# Electronic Supporting Information

Excitation-Resolved Area Normalized Emission Spectroscopy: A Rapid and Simple Steady-State Technique for the Analysis of Heterogeneous Fluorescence

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**Figure S16.** TRES (a) and TRANES (b) of C466, C307 and C153 mixture in methanol.

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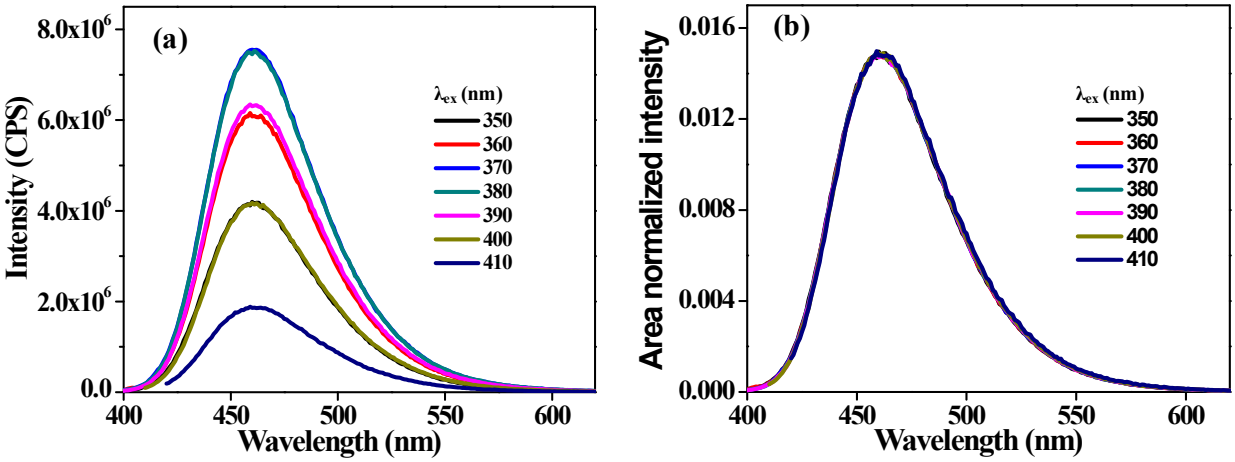


**Figure S1**. ERES (a) and ERANES (b) of C466 in methanol. No isoemissive point in the ERANES of C466 dye and found to be independent of excitation wavelength.

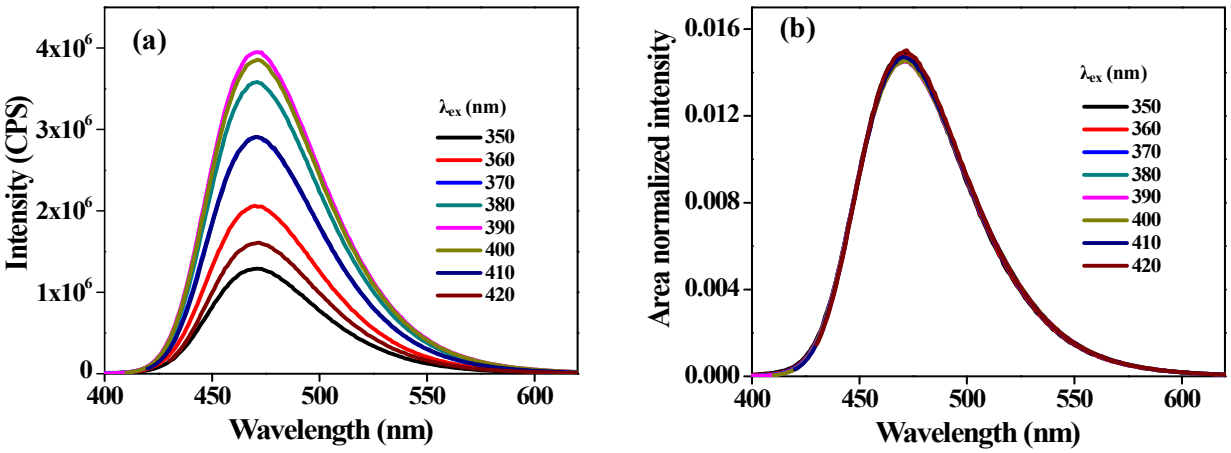

**Figure S2**. ERES (a) and ERANES (b) of C102 in methanol. No isoemissive point in the ERANES of C102 dye and found to be independent of excitation wavelength.

