



**KERALA UNIVERSITY OF FISHERIES & OCEAN STUDIES**  
**കേരള ഫിഷറീസ്-സമുദ്രപഠന സർവ്വകലാശാല**

**PANANGAD P.O., KOCHI 682 506, KERALA, INDIA**  
 Phone:0484- 2703782, 2700598; Fax: 91-484-2700337; e-mail: [utypanangad@kufos.ac.in](mailto:utypanangad@kufos.ac.in)



GA7/1103/2023  
02.2023

Panangad dated

**e- TENDER NOTICE**

E- tenders are invited for the Supply of Fluorescent Microscope with Digital Camera and Software (Ino) for PMMSY Aquatic Referral Lab, KUFOS, Panangad.

The Tender should be submitted as e- tender in the e- procurement portal of Kerala Government with detailed specification, Tender fee of Rs.2250/- and EMD of Rs.15,000/-, by means of e- Payment. The GST amount of the tender fee @18% should be remitted to the GST department directly by the bidder. More details will be available in the Office of Dr. Devika Pillai, PI, PMMSY Project on Referral Lab, KUFOS Panangad, on all working days with the permission of undersigned. As per DSIR registration, necessary exemption can be availed for customs & excise duties for the purchase. Our GST Regn. No. is: 32AAAGK0031Q1ZL

All the terms and conditions applicable to University/Government quotations/Tenders are applicable to this Tender also. Right to accept the Tender in full or in part or to reject without assigning any reason is reserved to the undersigned.

**REGISTRAR**

To : Firms/ Programmer to publish on the website

Copy to: Dean FFS/ Dr. Devika Pillai, PI, PMMSY Project through Dean FFS

**Research Fluorescence Microscope with Digital Camera and Software - Specifications**

Ergonomically designed stand preferably with international standard certification.

Rugged and sturdy stand with High Power LED Fluorescence .

It should have low positioned co-axial coarse and fine focus knobs Integrated Carrying Handle at the back.

The stand should have a built-in stabilized power supply for 24V/60W illuminator with mains connection to 110-240V, 50/60Hz.

**Microscope Should have High power 10W LED Transmitted illumination for high demanding illumination needs. should be Supplied with Interchangeable 12V/35W halogen illumination for Specific application**

Special skin-friendly material coated on all operating elements

30deg. Trinocular tube. Interpapillary adjustment from 55 to 75 mm or better

Sidentopf designed Binocular Photo tube with (0:100/0:100) swiveling for comfortable two position height observations.

Wide field 10x/ 23mmFOV mm or more with focusable front lens with provision to insert graticules including rubber eyecups.





Microscope should have Snap button for capturing images without computer and should have

Microscope should have Light Intensity manager function automatic light setting between objectives .

Microscope Should have Eco Mode (automatically goes to standby after being idle for 15 minutes)

Microscope should have 5X Coded revolving( automatically recognise objective) nosepiece with precision click stops to accommodate 5 objectives.

Should be supplied Objective A Plan 5x/0.12NA, A plan 10X/0.25NA, A Plan 20X/0.45NA , N Plan 40x/0.65NA and N Plan 100xOil/1.25NA

Should have Condenser 0.9 to 1.25NA or Better.

Should have Solid-State Light source, Type GB-UV 3-channel fluorescence light source with integrated control with continuous brightness adjustment, quickly switchable and adjustable by stand alone.

Equipped with 3 solid state LED lamps. - Green (565nm) for excitation of Cy3, TRITC, DsRed and similar dyes - Blue (470nm) for excitation of eGFP, Fluo4, FITC and similar dyes - UV (385nm) for excitation of DAPI, Alexa 405, Hoechst 33258

All the objectives should be of Anti-fungal treated.

Dual layered mechanical stage with hardcore anodized surface with 220x150mm or better with XY movement of 75x50mm with low positioned co-axial X Y movement knobs with friction adjustment mechanism.

### Scientific digital Microscopy Cooled Camera 5MP(CMOS )

Sensor Size : 11.25mmx6.3mm. Interface :USB 3.0,

Exposure time : .100µs -4s or better.

Gain -1x to16x adjustable .Pixel Size: 3.45µm X3.45µm or better

Fast readout with 36 full frame images per second@ 5MP resolution

**Cooling : temperature stable at 25°C for ambient Temperature between 18°C to 30°C**

Should have **Global shutter readout** avoids CMOS rolling shutter image distortions

Camera should have Black and White Image Modes.

Software for Area, Linear Measurement , Z stacking and Panorama, annotation and microbar Insertion.

Software for image capture, annotation, analysis, calibration, Microbar Incretion, Measurement of length, area of the specimen, Multichannel etc. should include panorama and manual Z staking software.

It should have RoHS, CE and CSA safety certificate

Should supplied with Branded PC, i5 Processor, 8GB ram, 2GB graphics card , 22" IPS Monitor , Win 10 original, key board and Mouse etc.

**Warranty : 3 Years from the date of installation of the equipment**

*Note: Microscope, camera and Software from the same manufacturer.*