



UNIVERSITY OF KERALA

INTERNATIONAL AND INTER UNIVERSITY CENTRE FOR NATURAL RESOURCES MANAGEMENT

DR. RAJESH REGHUNATH
CO-ORDINATOR

Kariavattom Campus
Trivandrum 695 581
Kerala, INDIA

Date :06.03.2015

Quotations are invited for the purchasing of the following equipments/items from the manufactures/authorised suppliers

ITEM 1 : ZOOM STEREO TRINOCULAR (LED) MICROSCOPE

The interested firms may quote for the following accessories also:

- Auxiliary objective 2X
- Fluorescence Ring light
- Interlock dual light guide

SPECIFICATIONS FOR THE MICROSCOPE

Magnification	: 0.67x to 4.5x
Zoom ratio	: 6.7:1
Working distance	: 110mm
Tube inclination angle	: 45°
Interpupillary distance adjustment:	Left / right interlocked adjustment range: 52 to 76mm
Video camera adaptability	: C Mount (0.5x built in)
Zoom adjustment knob	: Left / right single-shaft horizontal knob
Auxiliary objective	: Mounting by screwing into the thread at the bottom of the frame
Frame installation	: Mounting diameter: 76mm
Focusing adjustment	: Focusing stroke: 120mm
Light source	: Transmitted illumination : LED Reflected illumination :LED Average LED life span : 6000hrs. Input rating : 100-120 V/200-240V ~ 0.15 / 0.1A, 50/60 Hz
Eyepiece	: WHSZ10x (FN 22)
Optical performance	: Zoom magnification (0.67x, 1x, 2x, 3x, 4.5x)
Using 2x Auxillary objective	: Zoom magnification (1.34x, 2x, 4x, 6x, 9x)
Ring light guide	: Ring light guide should provide bright and uniform image.
Interlock dual light guide	: Standard oblique semi-rigid fiber optics light guide. The light Source should position on the rear side of the stand.

ITEM 2 : CMOS 3.1MP C-MOUNT CAMERA FOR THE STEREO MICROSCOPE WITH MICROSCOPE ADAPTER.

SPECIFICATIONS

Resolution: 2048x1536, Frame rate: 12, Simple connectivity, Ease of use & installation, USB 2.0 plug-and-play, Real-time preview & capture with true colour imaging. Auto /manual exposure, auto/manual white balance, Portability with laptop / computer OS Windows 7/8, (32/64 bit).

ITEM 3 : IMAGE ANALYSIS SOFTWARE FOR THE CAMERA (for measuring captured image, creating database and preparing reports).

SPECIFICATIONS

View	: Zoom preview, Image information, Slide show etc.
Image Processing	: Edge enhancement, Arithmetic Image Functions
Special filters	: For various image contrast
Morphometry	: Round less, shape, orientation, Image addition, subtraction, : Multiplication etc.
Count and classification	: Identification of objects in an image, count them, Obtain several features measurements, object Identification by user or automatically user designed Classification of basis of size or intensity
Measurement	: (a) Spherical calibration : (b)Line measurements for Distance, Length, Width, Perimeter
Segmentation	: Should measure area fraction and volume fraction. Should Identify Phases within microstructure
Report	:Should print out directly with original image, Proceeded image and tabular result. Also should be able to export to MS Office or Excel for further modification

TERMS & CONDITION

Delivery	: At Kariavattom Campus
Rate	: Inclusive of tax
Payment	: by demand draft or Cheque

Interested parties may submit their quotations on or before 4pm of 13th March 2014 to the following address:

**Co-ordinator
International and Inter University Centre for Natural Resources Management
University of Kerala
Kariavattom campus
Trivandrum 695 581**