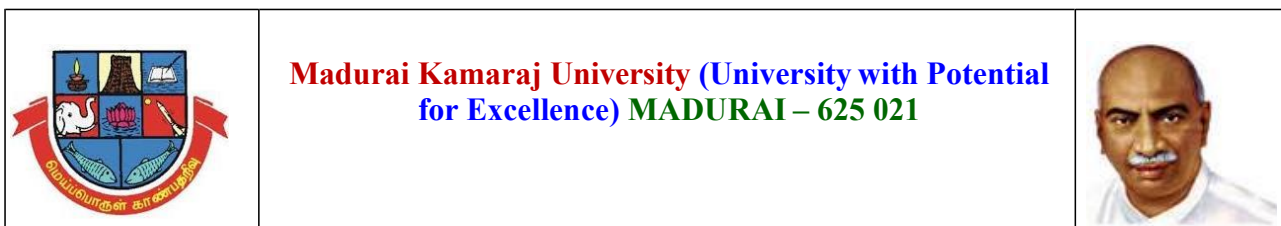


TENDER NOTIFICATION

SCHOOL OF BIOTECHNOLOGY

	MADURAI KAMARAJ UNIVERSITY <i>(University with Potential for Excellence)</i> Madurai - 625 021, Tamil Nadu, INDIA.		
Ref. No. MKU/SBT/ MoES/2025		Date: 23.10.2025	
For and on behalf of School of Biotechnology, Madurai Kamaraj University, the sealed tenders (Two-cover system) are invited by Dr. P. VARALAKSHMI, Principal Investigator, MoES Project, Department of Molecular Microbiology, School of Biotechnology, Madurai Kamaraj University, Madurai-625 021, for the supply and installation of the following items, from the Reputed suppliers/vendors.			
No.	ITEM	EMD Amount	Period of validity
1	High Performance Liquid Chromatography (HPLC)	1% of the estimate cost	90 Days
2	Concentrator	1% of the estimate cost	90 Days
3	Autoclave	1% of the estimate cost	90 Days
Sealed Tenders are invited until 5.30 p.m. on 14.11.2025 , which will be opened by the Purchase Committee constituted for that purpose by Madurai Kamaraj University within a week after receipt of the quotes. Technical bid along with EMD and Price bid must be submitted separately in sealed covers and should not be clubbed together. Quotes without EMD/MSME certificate will not be considered and summarily rejected. EMD should be furnished in the form of DD drawn favour of “ The Registrar, Madurai Kamaraj University, Madurai ”-21			
The specifications, terms & conditions are available in the University website www.mkuniversity.ac.in from: 23.10.2025. The tender documents are available for downloading at the website. Last date for the submission of quotes is 14.11.2025 (before 5.30 PM).			
Dr. P. Varalakshmi The Principal Investigator-MoES, Project School of Biotechnology Madurai Kamaraj University Madurai-21			



Tender Conditions

Sealed Tenders are invited for the supply of listed equipment (No: 1-3) for the MoES sponsored project, Department of Molecular Microbiology, School of Biotechnology, Madurai Kamaraj University, Madurai - 625021 up to 5.30 pm on 14.11.2025.

The Tender applications are expected from the reputed Manufacturers / Authorised dealers. Tenders in sealed cover as superscribed **“Tender quotes for the supply of 1. HPLC 2. Concentrator 3. Autoclave (a separate quotation is needed to be submitted for each equipment) to the School of Biotechnology, Madurai Kamaraj University.** The tender documents should be addressed to **“The Principal Investigator (Dr. P. Varalakshmi), PI-MoES Project, School of Biotechnology, Madurai Kamaraj University, Madurai”.**

Two cover systems: The Tender document relating to the Technical Bid duly filled in and signed must be put in a sealed cover superscribed as **“Technical Bid”**. The sealed Tender cover containing the Technical Bid should be sent with Earnest Money Deposit (EMD). A crossed demand draft 1% to the total cost value should be drawn in favour of ‘The Registrar, Madurai Kamaraj University, Madurai’ towards EMD charges. The product catalogue should be enclosed in the Technical bid. The Tender document relating to the Commercial Bid must be duly filled in and signed and must be put in a sealed cover separately, superscribed as **“Commercial Bid”**. Both the sealed Technical and Commercial Bids should be sent in a sealed cover to Dr. P. Varalakshmi, PI-MoES Project, School of Biotechnology, Madurai Kamaraj University, Madurai-625 021. Covers received without such superscription will be summarily rejected.

