CSIR- CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE
MYSURU-570 020, INDIA

(Constituent Laboratory of CSIR, New Delhi (Ministry of Science & Technology)
An ISO 9001:2008, ISO 14001:2004 & ISO 17025:2005, NABL Accredited Laboratory

CORRIGENDUM

Tender Ref: CFTRI/52366/25-26 Date: 08-12-2025

Tender ID: 2025_CSIR_255755_1

The revised and final specifications for the supply of Flow Cytometer based on the deliberations in the Pre Bid Conference held on 27-11-2025 at 11:00 A.M, are uploaded herewith. All the prospective bidders are requested to take cognizance of the revised specifications and submit their bids accordingly on or before the extended bid submission date i.e., 22-12-2025 at 3:00 p.m.

All other terms and conditions of the tender enquiry document remain unaltered.

Controller of Stores & Purchase
CSIR-CFTRI, Mysore
Dt. 08-12-2025

Technical specification for Flow cytometer

1. Bench-top research flow cytometer with at least 3 lasers:
    - 405 nm (violet)
    - 488 nm (blue)
    - 638 nm (red)
2. The system should support a minimum of 11 parameters, including at least 9 for fluorescence detection, plus FSC and SSC. The fluorescent channels provided should be compatible with the following fluorescent dyes: FITC, PE, PerCP, PI, DAPI, Pacific Blue, AmCyan, APC, Alexa Fluor 700.
3. Fluorescence detection should be based on high-sensitivity Avalanche Photodiode detectors (APD) or photomultiplier tube (PMT) detectors capable of resolving dim signals.
4. The system should have alignment alignment-free optical cuvette flow cell design to avoid any user-level alignment while day to day run of the instrument.
5. The system must be capable of analyzing at least 30,000 events per second or more with a coefficient of variation (CV) <3% across flow rates.
6. The system should have an option to upgrade to a high-throughput sampling (HTS) module for processing 96-well plates, with sample mixing to ensure homogeneity and cell viability.
7. The fluidics system should support single-tube loading with continuous flow and volumetric measurement capability.
8. Carryover must be less than 1% in single-tube format and less than 0.5% in plate format.
9. The system should provide high sensitivity to detect weak fluorescence signals, <80 MESF-FITC, <50 MESF PE, with performance specifications suitable for rare-event detection.
10. Software must allow automated startup, performance tracking, and shutdown, as well as support both offline and online compensation.
11. The system must be capable of storing a repository of compensation spillover values of dyes in a library to easily determine the correct compensation matrix with a virtual multicolor panel and/or with new gain/Voltage settings.
12. The system must support adjustable flow rates between ~12 µL/min and 120 µL/min or better (at least three modes: low, medium, high).
13. The optical system should provide a high numerical aperture (NA ≥1.2 or equivalent light collection efficiency) for optimal resolution.
14. The instrument should facilitate nanoparticle and small-particle research with high sensitivity for detecting particles ~200 nm or smaller
15. The instrument shall employ a sheath-based hydrodynamic focusing fluidics system ensuring laminar flow and stable single-particle analysis.
16. Power management: instrument should be supplied with a 3 KVA UPS with at least 1-hour backup, under full load conditions, with a 2-year warranty, including batteries.
17. Data management: the instrument should be supplied with a PC workstation, monitor, and with latest configuration pre-installed with system-compatible software. The PC should be preinstalled with a legal version of antivirus software, Microsoft Office, and other necessary software for reading, analysing, and converting data outputs into

different data formats. Upgradation/maintenance of any firmware and hardware in the PC during the warranty period should be taken care of by the vendor with free of cost.

18. Software should be license-free for end-users or supplied with at least 3 access keys for independent data analysis and upgrades for 10 years free of cost.
19. The instrument should comply with the CFR 21 with an audit trail.
20. A comprehensive warranty of at least three (3) years shall be provided from the date of satisfactory installation. Vendors must also submit a separate quotation for Annual Maintenance Contract (AMC) charges applicable after the warranty period for two years; however, the AMC cost shall not be included in the financial bid evaluation.
21. All required service accessories/consumables kits [sheath fluid (5L), tubes (2ml X 500), and standard QC beads (1set)] along with communication cables, firmware, device drivers. etc. (any other accessory not listed but required), are to be supplied by the vendor.
22. Installation and commissioning of the instrument should be carried out at the site.
23. On-site training for the operation of the hardware and software systems should be included.
24. A list of at least 3 Government Institutions/R&D units/NABL accredited laboratories where similar instruments have been supplied in India, including contact details (name of the person-in-charge, email, and phone number), should be provided. Along with the quoted model's three performance certificates should be enclosed, duly signed and stamped by the concerned scientist/staff.