Electronic Supplementary Material (ESI) for Materials Chemistry Frontiers.

A rhodamine-naphthalimide-benzamide trichromophoric system demonstrated a unique solvent depended aggregates and its emission

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Contents:

S1. Solvatochromic behaviour of conjugate **3**

Table S1. Change in the emission maxima of 3 with solvent

Solvent	Dielectric Constant ε[a]	Emission peak (nm)
$CHCl_3$	4.8	447
THF	7.6	450
EtOH	24.6	463
ACN	37.5	454
DMSO	46.7	457 & 582
DMF	36.7	457 & 577

[a]Values from *Vogel's Textbook of Practical Organic Chemistry (5th Edition)*. London: Longman Scientific & Technical, **1989**

S2 Spectra of compounds

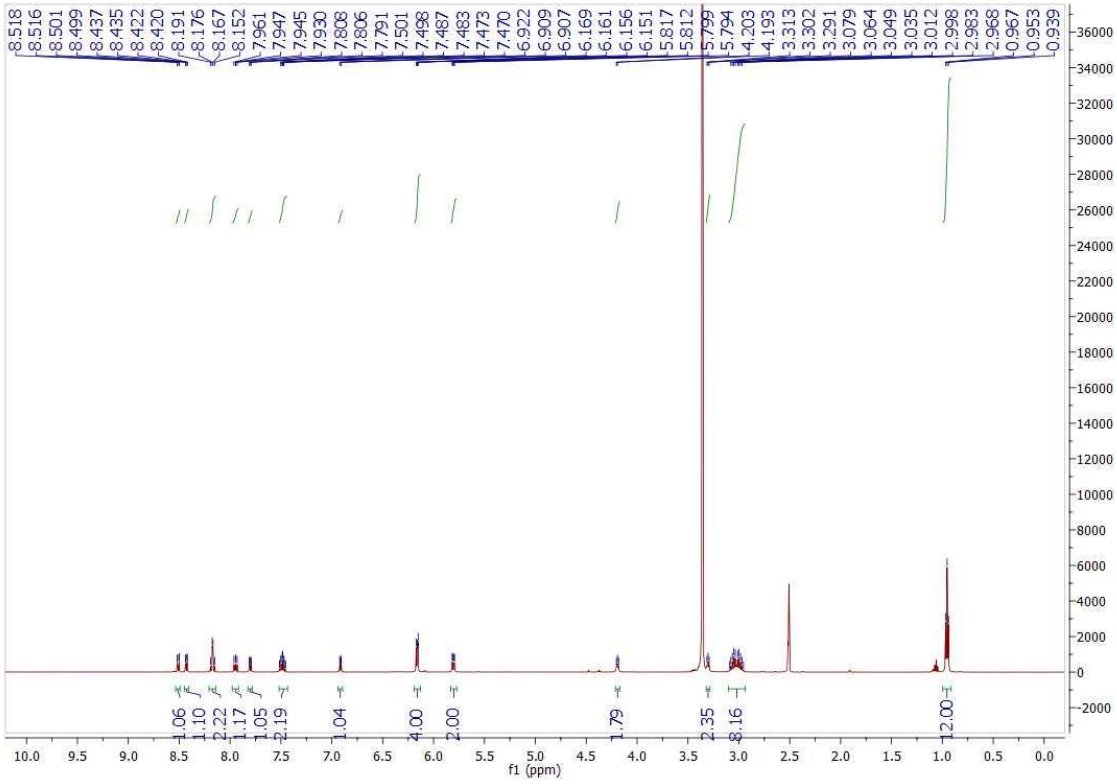

Figure S1. ^{1}H NMR of **2** in DMSO- d_6.

