Sri Sankara Arts and Science College



(Autonomous) Enathur, Kanchipuram

Department of Biochemistry

Consultancy / Testing Services

Ultraviolet (UV)-Visible Spectrophotometer

The Department of Biochemistry was established in the year of 1991 with the blessings of Their Holiness. The department was started with B.Sc Biochemistry and upgraded as the Postgraduate department in 1996. Further the department was promoted as the research department in 2019 by starting M.Phil., in Biochemistry. The Department has well equipped infrastructural facilities with laboratories and equipments for both the academics and research activities for carrying out experiments in the fields of Biochemistry, Molecular biology, Bio-organic chemistry, Enzymology, Food analysis and Clinical studies.

UV-Visible spectroscopy is an absorption spectroscopy technique used to measure light absorbance across the ultraviolet and visible regions of the electromagnetic spectrum. UV-Vis spectrophotometer can use this principle to quantify the analytes in a sample based on their absorption characteristics. It is a commonly used technique to analyse a wide variety of samples including biological materials, transition metals, chemical compounds, dyes, pigments and many more.

Instrument Specification

Model Name/Number	UH5300
Brand	Hitachi
Optical System	Czerny-Turner mount, Double beam monochromator
Wavelength/Scan Range	190-1100 nm
Wavelength Accuracy	<u>+</u> 0.3 nm
Wavelength Repeatability	<u>+</u> 0.1 nm
Spectral Band Width	1 nm



Hitachi UH5300

Contact Address

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Mobile No: 9443186132.

Applications of Ultraviolet (UV)-Visible Spectrophotometer

- To scan the sample in the wavelength, range from 190nm to 1100nm and to find out the peak values of the compounds present in the sample.
- > To determine the concentration of biological samples.
- To study the conformational changes in proteins and nucleic acids.
- Characterization of solid nano-bio materials that are homogeneously dispersed in a solvent.
- > To determine the strength and tone of dye samples.

User Instructions

- Minimum 3 ml of liquid sample should be sent to the college address with proper packing. The sample should be clear and non- turbid.
- The requisition form along with online payment receipt should be sent to the email id bioins@sankaracollege.edu.in
- The slot will be confirmed after receiving the online payment receipt.
- The payment will be accepted only through online as per the payment details given. Payment once done cannot be reversed or refunded.
- Please send the mail to <u>bioins@sankaracollege.edu.in</u> or make a call to 9944467306 for further clarification.
- The user is requested to acknowledge "UV-VIS Spectrophotometer Facility, SSASC" in all publications of research work.
- Kindly send us the details of publications (Journal name, volume, issue and page number.

Analysis charges

	Academic	Rs.100 per sample
	Industry	: Rs.200 per sample
Payment Details		
Acco	Account Number 510320011	
Acco	unt Name	Sri Sankara Arts and Science College
Bank	Name	Indian Bank
Bran	ch Name	SCSVMV University Campus, Enathur
IFSC Code		IDIB000S145





UV Spectrum of Ethanolic Extract of Acorus Calamus Rhizome



UV Spectra of Chloroform Extract of Vitex Negundo Leaf

UV Spectra of Silver Nano Particles



UV Spectra of Zinc Oxide Nano Particles