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**Wavelength Dependence of the Faraday Effect**

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Using the TeachSpinTM Faraday Rotation apparatus, the Verdet constant of a material can be found for various wavelengths of light. By utilizing lasers of differing wavelengths for a single material sample, in this case SF-57, the wavelength dependence of the Verdet constant can be observed. In addition, it is possible to define a function for the Verdet constant with respect to wavelength. The equation for the wavelength dependence of the Verdet constant was found to be:

$$V= 585.437\frac{rad}{Tm}\left(\frac{(0.014\pm 0.001)nm^{2}}{λ^{2}}\right)$$