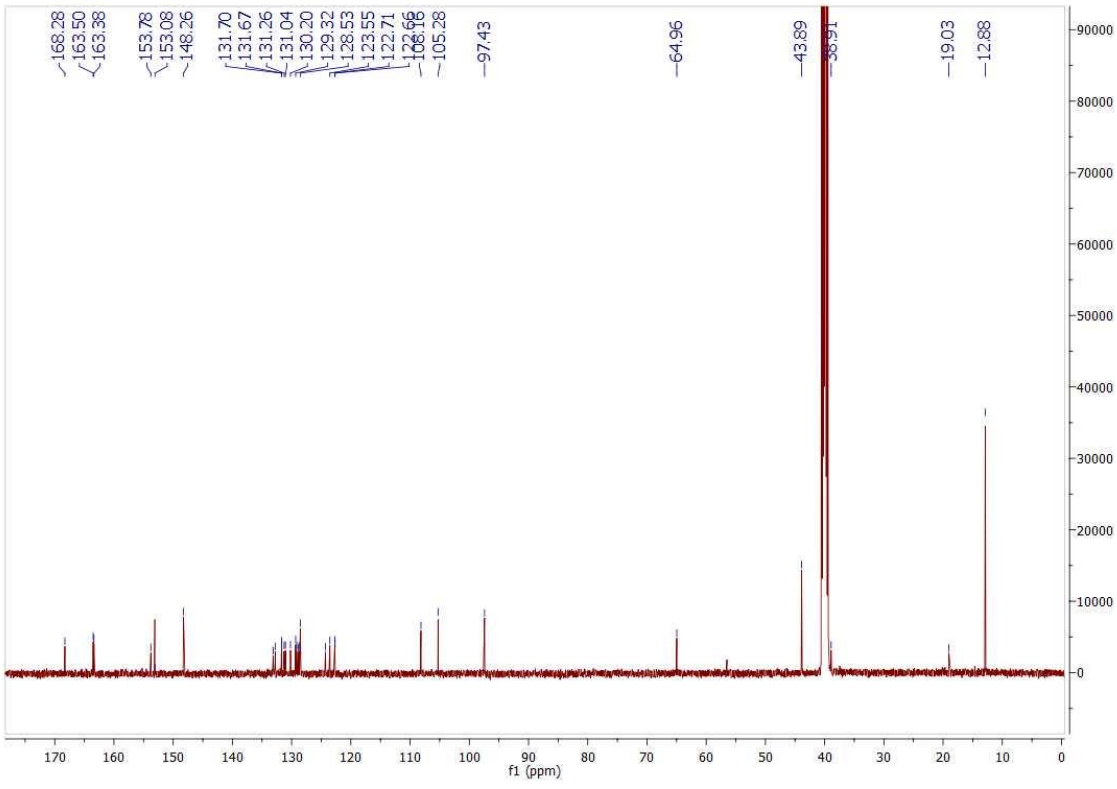

Figure S2. ^{13}C NMR of **2** in DMSO- d_6.

