



Ref: NCB/F-163867/2017-2018 (N)

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**Annexure to Enquiry No.NCB/F-163867/2017-2018 (N) Dt.20/03/2018**

**Technical Specifications of Bench Top Flow Cytometric Analyzer**

Flow Cytometric analyzer should be based on hydrodynamic focusing with laminar flow in the Quartz Flow Cell. The system should have data acquisition speed up to 10,000 events per sec. Bench top flow cytometer should be compact, automated and equipped with blue laser (488 nm) & red laser (635/640 nm).

All Lasers & their excitation & collection optics should be fixed & pre-aligned. The System should have the capability of four fluorescence detector and two light scatter detectors (forward & side scatter) with total six parameters measurement. The system should have PMT or APD based detectors.

The system should be able to accommodate wide range of sample input tubes in manual loading with various sizes microcentrifuge tubes, 12x75 mm or smaller sample tubes made of polypropylene or polystyrene. System should be supplied with module for high-throughput auto-sampling from 96 well and 24 tube rack. System should have at least 18 bit signal processing and digital data.

The system should preferably have pre-optimized detector gain. The Flow cytometer should have the capability of user-changeable optical filters. The system should be able to detect minimum particle size of 0.5 micron and capable to aspirate samples with volumes of minimum 50ul.

System should be able to perform absolute counting without the need of adding beads to the samples. System should have Fluorescence Sensitivity of at least MESF FITC <75; PE <50. System should be supplied with calibration reagents.

**Software & Data Management**

System should be supplied with suitable data acquisition and analysis software. Software should be capable of performing online & offline color compensation. System should be compatible for bead array applications. Data management system: All in one PC workstation & suitable color monitor and color printer.