

SPECTROSCOPIC INVESTIGATION OF THE EFFECTS OF ENVIRONMENT ON NEWLY-DEVELOPED NEAR INFRARED EMITTING DYES

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The effects of environment on the photophysical properties of a series of newly-developed near infrared emitting dyes was studied spectroscopically. Properties of interest include fluorescence emission, fluorescence lifetime, and quantum yield. Tracking how the photophysics of these compounds are affected in the solid phase, in thin films, in solution, and at the single molecule level with changing environment will provide a deeper insight into how dye structure affects their function.