



KANNUR UNIVERSITY

THAVAKKARA, CIVIL STATION P.O., KANNUR, KERALA 670002

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NOTICE INVITING E-TENDER

The Registrar, Kannur University invites e-tender(s) in Two Bid System (Two cover) for the supply, Installation, Testing and Commissioning of “**MALDI-TOF-TOF –MS**” (*MALDI Time-of-Flight/Time-of-Flight Mass Spectrometer System*) at Department of Molecular Biology, Janaki Ammal Campus, Palayad, Kannur University (under PM USHA scheme) from original equipment manufacturers (OEMs) or authorized distributors/dealers as per the technical specifications and schedule given below. The rate quoted should be inclusive of all taxes, installation charges and other charges. The Registrar, Kannur University reserves the right to accept or reject the tenders without assigning any reason thereof. The list of equipment/accessories proposed to be purchased, including its quantity and specifications are furnished in the schedule of items given below. Since this is an E-tender, only those bidders who have enrolled in the <http://etenders.kerala.gov.in> portal with their own Digital Signature Certificate (DSC) can participate in the tender. E-Tender document and other details can be obtained from the above e-portal.

TENDER SCHEDULE

Tender ID	2025_KnrU_763351
Name of work	Supply, Installation, testing and commissioning of Scientific MALDI-TOF-TOF –MS at Department of Molecular Biology, Janaki Ammal Campus, Palayad, Kannur University
Last date for receipt of Tender	23/06/2025, 11 AM
Date and time of Opening tender	24/06/2025, 3 PM
EMD	Rs. 3,22,000 /-
Tender fee	Rs.48,300 /- {excl. GST}
<p><i>All the MSMEs with Udyog Aadhar Registration working within the state of Kerala will be exempted from the payment of Tender Fee and EMD. Under MSME category, only Manufactures for Goods and Service Providers for</i></p>	

<i>Services are eligible for EMD/Tender fee exemption</i>	
Place of supply and installation	Department of Molecular Biology, Janaki Ammal Campus, Palayad, Thalassery Kannur University-670661

For further details logon to <http://etenders.kerala.gov.in>.

List of Equipments

SI No.	Item	Required Quantity (Nos)
1	MALDI Time-of-Flight/Time-of-Flight Mass Spectrometer System (MALDI-TOF-TOF -MS)	1

1. Technical Specification for MALDI-TOF-TOF -MS

The MALDI TOF-TOF instrument having features with highest quality performance in resolution, sensitivity and mass accuracy for a wide range of applications.

- a. The system should facilitate the identification and characterization of proteins, peptides and other bio molecules.
- b. The system should be capable of performing the identification of intact protein, protein/peptide identification and characterization, protein biomarker research, PTM identification and analysis, de novo sequencing, gel based and non-gel based applications, quantitative proteomics including label free and labelled (iTRAQ, ICPL, SILAC etc.) studies, MALDI ISD analysis, glycan analysis and biopolymer analysis.
- c. Further, the system should be capable of both positive and negative ion detection and other applications

Relevant literature and publications that support the quoted model's ability to perform all these capabilities must be included

General Specifications:

The instrument should consist of two stages of ion acceleration with the second stage used for MS/MS analysis of masses resolved by the first stage.