The University will not be held responsible for the postal delay and postal transit. Any Tender received after the due date and time will summarily be rejected. Tenderers will be informed of the date of opening the Tender. The tenderer should enclose an attested xerox copy of the commercial tax certificate regarding the GST number. The supply should be made within 30 days from the date of receipt of the supply order.

The bidders must fulfil the following Eligibility conditions and also submit documentary evidence in support of fulfilling these conditions while submitting the Technical Bid. The University will consider the Price bid of the vendors who qualify in the technical bid. For those vendors who are not qualified in the Technical Bid, the Price bid will not be considered. The bidder should submit i) GST, ii) TIN number, iii) Income Tax return details, iv) List of Institutions / Organizations supplied, v) Dealership certificate / Company Profile, etc.

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. The

successful tenderer is also requested to remit 5% to the cost of supply as security deposit for the proper fulfilment of supply and contract. EMD will be exempted for those providing MSME Certificate. The tenders received on the date specified in the Tender Schedule will be opened by the Committee constituted by the University within a week at School of Biotechnology, Madurai Kamaraj University.

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 will be recovered from the tenderer apart from forfeiting the EMD amount. If any tender is withdrawn, the EMD of the tenderer will be forfeited.

Dr. P. Varalakshmi, (Principal Investigator-MoES Project) School of Biotechnology, Madurai Kamaraj University, Madurai-625 021 is under no obligation to accept the lowest or any tender and reserves herself 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. Dr. P. Varalakshmi, PI-MoES Project, School of Biotechnology reserves the right to accept or reject any tender without assigning any reason. Tenders received in ordinary covers without seal will not be considered.

Technical Specification for High-Performance Liquid Chromatography (HPLC) System with Accessories

SPECIFICATION (Quaternary HPLC with PDA detector)

Sl No	Description	Qty
	Specification of Quaternary HPLC with PDA Detector	
	A) The system should be fully modular, and independent operation should be possible. B) HPLC System should meet Analytical to Rapid to Ultra-Fast HPLC. C) HPLC should have the flexibility to make many different system configurations to match our application by small modification. D) Complete flexibility & upgradability to various other detectors & auto sampling should be possible. E) The HPLC modules should have front panel access to control the system manually. F) The HPLC should be upgradable on field to Preparative, Supercritical Fluid system, Gel Permeation Chromatography.	
1	QUARTERNARY PUMP: - Flexible expandability by using plug-in expansion bay system - Flow rate range: 0.001 ~ 10.0 mL/min or better - Maximum pressure: 70 MPa or better - Flow Rate accuracy: $\pm 1\%$ or $\pm 2 \mu\text{L}/\text{min}$. - Flow rate precision: 0.05% RSD or $\pm 0.04 \text{ min SD}$ - Plunger cleaning: Standard. - Degasser: Built in with better efficiency - Number of Line: 4 - Mixing accuracy: $\pm 0.8 \%$ or Better - Mixing precision: 0.25 % or Better - Safety mechanism: Leak sensor etc - Standalone operation should be possible	1 No
2	PDA ETECTOR: - Light source: D2 & WI lamp - Wavelength range: 190 ~ 900 nm - PDA element number: 1024 ch - Slid width: 1,4,8 nm - Data acquisition rate: Maximum 100 spectra/sec (full range)	1 No

	- Noise level: $\pm 0.3 \times 10^{-5}$ AU - Drift: $\pm 0.5 \times 10^{-3}$ AU/h - Linearity: 2.0 AU or more - Flow cell: 10 mm, front loading cassette type, Temperature controlled - PC Communication: Through USB - Resolution: 1 nm - Inbuilt Mercury lamp for Automatic wavelength calibration.	
3	AUTO SAMPLER: Sample injection method: Full or partially fill loop injection Number of samples: ~ 50- 60 (2 mL vial) Injection volume: 0.1 ~ 100 μL Injection precision: RSD 0.3% or less Injection accuracy: $\pm 0.1\%$ or less Carry over: 0.01% or less	1 No
4	CHROMATOGRAPHY DATA SYSTEM: The Software should be supplied by the manufacturer itself and should have the options for the following - Peak integration and peak identification - Peak grouping - Linear and non-linear quantitation 3D chromatogram analysis - Spectral analysis - Style report generator - User calculation - Multiuser login - Automatic backup - Network storage - All raw data is protected and saved, which can then be analysed and re-analysed, reported and saved with both the raw data and with any data processing from the user's analysis. - Previously acquired chromatograms can be overlaid for visual comparison with the data currently being acquired. - Should have capability to control 4 HPLC System and Data acquisition up to 20 modules	1 No
5	Computer Processor type: Intel Core i7 Processor, 16 GB RAM	1 No

