



**NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA-769008 (ODISHA)**

An Institute of National Importance under Ministry of HRD, GOI

NOTICE INVITING TENDER

Tender Notification No: NITR/PH/15/M/1155 Dated 07.10.2015

Sealed bids from eligible bidders are invited for the supply of **Vibrating Sample Magnetometer (VSM) System.**

Last date of Submission of Bid: **27.11.2015 at 03.00 PM**

Opening date of Bid: **27.11.2015 at 04.00 PM**

Details: http://www.nitrkl.ac.in/Job_Tenders/9Equipment/Default.aspx **Contact**

: (i) **Prof. Prakash Nath Vishwakarma, Asst Prof. (Physics & Astronomy);** Ph: 0661-2462728; Email: prakashn@nitrkl.ac.in

REGISTRAR



National Institute of Technology, Rourkela, Odisha (India)
Department of Physics & Astronomy

Tender Notification No.: **NITR/PH/15/M/1155. Dated: 07.10.2015**

Name of the component: Vibrating Sample Magnetometer (VSM) system

Quantity required: 1 No.

EMD Amount: Rs.50,000/-

Delivery: Within 2 months from the date of order

Last Date of submission of Tender: **27.11.2015 by 3:00 PM**

Date of opening of bid: **27.11.2015, 4:00 PM**

Address for submission of Tender: The Director, National Institute of Technology

Rourkela- 769008, Odisha, India With Kind Attention to: Prof. Prakash

NathVishwakarma, Department of Physics & Astronomy

National Institute of Technology, Rourkela, Odisha-769008
Department of Physics & Astronomy

Tender Notification No.: : NITR/PH/15/M/1155 Dated: 07.10.2015

NOTICE INVITING TENDER

The National Institute of Technology, Rourkela (NITR) is an autonomous body under MHRD, GOI, imparting Technical Education and engaged in Research Activities. It is proposed to procure the following component for the departmental academic research activities.

Sealed Quotations under two cover systems are invited for the following component subject to the following terms and conditions from the reputed manufacturers or their authorized dealers so as to reach this office on or before scheduled date and time. The technical cover will be opened on the next day in the presence of bidders or their authorized agents who may choose to be present.

Name of the component: Vibrating Sample Magnetometer (VSM) system

Quantity required: 1 No.

EMD Amount: Rs.50,000/-

Delivery: Within 2 months from the date of order

Performance Security to be given by: BG upto 1 year (Successful bidder after release of purchase order (5 lakh in Rupees))

Warranty: One years of comprehensive warranty from the date of installation, commissioning and acceptance by NITR.

Minimum numbers of orders within last 5 years in Indian institutes: Minimum 5 of similar equipment.

Last Date of submission of Tender: *As mentioned above*

Address for submission of Tender: The Director, National Institute of Technology, Rourkela, Odisha, 769 008, With Kind Attention to: Prof. Prakash Nath Vishwakarma, Department of Physics & Astronomy.

Place, Date and time of opening of bid: Department of Physics & Astronomy; *As mentioned above*

Note: *The Institute shall not be responsible for any postal delay about non-receipt/ non delivery of the bids or due to wrong addressee.*

SECTION 1: INSTRUCTIONSTO BIDDER

The bidder should give details of their technical soundness and provide a list of customers of previous supply of similar items to Universities, Institutes or Government Departments/Undertakings/public sectors with contact details. The details of the agency/profile should be furnished along with the copy of all related documents.

Bids should be divided into two parts:

1. **Cover 1:**The cover 1 shall be superscribed as "Technical Bid" duly indicating the Tender reference No. and the due date of opening.

