

**DEPARTMENT OF CHEMISTRY
INDIAN INSTITUTE OF TECHNOLOGY KANPUR**

Enquiry No. IITK/CHM/SV/16-17/16

Opening Date: 23.2.2017

Closing Date: 06.03.2017

Subject: Request for quotation for an automated upright fluorescent research microscope

Kindly send a quotation for an automated upright fluorescent research microscope with following technical specifications:

Quantity: One

Technical Specification for Automated Upright Fluorescent Research Microscope

1. Upright Microscope with Bright Field, Phase, DIC & Fluorescence contrast technique, preferably, with an Inbuilt Touch screen control Panel.
2. Automated transmitted light axis (field aperture diaphragm, transmitted light, colour intensity, Kohler illumination etc.) for Bright filed contrast. Along with 0.9NA or better condenser. Automated fluorescence axis with 5 or more motorized turret, 5ms or faster shutter, 5 or more position based motorized Filter wheel for intensity control of fluorescence light.
3. Narrow Band Filters for DAPI, GFP/ FITC, TRITC/Rhodamine and Y5 filter for eyepiece visualization with Zero pixel Shift.
4. Microscope body inbuilt Stage based Motorized Z focus-drive with minimum 10nm or less step size. Manual X-Y stage with necessary specimen holder. Smooth movement Objective nose piece with maximum travel range (minimum 7 positions) and motorized multi position DIC turret / slider.
5. Motorized Field diaphragm with circular & rectangular diaphragm to make objective and camera CCD chip size for perfect image. Automated Contrast manager for all contrast techniques as described in 1.
6. All components (polariser, analyser, objective and condenser prisms) should be in/out of path with single command while changing contrast method. Trinocular observation tube with 3-beam splitting position (100/50/0%) along with 0.5X ~0.7x C-Mount adaptor.
7. Camera port with 19 mm FOV or more to match large FOV cameras. LED transmitted light with life span of 20000 hrs or more. Along with 10 ms or faster shutter. The intensity should be controllable by microscope main body and software. High power LED Fluorescence light with 10000 hrs life time for the filters mentioned above. 10X eyepieces with 25 mm or more Field of view.
8. Objectives: Plan 5x, 10x PH, 20x PH, 40x (DIC), Plan Fluotar 100x Oil (DIC) or higher NA would be preferred. All functions should be available in touch pad display as described in 1.
9. Digital cooled Dual mode CCD camera with 2.8 MP or more pixel resolution for mono and colour imaging, 120 fps with 5x5 binning mode or more. Advance Fluorescence imaging

system for Image Multi Channel Acquisition software, Z stacking, Time lapse, software. The Microscope, Light Source, camera and software should be from the same manufacturer.

Please send your offer for the above (original signed in sealed envelope) mentioning the following:

1. Cost of the item and accessories
2. Technical specifications in detail
3. Warranty period
4. Delivery time
5. Educational discount applicable considering end use for research and teaching
6. Payment terms
7. Proprietary Certificate, if applicable
8. Institute reserves right to cancel this tender without assigning any reason.

Please send in your quotation latest by 06. 03. 2017.

Regards,

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