



MADURAI KAMARAJ UNIVERSITY  
(University with Potential for Excellence)  
Re-accredited with A++ grade in the 4<sup>th</sup> Cycle



TENDER NOTIFICATION

Invitation of Tender for Fluorescence-activated cell sorter (FACS)

**1) Fluorescence-activated cell sorter (FACS)  
(Notification No. RUSA/MKU /SBT-01)**

Tender for the above item is invited upto 25.03.2022 by 5.30 PM. Tender schedule conditions, specifications and other particulars may be downloaded from [www.mkuniversity.org](http://www.mkuniversity.org)

The cost of Tender form	-	Rs.2,000/- + GST18% (Not refundable)
Last date for submitting the Tender	-	25.03.2022 at 5.30 PM

Opening the Tender - will be intimated later.  
Palkalai Nagar.  
Madurai – 625 021

**MADURAI KAMARAJ UNIVERSITY**  
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**Tender for supply of one number of Fluorescence - activated cell sorter (FACS) for the  
School of Biotechnology, Madurai Kamaraj University under RUSA/MKU Project.**

Application No.	
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1.	Name of the Firm	
2.	Full Address (with Pin Code & Telephone /Cell Numbers)	
3.	Quoted Amount (List Enclosed)	
4.	Details of the EMD amount remitted	Name of the Bank Branch DD No. Date Amount Rs.

**Declaration**

I have gone through the enclosed /above tender terms & conditions and will abide by them.

Place: Madurai  
Date:

Signature of the Tenderer

## TENDER SCHEDULE

1.	Tender inviting Authority, Designation and Address	The Registrar Madurai Kamaraj University Palkalai Nagar, Madurai – 625 021 0452-2458471 mkuregistrar@rediffmail.com
2.	Name of the Work	Purchase of one number Fluorescence - activated cell sorter (FACS) <b>Instrument</b> for the School of Biotechnology, Madurai Kamaraj University.
3.	Tender reference	<b>RUSA/MKU /SBT-01</b>
4.	Place of Execution	Madurai
5.	Tender documents	The Tender documents along with specifications can be downloaded from <a href="http://mkuniversity.org">http://mkuniversity.org</a> till due date and time of the Tender and a Demand Draft for Rs.2,000/- + GST 18% is to be attached while submitting the tender.
6.	Earnest Money Deposit	1% to the total cost value
7.	<b>Tender submission</b>	<b>Up to 25.03.2022, 5.30 PM.</b>
8.	<b>Date and Opening Time of Tender</b>	<b>Will be intimated later .</b>

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**Tender Conditions**

Open Tenders are invited under RUSA Project for supply of one number of **Fluorescence - activated cell sorter (FACS)** for School of Biotechnology, Madurai Kamaraj University upto 5.30 P.m. on **25.03.2022**. The Tender should be from the reputed Manufacturers/Authorized dealers.

**Two Cover System**

Bidders should examine all Instructions, Terms and Conditions and Technical specifications given in the Tender document. Failure to furnish information required by the Bid or submission of Bids not substantially responsive or viable in every respect will be at the Bidders risk and may result in rejection of Bids. Bidders should strictly submit the Bid as specified in the Tender, failing which the bids will be non-responsive and will be rejected. The Tender should be submitted in Two Parts viz Technical Bid (Envelope-A) and Price Bid (Envelope-B) as explained below:

**Technical Bid Cover (Envelope-A)**

- a) The Technical Bid as per the format given in the Tender document shall be typed, signed and stamped in all pages by the authorized signatory of the Tender. Any alterations, deletions or overwriting shall be attested with full signature of the Authorized signatory of the Tender.
- b) The supporting documents and other documents as given below should be submitted in the Technical Bid.

#	Documents to be Submitted
1.	EMD instrument shall be kept in a separate cover, sealed and superscribed as "EMD cover"
2.	Covering letter in the Bidder's Letterhead shall be enclosed.
3.	Authorization letter in the Bidder's Letterhead from the Managing Director/ Partner / Proprietor or Power of Attorney from the board of Directors of the Bidder company for Authorized Signatory of the Tender Shall be enclosed.
4.	A full set of Tender document should be printed, signed by the authorized signatory and stamped in all pages as a token of accepting the conditions.
5.	Technical bid should be duly filled & signed by the authorized signatory and stamped in all the pages.
6.	All the supporting documents to establish Bidder's eligibility as required should be signed by the authorized signatory and stamped in all pages and enclosed with Technical Bid.

