

QUANTIFYING EMISSION OF NIR-I AND NIR-II DYES VIA FLUORESCENCE QUANTUM YIELD

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Fluorescence Quantum Yield allows scientists to both quantify spectroscopic properties of dyes and compare to literature references. With the growing interest in NIR-emissive dyes for biological imaging, it is of great importance to reliably measure the fluorescent quantum yield of these novel dyes. Using a broadband excitation source and liquid nitrogen cooled InGaAs detector, steady state emission of four novel pentamethine indolizine cyanine dyes synthesized with N,N-dimethylaniline-based substituents on the indolizine periphery at varied substitutions sites is recorded.