

DEPARTMENT OF MECHANICAL ENGINEERING

INDIAN INSTITUTE OF TECHNOLOGY DELHI

Dated: September 16, 2015

**Notice Inviting Quotations**

Quotations are invited for the purchase of a Dual Channel Syringe Pump for microfluidics applications. More details on the desired specifications are provided below.

| S. No. | Item                      | Technical Specification                                 |
|--------|---------------------------|---|
| 1      | Type                      | Infusion & Withdraw pump                                |
| 2      | Accuracy                  | ±0.5% or better   |
| 3      | Reproducibility           | ±0.05% or better  |
| 4      | Number of Syringes        | 2 or more   |
| 5      | Syringe Size              | Minimum - 0.5µl, Maximum - 10ml or better               |
| 6      | Flow Rate                 | Minimum – 3.06 pl/min, Maximum – 11.7 ml/min or better  |
| 7      | Voltage                   | 240V AC, 50 Hz  |
| 8      | Linear Force              | 13.6 kg or better                                       |
| 9      | Mode of Operation         | Continuous  |
| 10     | Pusher Travel Rate        | Minimum 0.36µm/min, Maximum 71.55mm/min (or better)     |
| 11     | Step Rate                 | Minimum 27.5sec/µstep, Maximum 26µsec/µstep (or better) |
| 12     | Step Resolution           | 0.17 µm/µstep or better                                 |
| 13     | Motor Drive Control       | Microprocessor with 1/16 microstepping or better        |
| 14     | Connectors                | Should have RS-232 and USB-type B connection or better  |
| 15     | Display                   | Should have display on the pump with touchscreen        |
| 16     | Regulatory Certifications | CE, ETL(UL, CSA), WEEE, EU RoHS & CB Scheme             |

|    |          |   |
|----|----------|---|
| 17 | Warranty | A minimum warranty of one year from the date of installation is required. |
|----|----------|---|

### **Terms & Conditions**

1. Technical and Commercial bids are required to be submitted in separate sealed envelopes. Both these envelopes can be enclosed in a single envelope which should be clearly labeled as “**Quotation for Dual Channel Syringe Pump**”.
2. Compliance chart conforming to the specifications as per the NIQ should be attached along with technical bid. A bid without the compliance chart shall be rejected (Note: The Compliance chart should match the specification of NIQ)
3. The bidder must be a reputed OEM or an authorized local agent.
4. List and addresses of organizations in India where similar equipment has been supplied should be provided.
5. If there is any Indian agent associated with the foreign supplier, then an appropriate “Letter of Authorization” certificate has to be provided with the quotation.
6. Validity of the quotation should be at least 120 days from the date of submission.
7. Quotation must indicate a delivery schedule, which in no case should not exceed maximum of 8 weeks from the date of submission
8. Please indicate the cost as FOB, IIT Delhi.
9. Payment will be made after satisfactory installation as per IIT norms.
10. Installation, commissioning and staff training expenses are to be borne by the supplier.
11. The Institute reserves the right to accept/reject any or all quotation without assigning any reason.
12. Taxes as applicable should be indicated clearly.
13. No advance payment will be possible
14. Country of origin should be mentioned.

**Sealed quotations should reach the undersigned on or before October 1, 2015 by 3:00 p.m.**

Please quote best prices with appropriate discounts for academic institutions. The quotations can be sent to the undersigned:

Dr. Supreet Singh Bahga  
Department of Mechanical Engineering  
Indian Institute of Technology  
Hauz Khas, New Delhi-110016