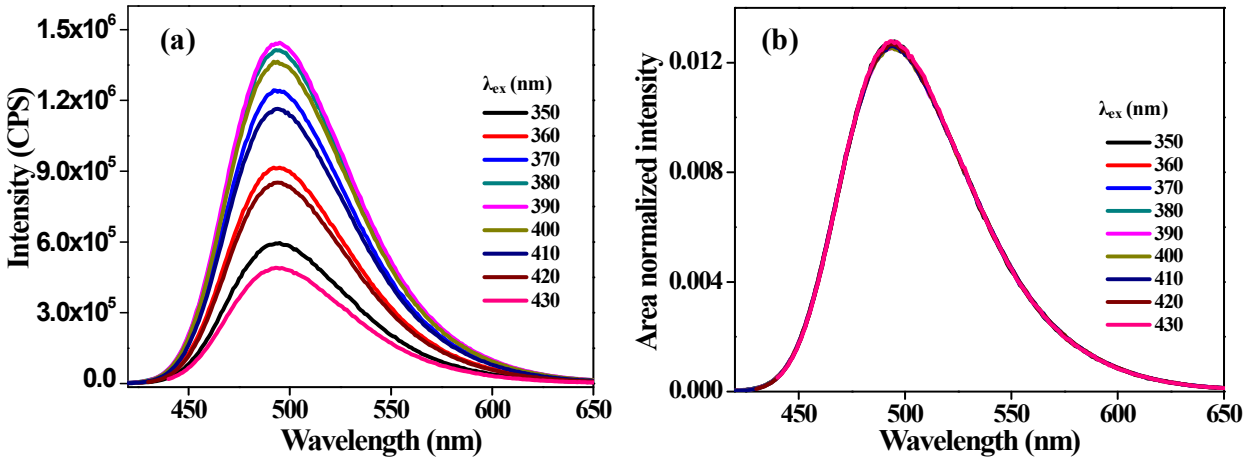


**Figure S3**. ERES (a) and ERANES (b) of C307 in methanol. No isoemissive point in the ERANES of C307 dye and found to be independent of excitation wavelength.

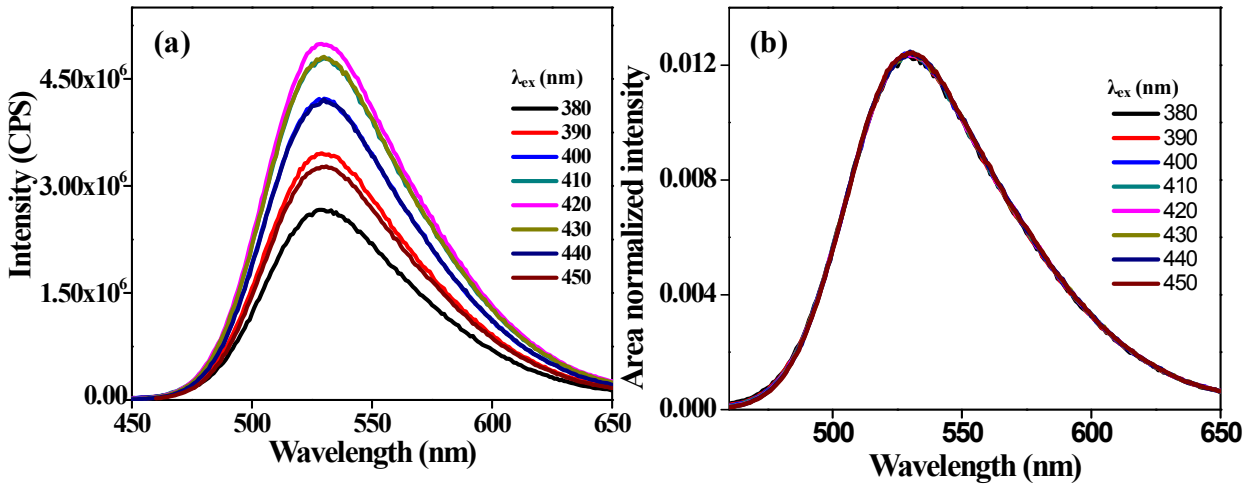

**Figure S4.** ERES (a) and ERANES (b) of C153 in methanol. No isoemissive point in the ERANES of C153 dye and found to be independent of excitation wavelength.

