**Form for Inviting Quotations**

**Reference No. AS/IMPRINT374/2018/IM**  **Date: 26-2-2018**

**Subject:** Supply and Installation of equipment (see Annexure I) for lab use by Indian Institute of Technology Madras

**Quotation Due Date: 20-03-2018**

Dear Sirs:

Quotations are invited for supply and installation of the equipment as per details in Annexure-I under the following terms and conditions.

**Terms and Conditions (Foreign Vendors/Suppliers):**

1. The total amount indicated is Ex. Works / FOB / CIF. Madras Value.

2. The consignment to be addressed to **Dr. Ashis Kumar Sen, 213 Hydroturbomachines Lab, Department of Mechanical Engineering, I.I.T. Madras, Chennai – 600 036, India.**

3. The consignment to be dispatched by surface / Air Post Parcel / Ocean Freight / Air Freight.

4. Please send three advance copies of Invoice direct to us immediately after dispatch to avoid delay in clearance. DEMURRAGE CHARGES, IF ANY, PAYABLE ON ACCOUNT OF DELAY IN RECEIPT OF ADVANCE COPIES OF INVOICE WILL BE DEBITED TO YOUR ACCOUNT.

5. The following set of documents is required in all cases:

a. Complete set of Clean Bill of Lading / Airway Bill / Air or surface Parcel Receipt, showing that the goods have been shipped and freight prepaid.

b. Insurance Policies / Certificates in duplicate covering Marine Insurance as per Institute Cargo Clauses (All risks) and perils as per Institute Strikes, Riots and Civil Commotion Clauses, War risks as per Institute, Clauses. Cover for CIF value plus 10 percent.

**General Terms and Conditions:**

1. The Quotations duly sealed super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
2. The quotations are invited as two-bid system i.e., technical bid and financial bid.
3. The Quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS&D Rate contract No. and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for, should be submitted free of charges, and collected back at the supplier’s expense.
6. Local Firms: Quotations should be for free delivery to this Institute. If Quotations for Ex-Godown delivery charges should be indicated separately.
7. Firms outside Madras: Quotations should be for F.O.R. Madras. If F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If Ex-Godown, packing, forwarding and freight charges must be indicated.
8. The rate of sales / General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales / General Taxes will be admitted at any stage and on any ground whatsoever The taxes leviable should take into consideration that we are entitled to have concessional Sales Tax applicable to non-Government Educational Institutions run with no profit motive for which a concession. Sales Tax Certificate will be issued at the time of final settlement of the bill.
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. Payment : Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later

**ANNEXURE-I**

**TECHNICAL SPECIFICATIONS FOR PURCHASE OF “MOTORISED INVERTED MICROSCOPE WITH Z-DRIFT COMPENSATOR” FOR MICROFLUIDIC AND BIOLOGICAL SAMPLE OBSERVATIONS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No.** | **Basic** | **Description** | **Quantity** |
| 1 | Frame | The microscope frame should be double deck, rigid, vibration free and rust-proof for easy maintenance. It should have port for fluorescence illuminator, DIC slider attachable three position light path prism (100:0/50:50/0:100). Provision to attach motorized/coded components. User friendly touch panel to control observational settings | 01 |
| 2 | Nose piece | Motorised revolving nose piece, with DIC slider slot. | 01 |
| 3 | Universal control unit | Control unit for all motorised components.  A remote control unit for Z focussing | 01 |
| 4 | C-Mount adapter | 2/3 inch C-Mount adapter. | 02 |
| 5 | Observation tube | Wide field trinocular head, F.N.22, three position prism, observation 100%, observation - camera port 20% - 80%, camera port 100%. | 01 |
| 6 | Eyepieces | Focusable 10X eyepieces | 02 |
| 7 | Pillar | Front operation of pillar for condenser movement with filter holders. | 01 |
| 8 | LED illumination system | Transmitted LED light source | 01 |
| 9 | Motorized attenuator with ND filters | 6 position motorised attenuator with diffusion filter, day light filter and ND filters | 01 |
| 10 | Condenser | Motorised Universal condenser with a minimum Numerical Aperture (NA) 0.55 and Working Distance (WD) 25 mm and 6 position turret, should have a green interference filter.  Turret rotation and aperture should be controllable by front panel and software | 01 |
| 11 | Z Drift Compensator | One-shot auto focus mode and continuous auto focus mode to avoid any drift in focus | 01 |
| 12 | Infinity corrected Objectives | 10X U Plan achromat phase objective with NA 0.25 and WD 10.  20X long working distance Universal Cplan, semi apochromat phase compatible fluorescent objective with variable WD from 6.6 to 7.8 mm, NA of 0.45 and variable cover correction from 0 to 2 mm via focus free correction collar for phase-contrast observations.  40X long working distance Universal Cplan, semi apochromat phase compatible fluorescent objective with variable WD from 3 to 4.2 mm, NA of 0.6 and variable cover correction from 0 to 2 mm via focus free correction collar for phase-contrast observations.  60X plan apochromat oil immersion objective with WD of 0.15 mm or more and NA of at least 1.4  100X universal plan super apochromat oil immersion objective with WD of 0.13 mm or more and NA of at least 1.4  Immersion oil with low auto fluorescence | 01 |

The microscope should be compatible for motorised XY stage. The microscope should be upgradable to confocal microscopy. The bidders can include any accessories necessary for the up gradation.

Complete installation of the microscope to be done by the vendor for free of cost. The entire microscope should have a warranty period of one year or more. The bidders can include warranty extension price as optional. Service and maintenance to be done by the vendor as and when required.

Thank you.

Sincerely,

Dr. Ashis Kumar Sen

213, Hydroturbomachines Lab

Department of Mechanical Engineering

Indian Institute of Technology Madras, Chennai - 600036, Tamilnadu, India