

Chirascan – Applied Photophysics

INTRODUCTION

The Lumetics LINK™ software platform scans network locations for new measurement data files, copies data directly to a centralized database, and provides a powerful user interface for rapid multi-measurement multi-technique data aggregation, visualization, analysis, and reporting. LINK employs a client/server-based architecture where the LINK server hardware is provided by the end user and resides on the end user's network. The LINK client is a portable web-based application that may be placed on any computer with network connectivity to the LINK server. For successful import, the LINK webserver requires read access to the folders where user data resides.

Chirascan is a CD system for analyzing biomolecules of all types and sizes. Chirascan data contributes to a deeper understanding of biomolecular characteristics, mechanisms and interactions. More than α -helix and β sheet but determining the structural and thermodynamic properties of molecules.

DETAILS

LINK requires a processed CSV file in order to import Chirascan data. This file should end with "p.csv". EX/ F10_BW0o5p.csv. LINK will also import CSV exports.

The following raw curve data will be imported, in addition to all available instrument/analysis settings and parameters calculated by the instrument software:

- Wavelength vs. Voltage
- Wavelength vs Temp.
- Wavelength vs. HT
- Wavelength vs. Count
- Wavelength vs. CD

Notes:

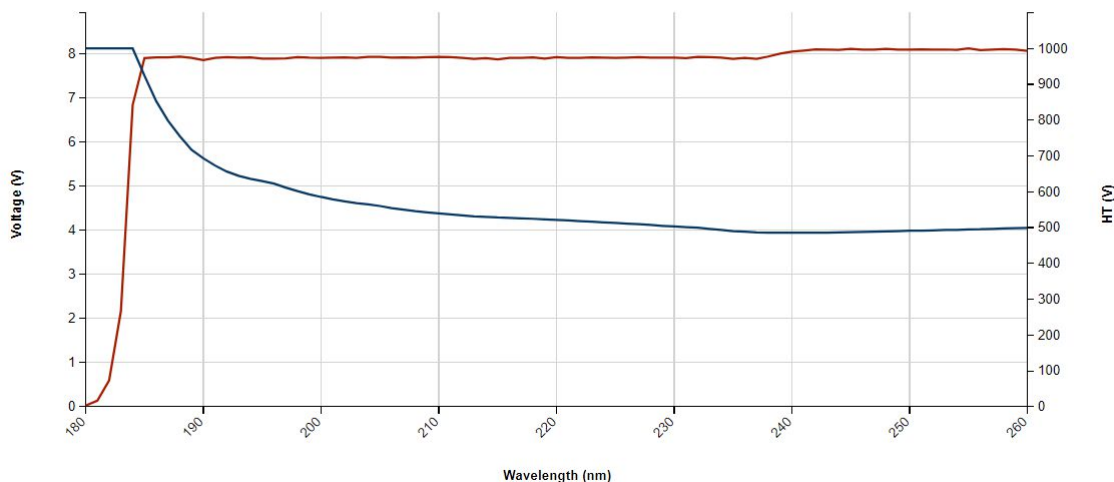
- If there are files ending with the below, they will also be imported into the LINK software:
 - <root file name>p_Average.csv
 - <root file name>p_Baseline Subtracted.csv
 - <root file name>p_Standard Deviation.csv
- The process ("<root file name>p.csv") and unprocessed (<root file name>.csv) may contain more than one run, ie. replicates. LINK imports replicates as distinct measurements, except in the Baseline Subtracted case. These replicates columns are all filled with 0's, therefore they are not imported.
- An example list of sample files that might be imported with a root file name of "F10_BW0o5" are:
 - F10_BW0o5p.csv (processed file, contains all metadata)
 - F10_BW0o5.csv (unprocessed file also contains metadata)
 - F10_BW0o5p_Average.csv (contains one column of averaged data from all replicates)
 - F10_BW0o5p_Standard Deviation.csv (contains one column of standard deviation data from all replicates)
 - F10_BW0o5p_Baseline Subtracted.csv (contains one column, average of all columns of the p file, but with baseline subtracted)
- Note: Since LINK requires the "root" file to end with a p.csv, be aware of same names ending with a 'p'.

EXAMPLES

Included below is a dashboard from Chirascan measurement files:

1. Line Chart plotting raw data curves for Voltage & HT vs. Wavelength

Voltage & HT vs. Wavelength



2. Tabular Summary examples

Measurement Summary Table – Measurement Results

Sample Name	Voltage (V) (Wavelength (nm) >1) - AVG	Temperature (°C) (Wavelength (nm) >1) - AVG	Particle Count (#) (Wavelength (nm) >1) - AVG	HT (V) (Wavelength (nm) >1) - AVG	CD (mdeg) (Wavelength (nm) >=2) - AVG	Count (Wavelength (nm) >=1) - AVG
Sample 1	614.27	1601.55	3240000.00	46717.49	-815.13	3240000.00
Sample 2	563.15	1467.99	2970000.00	42825.96	-866.07	2970000.00
Sample 3	497.35	1296.39	2622857.14	37821.27	-753.12	2622857.14
Sample 4	0.00	0.00	0.00	0.00	198.06	0.00

Measurement Summary Table – Instrument Settings

Sample Name	Validation Date	Concentration	Cell Serial Number - AVG	Analysis Date	Well ID - AVG	Repeat	Available Dimensions: - AVG
Sample 1	Monday, April 10, 20...	0 M	253002524147167...	Multiple (2 Values)	56	10 repeats in set., -it...	2
Sample 2	Monday, April 10, 20...	0 M	253002524147167...	Multiple (2 Values)	56	10 repeats in set., -it...	2
Sample 3	Monday, April 10, 20...	0 M	253002524147167...	Multiple (2 Values)	56	10 repeats in set., -it...	2
Sample 4	Monday, April 10, 20...	0 M	253002524147167...	2017-09-05 15:10:40	56	10 repeats in set., -it...	2

DASHBOARD DOWNLOADS

Included below are the links to downloadable dashboards for Chirascan measurement files:

<http://lumetics.com/dashboards/Chirascan/Chirascan.zip>



CONTACT LUMETICS

For direct assistance, please contact Lumetics LINK™ Support:

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