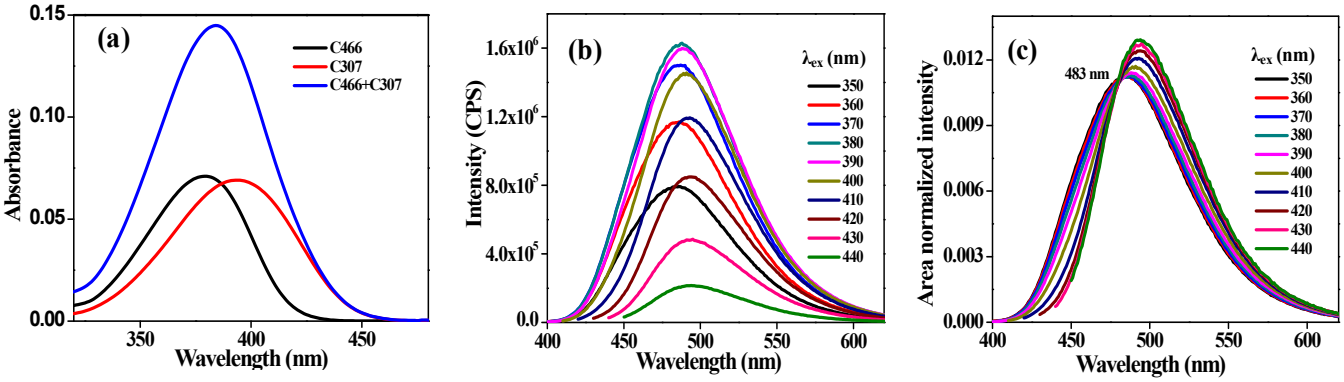


**Figure S5.** Absorption (a), ERES (b) and ERANES (c) of C307 and C466 mixture in methanol.

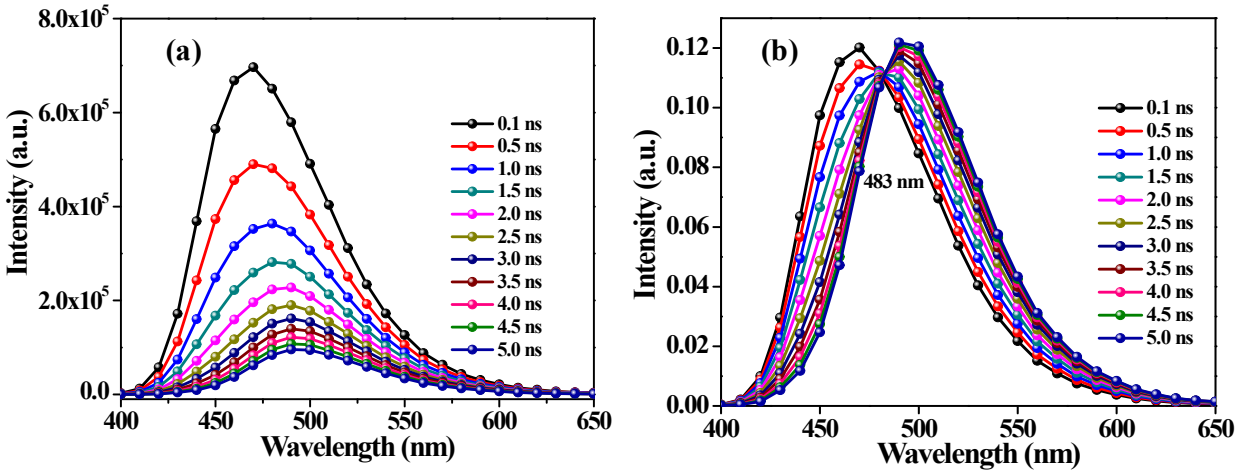

**Figure S6.** TRES (a) and TRANES (b) of C307 and C466 mixture in methanol. The ground state heterogeneity is resolved with isoemissive point 483 nm in the TRANES analysis. $\lambda_{ex}$ = 375 nm.