System Hardware Specifications	<ul style="list-style-type: none"> • It should be operational in Linear, Reflector and MS/MS mode. • Capable of TOF/TOF operation with true CID MS/MS fragmentation (MS/MS mode operation with gas collision cell). • Active video viewer and rastering of the target under acquisition. • High speed data digitizer (4GHz). • The ion refocusing region and detector with a two stage gridless reflection to better refocus the ions on the detector plane (necessary for higher mass accuracy vital to PMF analysis) with a fast detector coupled to fast electronics for high digital sampling rate.
MASS ANALYZER	<ul style="list-style-type: none"> • The instrument should employ TOF/TOF optics technology for highest resolution and sensitivity. • The system should be capable of performing intact protein mass identification, peptide mass fingerprinting, and precursor ion selection followed by high energy fragmentation to generate high resolution MS/MS spectra. • High sensitivity in both linear and reflector mode (pmol toamol range) fragmentation at high sensitivity and High energy (CID) and ISD.
MALDI ION SOURCE	<ul style="list-style-type: none"> • Solid State MALDI Laser with High repetition stable speed up to 2 KHz or better. • Laser life should be at least 3 billion or higher shots. • Collision Induced Dissociation (CID) facility with high collision energy for both type of ions. • Ion gate for Precursor Ion selection before CID for both positive and negative ions. • User friendly cleaning / self-cleaning of ion source specifying the down • A grid-less delayed extraction source (necessary for higher mass accuracy vital to PMF analysis)
	<p>The system should be operated in the following modes.</p> <p><u>LINEAR Mode</u></p> <ul style="list-style-type: none"> • Measurable mass range in this mode: ≥ 500 kDa. • Minimum Mass resolution in this mode (both positive and Negative mode): better than 1200 at 12 kDa • Mass peak reproducibility: Less than 0.05 Da @ 1600 Da.

- Minimum sensitivity for MS:500 fmol or better @66kDa with adequate S/N 100 :1
- Max Data Acquisition Speed ≥ 2 KHz or better.
- Mass Accuracy: better than 50 ppm with internal calibration
- Mass Accuracy: 60ppm with external calibration

REFLECTRONMODE

- Mass Accuracy: 2 ppm or better with internal calibration
- Max Data Acquisition Speed ≥ 2 KHz or better.
- Minimum sensitivity for mass 100 Da :250 a mol or better with adequate S/N.
- Minimum mass resolution in this mode (M/ Δ M):25,000@3000 Da.
- Mass peak reproducibility: less than 0.05 Da @ 1000-2000Da.

Modes of Operation

MS/MS mode

- The instrument should be capable of ToF - ToF facility and this mode operates with gas collision cell.
- The instrument should have two stages of ion accelerates with the 2nd used for MS/MS analysis of masses resolved by first stage under ToF -ToF facility.
- Mass resolution (M/ Δ M):1,500 @ 150Da and 4,500@1200Da.
- Minimum sensitivity: 250 amolor better @ 1500 Da with adequate S/N.
- Range in MS/MS mode 2000 to 6000 Da or better.
- Minimum measurable mass in MS/MS mode:300 Da or less
- Mass accuracy in MS /MS mode: Mass error less than 0.05Da
- MassPeakreproducibility:Lessthan0.05Da@500Da
- Mass resolution of precursor ion-gate selector: M/ Δ M: ≥ 750 or better.

Data System and Software, Work Station should have

- a. Software related to Protein identification and characterization, *de novo* sequencing, protein/peptide quantitation (labelled & Label free), PTM's discovery, and other proteomics application

along with the molecular weight determination of polymer (synthetic as well as bio-) must be supplied. Capable of automated MS or MS/MS analysis.

- b. MASCOT search engine/server based for protein data base search analysis.
- c. High performance computer (workstation) with adequate memory and all interfacing software and hardware. Computer specification should be submitted along with the technical bid.
- d. The operating system should be based on Windows 10 (or higher) (64bits) OS with adequate features to transfer data between computers for standalone data analysis.
- e. Suitable Laser printer should be provided.
- f. Protein calibration standards to be supplied.
- g. Quoted System should have Remote Service facility for the immediate diagnosis and trouble shooting by the Vendor's Service Support team.

Warranty and pre-installation accessories.

