



UNIVERSITY OF KERALA
DEPARTMENT OF AQUATIC BIOLOGY & FISHERIES

Karyavattom, Thiruvananthapuram 695 581, Kerala, India
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QUOTATION NOTICE 1- Microscopes

Sealed quotations are invited from the Original Equipment Manufacturers (OEM) or their authorized dealers for supply and installation of the following microscopes for implementing the **European Union- supported Erasmus+ research project titled "ECOMARINE" (Building a Comprehensive Mechanism for Preserving Marine Ecosystems and Life from the negative consequences of Climate Change and the disposal of Plastic Debris)** at the Department of Aquatic Biology and Fisheries, University of Kerala as per the specification mentioned here.

Last date and time of receipt of quotations: **12-01-2024; 03.00 PM**

Quotation may be addressed to: Prof A Biju Kumar, ECOMARINE project leader, Department of Aquatic Biology and Fisheries, University of Kerala, Karyavattom, Thiruvananthapuram 695581

1. Digital Binocular microscope with camera and tablet

Binocular, digital 360° rotating, 30° inclined.

Eyepiece: Wide Field; 5x, 10x/18mm

Nose piece: Quadruple, reversed

Objectives: HC Achromatic, 4x or 5x, 10x, 40x or 45x, 100x

Stage: Double layer, min. 125x115 mm with 70x30mm X-Y moving range, with clips

Condenser: N.A. 1.25; with adjustable height and iris diaphragm

Digital head/tablet: Screen: min. 15.6", 3480×2160 pixel

Illumination: High efficiency min. 3 W LED illumination, with brightness control; USB output; compatible for any computer/laptop.

Camera: Min. 3 MP or above; CMOS or equivalent technology; HDMI resolution:

3480×2160; image size: 2048 x 1536 or above; manual and auto controls of exposure and other features.

Software for capturing and editing; HDR image processing: English version, with facilities for measurement and video recording. Adaptor for camera, compatible for the microscope.

Tablet: min. 10.1", Windows operating System; Image capturing system installed, for the supplied microscope; Multi Touch Screen; LCD resolution 1280 x 800, 16/10 (WXGA)-

Storage HDD 32GB; Network Wireless, Bluetooth 4.0; Input/output ports Micro USB-B - USB - Microphone - MicroSD card reader - Mini HDMI - Head-phone; Control Buttons Auto rotate off, volume control; Battery Technology Lithium-ion battery, 2x cell; Battery capacity 6000 mAh; CPU Intel® Atom™ Z3735F, Quad core; CPU speed 1,83 GHz; Graphics Card Intel® HD Graphics 3D Accelerator; Memory Ram 2,048 GB DDR3L; Instruction manual, Keyboard with touchpad, touch pen. With attachment and detachment facilities to the microscope.

Accessories: immersion oil 10ml. Micrometer slide for software calibration, 1mm/10um, 10mm/100um. Cleaning kit. Plastic dust cover, large.
Two year warranty on body and illumination system

2. Trinocular stereo zoom microscope and compatible digital camera

Observation mode: Brightfield, darkfield, polarisation

Heads: Binocular with additional phototube; rotating and ° inclined.

Dioptric adjustment: On both eyepieces.

Eyepieces: Interchangeable 10× and 15x or 15 to 20 x range

Magnification range 2× to 200x interchangeable optics

Benchtop stand (compatible)

Boom stands double arm model

Objectives: Achromatic 8:1 zoom

Specimen stage: Sliding stage circular, ball-and-socket stage, rotating pol stage

Focusing: Rack and pinion system, controllable

Illumination: High efficiency Double Spot K LED, substage and double arm LED spot; ring light; Cold light sources CL 4500 LED

Fiber optic light - flexible double arm gooseneck

Camera: Axiocam 208 color; 4K; 8 megapixel; CMOS technology. Software for capturing, editing and measuring images; English version. Stand alone and compatible with other microscopes. USB/HDMI cable. Adaptor for microscope.

Accessories: Plastic dust cover large; Cleaning kit.

Two year warranty on body and illumination system

Terms and Conditions

1. The bidder should submit following documents along with bid:
 - Detailed technical compliance of product quoted with cross reference
 - Brochure and literature of the product quoted establishing its Brand, Make, Model and Technical Specifications
 - List of addresses of Offices/Company's Service Centres
 - Original Equipment Manufacturer (OEM) Certificate/ Undertaking. If the bidder is not an OEM, Certificate of authorized dealership/ distributorship from the OEM.
 - Certificate from the OEM for technical support to the bidder and supply of spares.
 - **Earnest Money Deposit (EMD): EMD calculated @ 1% of the Purchase Assessment Cost (PAC- excluding GST) should be paid by the firm. The EMD should be remitted by way of Demand Draft drawn in favour of 'The Finance Officer, University of Kerala' payable at 'SBI, University Office Campus, Palayam' and to be submitted along with sealed quotations.**
2. Incomplete & conditional quotations received after the due date will be summarily rejected without assigning any reasons thereof
3. The Price/Rate quoted should be inclusive of all Taxes Freight, Packing & Forwarding Charges, Handling, Delivery Charges, installation charges etc.

4. The configuration given is the minimum configuration that is/are required. Vendors may choose to supply higher/better/ enhanced systems, but their financial quotes shall be treated as if they have been offered for the specified configuration only.
5. The bid shall be typed and shall be signed by the bidder or a person duly authorized to bind the bidder to the contract.
6. The bidder is expected to examine all instructions, forms, terms, condition, and technical specifications in the quotation Documents. Failure to furnish all information required by the quotation documents or submission of a bid not substantially responsive may result in the rejection of its bid.
7. The bidders shall give undertaking that all the Components used in the equipments shall be original make as per the technical specifications submitted and the hardware/software shall be supplied with the authorized license certificates, if found contrary the supplier shall replace the component/equipment with original one at their own cost 8.
8. All prices should be in INR
9. Delivery and installation: Proposed delivery schedule should be mentioned clearly. Delivery and installation should be made at the Department in Karyavattom campus without any extra cost. Complete installation, testing of the system and demonstration are to be provided at site.
11. Service facility: Supplier should mention their details of service setup and manpower in Kerala who are responsible for service and supply of AMC, if any.
12. In case of any dispute, the decision of the University authority shall be final and binding on the bidders. The undersigned reserves the right to reject any or all of the tenders received without assigning any reason thereof.

The quotations should be submitted in sealed over with title **“Quotation for the equipments for implementing ECOMARINE project at the Department of Aquatic Biology & Fisheries, University of Kerala”**

Sd/-

Dr A BIJU KUMAR