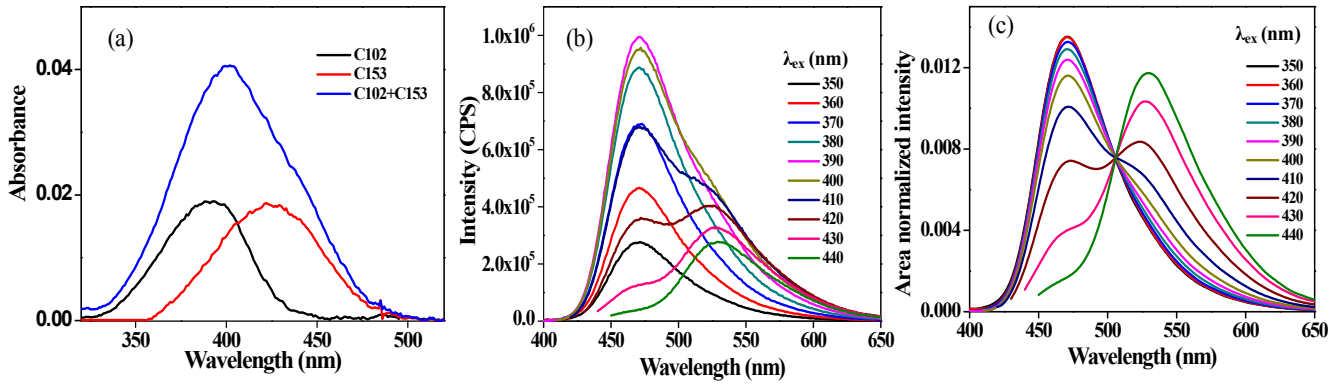


**Figure S7.** Absorption (a), ERES (b) and ERANES (c) of C102 and C153 mixture in methanol.

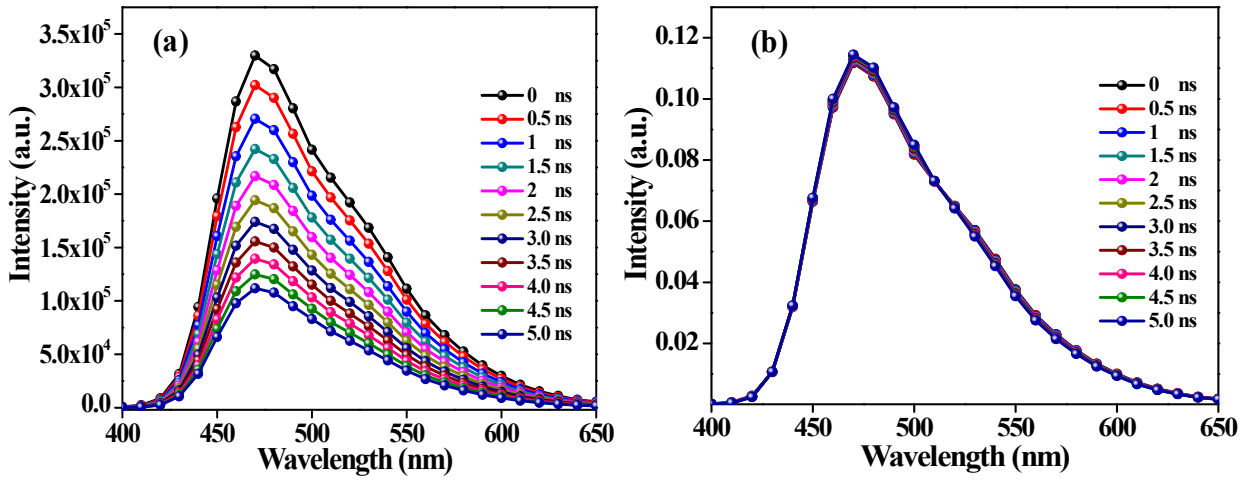

**Figure S8.** TRES (a) and TRANES (b) of C102 and C153 in methanol. The GSH was not resolved due to absence of clear isoemissive point in the TRANES analysis. $\lambda_{ex}$ = 375 nm

