



**Madurai Kamaraj University**  
(University with Potential for Excellence)



**Sealed Tenders (Two cover system) are invited for the supply of UV-Vis Spectrophotometer to the Department of Genetic Engineering, School of Biotechnology**

1	Item to be purchased	:	<b>UV-Vis Spectrophotometer</b> The specifications and quality of the equipment are given in Annexure -1.
2	Due date and time for receipt	:	Date: 24-02-2020 Time: 04.00 pm
3	Due date and time for opening	:	Within a week after the receipt of quotes
4	Mode of sending	:	Sealed cover addressed to “The PI, CSIR Project, Motor ...analysis, Dr. B. Ashokkumar, School of Biotechnology, Madurai Kamaraj University, Madurai-21”.  Should be superscribed as Tender for the supply of UV-Vis Spectrophotometer.
5	EMD	:	1. Rs 7000/- (Rupees Seven thousand only)
		:	2. To be furnished in the form of DD drawn favor of “The PI (Dr. B. Ashokkumar), CSIR Project, School of Biotechnology, Madurai Kamaraj University, Madurai-21.
		:	3. Demand draft to be obtained on or after the date 12-02-2020.
6	Validity of the tender	:	Up to six months from the date of opening.
7	<b>Conditions</b>		
i	The rate and the taxes thereon if any should be furnished separately.		
ii	The amount should be shown both in figures and in words. Corrections if any should be attested properly. Tenders with corrections without attestation will be rejected.		
iii	a. tenders without furnishing the required EMD will be rejected.		

	b. Tenders claiming exemption from paying the EMD should produce necessary evidence / documents in support of their request.
	c. EMD in respect of unsuccessful tenders will be refunded as soon as the tender is finalized. EMD in respect of successful tenders will be refunded after the satisfactory supply.
	e No interest is payable on EMD
iv	Tender should be furnished for the exact specifications as given in the letter. Tender not in accordance with the specification will be rejected.
v	The supply should be effected within 15 days from the date of purchase order to this office.
vi	Warranty period should be indicated. Warranty of 2 years is preferred.
8	The successful bidder should remit a performance security of 5% of the total bill of cost either in the form of demand draft or Bank Guarantee should be valid up to the end of the warranty period.
9	If the successful tender fails to supply the item within the stipulated time, the EMD will be forfeited apart from initiating further action for consequential loss if any, to the MKU, Madurai.
10	Tender shall be furnished in the prescribed format enclosed in the tender document duly signed by the tenderer accepting the condition and the tender format shall be sent. Tender not furnished in the prescribed format itself will be rejected.

**Annexure 1**  
**Specifications for Double beam UV-Vis Spectrophotometer (PC based)**

Optical System	: Single Monochromator, Double beam
Light Source	: D2 Lamp: 190 to 350nm Halogen Lamp: 330 to 1100nm
Light source	
Exchange Wavelength	: User selectable within a range of 330 to 350nm
Detector	: Silicon photodiode
Wavelength Range	: 190 – 1100 nm
Wavelength Accuracy	: +/- 0.2 nm
Wavelength Repeatability	: +/- 0.1 nm
Scanning Speed	: 10 to 8000 nm/min
Slew Speed	: 24,000 nm/min
Spectral Bandwidth	: 1.0 nm fixed
Photometric Range	: -3 to 3Abs
Photometric Accuracy	: +/-0.0015Abs (0 - 0.5Abs), +/-0.0025Abs (0.5 - 1Abs), +/-0.3%T
Baseline Stability	: +/-0.0004Abs/hour
Baseline Flatness	: +/-0.0005Abs
RMS Noise	: 0.00004 Abs
Measurement Modes	: Quantitative Analysis
Wavelength scan	: (Abs, %T, %R, sample reference)
Time scan	: (Abs, %T, %R, sample reference)
Fixed Wavelength	: (up to 8 wavelength)
Abs/%T monitor	

Data Processing : peak picking, peak height , peak area, peak width , Derivatives, smoothing, Data Transaction, Arithmetic , Base line connection, subtraction, Deconvolution, vertical axis conversion , horizontal axis conversion.

Other standard functions: validation software, Enzyme activity calculation, film thickness measurement, color analysis

Instrument should be upgradable to be used with Micro volume of samples less than 1 $\mu$ l.

Should quote the following items along with the instrument:

- Accessories** : 1. Quartz Cuvettes, 10 mm - 1 Pair  
2. Suitable Desktop system with intel core i5, 8 GB ram, 1 TB hard disk with 19.5 inch monitor  
3. 1 Kv online UPS  
4. 1 Tonne Air Conditioner  
5. Multisample Analysis (Optional)

Price should include Tax and Air freight, insurance and customs clearance if any.

**Warranty:** Two years from date of installation