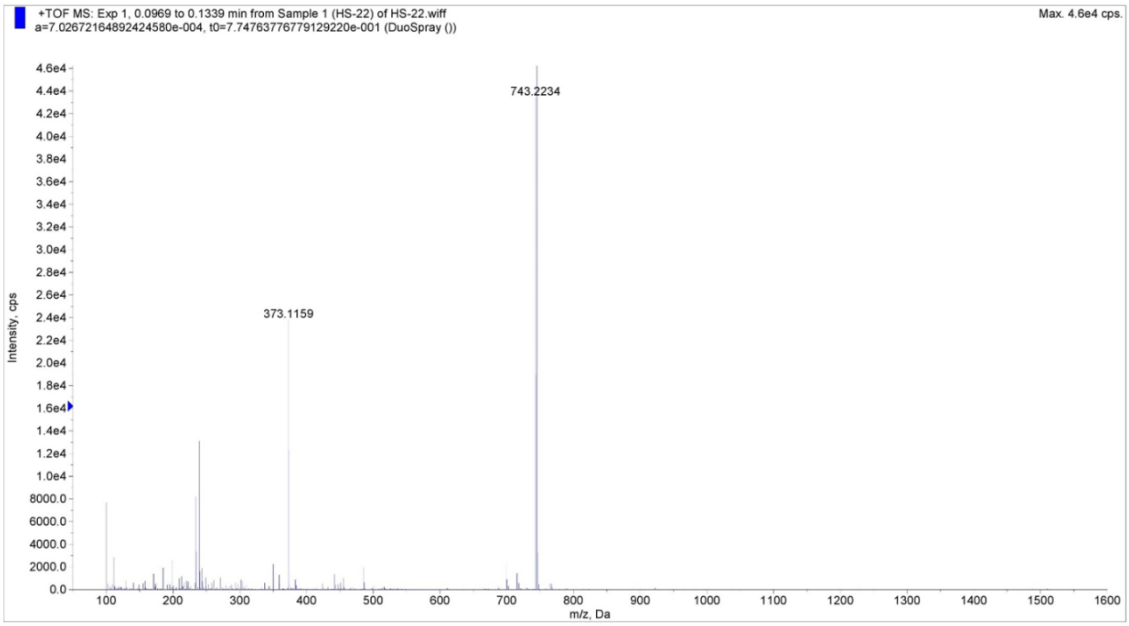

Figure S3. High Resolution Mass Spectrum of **2**.

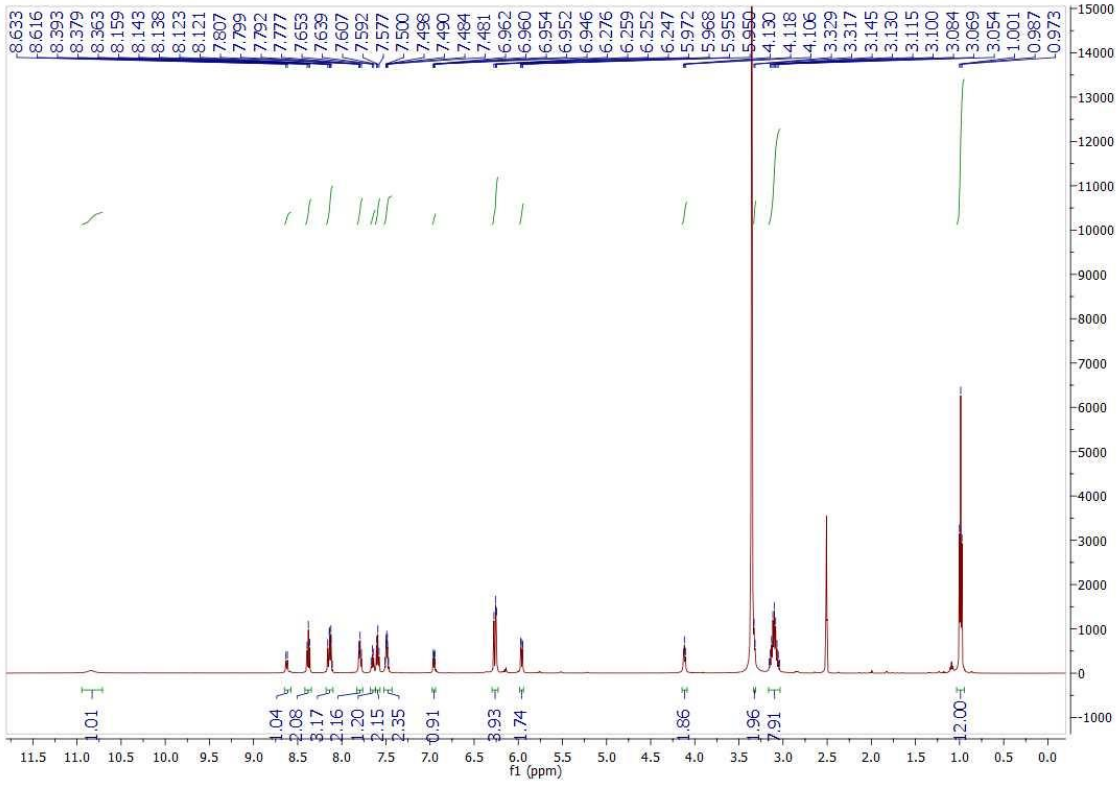

Figure S4. ^{1}H NMR of **3** in DMSO- d_6.

