

	<p style="text-align: center;">INDIAN INSTITUTE OF TECHNOLOGY MADRAS Chennai 600 036</p> <p>Telephone : [044] 2257 8356/9760 FAX : [044] 22570545/8366 E-mail: arpp@iitm.ac.in</p>	
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Dr. Athi Narayanan N
Project Coordinator

Ref: BIO/NATH/024/2015
Dated: 31.12.2015

Limited Tender No: BIO/NATH/024/2015

Technical Bid Opening Meeting on 19.01.2016 at 4.00 pm

Due Date: 14.01.2016, 4.00 pm

Dear Sir/Madam,

On behalf of the Indian Institute of Technology Madras, offers are invited for the supply of **“Automated Capillary Differential Scanning Microcalorimeter”** conforming to the specifications given in (Annexure-I):

Instructions to the Bidder

- (i) **Preparation of Bids:** The Limited 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 the following address before the due date and time specified in our Schedule:

Dr. Athi Narayanan N
BT 101, Department of Biotechnology
Indian Institute of Technology Madras (IITM)
Chennai-600 036, India.
- (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 bidders will be invited for opening of Technical bids. In respect of opening of financial bid, those bidders who are technically qualified only will be called for.
- (iv) **Prices:** The price should be quoted in net per unit (after breakup) and must include all packing and delivery charges to various Departments/Centres/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 EX-WORKS and CIP 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 Departments 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) **Technical Bid Opening:** The technical bid will be opened on the 19th of January 2016 at 4.00 pm at BT 517 (Conference Room), Department of Biotechnology, IIT Madras, Chennai-600036 and the financial bids of those tenders who are technically qualified will be opened at a later date under intimation to them.
- (viii) IIT Madras reserves the full right to accept / reject any tender at stage without assigning any reason.

Yours sincerely,



(N. Athi Narayanan, Dept. of Biotechnology, IIT Madras)

SCHEDULE

Important Conditions of the Tender

1. The due date for the submission of the tender is **14.01.2016, 4.00 pm.**
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, pricing 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 for supply of “**Automated Capillary Differential Scanning Microcalorimeter**” should be written on the left side of the outer bigger cover and sealed.
3. **EMD: EMD should be at 2% (two percent) of the tender value quoted by the bidder.** 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 favor 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.
4. **Performance Security:** The successful bidder should submit Performance Security for an amount of 5% of the value of the contract/supply. The Performance Security may be furnished in the form of an Account Payee DD, FD Receipt from the commercial bank, Bank Guarantee from any nationalized bank of India will be an acceptable.

Only after submission of Performance Security, Purchase Order/Work Order will be released / L.C will be opened.

Performance Security in the form of Bank Guarantee: In case the successful bidder wishes to submit Performance Security in the form of Bank Guarantee, the Bank Guarantee 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 from a Nationalized Bank of India.

The Bank Guarantee 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.

5. If an Indian agent is involved, the following documents must be enclosed:
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.
 - ✓ Copy of the agency agreement with the foreign principal and the precise relationship between them and their mutual interest in the business.
 - ✓ The enlistment of the Indian agent with Director General of Supplies & Disposals under the Compulsory Registration Scheme of Ministry of Finance.
6. 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.
7. 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.
8. 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.
9. Compliance or Confirmation report with reference to the specifications and other terms & conditions should also be obtained from the principal.
10. **Validity:** Validity of Quotation not less than 90 days from the due date of tender.
11. **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.
12. **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.
13. **Payment:** No Advance payment will be made for Indigenous purchase. However 90% Payment against Delivery and 10% after installation are agreed to wherever the installation is involved. In case of import supplies the payment will be made only through 100% Letter of Credit i.e. (90% payment will be released against shipping documents and 10% after successful installation wherever the installation is being done).
14. **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.

15. **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 site of IIT Madras.
16. **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. (for more details please refer our Technical Specifications).
17. **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, Courier or any other delay.
18. **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.
19. **Do not quote the optional items or additional items unless otherwise mentioned in the Tender documents / Specifications.**
20. **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.
21. All Amendments, time extension, clarifications etc., will be uploaded on the website only and will not be published in newspapers. Bidders should regularly visit the above website to keep themselves updated. No extension in the bid due date/ time shall be considered on account of delay in receipt of any document by mail.

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**

Technical Bid opening meeting on 19.01.2016 at 4.00 pm (please refer point No. vii)

Annexure - I

Technical Specifications

Automated Capillary Differential Scanning Microcalorimeter

The quoted system should directly measure the bio-molecular stability in solution and without labelling. Further, they should be able to handle solutions that interfere with conventional optical methods including turbid or coloured solutions or particulate suspensions.