- a. A complete online 10 KVA UPS system with minimum 2 hrs back up for uninterrupted data acquisition.
- b. Suitable gas cylinders with regulator should be quoted for the CIDMS /MS Applications.
- c. Comprehensive **Warranty for a period of 3 years** for the complete system viz., MALDI TOF/TOF, and Computer workstation should be offered from the date of supply.
- d. Should have a good after sales service/technical support capable of reaching our site at short notice. Visits towards breakdown calls by service/application support engineers should be attended within 48-72 hours. Technical as well as Application support for the department shall be provided as & when required without any additional cost.
- e. The vendor should provide online service / application support within 24 hrs time and check the system during any issue or if support required.
- f. The supplier must provide an application-oriented training for the users on the operation of the instrument for 1 week and support analysis of our samples if required.
- g. A complete operation manual shall be supplied listing all the capabilities and operations of the instrument.

Other terms & clauses

- a. The vendor should provide MALDI – TOF and MALDI-TOF/TOF installation references within INDIA.
- b. The Vendor should take all the responsibility from the supply, transport and insurance coverage to the installation of the instrument at the installation site or campus.

General Terms and Conditions

1. The tender should be submitted in two cover system (Technical bid & Financial bid).
2. Prices shall be quoted in Indian Currency only.
3. Tender fee and EMD should be remitted through SBI MOPS as indicated in the e-Tender website. *All payments including EMD should be made through online but 18% GST of Tender fee should be remitted to GST Department directly and upload the receipt in the e-procurement portal.*

Sl. No	Equipment	Tender Fee		EMD
		Fee	18% GST	
1.	MALDI-TOF-TOF -MS	Rs.48,300	Rs.8,694	Rs.3,22,000

4. *All the MSMEs with Udyog Aadhar Registration or any other body specified by the Ministry of Micro, Small and Medium Enterprises working within the state of Kerala will be exempted from the payment of Tender Fee and EMD. Under MSME category, only Manufactures for Goods and Service Providers for Services are eligible for EMD/Tender fee exemption.*
5. Custom Clearance of the consignment including all the stages of custom clearance will be under the purview of supplier.
6. The total rate tendered should be inclusive of all taxes and other charges.
7. The bidders shall keep their rate for a period of **180days**.
8. The successful bidder shall, before signing the agreement and within the period specified in the letter of acceptance of his tender, deposit a sum equivalent to 5% **of the value of the contract** by way of Demand Draft drawn in favour of the Finance Officer, Kannur University payable at SBI Kannur University Campus Branch or Kannur Branch of other Nationalized or Scheduled bank, as security for the satisfactory fulfillment of the contract.
9. All bid/tender documents are to be submitted online. Tenders /bids shall be accepted only through online mode on the website and no manual submission of the same shall be entertained.
10. Profile of Bidder as per Annexure1 shall be provided.
11. The bidder should upload along with his tender a preliminary agreement executed and signed in Kerala Stamp Paper of value of Rs.200/- as per format given in Annexure 2.
12. The earnest money of the unsuccessful bidders will be returned through online Transaction and the EMD of successful bidders will be discharged upon the bidder executing the contract

and furnishing the security deposit that will have to be deposited for the satisfactory fulfillment of the contract.

13. The bid shall contain detailed technical specifications, Brochures and pamphlets of all items quoted.
14. All the claimed specifications (make, model, year of manufacture, warranty etc) should be mentioned in the Brochure or Catalogue of the equipment
15. The installation, commissioning and the initial operation will be the responsibility of the supplier.
16. In case of underperformance during the warranty period, the item should be replaced and the period of warranty will recommence from the date of replacement.
17. The payment will be made after completion of supply, installation and commissioning.
18. The bidder shall undertake to supply materials according to the standard sample and /or specifications.
19. No representation for enhancement of rates once accepted will be considered.
20. The bidder shall quote their rate in the standard BOQ provided indicating the breakup details.
21. The supplier shall ensure the quality of the stores supplied.
22. The provisions of Kerala Stores Purchase Manual are applicable to this Tender and further proceedings.
23. The University reserves all rights to accept or reject any or all the tenders without assigning any reason whatsoever at its discretion.
24. The bidder should have the responsibility to attend the first level service if any complaint report. Bidders should have authorized service centres in Kerala
25. The final acceptance of the tenders rests entirely with the University who do not bind themselves to accept the lowest or any tender. But the bidders on their part should be prepared to carry out such portion of the supplies included in their tenders as may be allotted to them.
26. Communication of acceptance of the tender normally constitutes a concluded contract. Nevertheless, the successful bidder shall also execute an agreement for the due fulfillment of the contract within the period to be specified in the letter of acceptance. In cases where a successful bidder, after having made partial supplies fails to fulfill the contracts in full, all or any of the materials not supplied may at the discretion of the Registrar, be purchased by means of another tender/quotation or by negotiation or from the next higher bidder who had offered to supply already and the loss, if any, caused to the University shall there by together with such sums as may be fixed by the University towards damages be recovered from the defaulting bidder.

