A new cyanoaromatic photosensitizer *vs*. 9,10-dicyanoanthracene: systematic comparison of the photophysical properties

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- **Figure S1** : Excitation (λ_{em} = 420 nm) and emission spectra (λ_{ex} = 260, 355, 380, 400, 400, 400, 410 nm in acetonitrile, methanol, toluene, cyclohexane, ethanol, chloroform and hexane) of DCA at room temperature.
- **Figure S2**: Electronic absorption spectra of DCA in ethanol/water mixtures (v/v) at room temperature.
- **Figure S3:** Absorption spectra of **1** in ethanol/water mixture (v/v) at room temperature, (l =1 cm).
- **Figure S4:** Absorption and excitation (λ_{em}= 420 nm) and spectra of **1** in hexane/methanol mixtures ([**1**]=6.0 $\times 10^{-6}$ M, l = 1cm).
- **Figure S5**: Excitation spectra (λ_{em} = 414, 440, 440, 466, 490, 490 and 550 nm in hexane, toluene, chloroform, ethanol, acetonitrile,and ethanol/water 63/37 (v/v) and emission spectra (λ_{ex} = 307 nm) of **1** at room temperature.
- **Figure S6:** Excitation (λ_{em}= 490 nm) and emission (λ_{ex} = 396 nm) spectra of **1** in ethanol/water mixtures (v/v) (l = 1cm, absorbance at 396 nm = 0.06).

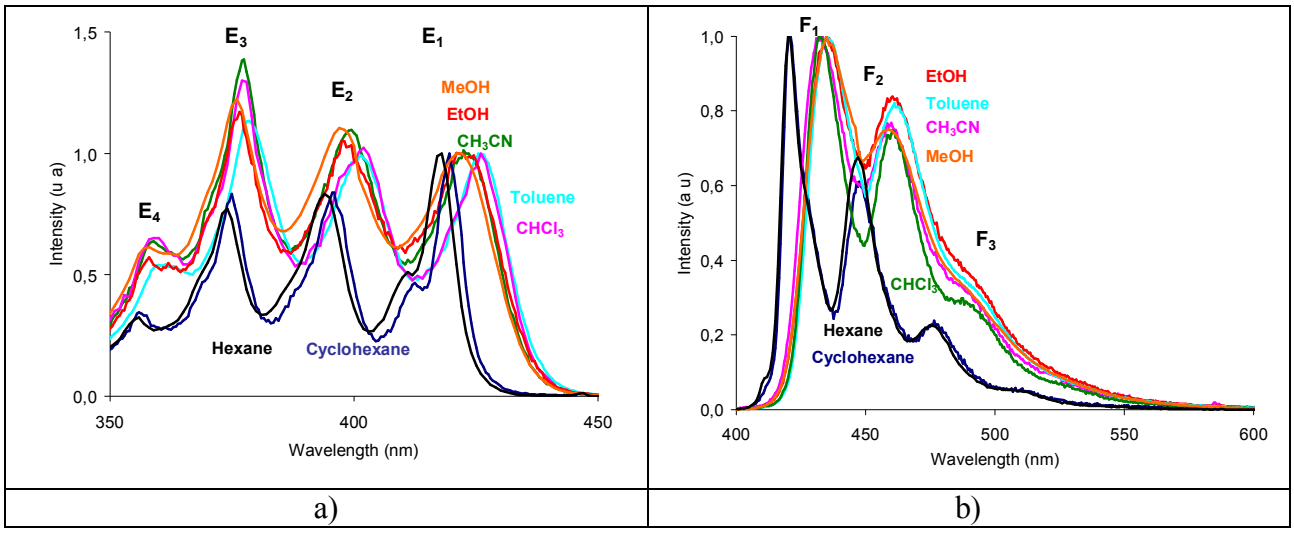

Figure S1 : Excitation (λ_{em} = 420 nm) and emission spectra (λ_{ex} = 260, 355, 380, 400, 400, 400, 410 nm in acetonitrile, methanol, toluene, cyclohexane, ethanol, chloroform and hexane) of DCA at room temperature.