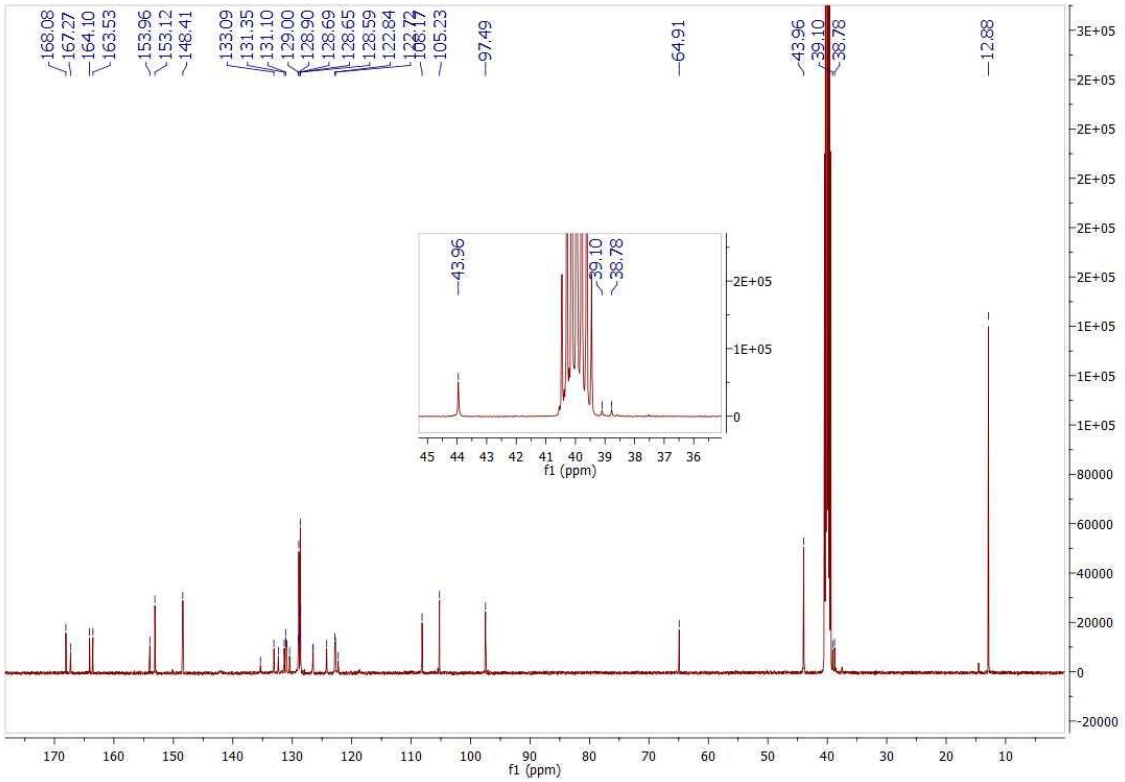

Figure S5. ^{13}C NMR of **3** in DMSO- d_6.

