

TENDER

FOR

SUPPLY & INSTALLATION OF
INSTRUMENTS FOR B. TECH. PHYSICS LAB
SCHOOL OF BASIC SCIENCES, IIT MANDI



Tender No.: IITMANDI/SBS/TEN/2011-12/PHYLAB/1

Tender date: May 12, 2011

Last Date of submission: June 15, 2011

Indian Institute of Technology, Mandi

Transit Campus: Mandav Hotel, 2nd Floor (Near Bus Stand), Mandi – 175001 (H.P)

Tel.: 01905-237917/7926/7931 **email:** sbs_office@iitmandi.ac.in

Indian Institute of Technology (IIT) Mandi, Mandi invites tender for supply, installation and commissioning, testing and demonstration of B. Tech. Physics Lab instruments, as per specifications given in the Schedule attached to the Tender form annexed hereto. All offers should be made in English and should be written in both figures and words. Tender forms can be downloaded from the website (<http://iitmandi.ac.in/administration/tenderseoi.html>) of the Institute.

The bidders are requested to read the tender document carefully and ensure compliance with all specifications/instructions herein. Non-compliance with specifications/instructions in this document may disqualify the bidders from the tender exercise.

The Director, IIT Mandi, reserves the right to select the item (in single or multiple units) or to reject any quotation wholly or partly without assigning any reason.

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

Terms and Conditions:

1. The technical and financial bids should be quoted separately and put in different sealed envelopes marked **“Technical bid”** or **“Financial bid”** as applicable **for each items**. These separate bids envelopes are to be put in an outer envelope which should also be sealed.
2. The technical and financial bids should be submitted in duplicate. The financial bid should include the cost of main equipment/item and its accessories. If there is any separate cost for installation etc. that should be quoted separately.
3. The quotations shall be submitted in a sealed envelope duly marked “Quotation against enquiry no. --- dated---- due on ---- “on the corner of the envelope.
4. The printed literature and catalogue/brochure giving full technical details should be included with the technical bid to verify the specifications quoted in the tender. The bidders should submit copies of suitable documents in support of their reputation, credentials and past performance.
5. The rates should be quoted in figures (typed or printed) and cutting should be avoided. The final amount should be in figures as well as in words. If there are cuttings, they should be duly initialled, failing which the bids are liable to be rejected.
6. The technical and financial bids should be addressed to “The Head, School of Basic Sciences, Indian Institute of Technology Mandi, Mandi-175001 (H.P)”.
7. All tender documents should have to be sent through courier, speed post or registered post only. All tender documents received after this specified date and time shall not be considered. The postal address is:

**“The Head, School of Basic Sciences,
Indian Institute of Technology Mandi (IIT Mandi),
Academic Block (Vallabh Degree College Campus),
Mandi – 175001 (H.P)”**

8. Quotation received after closing date/time will not be considered.
9. While sending rates, the firm shall give an undertaking to the effect that "*the terms/conditions mentioned in the enquiry letter/Tender Notice against which the rates are being given are acceptable to the firm.*" In case the firms do not give this undertaking, their rates will not be considered.
10. If the supplier/firm is original equipment manufacturer (OEM)/authorized dealer/sole distributor of any item, the certificate to this effect should be attached.
11. The quantity shown against the item is approximate and may vary as per demand of the Institute at the time of placing order.
12. In the event of any dispute or difference(s) between the vendee Institute (IIT Mandi) and the vendor(s) arising out of non-supply of material or supplies not found according to 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 Director, IIT Mandi", Mandi 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.
13. The place of arbitration and the language to be used in arbitral proceedings shall be decided by the arbitrator.
14. All disputes shall be subject to Mandi Jurisdiction only.
15. All tenders in which any of the prescribed conditions is not fulfilled or any condition is put forth by the tenderer shall be summarily rejected.

The Technical bid will be opened on **June 17, 2011 at 10.00 A.M** in the Conference Room of the Academic Block. The bidders or their authorized representative may also be present during the opening of the Technical Bid, if they desire so, at their own expenses.

Price bids of only those bidders will be opened whose technical bids are found suitable by the committee appointed for the purpose. Date and time of opening of price bids will be decided after technical bids have been evaluated by the committee. Information in this regard will be posted on Institute's web site / Notice board. In exceptional situation, an authorized committee may negotiate price with the qualified bidder quoting the lowest price before awarding the contract.

1. Clarifications:

In case the bidder requires any clarification regarding the tender documents, they are requested to contact Dr. Suman Kalyan Pal, Assistant Professors, IIT Mandi (e-mail: suman@iitmandi.ac.in) on or before 10/06/2011.

2. Tender Cost:

A Demand draft of Rs. 250/- (Rupees two hundred and fifty only) towards non-refundable tender fee drawn in favour of "The Registrar, IIT Mandi" payable at Mandi should accompany the Technical bid document for each items.

3. Earnest Money Deposit (EMD):

If the cost of the equipment/item is more than 5 lakhs, a refundable amount @ 2% of the quoted price as earnest money deposit (EMD) in the shape of DD drawn in favour of "The Registrar, IITMandi" payable at Mandi should accompany the bid documents. The EMD should be kept in a separate sealed envelope, should be marked clearly and put in the outer envelope that contains the technical and financial bid envelopes.

4. Pre – Qualification Criteria:

a. Bidders should be the manufacturer / authorized dealer. Letter of Authorization from original equipment manufacturer (OEM) on the same and specific to the tender should be enclosed.

b. An undertaking from the OEM 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.