The Capillary DSC System should be a highly sensitive differential scanning calorimeter for characterizing the stability of proteins and other biomolecules. The DSC system should directly measure the enthalpy (ΔH) and temperature (T_m) of thermally induced structural transitions in solution.

The quoted system should address various listed applications such as protein stability and folding, liquid biopharmaceutical formulations stability, process development, protein engineering, antibody domain studies, characterization of membranes, lipids, nucleic acids and micellar systems, assessment of the effects of structural change on a molecule's stability, measurement of ultra-tight molecular interactions, assessment of biocomparability during manufacturing.

Temperature Scanning	The system should have internal Peltier device providing an efficient, rapid and precise temperature equilibration between experiments which cannot be achieved with an external water bath.
Adiabtic Chamber	The system should have the adiabatic chamber for sample and reference cells and the cells should be enclosed in adiabatic chamber.
Power Feedback	Heat compensation to cells via power feedback should be available for accurate, sensitive heat determinations and rapid response. The system should provide the multiple feedback modes such as passive, high gain and low gain for application versatility.
Capillary Cells	The matched capillary cells should provide fast scan rates and fast temperature equilibration. It should also be non-reactive and chemically resistant to ensure inertness when working with proteins and other biomolecules. The cells should be preferably made up with tantalum alloy in order to offer wide range of pH (pH 2-10) and buffer identities such as Acetate, Phosphate, Tris, HEPES and PIPES buffers.
Active Cell Volume	The Capillary DSC System should has an active cell volume of <150 μl , allowing for thermodynamic measurements of even low concentrations.

Total Cell Volume	The total sample volume required should be equivalent to or less than 400 μL . The vender should clearly specify the system cell volume and dead volume.
Auto Sampler	A fully integrated auto sampler is needed for running of up to 50 samples per day. The system should come with standard 96-well plate format for high capacity and loading ease. The sample holding capacity of instrument should be at least 576 (six 96 well plates) of 400 μL /well. All filling, injection, and cell cleaning functions should be fully automated for walk-away operation.
Scan Parameters	The system should allow user to adjust scan parameters for all scans to be unique. The user selectable scan rate should have at least a range of 0-240 $^{\circ}\text{C}/\text{hr}$ in up scan mode. The maximum scan rate should be 4 $^{\circ}\text{C}/\text{min}$ (240 $^{\circ}\text{C}/\text{hr}$).
Temperature Range	The operating temperature range should be -10 $^{\circ}\text{C}$ to +130 $^{\circ}\text{C}$.
Baseline Reproducibility	The baseline reproducibility should be less than 1.5 $\mu\text{Cal}/^{\circ}\text{C}/\text{minute}$.
Noise	The short term noise (RMS Average) should be less than 0.05 $\mu\text{Cal}/^{\circ}\text{C}/\text{minute}$.
Response Times	The system should provide the at multiple (minimum 4) user selectable response times for different type of sample analysis and which should allow user to optimize sensitivity for the process being studied. The system should have minimum response time equal to or less than 5 sec.
Binding Constants	The binding constants detectable range should be up to 10 ²⁰ M^{-1} to determine ultra-tight binding constants, which cannot be measured by other techniques.
Degassing	An accessory for thermostating, cleaning and degassing of samples at temperature range 0-80 $^{\circ}\text{C}$ and vacuum of 28.4" Hg should be included.
Software	Software should control all real-time parameters of Capillary DSC system, autosampler support functions including Intuitive, graphical tray setup, Syringe and cell maintenance controls, advanced autosampler configuration, automated calibration procedures and standardized calibration report generators and a fully integrated origin based data analysis software for post run analysis. Also the analysis software should provide unlimited copies of offline analysis software and should not require a separate software-supporting license. The data analysis software should have a provision of multiple user selectable curve fitting models (Two-State,

Non Two-State, Two-State with ΔC_p , Dissociation with ΔC_p curve fitting, Simulation Model and Binding Constant). Provide a computer with at least 8 GB RAM and hence capable of handling complex and large volume of data.

Service, Maintenance and Warranty

(a) There should be at least one service engineer and one application scientist in India trained on the same quoted instrument. (b) Instrument should have a warranty of at least 24 months (parts, labour and on-site repair) and should have frequent visits from both service and applications scientist. In case of instrument breakdown during the warranty period, the effective downtime of the instrument will be taken into consideration and the warranty period should be accordingly extended.