



Dr. Ashis Kumar Sen
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Form for Inviting Quotations

Reference No. AS/RFTP/IMS/2016

Date: 14-02-2016

Subject: Supply and Installation of equipment for lab use by Indian Institute of Technology Madras

Quotation Due Date: 10-03-2016

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 INVERTED TRINOCULAR PHASE CONTRAST MICROSCOPE WITH TWO DECKS FOR MICROFLUIDIC AND BIOLOGICAL SAMPLE OBSERVATIONS

Sl. No.	Basic	Description	Quantity
1	Frame	The two deck frame should be rigid, vibration free and rust-proof for easy maintenance. It should have port for fluorescence illuminator, three position light path prism (100:0/50:50/0:100). Provision to attach motorized/coded components.	01
2	Nose piece	Coded 6-position turret nosepiece, with DIC slider slot.	01
3	C-Mount adapter	2/3 inch C-Mount adapter.	01
4	Video port adapter		01
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 eyepiece, F.N 22, 10X eyepiece, F.N 22.	01
7	Pillar	Front operation of pillar for condenser movement, tiltable transmitted 100 watts pillar. Pillar tilt mechanism (30° inclination angle, with vibration reducing mechanism), condenser holder (with 88mm stroke, refocusing mechanism), field iris diaphragm adjustable, 4 filter holders.	01
8	Halogen illumination system	Transmitted Koehler illuminator, 12V, and minimum 100W Halogen power supply with intensity control knob & On/Off switch, input supply - 230V, halogen lamp house, halogen bulb (12V minimum 100W).	01



9	Filters	Diffusion filter, day light filter, ND6 Filter, ND25 Filter.	01
10	XY Stage	Motorised XY stage with travel range 114 x 75mm with 2mm pitch ball screw and 200 step motors, minimum step size of 0.04 micrometre, maximum speed of at least 60 mm/s, mean repeatability of 0.2 micrometre and minimum load capacity of 10 kg. Controller to control the encoded XY stage and focus, USB and programmable TTL supplied with SDK, free user friendly software compatible with Windows 7/8/8.1/10 to control the stage using computer.	01
11	Holders	Universal specimen holder for slides Petri dishes and small flasks, extra recessed holder for micro titre plates (85x128mm) with diagonal corner sections removed, for 4, 6, & 96 well plate.	01
12	Condenser	Universal condenser with a minimum Numerical Aperture (NA) 0.5 and Working Distance (WD) 45 mm and 5 position turret, should have a green interference filter and phase rings for 10X, 20X, 40X and 60X.	01
13	Objectives	<p>4X Plan achromat objective with NA 0.1 and WD 18.5.</p> <p>10X Plan achromat phase objective with NA 0.25 and WD 10.</p> <p>20X long working distance Universal Cplan, 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.</p> <p>40X long working distance Universal Cplan, 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.</p> <p>60X long working distance Universal Cplan, phase compatible fluorescent objective with variable WD from 1.5mm to 2.2mm, NA of 0.7 and variable cover correction from 0.1 to 1.3 mm via semi-focus free correction collar for phase-contrast observations.</p>	01
14	Fluorescent attachment	<p>Coded 8 positions turret attachment, built-in shutter.</p> <p>Filters:</p> <p>Mirror unit for fluorescence microscopy with narrow band UV excitation with band pass barrier, exciter filter 360-370 nm, dichroic beam splitter 410 nm,</p>	01



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		<p>barrier filter 420-460 nm, including plastic case for DAPI / Hoechst dye.</p> <p>Mirror unit for fluorescence microscopy with narrow band blue excitation (with band pass barrier), with exciter filter 470-495 nm, dichroic beam splitter 505 nm and barrier filter 510-550 nm, including plastic case for Alexa Fluor 488 / GFP / FITC.</p> <p>Mirror unit for fluorescence microscopy with wide band interference green excitation, with exciter filter 530-550 nm, dichroic beam splitter 570 nm and barrier filter 575nm-IF, including plastic case for Rhodamine / TRITC</p> <p>Illumination system: Straight design illuminator with field iris diaphragm, light source of High-pressure mercury 130 W lamp with reflector, complying to RoHS & WEEE regulation, Intensity adjustment : 100, 50, 25, 12, 6, 3, 0%, light guide complying to RoHS regulations.</p>	
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Thank you.

Sincerely,

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