

BOSE INSTITUTE  
KOLKATA

Tender id : 2017\_BIK\_227087\_1  
Tender No. BI-K/E-TEND/17/2017-18  
Tender Title : Procurement of Fluorescence Microscope

### Amendment to

INVERTED FLUORESCENCE MICROSCOPE WITH CAMERA AND IMAGING SOFTWARE

Existing specifications	Amended specifications
➤ Optical system with uniform illumination in entire Field of View	NO CHANGE
➤ LED eco illumination with long life	NO CHANGE
➤ Nosepiece that can hold Five or Six objectives simultaneously	<b>Nosepiece that can hold 4 or more objectives simultaneously</b>
➤ Equipped with Plain stage	NO CHANGE
➤ Coarse focus and Fine focus	NO CHANGE
➤ Condenser with extra working distance (removable)	NO CHANGE
➤ Binocular Eyepiece tube	<b>Trinocular Eye piece Tube</b>
➤ Diascopic illumination brightness adjuster	NO CHANGE
➤ Fluorescence cube turret with Shutter	<b>Fluorescence cube turret / slider</b>
➤ Fluorescence illumination brightness adjuster	NO CHANGE
➤ Selector switch between Fluorescence and Transmitted illumination	NO CHANGE
➤ 10X (F.O.V. 22mm) with diopter Adjustment in both the Eyepiece for correction of eyesight.	NO CHANGE
➤ Mechanical Stage with XY Cross travel facility	NO CHANGE
➤ Universal Holder for all types of sample holder.	NO CHANGE

<p><b><u>OBJECTIVE LENS</u></b></p> <ul style="list-style-type: none"> <li>➤ 20X/0.25/6mm or better, for Brightfield</li> <li>➤ 40X/0.65/0.60 or better, Spring-loaded for Brightfield and Fluorescence</li> <li>➤ 60X/100X Oil/ 1.30/0.16 or better, Spring-loaded for Brightfield and Fluorescence</li> </ul>	NO CHANGE
<p><b><u>LED ILLUMINATION FOR EPI-FLUORESCENCE</u></b> LED UNIT FOR BLUE, GREEN and RED with corresponding filters.</p>	<b>LED UNIT or mercury light source FOR BLUE, GREEN and RED with corresponding filters</b>
<p><b><u>DIGITAL COLOR CAMERA</u></b> Microscope Camera, 5Mega pixel or more, Live Image capture, Binning 2X2, ISO50, Exp 100µsec-30sec, USB3.0 connector for PC, 2880X2048/1440X1024, Quantum Efficiency50% or better ISO 50(50-3200), Gain&gt; 50db, exposure control, Direct Connectivity to PC/ Laptop vide USB 3 C-mount Relay Lens</p>	<p><b>Digital colour camera (at least 1.4 MP) cool CCD / True monochrome camera with pixel size of approx. 6.45 x 6.45 micron</b></p> <p><b>Note : Camera spec id ok but our suggestion is to go for a True monochrome cool CCD camera for the fluorescence imaging instead of colour camera.</b></p>
<p><b><u>IMAGE ANALYSIS SOFTWARE</u></b> Software for Measurement acquisition, Line, intensity profile, Live-stream (Video Recording) capture, 3D volume view, rotatable 3D volume view can be converted to AVI or Movie for file export, 2D / 3D View, Macro, Multi-channel Fluorescence, Live Image, Capture, Merging, Z series, Calibration, Auto measurement, count, length,area,angle,circle and ellipse, Image Filtering, Morphology, Image stitching ( large Image), Multipoint, Optical configuration, back ground correction, Report generation etc.</p> <p><b>NOTE: - MICROSCOPE, CAMERA AND IMAGING SOFTWARE FROM SAME MANUFACTURER FOR BEST COMPATIBILITY</b></p>	NO CHANGE
<ul style="list-style-type: none"> <li>• <b>Warranty:</b> Two years comprehensive warranty</li> </ul>	NO CHANGE
<ul style="list-style-type: none"> <li>• <b>Kolkata based service centre</b></li> </ul>	NO CHANGE
<ul style="list-style-type: none"> <li>• <b>List of users where similar instrument has been supplied and installed in Eastern India in last <u>THREE YEARS</u> should be submitted along with latest service report</b></li> </ul>	NO CHANGE

**OPTIONAL ITEM**

A PC with corei5 Processor, 1TB hard disk, 4GB RAM with 21 inch colour monitor. Other optional items may also be quoted.

Any other item which may be necessary for the camera for specific function

NO CHANGE