- c) The Technical Bid shall not contain any indications of the Price Bid whether directly or indirectly otherwise the Bid will be summarily rejected.
- d) The EMD cover and filled Technical Bid document enclosed with supporting documents should then be put in a separate cover and sealed appropriately. The Technical Bid cover (Envelope-A) should be superscribed as **“Technical Bid (Envelope-A) – Purchase of one numbers of Fluorescence - activated cell sorter (FACS) for School of Biotechnology, Madurai Kamaraj University –Tender Ref: RUSA/MKU /SBT-01”**. The “FROM” address and “TO” address should be clearly written in the outer cover otherwise the BID is liable for rejection.
- f) The technical details submitted by the companies who participated in the tender will not be disclosed to any third party as the disclosure would harm the competitive position, trade secrets and intellectual property rights.

#### **Price Bid Cover (Envelope-B)**

- a) All the price items as per the format given in the Tender document shall be typed, signed and stamped in all the pages by the Authorized Signatory of the Tender. Any alteration, deletions or overwriting shall be attested with full signature of the authorized Signatory. Only a single price should be quoted for each Price Bid item. The Bid is liable for rejection if price Bid contains variation clause or conditional offers or partial offers.
- b) The Price Bid shall be placed in a separate cover and sealed appropriately. The price Bid cover (Envelope-B) shall be superscribed as **“Price Bid (Envelope B) – Purchase of one numbers of Fluorescence - activated cell sorter (FACS) for School of Biotechnology, Madurai Kamaraj University –Tender Ref: RUSA/MKU /SBT-01”**. The “FROM” address and “TO” address shall be written without fail otherwise the price Bid is liable for rejection.

#### **Outer Cover**

- c) Both the Technical Bid cover enclosed with EMD cover (Envelope- A) and Price Bid Cover (Envelope –B) shall then be put in a single outer cover and sealed appropriately. The outer cover shall be superscribed as **“Purchase of one numbers of Fluorescence - activated cell sorter (FACS) for School of Biotechnology, Madurai Kamaraj University – Tender Ref: RUSA/MKU /SBT-01”**. The “FROM” address and “TO” address shall be written without fail otherwise the Technical Bid is liable for rejection.

Tender in sealed covers superscribed as **“Purchase of one numbers of Fluorescence - activated cell sorter (FACS) for School of Biotechnology, Madurai Kamaraj University –Tender Ref: RUSA/MKU /SBT-01”**. Addressed to Dr. V.S.Vasanth, Registrar, Madurai Kamaraj University, Madurai - 625 021. The University will not be held responsible for the postal delay and postal transit.

The tenderer should enclose an attested xerox copy of the commercial tax certificate regarding GST number. The supply should be made within 30 days from the date of receipt of supply order. The rates quoted by the firm should be valid for a period of one year from the date of acceptance of tender and no escalation of rates will be allowed under any circumstance. A crossed demand draft **1% to the total cost value** should be drawn in favour of the **PROJ COORDINATOR DP SBOT AND COOR RUSA, Madurai Kamaraj University, Madurai** towards Earnest Money Deposit should accompany the Tender. The successful tenderer is also requested to remit 4% to the cost of supply as security deposit for the proper fulfillment of supply and contract.

The successful tenderer should deliver the items on destination and no freight charges will be paid by the University on any circumstances. If the successful tenderer fails to execute the above supply as per the schedule and satisfaction of the authorities, the resultant excess expenditure that will be there after incurred for the purchase of the above mentioned item, will be recovered from the tenderer apart from forfeiting the E.M.D amount. If any tender is withdrawn, the Earnest Money Deposit of the tenderer will be forfeited.

The Registrar is under no obligation to accept the lowest or any tender and reserve himself the right to accept or reject any tender in whole or in part without assigning any reason and tender will be accepted only on those conditions. The Registrar reserves the right to accept or reject any tender without assigning any reason. Tenders should be addressed in the name of **Dr. V.S.Vasantha, Registrar, Madurai Kamaraj University, Palkalai Nagar, Madurai-625021** and should be in sealed covers by Registered Post with acknowledgement due or in person. Tenders received in ordinary covers without seal will not be considered.

The Tender cover should be superscribed as **“Purchase of one numbers of Fluorescence - activated cell sorter (FACS) t for School of Biotechnology, Madurai Kamaraj University –Tender Ref: RUSA/MKU /SBT-01”**. Any Tender received after the due date and time will summarily be rejected. The Tender will be opened by the Registrar or any other officer authorised by him in the presence of Tenderers or their authorised agents who may be present at that time.

Palkalai Nagar,  
Madurai-21.

