



INDIAN INSTITUTE OF TECHNOLOGY MADRAS
Chennai 600 036

Telephone : [044] 2257 8356/8368

FAX : [044] 2257 0545/8366

E-mail: arpp@iitm.ac.in



Ref: MEE/14-15/322/DBTX/SUJA

Date: 28.08.2014

Tender No.: MEE/SUJA/009/2014

Due Date: 22.09.2014, 3:30pm

N.E. Nagaraj
Special Officer (Project Purchase)
IC&SR, I.I.T. Madras

Dear Sirs,

On behalf of the Indian Institute of Technology Madras, offers are invited for the supply of various Scientific Instruments such as **“Motion Capture System for Biomechanical Analysis”** conforming to the specifications given in Annexure.

I) Instructions to the Bidder

- (i) **Preparation of Bids:-** The tenders should be submitted under two-bid system (i.e.) Technical bid and Financial bid.
- (ii) **Delivery of the tender:-** The tender shall be sent to the below-mentioned addresses either by post or by courier so as to reach our office before the due date and time specified in our Schedule. The offer/bid can also be dropped in the tender box on or before the due date and time specified in the schedule. The tender box is kept in the office of the “Special Officer, Project Purchase” IC & SR Building 2nd floor, I.I.T. Madras, Chennai – 600 036.
- (iii) **Opening of the tender:-** The offer/Bids will be opened by a committee duly constituted for this purpose. The technical bids will be opened first and it will be examined by a technical committee which will decide the suitability of the bid as per our specifications and requirements. The financial offer/bid will be opened only for the offer/bids which technically meet all our requirements as per the specification. The bidders, if interested, may be present on the financial tender opening Day which will be communicated to you.

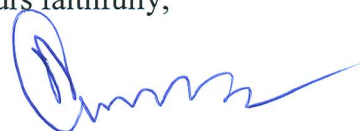
- (iv) **Prices:-** The price should be quoted in nett per unit (after breakup) and must include all packing and delivery charges to Various Institutions. The offer/bid should be exclusive of taxes and duties, which will be paid by the purchaser as applicable. However the percentage of tax & duties should be clearly indicated.

The price should be quoted without custom duty and excise duty, since I.I.T. Madras is exempt from payment of excise duty, and the custom duty will be paid at concessional rate against duty exemption certificate.

In case of import supply, the price should be quoted on FOB and CIF basis indicating the mode of shipment.

- (v) **Agency Commission:-** Agency commission, if any, will be paid to the Indian agents in Rupees on receipt of the equipment and after satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in Tender even in the case of 'Nil' commission. The tenderer should indicate the percentage of agency commission to be paid to the Indian agent. The foreign Principal should indicate about the percentage of payment and it should be included in the originally quoted basic price, if any.
- (vi) **Terms of Delivery:-** The item should be supplied to our Various Institutions as per Purchase Order. In case of import supply, the item should be delivered at the cost of the supplier to our Institution. The Installation/Commissioning should be completed as specified in our important conditions.
- (vii) IIT Madras reserves the full right to accept / reject any tender at stage without assigning any reason.

Yours faithfully,



N.E. Nagaraj
Special Officer (Project Purchase)
IC&SR, I.I.T. Madras.

एन.ई. नागराज
N.E. NAGARAJ
विशेषाधिकारी (परियोजना क्रय)
SPECIAL OFFICER (PROJECT PURCHASE)
आईसी एवं एसआर केन्द्र / Centre for IC & SR
आईआईटी मद्रास / I.I.T. MADRAS- 600 036

SCHEDULE

I) **Important Conditions of the tender**

1. The due date for the submission of the tender is **Dt : 22.09.2014, 3:30pm.**
2. The offers / bids should be submitted in two bids systems (i.e.) Technical bid and Financial bid. The Technical bid should consist of all technical details / specifications only. The Financial bid should indicate item-wise price for each item and it should contain all Commercial Terms and Conditions including Taxes, transportation, packing & forwarding, installation, guarantee, payment terms etc. The Technical bid and Financial bid should be put in separate covers and sealed. Both the sealed covers should be put in a bigger cover. The Limited Tender / Open Tender for supply of **“Motion Capture System for Biomechanical Analysis”** should be written on the left side of the Outer bigger cover.
3. (i) EMD should be at 2% (Two percent) of the tender value quoted by the company. The EMD should be included in the Financial bid which will not be opened for Technical evaluation. **Enclosing the EMD in the Technical bid will automatically disqualify the tenderer.** EMD should be in the form of DD in favour of “The Registrar, Indian Institute of Technology Madras” and payable at Chennai. The tender without EMD would be considered as UNRESPONSIVE and REJECTED. Photo/FAX copies of the Demand Draft/Banker's pay orders will not be accepted. No interest will be paid for the EMD and the EMD (Bid Security) will be refunded to the Successful bidder on receipt of Performance Security.