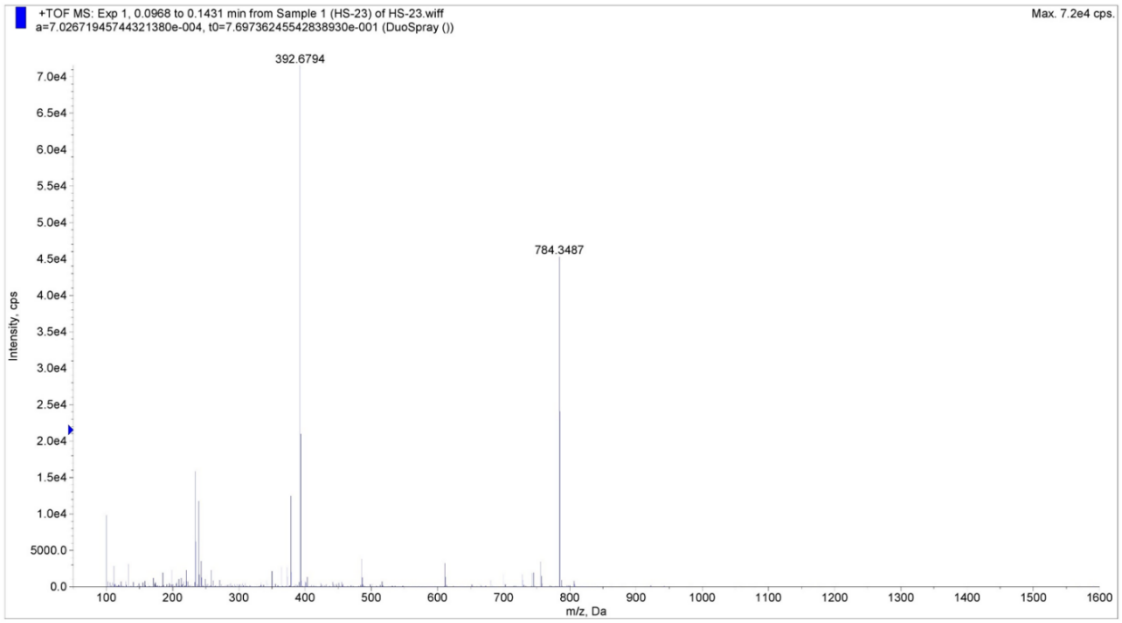

Figure S6. High Resolution Mass Spectrum of **3**.