**Dr. V.S.Vasantha**  
**REGISTRAR**

**MADURAI KAMARAJ UNIVERSITY**  
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**TENDER NOTIFICATION No. RUSA/MKU /SBT-01**

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Palkalai Nagar  
Madurai – 625 021

**Registrar**

## General Tender Specifications of high-efficiency cell sorter

1. High-performance flow cytometer with Cell sorting having 4lasers, that is 488nm Blue,561 nm Yellow Greenlaser,Violet laser 405nm and Red Laser 638 nm with 15 fluorescent channels and with additional forward and side scatter detectors.
2. Extensive set of repositionable bandpass filters must be provided for sharper signal acquisition. All necessary filters, dichroic and beam splitters to be included for the above configuration
3. The system should be capable of sorting and acquisition speed of 30,000 events per second or more.
4. System must have Automatic full matrix compensation.The system should be able to perform color compensation of all possible spectral overlaps for all the colors.
5. The cell sorter must be equipped with sensitive detectors for capturing high Sensitivitysignals for both fluorescence and scatterdetection.
6. Removable and ultrasonically cleanable 100µm nozzle must be provided for sorting of cells of interest.
7. The system shouldhave superior sensitivity: <80 MESF-FITC, <30 MESF PE or lesser to measure events with low antigen expression and application with dim fluorescence staining, which is achievable by high efficiency, low-noise.
8. The purity of sorted cells must be 96% or better with 5% target population, sample threshold ≤10,000 events per second, while the yield rate is above 80% theoretic rate.
9. Sample flow rate: around 10-100µL/min (est.) adjustable, 200µL/min for cleaning or better.
10. Programmed procedures should include daily clean, shutdown, long-term shutdown, flow cell clean, aseptic clean, sheath filter de-bubble, flow cell de-bubble
11. Thesystem should be ableto perform Automated QC and automatically set, monitor, and adjust the drop delay by continuously computing the correct drop delay during a live sort.
12. The system should behaving 4-way tube sorting capability, with the possibility to assign to each sort stream an individualsort ofMode. Thesystem should be able to sort cells onto tubes, slides or multi-well trays
13. The system supports these sort of collection devices: 5 mL tube, 15 mL tube,96-well plate (deep and shallow)384-well plate,Slides
14. The system is having autoclavable sheath tank, replaceable sterile sample tubing.
15. Instrument should be supplied with factory fitted Biosafety cabinet from Baker Corporation so that cell sorter can be placed inside a Built in with class II, Type Biosafety Containment Cabinet for sterile cell sorting andanalysis verified to meet personnel and product protection standards. It should also include an aerosol evacuation system.
16. Instrument should be Provided with General Purpose Tabletop Centrifuge – 1 no from reputed manufacturer withup to 1.6 liters capacity and 18,000 RPM along with one suitable swing out rotor and adapters to run 13x75 mm tubes for upstream sample processing.
17. Instrument should be supplied with water circulating bath to maintain the sample temperature.
18. Service and Application support to be provided with the down time of 72 hours either virtually or in person.
19. Instrument should come with all standard accessories, software and suitable Online UPS with 1 hours Back up.



20. Instrument should be provided with Split Air Conditioner 1.5 Ton AC 1 No from reputed make that includes stabilizer and installation to maintain the ambient temperature of the environment.
21. Instrument should be supplied the following consumables that includes Sheath Fluid – 10 Nos, Cleaning solution – 2 Nos, QC beads – 2 Nos, Cleaning detergent – 2 Nos, Flow Check Kit – 1 no's, shut down fluid – 10 Nos , Iso Flow Sheath Fluid – 10 Nos , Test tubes 12 X 75 MM – 1000 no's .
22. Instrument should be also provided with 1 kit of Cell Cycle and 3 kits of CD marker antibodies . The reagents would be further detailed during finalization of the bid.
23. Latest branded computer system with the sorter.

**COMPUTER SPECIFICATIONS**

CPU: Intel Core i7 or above.

24. L Memory: 8 GB RAM or higher.  
i Storage: 1 TB drive or higher.  
c Ethernet: Integrated 100M GB, Dual Ethernet ports.  
e USB Port: ≥4 ports, at least one USB 3.0.  
n Monitor: 32-inch monitor (2560x1440 resolution)

Free software should be provided, or minimum of 10 set of licenses for analysis software for offline data analysis should be supplied with the system.

25. System should be quoted with 3 year of comprehensive maintenance contract (CMC), that should cover all aspects including spare parts, service visit and aspects related to operations of the instrument.