Cover 1 should contain the following:

- a. EMD by Demand Draft drawn on any scheduled bank in favour of "The Director, NIT, Rourkela" payable at Rourkela should be submitted. EMD shall bear no interest. Any bid not accompanying with EMD is liable to be treated as non-responsive and rejected.
 - b. Technical pamphlets.
 - c. Detailed technical specifications.
 - d. The agency should furnish copy of license certificate for manufacture/supply of the item.
 - e. The agency should furnish Income Tax PAN number.
 - f. Warranty period offered for the tendered item to be specified. If the warranty period is not conforming with the schedule of requirements given in the bid document, the bid is liable to be treated as non-responsive and rejected.
 - g. Duly filled up technical questionnaire, if any.
 - h. Duly filled up deviation schedules to technical specification.
 - i. Copy of orders completed during the last five years along with the list of customers.
 - j. If the prices are revealed in the cover 1, the offer will be summarily rejected.
 - k. Commitment for quick service in case of any break down.
 - l. List of spares and consumables to be supplied.
 - m. Details about service centers and number of service engineers available in each center in India.
2. **Cover 2:**Cover 2 shall contain Price only and shall be superscribed as "Price Bid" duly indicating the Tender Reference No. and the due date of opening.

Each Cover shall be sent in a double sealed cover. The inner covers (Cover 1 and Cover 2) should be sealed individually with the sellers distinctive seal and superscribed with the tender reference no. and due date of opening. Both the inner covers shall be placed in a common outer cover which shall also *be sealed with seller's distinctive seal and superscribed with the tender reference no. and due date of opening.* Mention "*Kind Attention: Prof. Prakash NathVishwakarma*", and submit at the address given in the Notice Inviting Tender.

1. Cover 1 will be opened on the scheduled date and time mentioned in the tender enquiry. Cover 2 of the technically and commercially qualified bidders alone will be opened on a date which will be intimated later to those bidders only.
2. The agencies should submit their rate as per the format given in Section 3 of the Notice Inviting Tender in this cover. ***Rate should be quoted in foreign currency for imported items and in Indian Rupee for indigenous items. The rate should be quoted both in words and figures.*** All the pages of the bid should be signed affixing the seal. All corrections and overwriting should be initialed.
3. The tender will be acceptable only from the manufacturers or its authorized supplier.
4. The bid shall be in the format of price schedule given in Section 3. The contract form as per format given in section 4 shall be submitted. Incomplete or conditional tender will be rejected.
5. Details of quantity and the specifications are mentioned in technical specifications appended to this Tender.
6. The item to be used is strictly according to the specification and subject to test by the Institute/concerned authorities. It must be delivered and installed in good working condition.
7. The Institute reserves the right to cancel or reduce the quantity included in the schedule of requirements at any time after acceptance of the tender with a notice. The Contractor/Supplier shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the work/supply in full but he did not derive in consequence of the foreclosure of the whole or part of the works.
8. Performance Security of 5 lakh of the contract value in terms of Bank guarantee of any scheduled banks shall be given by the successful bidder for the total period up to three months beyond the warranty period.
9. Release of EMD: The EMD shall be released after receipt of performance security from successful bidder.
10. Validity of bids: The rate quote should be valid for a minimum of 90 days. No claim for escalation of rate will be considered after opening the Tender.

11. Imports: In case, goods are to be imported, the Indian agent should furnish authorization certificate by the principles abroad for submission of the bid in response to this Notice Inviting Tender.
12. Clarification of Tender Document: A prospective bidder requiring any clarification of the Tender document may communicate to the contact person given in this notice inviting tender.
13. **Amendment of tender document:** At any time prior to the last date of receipt of bids, Institute may for any reason, whether at its own initiative or in response to a clarification requested by prospective bidder, modify the Tender document by an amendment.
14. L. D. of the institute (Back side of POs)
15. This institute is liable to pay Customs Duty in concessional rate under Notification No. **39/96 dated 23rd Jul 1996 & Amended by 60/96 dt 22nd Aug 1996** and exempted of Excise Duty under Notification No. **10/97 Central Excise dated 01 Mar 1997**. However, prices should be quoted indicating clearly customs/Excise Duties. If agreed, the necessary exemptions certificate may be provided.
16. **The Institute may at its own discretion extend the last date for the receipt of bids.**
17. The bids shall be written in English language and any information printed in other language shall be accompanied by an English translation, in which case for the purpose of interpretation of the bid, the English translation shall govern.
18. The Institute reserves the right of accepting any bid other than the lowest or even rejecting all the bids without assigning any reasons therefore. The decision of the Director is final in all matters of tender and purchase.
19. The bidder should give the following declaration while submitting the Tender.
20. Any other details required may be obtained from the contact person given in the notice inviting tender during the office hours.

