



**DEPARTMENT OF BIOTECHNOLOGY**  
**Indian Institute of Technology, Madras, Chennai, 600 036,**  
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D.KARUNAGARAN  
Professor and Head

Date: 11.12.2014

**Ref: BT/RAMS/2014/022/SPL**

**Dt. 11.12.14**

**Due Dt.29.12.14**

1. Quotations are invited in duplicate for the various items shown below/overleaf/ enclosed list.
2. The quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS & D Rate Contract, Rate Contract Number and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the rate contract price. If so, please send copy of the R.C. (Please note that we are not Direct Demanding Officers).
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for should be submitted free of charges and collected back at the supplier's expenses.
6. **Local Firms:** Quotations should be for free delivery to this Institute. If quotations are for Ex-Godown, delivery charges should be indicated separately.
7. **Firms outside Chennai:** Quotations should be for F.O.R Chennai. If F.O.R. Consigner stationer freight charges by passenger train/lorry transport must be indicated. If Ex-Godown, Packing, forwarding and freight charges must be indicated.
8. The rates of Sales/General Taxes and the percentage of such other taxes legally livable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales/General Taxes will be admitted at any stage and on any ground whatsoever. **The taxes livable should take into consideration that we are entitled to have concessional sales tax applicable to non-government educational institutions run with no profit motive for which a Concession. Sales tax certificates will be issued at the time of final settlement of the bill.**
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. **Payment:** Every attempt will be made to make payment within 30 days from the date of receipt of bill/acceptance of goods, whichever is later.

## **BENCH TOP FLOWCYTOMETER SYSTEM (2 Laser)**

1. BENCH TOP FLOWCYTOMETER WITH AIR COOLED SOLID STATE 488 nm LASER AND AIR COOLED 633 nm HeNe LASER. ALL LASERS & THEIR EXCITATION AND COLLECTION OPTICS SHOULD BE FIXED ALIGNED.
2. THE SYSTEM SHOULD HAVE PROVISION FOR FUTURE UPGRADATION WITH VIOLET LASER WITH FIXED ALIGNED EXCITATION & COLLECTION OPTICS.
3. THE SYSTEM SHOULD HAVE FIXED OPTICAL ASSEMBLY OF LASER UPON THE CUVETTE FLOW CELL TO ENSURE FIXED ALIGNMENT.
4. THE SYSTEM SHOULD HAVE REFLECTIVE ARRAY BASED COLLECTION OPTICS FOR ENHANCED SENSITIVITY.
5. THE SYSTEM SOFTWARE SHOULD BE CAPABLE OF ESTABLISHING BASELINE SETTINGS OF SYSTEM PERFORMANCE AND BE ABLE TO ADJUST FOR INSTRUMENT VARIABILITY THEREBY AUTOMATING INSTRUMENT SETUP LEADING TO CONSISTENT & RELIABLE RESULTS. THE SYSTEM SETTINGS SHOULD BE ABLE TO BE TRACKED BY LEVY-JENNINGS PLOTS FOR MONITORING THE PERFORMANCE.
6. THE SYSTEM SHOULD HAVE ROBUST FLUIDICS WITH CARRY OVER OF LESS THAN 0.1% TO ENSURE RELIABILITY OF RESULTS.
7. THE SYSTEM SHOULD HAVE THE CAPABILITY OF 6 FLUORESCENCE & 2 SCATTER (8 PARAMETERS) MEASUREMENT UPGRADABLE TO 8 FLUORESCENCE & 2 SCATTER(10 PARAMETERS) MEASUREMENT.
8. THE SYSTEM SHOULD BE ABLE TO ACQUIRE UPTO 10000 EVENTS/SECOND.
9. THE SYSTEM SHOULD HAVE UPGRADABILITY OPTION FOR BUILT IN 40 TUBE CAROUSEL SAMPLE LOADER AND AN OPTIONAL BARCODE READER. THE SYSTEM SOFTWARE SHOULD BE COMPATIBLE WITH LIS FOR BI-DIRECTIONAL INFORMATION EXCHANGE.
10. THE SYSTEM SHOULD HAVE UPGRADABILITY FEATURE FOR INBUILT WALK AWAY AUTOMATION FOR FLOWCYTOMETRIC ANALYSIS FROM 96 AND 384 WELL PLATES DIRECTLY.
11. DATA MANAGEMENT SYSTEM: SUITABLE PC WORKSTATION WITH LATEST PROCESSOR , 160 GB HARD DRIVE, DVD/CD-ROM READ/WRITE COMBO DRIVE, FLOPPY DRIVE, 19" LCD MONITORS AND COLOR LASERJET PRINTER.

12. ALSO THE SUPPLIER SHOULD BE ABLE TO PROVIDE KITS / REAGENTS FOR CELL PROLIFERATION, CELL CYCLE ANALYSIS, APOPTOSIS DETECTION, CYTOTOXICITY ASSAYS, STEM CELL ANALYSIS ETC., AND SHOULD BE ABLE TO DEMONSTRATE THE SAME.
13. THE COMPANY SHOULD HAVE PROVEN CAPABILITY DEMONSTRATED IN THE PAST IN AFTER-SALE-SERVICE AND APPLICATION SUPPORT IN THE FIELD OF FLOWCYTOMETRY INSTRUMENTATION IN INDIA.
14. THE COMPANY SHOULD PREFERABLY HAVE MINIMUM OF 150 INSTALLATIONS IN THE COUNTRY AND A FLOWCYTOMETRY TRAINING CENTRE IN INDIA PROVIDING REGULAR TRAINING COURSES ON RESEARCH APPLICATIONS.

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