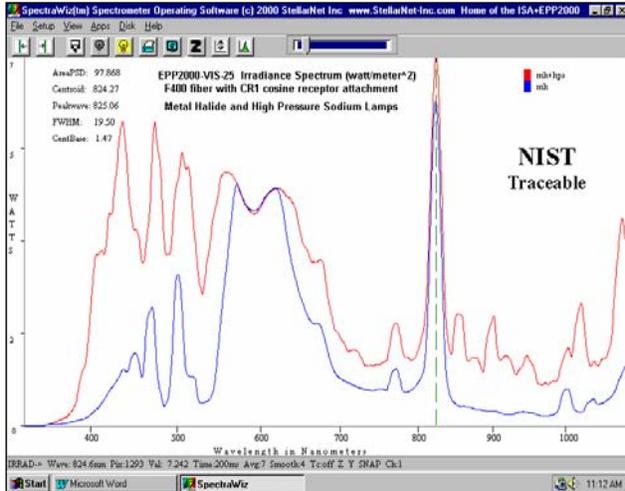


# Analytical Instrumentation

Surf the New Wave in Portable Fiber Optic Spectrometry



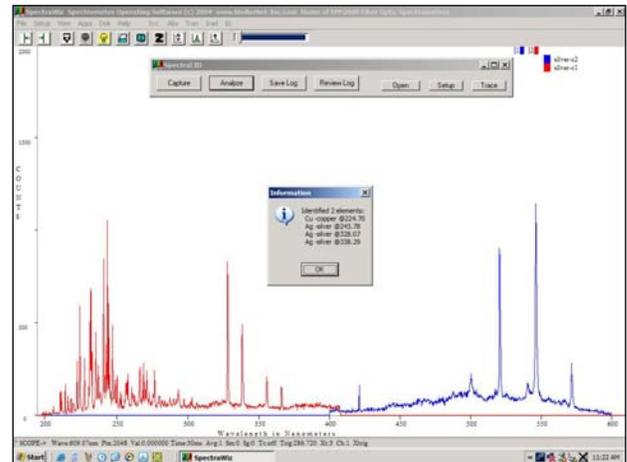
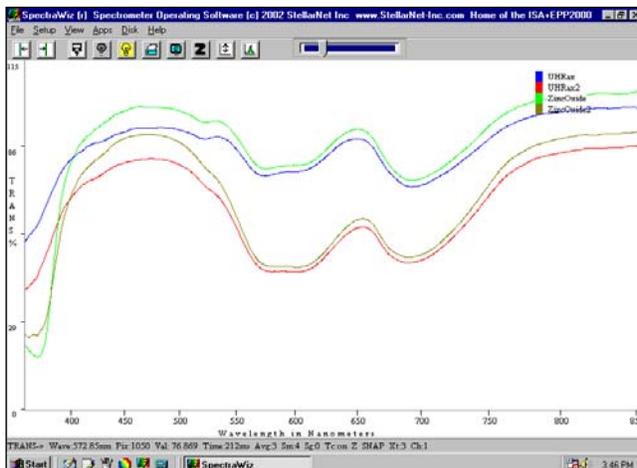
## SpectraWiz® Software Features:

- ✓ Real-time Spectral Graphing and Instrument control with Data Save and Multi-File Plot
- ✓ Measure Spectral Absorbance, Transmittance, reflectance, Irradiance, Fluorescence & Emissions
- ✓ SpectroRadiometer App Measures Absolute Intensity Watts, Lux, and Color Temp & xy Chromaticity
- ✓ SpectroColorimeter App Measures CIELAB Color L\* a\* b\* and Delta E\* Color Differences in Real-time
- ✓ ChemWiz® Measures Concentrations via Methods

The SpectraWiz® operating software for Win9x/NT/00/XP is included free with each StellarNet miniature fiber optic spectrometer system. SpectraWiz has powerful applications and tools to interpret and measure your spectral data for real-time spectroscopy.

The **SpectroRadiometer** application measures irradiant intensity in watts per meter<sup>2</sup>, and moles per second (a photon dose rate) with integral PAR value (Photo-synthetic Active Radiation). Illuminance can also be measured in photometric units of lumen per meter<sup>2</sup> per nm with an integrated value displayed for total LUX. Also ft. candles, radiant, & luminous flux.

**Transmittance** and **reflectance** can be used to characterize fluids, gasses, and optical materials. Light reflectance from solids and transmittance in fluids is also used to provide colorimetric information. The **SpectroColorimeter** app converts the spectral data to **CIELAB color** values **L\* a\* b\*** for both solid and liquid samples. Color differences between a



sample and a pre-saved color standard are easily measured using the CIELAB **Delta E\*** value indicator.