DECLARATION

I/we have not tampered/modified the tender forms in any manner. In case, if the same is found to be tampered/modified, I/we understand that my/our tender will be summarily rejected and full Earnest Money Deposit (EMD) will be forfeited and I/we am/are liable to be banned from doing business with NIT, Rourkela and/or prosecuted.

Signature of the Bidder:

Name and Designation:

Business Address:

Seal of the Bidder's Firm

SECTION 2: CONDITIONS OF CONTRACT

1. The rates should be quoted in Indian Rupee FOR NIT, Rourkela for supply within India.
2. In case of import CIF rate should be quoted in foreign currency.
3. The Institute is eligible for excise duty exemption and concession customs duty.
4. The rate quoted should be on unit basis. Taxes and other charges should be quoted separately, considering exemptions if any.
5. Rate quoted should be inclusive of Testing, commissioning and installation of equipment and training. In this bid the components should be shown categorically.
6. Payment: No advance payment will be made. Payment will be made only after the supply of the item in good and satisfactory condition and receipt of performance security (if applicable) by the supplier. In case of imports, the payment will be made through LC and performance security need to be submitted before LC commitment (if applicable).
7. Guarantee and Warrantee period should be specified for the complete period mentioned in this tender document.
8. Period required for the supply and installation of item should be mentioned in this tender document.
9. In case of dispute, the matter will be subject to Rourkela, Orissa Jurisdiction only.

SECTION 3: PRICE SCHEDULE
[To be used by the bidder for submission of the bid]

1. Component Name:
2. Specifications (confirming to Section: 5 of Tender document – enclose additional sheets, if necessary)
3. Currency and Unit Price:
4. Quantity:
5. Item cost (Sl.No.3 &Sl.No.4) :
6. Taxes and other charges:
 - (i) Specify the type of taxes and duties in percentages and also in figures:
 - (ii) Specify other charges in figures:
7. Warranty period should be mentioned in Technical and Financial bid:
8. Delivery Schedule:
9. Name and address of the firm for placing purchase order :
10. Name and address of Indian authorized agent (in case of imports only) :

Signature of the Bidder:

Name and Designation:.....

Business Address:

Place:

Date:

Seal of the Bidder's Firm

SECTION 4: CONTRACT FORM
[To be provided by the bidder in the business letter head]

1. (Name of the Supplier) hereby abide to deliver the by the delivery schedule mentioned in the tender document for supply of the items if the purchase order is awarded.

2. The item will be supplied conforming to the specifications stated in the tender document without any defect and deviations.

3. Warranty will be given for the period mentioned in the tender document and service will be rendered to the satisfaction of NIT, Rourkela during this period.

Signature of the Bidder:

Name and Designation:

Business Address:

Place:

Date:

Seal of the Bidder's Firm

SECTION: 5 DETAILED TECHNICAL SPECIFICATION
Vibrating Sample Magnetometer (VSM)

1.0 General

The Vibrating Sample Magnetometer (VSM) system should be of research grade. System should be capable to measure and study magnetization/moments of nanocomposite, thin films, multilayer and heterostructure materials.