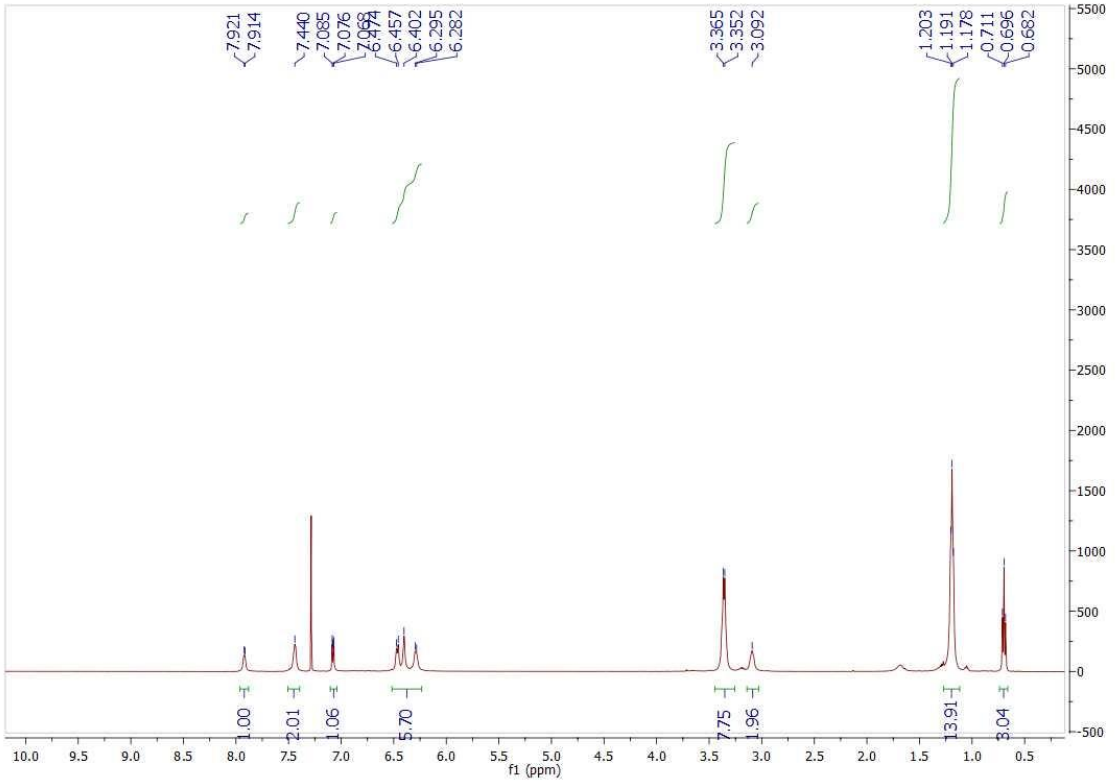

Figure S7. ^{1}H NMR of **6** in $CDCl_3$.

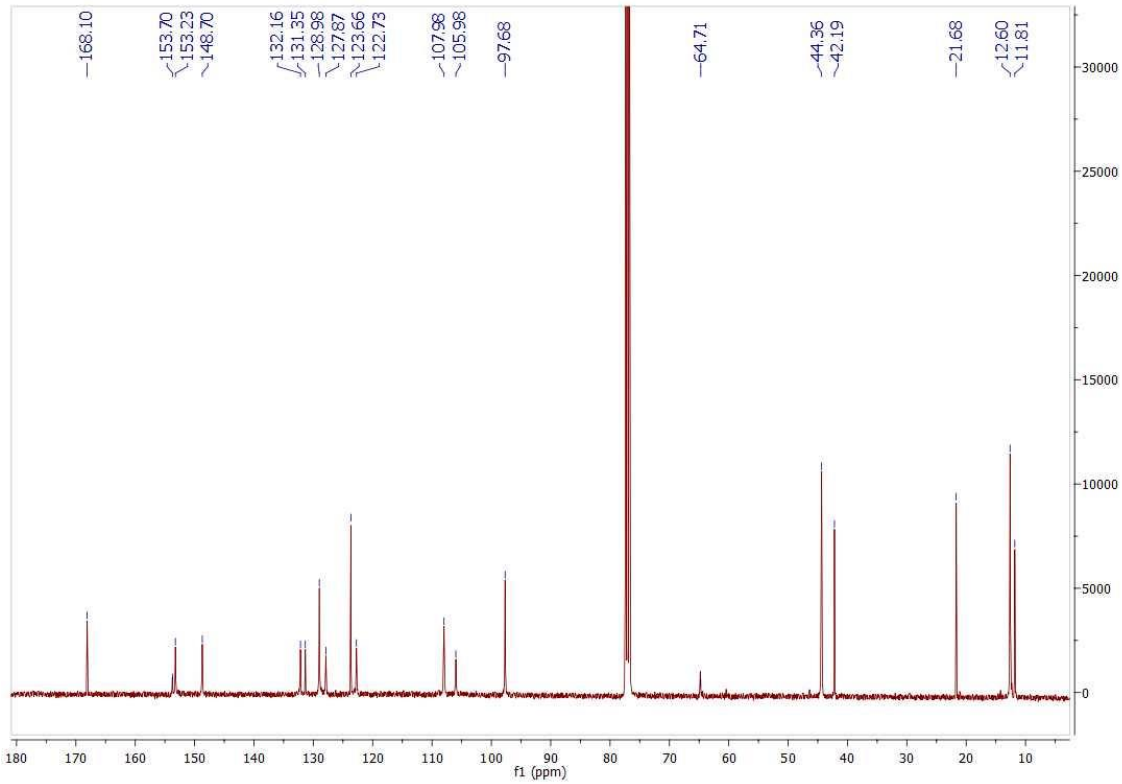

Figure S8. ^{13}C NMR of **6** in $CDCl_3$.