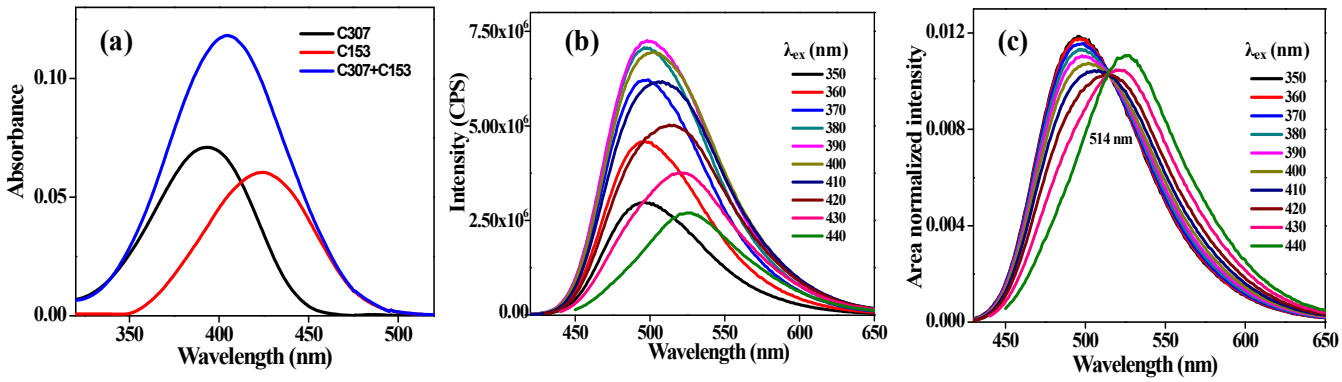


**Figure S9.** Absorption (a), ERES (b) and ERANES (c) of C307 and C153 mixture in methanol.

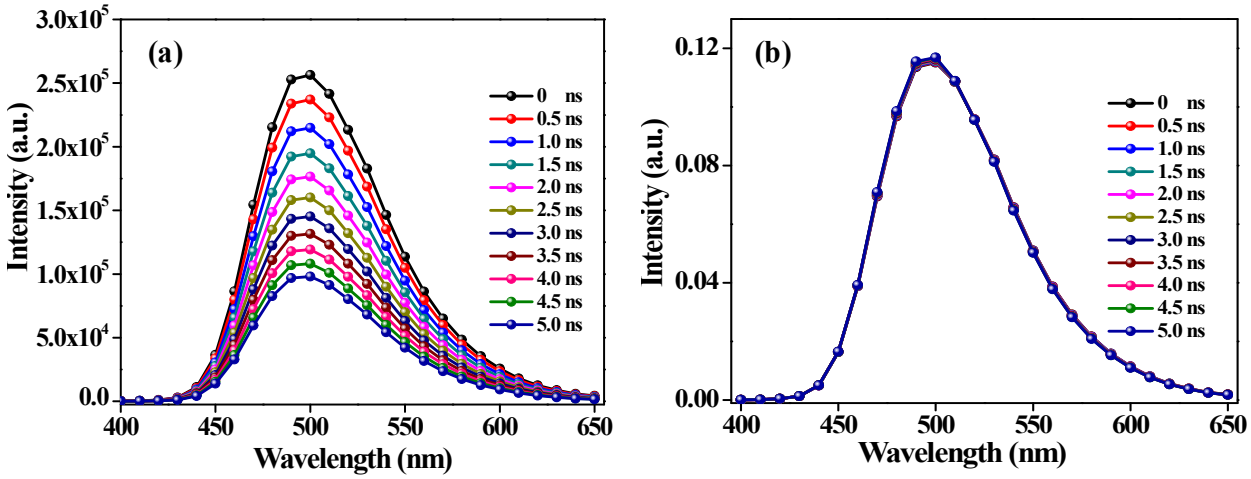

**Figure S10.** TRES (a) and TRANES (b) of C307 and C153 mixture in methanol. The GSH was not resolved due to absence of clear isoemissive point in the TRANES analysis. $\lambda_{ex}$ = 375 nm

