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 superscribed 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***



# 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.: Mech/PRJ/052/18-19

Date: 04-06-2018

## Terms & Conditions

- 1) The rates should be quoted for each item separately.
- 2) Conditional offer will not be accepted.
- 3) ***Tender Cost of Rs. 500/- (non refundable) is to be paid by way of Demand Draft drawn in favor of Registrar, ISM payable at Dhanbad. Non-submission will lead to rejection of your bid.***
- 4) IIT (ISM) does not issue any Form 'C' or 'D' towards sales tax concessional rate. Hence, full rate of GST applicable should be quoted.
- 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) Successful bidder has to submit performance security @ 10% of total purchase order value.
- 7) ***Educational discount***, if any, should be clearly mentioned.
- 8) You are requested to submit your quotation strictly as per the specifications mentioned in the NIT.
- 9) Your tender must be valid for **minimum 90 days** from the date of opening of tender.
- 10) Please mention warranty/ guarantee in your offer clearly. Material/ equipment to be supplied must have minimum warranty/guarantee of **12 months**.
- 11) ***Each page in the bid document must be numbered properly*** and duly signed & sealed by the bidder on every page of the bid.
- 12) **The items/ materials shall be required to be delivered at Mech. Engg. Department/ Section through Purchase & Store Section, 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 or part payment is not admissible.*** Payment shall normally be made within 3-4 weeks subject to receipt and acceptance & installation of the ordered materials/items and submission of bills, PBG etc. (as per Purchase Order Terms).
- 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.

Deputy Registrar



# 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.: Mech/PRJ/052/18-19

Date: 04-06-2018

Annexure – I

## Technical Specifications:-

### Detail Specifications for Thermal Properties Analyzer

#### Specifications:

Thermal properties analyzer with having provision for measurement of Thermal Conductivity, Resistivity, Thermal Diffusivity and Specific Heat for solid/liquid samples.

**Type:** Ultra low-power 16-bit microcontroller with 24-bit A/D converter

#### **Range of Measurements:**

Thermal Conductivity:  $0.02$  to  $4 \text{ Wm}^{-1} \text{ }^{\circ}\text{C}^{-1}$  (for solid and liquid)

Thermal Diffusivity:  $0.1$  to  $1.0 \text{ mm}^2\text{s}^{-1}$  (for solid/liquid or both)

Specific Heat:  $0.5$  to  $4 \text{ MJ m}^{-3} \text{ }^{\circ}\text{C}^{-1}$  (for solid/liquid or both)

#### **Accuracy:**

Thermal Conductivity/Resistivity:  $\pm 10\%$  or better

Specific Heat:  $\pm 10\%$  or better

Thermal Diffusivity:  $\pm 10\%$  or better

**Data Storage:** 4,000 readings or more

**Compliance to Standards:** ASTM Standard D5334-08/ IEEE Standard 442-1981/ ASTM D7896-14

**Battery Source:** 4 AA (Rechargeable battery with charger)

**Display:** Liquid Crystal Display (LCD).

#### **Accessories:**

User's manual, Carrying case, Readout stand, Performance verification standards

Thermal grease

RS232 cable

#### **Sensors:**

i) Thermal Conductivity/Resistivity sensor (for liquids and solids)

iii) Thermal Diffusivity and Specific Heat sensor (for solid/liquid or both)

**Calibration:** Calibration must be performed at site with standard solid or liquid samples

Supply should be completed with all accessories required for installation and commissioning of the items at site.



# 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.: Mech/PRJ/052/18-19

Date: 04-06-2018

Annexure - II

## Format for Commercial Bid

Our NIT No.: Mech/PRJ/052/18-19

Date:

Bidders Ref: No.

Date:

### Sub: Supply and installation of Thermal Properties Analyzer

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.