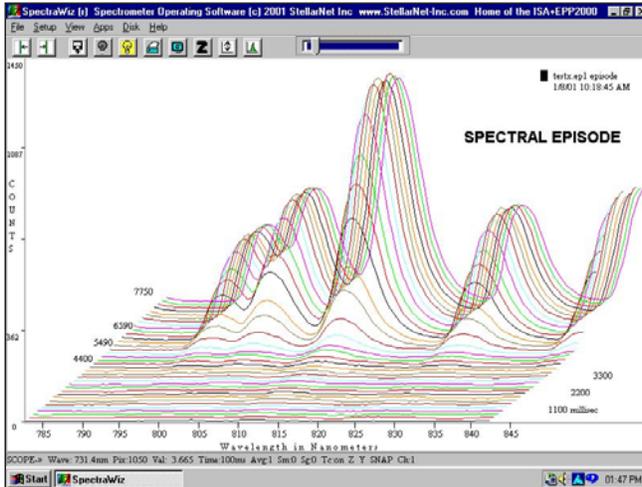
With multi-channel displays and toolbar functions, **emission** measurements of peak, centroid, and FWHM wavelengths can be easily made for plasma, laser, and light emitting diodes. Measure area of **fluorescence** emitted by chemical reagents, UV/laser induced spectroscopy, and fiber optic chemical sensors. The **ChemWiz** app measures sample concentrations using **absorbance** according to Beer's law for a specific path length. User configurable methods specify instrument setup and calibration parameters.



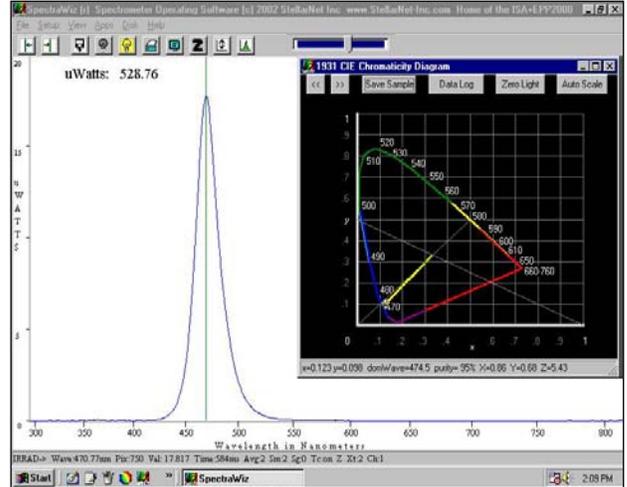
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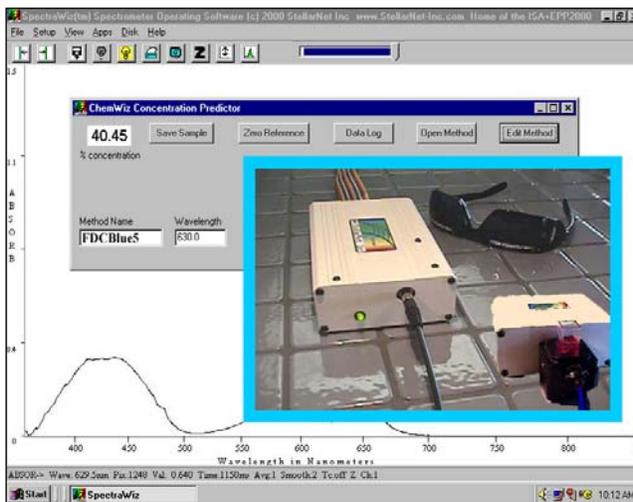
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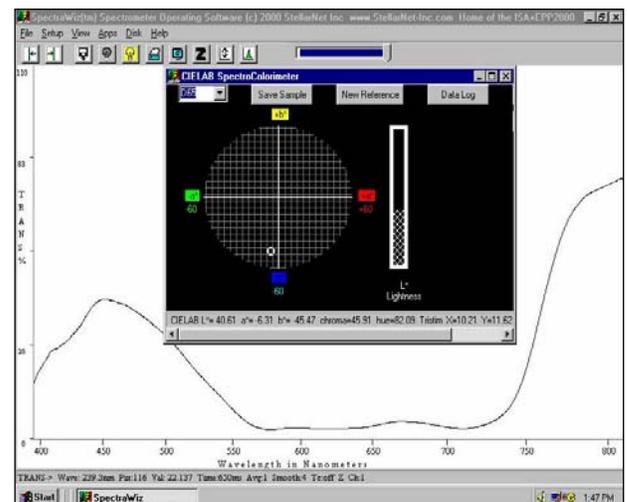
Spectral Time Series Analysis  
Via Episodic Capture



SpectroRadiometry & LED xy Chromaticity  
& Correlated Color Temperature (CCT)



ChemWiz Concentration Display  
Via Integrated PLS Calibration



CIELAB SpectroColorimetry  
L\* a\* b\* plus Delta E\*

**Spectroscopy** measurement applications are **integrated into a single program** to measure absorbance AU, %T, Concentrations, Reflectance, Colors, Fluorescence, Emissions, Absolute Intensities (watts, lumens, lux, moles), **LED & Light xy Chromaticity, CCT, UVabc emission monitor** (not shown). Optical Trigger, Graphing, Time series, and **Multi-Channel features**. SpectraWiz software also includes customizable programs for operation with **LabView, Excel + VBA** (Visual Basic Automation), **Delphi Pascal**, and **Visual C**.