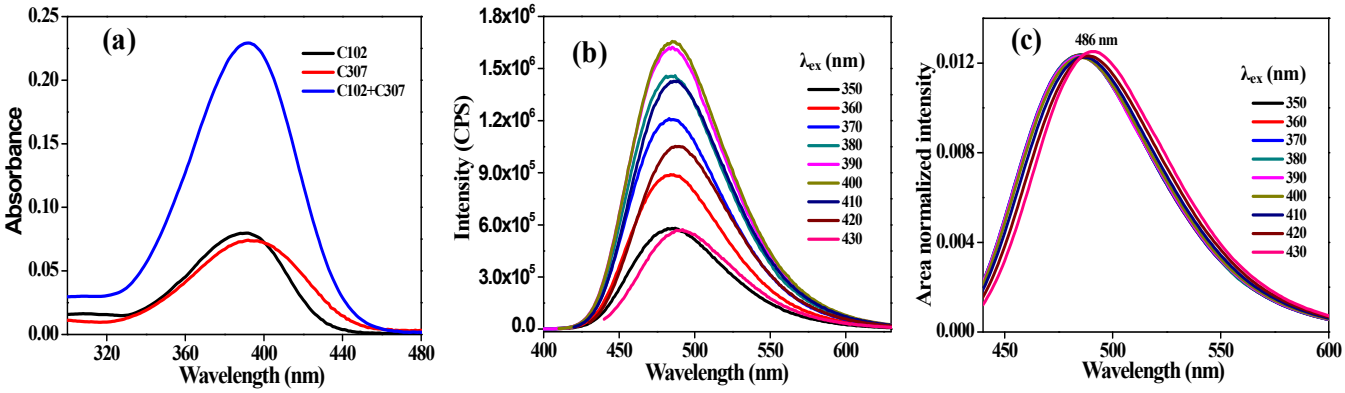


**Figure S11.** Absorption (a), ERES (b) and ERANES (c) of C307 and C102 mixture in methanol.

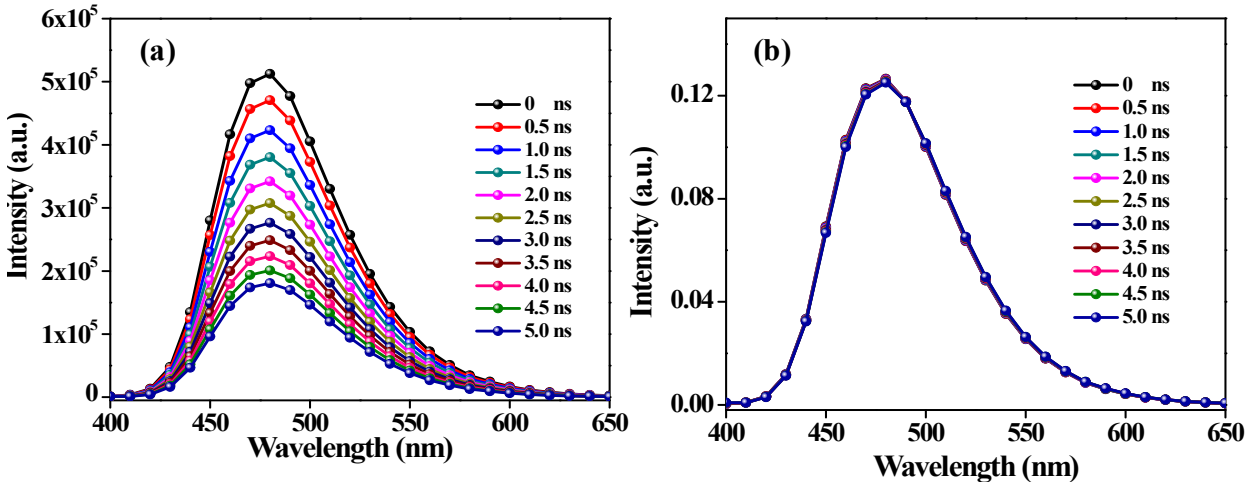

**Figure S12.** TRES (a) and TRANES (b) of C307 and C102 mixture in methanol. The GSH was not resolved due to absence of clear isoemissive point in the TRANES analysis. $\lambda_{ex}$ = 375 nm.