(ii) The Successful bidder should submit Performance Security of an amount of 5% of the value of the contract. The Performance Security may be furnished in the form of an Account Payee DD, FD Receipt from the commercial bank, Bank Guarantee from commercial bank will be an acceptable.

(iii) The Performance Security should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including the warranty obligations.

4. If an Indian agent is involved, the following documents must be enclosed:

- i) Foreign principal's proforma invoice indicating the commission payable to the Indian Agent and nature of after-sales service to be rendered by the Indian Agent.
- ii) Copy of the agency agreement with the foreign principal and the precise relationship between them and their mutual interest in the business.
- iii) The enlistment of the Indian agent with Director General of Supplies & Disposals under the Compulsory Registration Scheme of Ministry of Finance.

5. The offer/bids should be sent only for a machine that is available in the market and supplied to a number of customers. A list of customers in India and abroad with details must accompany the quotations. Quotations for a prototype machine will not be accepted.

6. Original catalogue (not any photocopy) of the quoted model duly signed by the principals must accompany the quotation in the Technical bid. No prices should ever be included in the Technical bid.

7. Documentary proof for the claimed position and repetition accuracies must be obtained from the principals and submitted along with the relevant pages of the standards.

8. Compliance or Confirmation report with reference to the specifications and other terms & conditions should also be obtained from the principal.

9. **Validity:** Validity of Quotation not less than 90 days.

10. **Delivery Schedule:-** The tenderer should indicate clearly the time required for delivery of the item. In case there is any deviation in the delivery schedule, liquidated damages clause will be enforced or penalty for the delayed supply period will be levied.

11. **Risk Purchase Clause:-** In the event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from other sources on the total risk of the supplier under risk purchase clause.
12. **Payment:-** No Advance payment will be made for Indigenous purchase. However 90% Payment against Delivery and 10% after installation is agreed to wherever the installation is involved. In case of import supplies the payment will be made only through Letter of Credit and 90% payment will be released against delivery and 10% after installation wherever the installation is being done.
13. **Advance payment:** No advance payment is generally admissible. In case of specific percentage of advance payment is required, the foreign Vendor has to submit a Bank Guarantee equal to the amount of advance payment and it should be routed through the Beneficiary Bank to the end user Bank. Otherwise, the Indian Agent of the foreign vendor has to submit a Bank Guarantee through a Nationalized Bank of India.
14. **On-site Installation:-** The equipment or machinery has to be installed or commissioned by the successful bidder within 15 to 20 days from the date of receipt of the item at Institution of IIT Madras.
15. **Warranty/Guarantee:-** The offer should clearly specify the warranty or guarantee period for the machinery/equipment. Any extended warranty offered for the same has to be mentioned separately.
16. **Late offer:-** The offers received after the due date and time will not be considered. The Institute shall not be responsible for the late receipt of Tender on account of Postal or any other delay.
17. **Acceptance and Rejection:-** I.I.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.

18. Disputes and Jurisdiction:- Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Chennai in Tamil Nadu.

19. Acknowledgement:- It is hereby acknowledged that the tenderer has gone through all the conditions mentioned above and agrees to abide by them.

**SIGNATURE OF TENDERER
ALONG WITH SEAL OF THE
COMPANY WITH DATE.**

Motion capture system technical specifications- Aug 19, 2014

S.No	Parameter	Description/Specification
1	Type of motion analysis system	3D optical motion capture system for biomechanical studies.
2	Operational environment	The system should perform indoor as well as outdoor.
3	Number of cameras	Minimum number of cameras should be 8. Each camera should be independent.
4	Camera mountings	Tripods and/or wall mountings should be provided along with cameras.
5	Camera resolution	Min 3600x3600 (12 Megapixel)
6	Frame rate	Minimum frame rate should be 800 fps at full resolution.
7	Camera field of view (Capture angle)	Minimum 60 degree
8	Video capture camera	Min-1 number, with pan and tilt capability. Controller, software and necessary hardware for video camera synchronization with the motion capture system should be provided.
9	Number of markers provided along with the system	Minimum 40 markers
10	Marker Type	Active optical markers with unique ID
11	Software	It should have dedicated software for data acquisition and display. Further upgrades of software should be possible.
12	Future system upgrades	The system should support further addition in number of cameras and integration with additional equipment (Force plates, EMG etc.)
13	Training and support	Training and support should be provided onsite / video based mode / webinars etc.
14	Warranty	Minimum 1 year.
15	References	Bidder must provide 3 references with contact details of PI from reputed academic/research institutions (at least one from India) that are currently using their system. Bids without references will not be considered and will be disqualified from the process.
16	Necessary Accessories	Motion capture suit Calibration object Server computer Controller cables, connectors, etc.