CD -SPECTROPOLARIMETER

Instrument Details:

Make : JASCO

Model: J-810

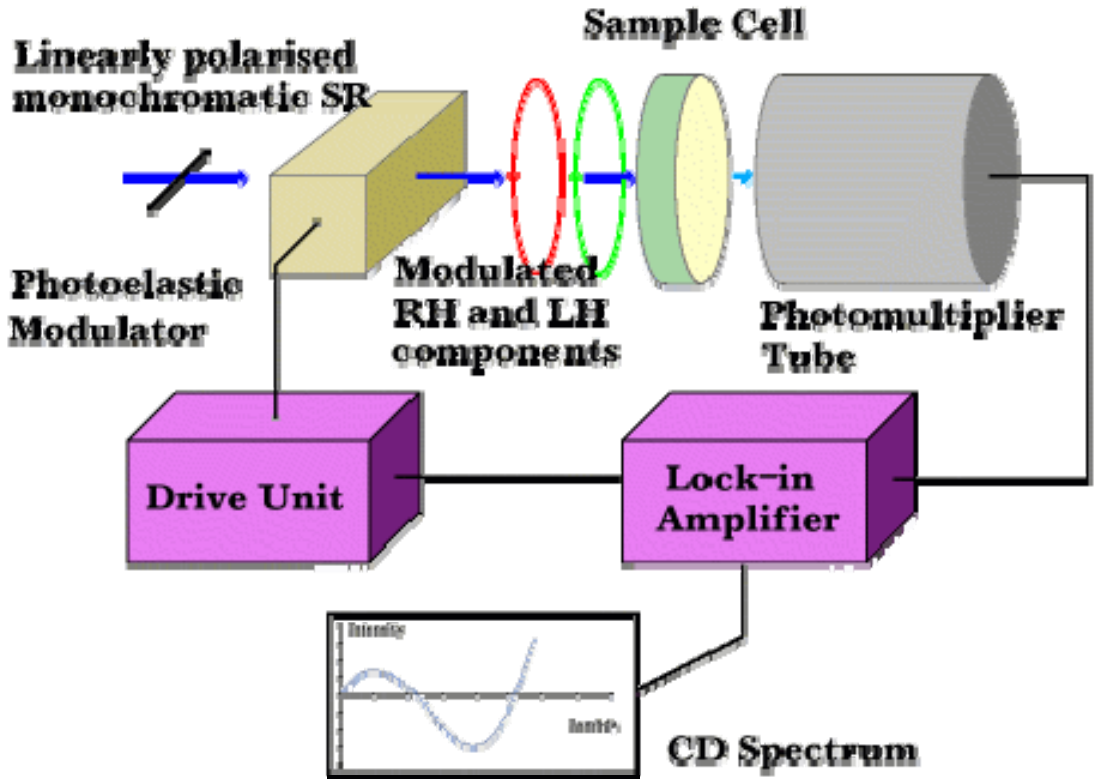
Specification: JASCO's J-810 Circular Dichroism Spectropolarimeter a comprehensive Chiro-optical Spectrometer, it is a latest acquisiton for the BRIN Laboratory (W186). It is a Circular Dichroism and UV/Visible absorbance research-grade chiroptical spectrometer.

The J-810 offers hardware and software features to save time and deliver even better results. Instrument control and data processing are handled by user-friendly Spectra Manager for Windows PC platform. Increased Performance of the J-810's optical bench, with dual prism optics, and the 150-watt air cooled lamp housing provide remarkable stability and low maintenance cost.

Principle of CD:

Circular Dichroism (CD) is observed when optically active matter absorbs left and right handed circularly polarized light slightly differently. It is measured with a CD spectropolarimeter, which is able to measure accurately in the far UV at wavelengths down to 170 or at least 190 nm. In addition, the difference in the left and right handed absorbance is very small (usually in the range of 0.0001

absorbance units) corresponding to an ellipticity of a few 1/100th of a degree. The CD spectrum is the wavelength dependency of the difference in absorption between the right and left-handed components.



Application:

Using circular dichroism spectra to estimate protein secondary structure

User Instructions

1. Samples should not be viscous.
2. Samples should not be prepared in salt solution it should in 10mM phosphate buffer only
3. Minimum volume of sample required for analysis is 500µl and the concentration 0.5mg/ml

Sample Submission: Samples are to be brought in person on the date of your appointment

Results:

User is expected to bring their own recordable CD(s) to copy the collected data. After the sample analysis is complete, the collected data files will be copied to the CD provided by the user.

1. The experimental data provided is only for research / development purposes. These cannot be used as certificates in legal disputes.
2. Samples will not be analyzed till payment is received.

CD Charges including GST:

Sl. No	Equipment	Services offered	Sample types	Sample Concentration/ Volume	Cost (In Rupees plus 18% GST)	
					Academia	Corporate
1	**PROTEOMICS: CD Spectropolarimeter (Jasco J-810)**	Structure analysis	Protein sample	1 mg/ml~200-300 µl	Rs. 600+ Rs. 108 GST= Rs. 708 per hour	Rs. 1,200 +216 GST = Rs. 1,416 per hour

Payment:

External Users: Information

1. Academic Institutions:

User can come personally or send a letter from the Guide/HOD on the Institution's Original Letter Head along with the Registration Form and Demand draft. The letter must clearly indicate whether the samples are for Research or Consultancy purposes. The letter should be addressed to Mr. Vinod Kumar Mishra Staff Scientist, Head, Sophisticated Equipment Facility(SEF) Centre For DNA Fingerprinting and Diagnostics(CDFD) Hyderabad Email-sefcdfd@cdfd.org.in, vkmishra@cdfd.org.in

2. Industry& Non-Government Agencies:

User can come personally or send a letter signed by an authorized signatory of their Institution on Original Letter Head along with the Registration Form and Demand draft. The letter should be addressed to Mr. Vinod Kumar Mishra Staff Scientist, Head,Sophisticated Equipment Facility(SEF) Centre For DNA Fingerprinting and Diagnostics(CDFD) Hyderabad Email- sefcdfd@cdfd.org.in, vkmishra@cdfd.org.in

Tariff for external users: Basic charges + GST* (as applicable)

*GST rate as on 1.8.2017

*Pricing is only for data collection. User is expected to bring their own recordable CD to copy the collected data.

*Acquisition refers to collecting data on different channels and statistics as reported by Jasco CD J810 software.

General instructions to the users

Payment Mode: Payment should in the form of a Demand Draft (DD) drawn in favour of The DIRECTOR CDFD HYDERABAD.

Appointment: The users will be informed about their date and time-slot by email. If the day and timeslot is not suitable for you, an email request to sefcdfd@cdfd.org.in, vkmishra@cdfd.org.in should be sent immediately for an alternate slot.

CENTER FOR DNA FINGERPRINTING AND DIAGNOSTICS

SOPHISTICATED EQUIPMENT FACILITY

UPPAL, HYDERABAD

CIRCULAR DICHROISM–REQUISITION FORM

NAME		**DATE :**
GROUP / SUPERVISOR		
INSTITUTION	**a) Academic [ ]** **b) Industry [ ]**	
NO.OF. SAMPLES		
TYPE OF SAMPLE		
ANALYSIS REQUESTED		
SPECTRAL RANGE		
SAMPLE INFORMATION		
E-mail / PHONE		
DECLARATION	**This is to certify that these samples do not contain Radioactive material** **Signature**	

This is to submit that Content of this report is meant for our information only and we will not use the content of this report for advertisement, evidence, litigation or quote as certificate to third party.

Signature of Student **Signature of the Group Head**