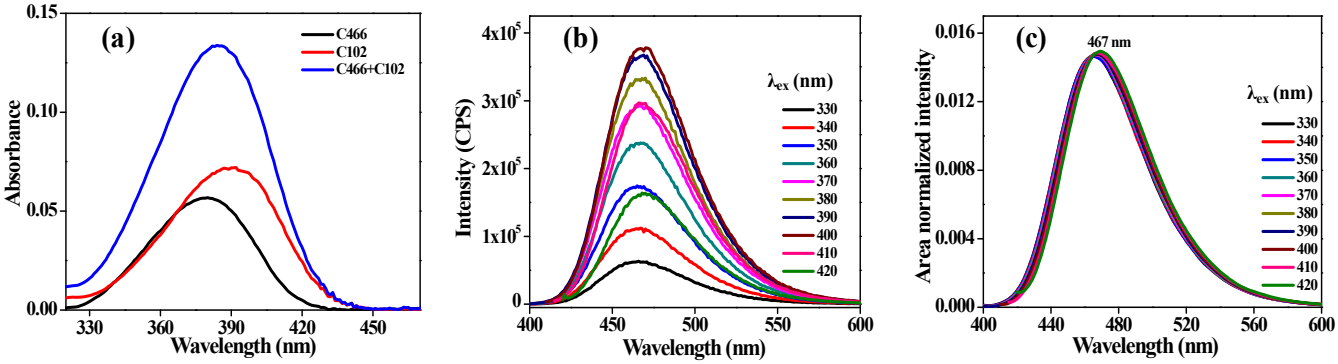


**Figure S13.** Absorption (a), ERES (b) and ERANES (c) of C102 and C466 mixture in methanol.

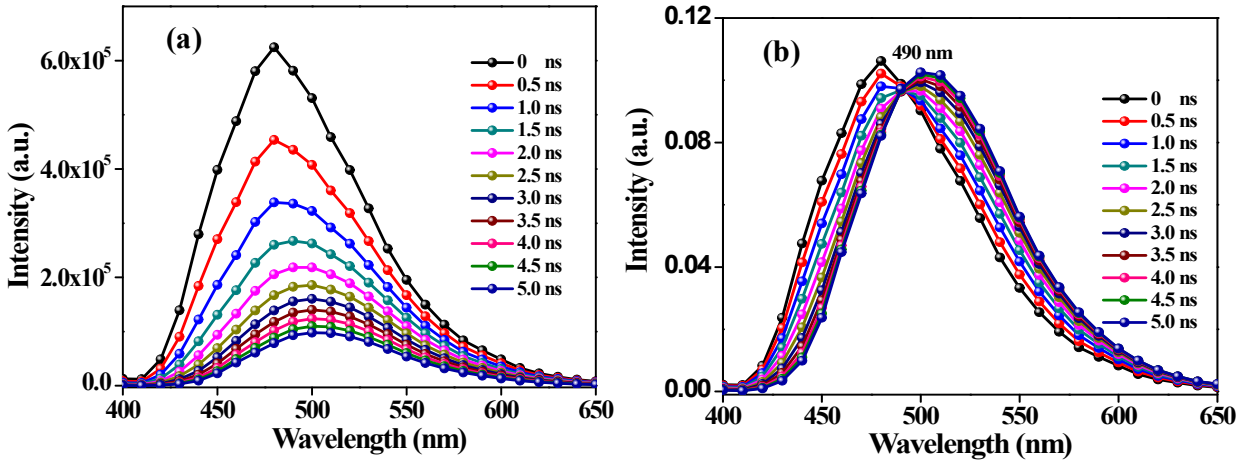

**Figure S14.** TRES (a) and TRANES (b) of C102 and C466 mixture in methanol. The ground state heterogeneity is resolved with isoemissive point 490 nm in the TRANES analysis. $\lambda_{ex}$ = 375 nm.