S3. UV-vis and Fluorescence Spectroscopy Experiments

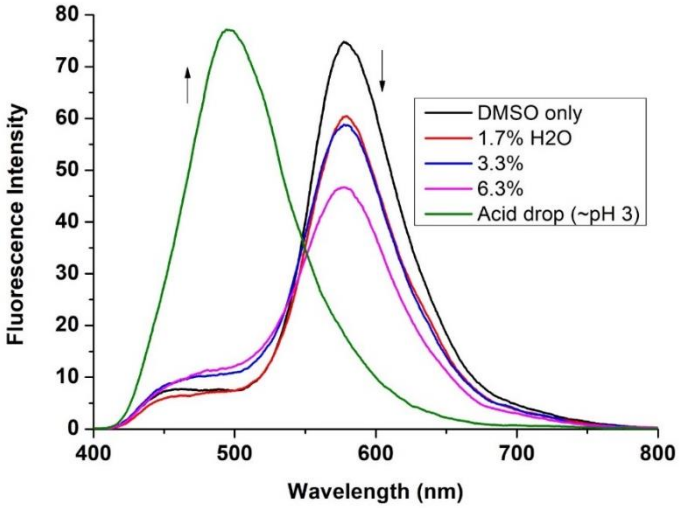

Figure S9. Emission spectra of **3** (100 μM; λ_{ex} 367 nm) in DMSO with increasing water content.

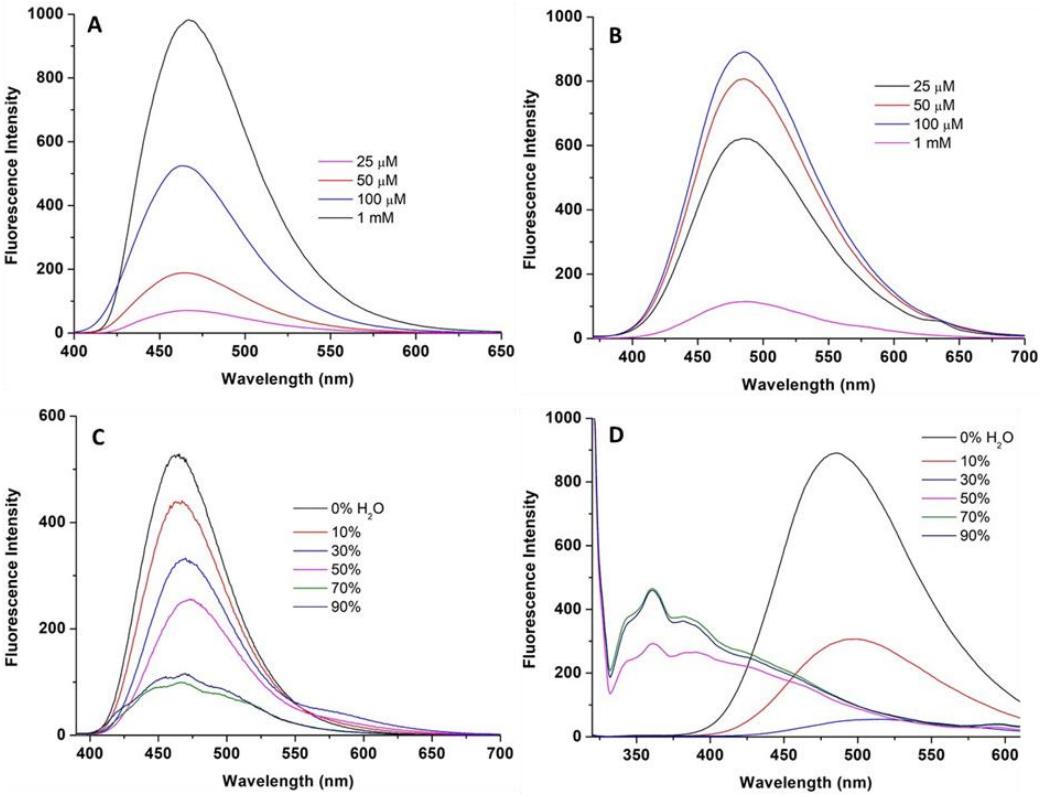

Figure S10: (A) and (B) Effect of concentration on the emission spectra of **5** (λ_{ex} 367 nm) and **6** (λ_{ex} 317 nm) in DMSO respectively; (C) and (D) Effect of water content on the emission spectra of **5** (100 μM; λ_{ex} 367 nm) and **6** (100 μM; λ_{ex} 317 nm) in DMSO with increasing water content respectively.