	- Memory size: 1 TB SSD, CD-ROM or DVD + RW drive, USB port. - Operating system; Windows 11/13 Professional (64 bit) or most recent with license. - Monitor type: Wide Screen Monitor (Minimum 21")	
6	C18 Column 4.6mm X 250 mm 5µ	1 No
7	Tubing Kit	1 set
8	Maintenance tool kit	1 set
9	Bottle stand & mobile phase bottles	1 set
10	Accessories for Maintaining HPLC 1. UPS -5Kva UPS 1No. 120V, single phase, one year warranty; Battery 42 Ah (3 years warranty or above). 2. Air conditioner (1.5 ton).	1No 1No
12	Warranty	3 years

Technical Specification for Concentrator

Specifications	
Features	
• Chemical-resistant, maintenance-free PTFE diaphragm pump. Small footprint saves valuable bench space • Wide variety of 15 different rotor options to accommodate tubes from 0.2 mL to 50 mL, • Maintenance-free induction drive and chemical-resistant, stainless-steel chamber for trouble-free operation • Can be connected with most commercially available cold traps for use with vapours • New: coated lid with superior chemical resistance	
Operational features	
• Choice of 3 operation modes (vacuum concentrator, centrifuge, and desiccator) for a variety of application needs • Choice of 4 heating levels (ambient, 30 °C,- 60 °C) allows safe and efficient concentration of various samples. • Choice of 3 application modes (aqueous, alcohol or high vapour pressure) to correspond with sample solvent— reduction of processing time up to 20 %	
<u>Technical specification</u>	
Max. capacity	: 144 × 0.5 mL tubes, 96 × 1.5/2 mL, 6 × 50 mL conical tubes,
Fixed rotation speed	: ~ 1500 rpm (max. RCF 250 × g)
Timer	: 1 min to 10 h with continuous mode
Noise level	: < 50 dB(A)
Temperature control	: ambient, 30 °C, 45 °C, 60 °C
Vacuum pressure	: 20 hPa (20 mbar Port to connect external devices to vacuum pump)
Power supply	: 230 V, 50/60 Hz
Power Requirement	: Max. 350 W) (Complete system w/port Max. 350 W)
Dimensions (W × D × H)	: 33 × 58 × 29 cm
Weight without rotor	: 31.5 kg
With branded Stabilizer	: 1 No
Warranty	: Three years

Technical Specification for Autoclave

SI No	Specification
1	Fully automatic autoclave is offered with a unique single lever lock for lid. Automatic Autoclave should have a customised microprocessor-based control system that ensures required sterilization accuracy, repeatability & safety.
2	Expected features The system includes lid safety, the process will not initiate unless the lid is securely locked. It features over-temperature protection with an independent alarm and a durable gasket for extended service life. A unique single-lever lid lock enables easy one-hand operation. The microprocessor-based control ensures repeatability and high accuracy, maintaining compliance with both national and international standards. Additional safety features include low-water detection, a spring loaded safety valve for overpressure protection, and a pressure interlock on the door. Constructed with stainless steel wire mesh carriers/baskets, the unit is CE certified for quality and safety assurance. Technical Features Size and Volume 550 x 760 mm / 180 L Lid, Inner, Outer – made up of Stainless Steel 304. With energy efficient Heater, Pressure Gauge, Safety Valve, Vacuum Breaker, Extra Safety Valve and moulded Rubber Gasket. Automatic purging for efficient sterilisation. Argon-welded joints, ground and polished for crevice-free internals. With Low water level cut-off & SS wire basket. 15 psi. STWL: Standard with Low Water Level cut-off. Manual operation. Check for 15psi on the Gauge and switch off after your required time. PAD: Preset Automatic Digital Indicator cum Controller, permanently set at 121°C and linked to a preset (20 min) timer. Accuracy: $\pm 1^{\circ}\text{C}$. Pt100 Sensor. End of cycle buzzer. Warranty: 3 years