

**Tender Notification for the procurement of Microscale Thermophoresis Instrument at the Indian Institute of Science, Bengaluru**

(Last Date for submission of tenders: July 8, 2019)

Dear Sir/Madam,

Kindly send your best quotation for the following item with various accessories on C.I.P. Bangalore basis to the undersigned. Your quotations should clearly indicate the terms of delivery, delivery schedule, warranty, payment terms, etc. The tender should be submitted in two separate sealed envelopes: one containing the technical bid and the other containing the commercial bid, both of which should reach the undersigned, duly signed on or before 1700 hours July 8, 2019. The technical bid must include details of technical specifications of the equipment along with commercial terms and conditions; however, the price components should NOT be shown.

The commercial bid must include the price of the item as CIP bangalore indicating the break up of the following:

- (i) The price of the goods quoted on CIP, please note no Agency Commission will be paid
- (ii) The charges for insurance and transportation of the goods by Air up to Bangalore.
- (iii) The installation, commissioning and training charges including any incidental services, if any. The installation and training charges should be for onsite (Bangalore) only and not include any travel amount. This is should be mentioned in the document.
- (iv) Please include a table indicating compliance with the specifications indicated below.

Please enclose a compliance certificate along with the technical bid.

**The following points should also be noted**

The system should include a computer, if required for running the instrument.

Startup reagent kits and essential materials for making measurements need to be included.

Supplier needs to provide on-site applications training in IISc to the satisfaction of the facility-in charge.

**Terms and conditions:**

The vendor should have a good track record of having previously supplied similar equipment in India (please furnish the details).

The vendor should have qualified technical service personnel for the equipment based in India (preferably in Bangalore).

The payment will be through a Letter of Credit.

The lead time for the delivery of the equipment should not be more than 6 months from the date of receipt of our purchase order.

The validity period of the quotation should be 90 days.

Kindly indicate the import code of the items.

If the goods are found to be defective, they have to be replaced or rectified at the cost of the supplier within 15 days from the date of receipt of written communication from us. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.

The purchaser reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to award of contract without thereby incurring any liability of the affected bidder or bidders.

Yours Sincerely,

Raghavan Varadarajan  
Professor  
Molecular Biophysics Unit  
Indian Institute of Science  
CV Raman Ave  
Bangalore-560012

(on behalf of the Purchase Committee)

## **Name and Specifications of the product: Microscale Thermophoresis Instrument**

The instrument should provide a facility to detect biomolecular interactions and precisely determine binding affinities using MicroScale Thermophoresis technology by measuring the motion of molecules along microscopic temperature gradients and detecting changes in their hydration shell, charge or size.

### **The quoted instrument should have the following features:**

1. Should detect interactions between any kind of biomolecules from ions and small molecules to higher molecular weight and multi-protein complexes.
2. Should allow investigation of bulky or sensitive molecular assemblies such as liposomes, nanodiscs or membrane proteins.
3. Should be compatible with highly hydrophobic molecules and allow to study interactions of hydrophobic ligands with various molecules.
4. Should allow to study interactions directly in serum or cell lysate and thus in a more physiologically relevant environment.
5. Solution phase affinity determination free of immobilization artifacts from  $\mu\text{M}$  to  $\text{mM}$  dissociation constants.
6. Molecular Weight Range (Da):  $10^1 - 10^7$
7. Apart from affinity the instrument should also provide additional information such as information on stoichiometry, aggregation, oligomerization and Thermodynamic parameters (e.g. enthalpy and entropy via a Van't Hoff Plot).
8. Should require only  $\mu\text{M}$  to  $\text{nM}$  concentrations of sample.
9. Volume requirement:  $100 \mu\text{L}$  or less per measurement
10. Temperature range:  $22-45^\circ\text{C}$ .
11. Should provide fast measurements with measurement and analysis times of only a few minutes.
12. Should be relatively maintenance free, easy to handle and without need for extensive cleaning, regeneration between measurements.
13. Operating Voltage:  $220\text{V}/50 \text{ Hz}$
14. Protein stability related analysis should preferably also be included in the accessories