S4. DLS spectra

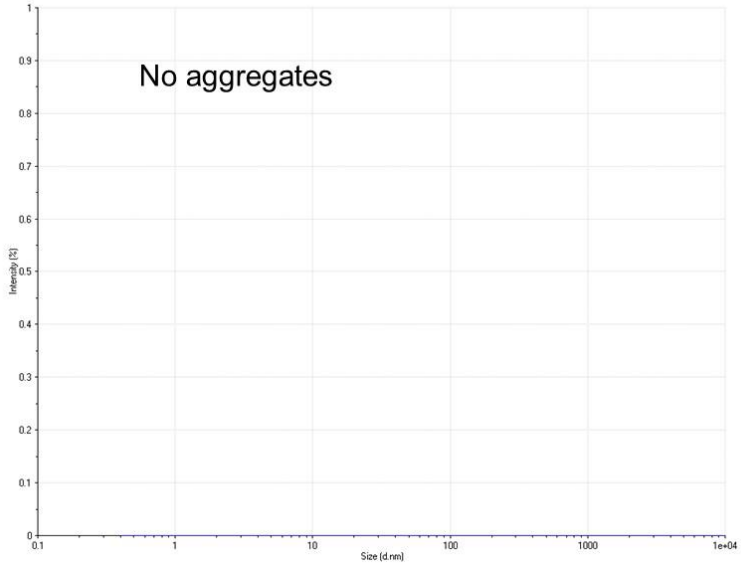

Figure S11: DLS spectra of **3** at pH 11.0 in 7:3 DMSO:H_2O (v/v)

S5. Change in fluorescence intensity before and after grinding

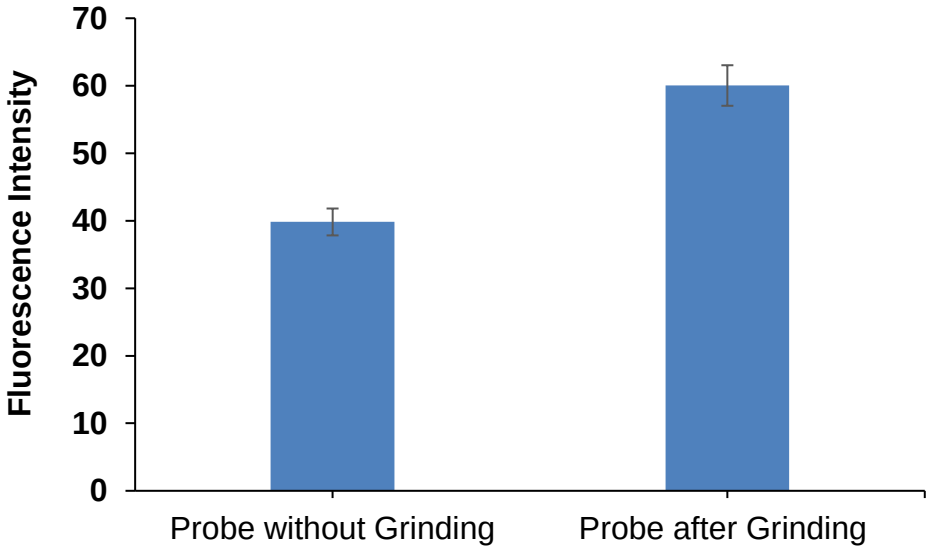

Figure S12. Change in fluorescence of conjugate **3** before and after grinding. The intensity was obtained from ImageJ software.