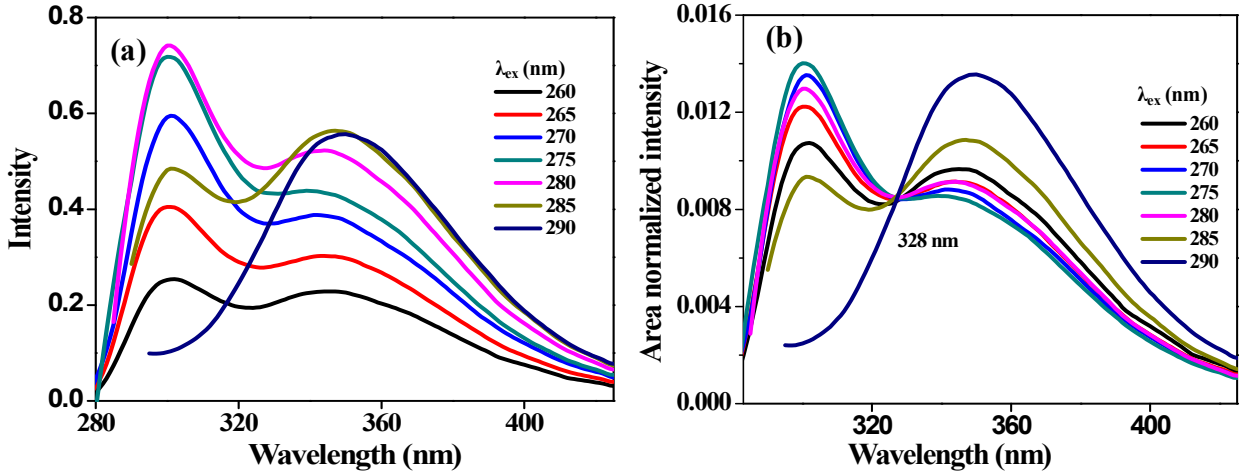


**Figure S15.** ERES (a) and ERANES (b) of Tryptophan and Tyrosine mixture in phosphate buffer solution.

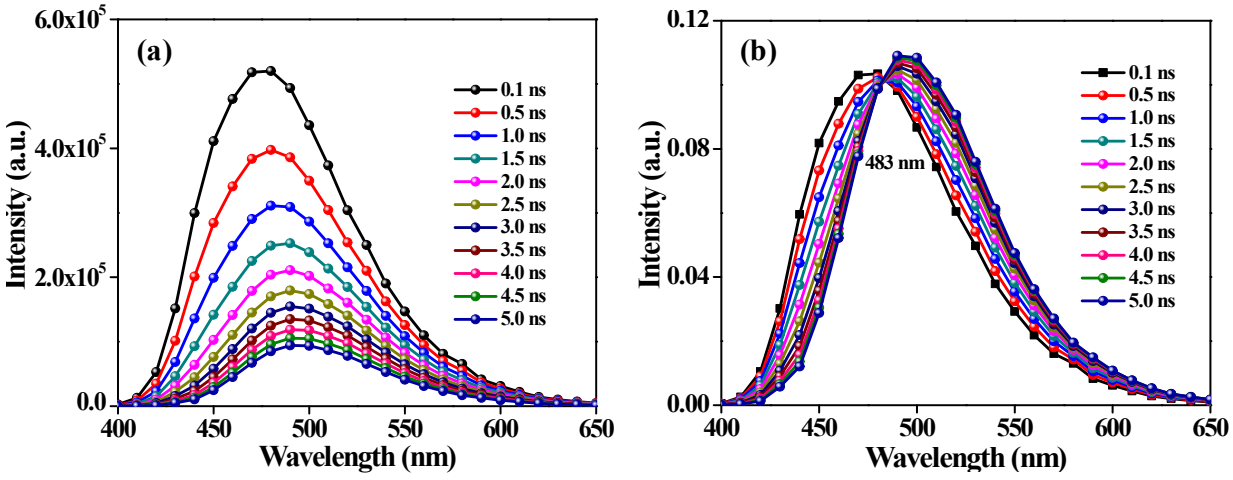

**Figure S16.** TRES (a) and TRANES (b) of C466, C307 and C153 mixture in methanol. The ground state heterogeneity is resolved with isoemissive point 483 nm in the TRANES analysis. $\lambda_{ex}$ = 375 nm.