TECHNICAL SPECIFICATION FOR INVERTED EPI-FLUORESCENCE MICROSCOPE

1. Body of the Microscope: Inverted Microscope with Infinity corrected optical system, having upgradability to the DIC application in future. Microscope camera and image analysis software should be from same manufacturer or source.

   a. Should be 12V 100 W Halogen illumination.
   b. Condenser should be Universal long working condenser for phase/bright field.
   c. Nosepiece should be at least Sextuple revolving nosepiece to accommodate six objectives at a time.
   d. Eye piece 10x (F.O.V 22 mm), Should have diopter adjustment facility on both eye.
   e. Rectangular X-Y Mechanical Stage with universal holder.

2. Objectives: High performance Extra Long Working Distance (ELWD) Objective suitable for bright field/Phase contrast/Fluorescence observation.

   - Achromat 4X N.A 0.10, W.D 30.00mm or better
   - Achromat 10X N.A 0.25, W.D 6.20mm or better suitable for bright field, phase contrast and fluorescence
   - Super Plan Fluor 20X N.A. 0.45, W.D 8.2-6.9mm or better with correction ring suitable for bright field, phase contrast and fluorescence
   - Super Plan Fluor 40X N.A. 0.60, W.D 3.6-2.8mm or better with correction ring suitable for bright field and fluorescence

3. Fluorescence attachment should have at least 6 position turret filter block and fluorescence illumination should be 120/130 W. There should be Precentred mercury illumination having lamp life of 2000hr or more.

4. Filter mirror for DAPI, FITC, and Fura Red (B2A)

5. Digital CCD Camera
   - Digital color cooled CCD camera
   - 2/3” CCD chip, 12 million pixel resolution (2000 TV Lines or more), At least 15 f/p/s/ with full screen size,
   - Cooling 10ºc below ambient,
   - 12-bit digitization,
   - Dynamic range 2000:1,
   - ISO Sensitivity equivalent to ISO 200

6. Software
   - Compact software having following features:
     a. Acquisition and device control through three-dimensional acquisition, Image Acquisition, Time Lapse Imaging, Z-Stack, Multi-channel Fluorescence, Annotation,
     b. 2D / 3D View, ND Viewer, Filter, Morphology, Large Image, Macro, Segmentation,
     c. Auto-measurement, Report Generator facility, Data Base, Vector layer & Multi-Dimensional File Format (ND format).

7. Branded computer with i3 processor, 500HDD, 2 GB RAM, Keyboard, Mouse, with 18.5” color TFT monitor and UPS.
Optional

- Super Plan Fluor 60X N.A 0.70, W.D 2.6-1.8mm or better with correction ring Suitable for bright field and fluorescence.
- A sturdy table for placing the Microscope and associated accessories.

**Note:** Microscope, camera and image analysis software should be from same manufacturer for better compatibility and future upgradability. All USB interface/cables/Power-cords/adapter required for operation should be provided inclusively.

**Terms and conditions:**

1. A minimum 2 years warranty plus three year of free service.
2. AMC charges post warranty and extended warranty should be quoted separately.

**General instructions:**

1. Letter from the manufacturer specifically to quote for this tender is to be attached for authenticity of dealership/ agency and the dealer should be authorized service provider.

2. Vendor should get a fresh certificate directly from their product principal’s clearly mentioning about warranty for two years of the equipment to be delivered. The lowest quotation however, does not depend upon the warranty period.

3. Validity of the quotation should be at least three months.

4. Vendor will do the installation and demonstration of the equipment at IIT Delhi premises without additional charges.

5. Taxes, terms and conditions should be clearly mentioned.

6. In the case the items are proprietary products of the company, a proprietary item certificate stating the same may be provided.

7. Specifications form should be similar to the given specifications sheet.

8. A compliance statement for required specifications should be attached.

9. Payment terms and conditions should be clearly mentioned. No advance payment is encouraged by IIT Delhi.

12. Firm MUST provide a compliance statement vis-à-vis specifications in a “tabular form” clearly stating the compliance and giving justification, if any supported by
technical literature with clear reference of page number, paragraph or lines. This statement must be signed, with the company seal, by the tendered for its authenticity and acceptance that any incorrect or ambiguous information found submitted will result in disqualification of the tender. The quotation should be complete in all respects. (as per IIT-Delhi rules).

The Institute/ purchase committee has the right to accept or reject any bid or all quotations without assigning any reason whatsoever.

Sealed quotations in separate envelopes of Technical and Commercial bids kept in one sealed outer envelope (super-scribed “Quotation for INVERTED EPI-FLUORESCENCE MICROSCOPE” should be addressed to Dr. Archana Chugh, Kusuma School of Biological Sciences, IIT-Delhi, Hauz Khas, New Delhi 110016 and should reach the Kusuma School of Biological Sciences Office, IIT-Delhi by 15:00 hrs on October 10, 2013.