## Sovan Lal Das, PhD

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> IITK/ME/2012/SLD-01 Date: April 12, 2012

То				
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Sub: Purchase of Inverted Research Microscope for Brightfield, Fluorescence Imaging, along with Digital Image System

We are interested in purchase of Inverted Research Microscope for Brightfield, Fluorescence imaging, along with Digital Image system with the specifications mentioned in the next page. Please send sealed quotations for the same to:

Dr. Sovan Lal Das Department of Mechanical Engineering Indian Institute of Technology Kanpur Kanpur – 208016, India

## Note:

- 1. The envelope must be inscribed with word "Quotations".
- 2. All quotations must reach by **April 25, 2012,** at or before 1600hrs.
- 3. The quotation must be valid for 90 days.
- 4. The delivery period should not be more than 4 weeks.
- 5. Send complete details of the products.
- 6. Payment terms: 90% on installation, 10% after satisfactory report.
- 7. All prices are to be FOR IIT Kanpur.

With best regards,

Dr. Sovan Lal Das

## <u>Specification for Inverted Research Microscope for Brightfield, Fluorescence Imaging, along with Digital Image System</u>

Microscope Body: Multi-port design Microscope body with Infinity optical corrected optical system;

Extendable optical free space for attaching TIRF/ Other Attachment etc. in future; facility for 4 way or more light distribution path; up/ down focusing; left & right side port for attaching digital camera; binocular tube with built-in Bertrand lens & darkslide shutter alongwith diopter adjustment facility; built-in 1.5x magnifier or

better in the main body to increase magnification.

Stroke: 5mm/rotation coarse stroke; 0.1mm/rotation fine stroke; minimum fine reading

1micron

Condenser: Universal turret condenser (suitable for all microscopy techniques) with 5 positions

Illumination: 12V 100W Pre-centred Halogen Illumination.

Eyepieces: 10X with F.O.V 22 or better and diopter adjustment facility on both eyes,

Anti-fungus type,

Nosepiece: sextuple revolving nosepiece to accommodate six objectives at a time.

Mechanical stage: Rectangular mechanical stage

Objectives: High performance Long working distance Objectives suitable for Brightfield/

fluorescence

10x Achromat or equivalent, 40X Fluor or equivalent, 60X Flour or equivalent

Epi fluorescence attachment :

With 6 position turret filter block, Noise Terminator mechanism incorporated for

high signal to noise ratio images with

Mercury Illuminator of 100W

Band pass fluorescent filters for with excitation range applicable for dyes

FITC/GFP/Alexa488/Texas Red/Dil

Digital camera: Digital color cooled camera capable of handling very low light fluorescence,

darkfield or DIC images with 2/3" high density CCD chip, approx. 12 or more million pixel resolution, 30 or more fps, cooling 10°c below ambient, Fire-Wire

Port for attaching camera onto desktop

Application: High resolution, colored, low noise, brightfield, multistaining color

fluorescence.

Note: Microscope and camera should be from same manufacturer for better compatibility.

**Data Processing Unit:** Branded With, 2 GB Ram, DVD Writer, 320GB or Higher HDD, 20" or more TFT Color Monitor, Multimedia Kit.

Dr. Sovan Lal Das