

Abstract Submitted
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Quantum Efficiency Determination using Photothermal Deflection Spectroscopy BRANDON COUCH, STEPHEN JOHNSON, Transylvania Univ — In this study, we present a new method to measure the fluorescence quantum efficiency (QE) of organic dyes using photothermal deflection spectroscopy (PDS). While PDS has been used in the past to measure QE, the data presented in this study were taken without the use of reference standards. Dyes used in the study had QE ranging from 0-1 and data agree well with reported literature values. This new method obviates the need for integrating sphere setups and multiple calibration measurements, thereby streamlining the entire measurement process.

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