5. Prices:

a) The Prices quoted should be inclusive of all taxes or duties, packing, forwarding, freight, insurance, delivery and commissioning etc. at destination site (IIT Mandi, Mandi). Custom / Excise Duty Exemption Certificate will be issued by IIT Mandi. **Prices should be quoted separately inclusive and exclusive of Customs/Excise Duty.** The rates shall be firm and final. Nothing extra shall be paid on any account.

b) In case of imported equipment(s)/item(s), the agency commission, if any, payable in Indian rupees should be mentioned separately. For imported equipment, the Letter of Credit will be opened for the amount excluding agency commission in Indian Rupees. The firm should clearly mention the address of foreign bank in the financial bid.

6. Validity:

The bid should be valid for acceptance up to a period of 180 Days. The Bidders should be ready to extend the validity, if required.

7. Delivery:

The Equipment should be delivered and installed within the period as specified in the purchase order and be ready for use within 16 weeks of the issue of purchase order unless otherwise prescribed. If the bidder 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.

8. Warranty Declaration:

Bidders must give the comprehensive onsite warranty as required from the date of successful installation of Equipment against any manufacturing defects and also give 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 bidders need to supply all the goods in the specified form to the satisfaction / specifications specified in the order / contract and demonstrate at the their own cost.

9. Terms of Payment: Payment will generally be made only after delivery and satisfactory installation, testing, commissioning etc. This must be specified in the tender/quotation.

- In case of Imported supplies, payment (excluding Indian agency commission, if any) will be made through Letter of Credit.

10. Tender expenses and documents: All costs incurred by the bidder in the preparation of the tender shall be at the entire expense of the bidder.

11. Tender Evaluation Criteria: The technical bids will be opened on 17th June, 2011 and will be evaluated by a duly constituted committee. After evaluation of the technical bid, the financial bid for only those offers which have qualified in the evaluation of technical bid will be opened.

12. Return of EMD:

- The earnest money of the successful bidder will be returned to them without any interest after completing the successful contract.

- The earnest money of unsuccessful bidders will be returned to them without any interest within fifteen working days after awarding the contract.

13. Manual and documentation: All the manuals necessary for operating and servicing the equipment (including details of electronic circuits) will have to be provided along with the instrument.

Registrar (IIT Mandi)

BID PARTICULARS

1. Name of the Supplier :

2. Address of the Supplier :

3. Availability of demonstration of equipment : Yes / No

4. Tender cost enclosed: : Yes/No if yes

D.D. No. _____ Bank _____ Amount _____

5. EMD enclosed : Yes / No if Yes

D.D. No. _____ Bank _____

6. Name and address of the Officer/contact person to whom all references shall be made regarding this tender enquiry.

Name :

Address :

Telephone No. :

Fax No. :

Mobile No :

e-Mail :

Web :

Annexure -1

Item No. 1. To study the magnetic field along the axis (at different points on the axis) of a single coil

Qty. 02 Nos.

Specifications:

Complete set-up with following items:

- (a) digital gaussmeter / teslameter:
range: 0.1G to 200G/ 10^{-5} T to 2×10^{-2} T or better
accuracy: 3-4 % or better,
- (b) d. c. power supply:
range: 0 - 15 V, 0 - 5A or better
(Load effect on voltage and current should be negligible),
- (c) Coils:
material: Copper,
quantity: 3, having different diameter (>3 cm) and number of turns 100 or more.

Item No 2. To study the magnetic field along the common axis (at different points on the axis) of two coils when the distance between the coils is equal to, greater than and less than radii of the coils

Qty. 02 Nos.

Specifications:

Complete set-up with following items:

- (a) digital gaussmeter / teslameter:
range: 0.1G to 200G/ 10^{-5} T to 2×10^{-2} T or better
accuracy: 3-4 % or better,
- (b) d. c. power supply:
range: 0 - 15 V, 0 - 5A or better
(Load effect on voltage and current should be negligible),
- (b) Coils:
material: Copper,
quantity: One pair of equal radii and number of turns 100 or more.

Item No 3. Millikan's oil drop experiment to measure elementary charge (charge of an electron)

Qty. 02 Nos.

Specifications:

Complete set-up with following items:

- (a) Millikan unit with power supply:
distance between capacitor plates - 2.5 mm or more,
plate Voltage - 500 VDC or more,
microscope magnification – 30 or more,
- (b) suitable stop watch for the measurement of fall/rise times of the oil drops in this experiment.

Item No 4. Verification of Faraday's and Lenz's law of induction by measuring the induced voltage as a function of time

Qty. 02 Nos.

Specifications:

Complete set-up with following items:

- (a) induction Coil/coils,
- (b) permanent magnet,
- (c) automated data acquisition system.

Item No 5. To study the hysteresis curves (tension vs angular rotation) of different metallic rods

Qty. 02 Nos.

Specifications:

Complete set-up with following items:

- (a) torsion apparatus,
- (b) torsion rods – steel, brass, aluminum, copper,
- (c) stop watch (accuracy 0.1 sec or better).

Item No 6. To determine the wavelength of a monochromatic light and/or the refractive index of liquids by measuring the radii of Newton's rings

Qty. 02 Nos.

Specifications:

Complete set-up with following items:

- (a) Newton's ring apparatus including plano convex lens with plane glass plate,
- (b) monochromatic light source,
- (c) suitable arrangement for measuring radii of Newton's ring.

Item No 7. To determine the wavelength of a monochromatic light by measuring the width of interference fringes produced by biprism

Qty. 02 Nos.

Specifications:

Complete set-up with following items:

- (a) Fresnel's biprism,
- (b) monochromatic light source,
- (c) optical bench,
- (d) suitable arrangement for measuring fringe width.