



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

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GA 7/1330/2023
02.2023

Panangad dated

e- TENDER NOTICE

E- tenders are invited for the Supply of **Flow Cytometer** 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.6000/- and EMD of Rs.40,000/-, 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. Our GST Regn. No. is: 32AAAGK0031QIZL

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 i/c

To : Firms/ Programmer to publish on the website

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

Specification for Flow cytometer Analyzer

1. The flow Cytometer analyzer should be compact, Transportable (required for both Field and Lab application), automated & bench top with a blue laser (488 nm) & red laser (640 nm). All Lasers & their excitation & collection optics should be fixed & pre-aligned.
2. The System should have the capability of four fluorescence detectors and two light scatter detectors (forward & side scatter) with six parameters measurement.
3. The flow cytometer system should be based on hydrodynamic focusing on the laminar flow within the Flow Cell (Quartz).
4. The System should have pre-optimized detector settings. PMT detectors should be provided standard along with the system.
5. The Flow cytometer should have the capability of user-changeable optical filters.
6. The system should be able to detect a minimum particle size of 0.5 micron and capable of aspirating samples with volumes of a minimum of 50ul.
7. The system should have a data acquisition speed 10,000 events per sec.
8. System should be able to perform absolute counting without adding beads to the samples. (x) The system should have Fluorescence Sensitivity of at least MESF FITC <75; PE <50 (xi) The system should have 18-bit or higher signal processing, and digital data should be collected with a 5-7-

decade dynamic range.

(B) Software & Data Management

The system should come with suitable software for acquisition and data analysis for all applications. Should quote for both online & offline compensation software for data analysis. Design should be compatible with bead array applications. The company should provide all the software updates for the next three years for the system.

Data management system: All in One PC workstation with the latest workstation & suitable monitor.

(C) Mandatory requirements:

1. The company should have at least five installations of a flow cytometer in India in Govt. Institutes. (5 Performance certificates must be quoted with the bid)
2. Full warranty for three years must be provided. The AMC/CMC post-warranty for two years should be quoted.
3. Complete details of services and application support should be given.
4. Also, the company should have a facility for technical help, troubleshooting & training on the same system.
5. Technical features for the product quoted should exclusively be supported by an authentic company catalogue and must be verifiable from the official company website. The bids not supported with an accurate/original record will not be considered.
6. Bidder should be a reputed Original Equipment Manufacturer (OEM) or Authorized dealer of the OEM who has an Authorization Certificate from the OEM to participate in the tender. Certificate from the OEM for sales and service to be produced
7. Should have a factory trained Service Engineer available in Kerala (For the quoted model) .
8. The bidder should provide a proper demonstration cum training at their cost for researchers in using the instrument.
9. The bidder should ensure the complete onsite installation of the instrument at the place in a laboratory suggested by the Principal Investigator, and any accessory for the installation should be managed at their cost .
10. The equipment supplied should be proven and suited for:
 - (a) Analysis of all three naturally occurring fluorophore categories in common aquatic microorganisms — chlorophyll, phycocyanin, and phycoerythrin .
 - (b) Allow a minimum detectable particle size of 0.5 microns to a wide range of particle types and sizes, from viruses and bacteria to large algal species.
 - (c) The equipment should have configured a software template to enumerate intact and damaged bacteria in drinking water and other samples.
11. A startup kit should be provided along with the equipment for safe installations & demonstrations of





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<http://www.kufos.ac.in/>
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KUFOS HQRS, Panangad, Ernakulam

the instrument

12. 2KVA UPS with a minimum of two hour backup for working the instrument in emergencies.