1. Bidder Profile (as per format mentioned in Annexure1)
2. Scanned copy of valid registration certificate (GST) & PAN Card
3. Scanned copy of Preliminary Agreement in Kerala Stamp Paper of Rs.200/-(as per format mentioned in Annexure 2)
4. Scanned copy of relevant Brochure of the equipment including make & model and copy of its certifications like ISO certification.
5. Copy of GST payment receipt to Kerala GST department (*18% of tender fee*)
6. Address details of Service Centres
7. Warranty Certificate

GSTIN32AAAGK0152J1ZT

Contct : 0497 2715243

Sd/-

Registrar (i/c)

ANNEXURE 1**BIDDER PROFILE**

Sl.No	Particulars	
Details of bidder(Firm/Company)		
1	Name	
2	address	
3	Telephone & Mob	
4	Email & website	
Details of Authorized Person		
5	Name	
6	Address	
7	Telephone & Email	
Information about the company		
8	Status of Company (Public Ltd./Pvt.Ltd)	
<i>Details own functional service centre or authorized functional service centres</i>		
9	Number of Professionals	
10	Service Tax Registration Number	
11	Income Tax Registration Number (PAN)	
12	GST Registration Number	

Signature of the Bidder

PRELIMINARY AGREEMENT

Articles of agreement executed on this the day of
..... between the Registrar, Kannur University (hereinafter referred to as “the University”) of the one part and Shri.....
..... (H.E. name and address of the tenderer)(hereinafter referred to as “the bounden”) of the other part.

WHEREAS in response to the Notification No..... dated..... the bounden has submitted to the University a tender for the specification therein subject to the terms and conditions contained in the said tender;

WHEREAS the bounden has also deposited with the University a sum of Rs..... as earnest money for execution of an agreement undertaking the due fulfillment of the contract in case his tender is accepted by the University NOW THESE PRESENTS WITNESS and it is hereby mutually agreed as follows:

1. In case the tender submitted by the bounden is accepted by the University and the contract for..... is awarded to the bounden, the bounden shall within days of acceptance of his tender execute an agreement with the University incorporating all the terms and conditions under which the University accepts his tender.
2. In case the bounden fails to execute the agreement as aforesaid incorporating the terms and conditions governing the contract, the University shall have power and authority to recover from the bounden any loss or damage caused to the University by such breach as may be determined by the University by appropriating the earnest money deposited by the bounden if the earnest money is found to be inadequate the deficit amount may be recovered from the bounden his properties movable and immovable in the manner hereinafter contained.
3. All sums found due to the University under or by virtue of this agreement shall be recoverable from the bounden and his properties movable and immovable under the provisions of the Revenue Recovery Act for the time being in force as though such sums are arrears of land revenue and in such other manner as the University may deem fit.

In witness where of Shri..... (name and designation) for and on behalf of the University and Shri..... Bounden have hereunto set their hands the day and year shown against their respective signatures.

Signed by Shri. (date)
In the presence of witnesses:

1.
2.

Signed by Shri. (date)
In the presence of witnesses:

1.
2.