2.0 Electromagnet with following specifications

- 2.1 Magnetic field strength: Minimum 1.0 Tesla with closed cycle refrigerator tail.
- 2.2 Variable magnetic pole air gap. Able to fix the poles at required gap.
- 2.3 Magnetic field accuracy: $\pm 0.05\%$ or better
- 2.4 Magnetic field resolution: 0.01 Oe or better
- 2.5 Magnetic field homogeneity: $\pm 0.1\%$ over 10 mm^3
- 2.6 Compatible bipolar power supply for the electromagnet

3.0 Magnetic moment

- 3.1 Sensitivity: 10^{-7} emu or better
- 3.2 Moment accuracy: $\pm 1\%$ or better
- 3.3 Moment repeatability: $\pm 0.5\%$ or better
- 3.4 Moment Stability: $\pm 0.05\%$ or better

4.0 Temperature Variation

- 4.1 Temperature range: 300K to 15K or lower
- 4.2 Temperature stability: $\pm 0.5\%$ of the set point or better, over the specified temperature range above.
- 4.3 Temperature accuracy: $\leq 1\%$ of the set point or 0.5K (whichever is lower)
- 4.4 Above mentioned temperature range must be covered using closed cycle refrigerator tail arrangement.

5.0 System electronics & standard sample

- 5.1 System should have necessary electronics i.e. gauss meter, mini pick-up coils etc.
- 5.2 Integrated gauss meter with calibration standards
- 5.3 Minimum two high purity standard samples.

6.0 Sample rotation: Optional

7.0 Sample mounting

- 7.1 The sample mounting should enable measurement of sample in vertical and horizontal positions, at room temperature and low temperatures.

8.0 Computer and software

- 8.1 Personal computer for data acquisition and control: optional
- 8.2 Licensed software compatible with VSM for data acquisition and analysis: must.

8.3 The software must be able to do M~H at various stable temperatures and M~T measurements at various applied fields with desired temperature ramping rate.

8.4 Windows operating system: Not required. Institute has licenced version.

9.0 Documentation

9.1 Vendor to provide complete documentation: Installation manual, Operation manual, Maintenance manual.

9.2 Documentation/ manuals shall include all drawings, schematics, spare parts, catalogues and sub-vendor manuals.

9.3 All documents should be in English.

10.0 Support and maintenance:

10.1 System maintenance kit (with detail information).

10.2 Vendor should commit to provide spare parts and support for 10 years after expiry of warranty period for the maintenance of system.

11.0 Warranty:

11.1 Standard one year warranty for the system from the date of installation and commissioning at NIT Rourkela.

11.2 Only reputed original equipment manufacturers (OEM) of international standard should submit tender with supported document. The system being supplied should meet international standards.

11.4 Vendor shall provide a list of customer along with their names, addresses, e-mail addresses where similar systems are installed.

11.5 Resell or refurbished equipment would not be acceptable.

12.0 Infrastructure:

Vendor shall provide details of all utilities/ facilities such as power, running load, footprint, compressed air, nitrogen etc, requirement in tender documents.

13.0 Available power supply at NIT Rourkela:

13.1 220-240 Volts, 50 Hz, i.e., system should be compatible with Indian power standards.

13.2 Online UPS protection, if required, must be mentioned clearly with the required specifications.

14.0 Installation and commissioning:

14.1 Vendor shall install and commission the equipment at NIT Rourkela, within one month after receiving of equipment at NIT Rourkela.

15.0 Process demonstration:

15.1 Vendor shall demonstrate the operation of the equipment and carry out magnetic measurement on standard samples as per specifications.

16.0 Equipment training:

16.1 Vendor shall provide one week equipment training to the faculties and technical persons at NIT Rourkela after installation and commissioning of the equipment, at the vendor's cost.

17.0 Optional items:

17.1 Low temperature measurement using closed cycle refrigerator. The temperature range 300 – 15K must be covered in the measurement.

17.2 Accessories required locally, such as vacuum pump, chiller, etc. must be mentioned clearly along with specifications.

17.3 Necessary spares parts for three years.