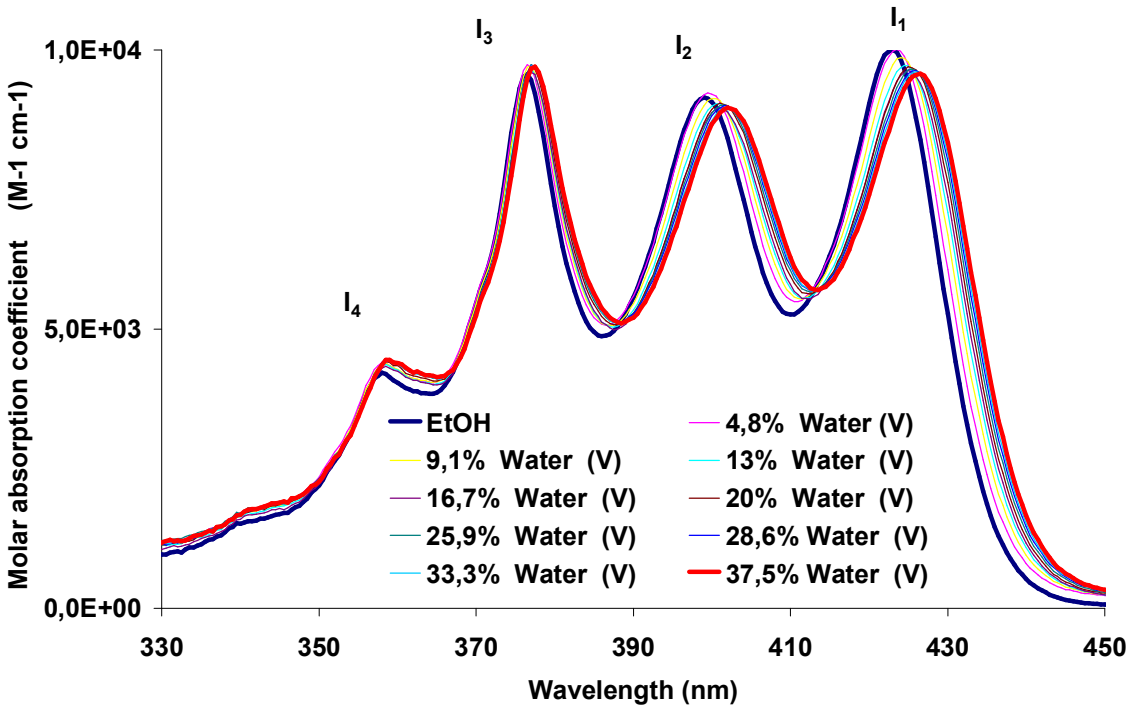

Figure S2: Electronic absorption spectra of DCA in ethanol/water mixtures (v/v) at room temperature.

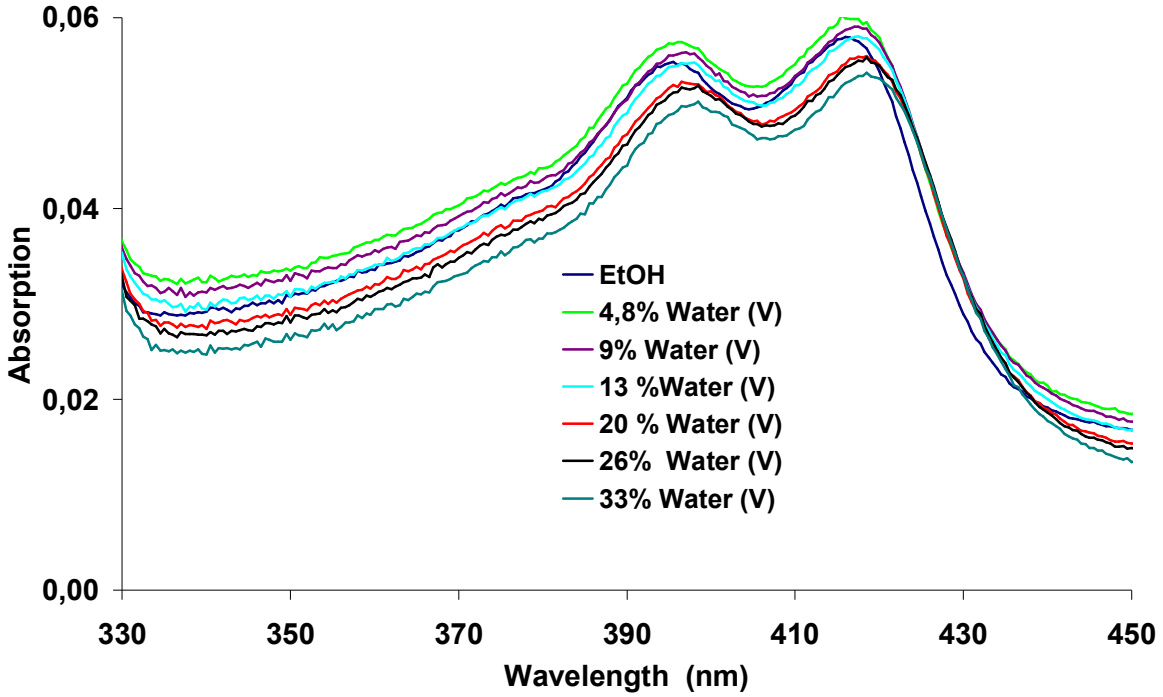

Figure S3: Absorption spectra of **1** in ethanol/water mixture (v/v) at room temperature, (l =1 cm).

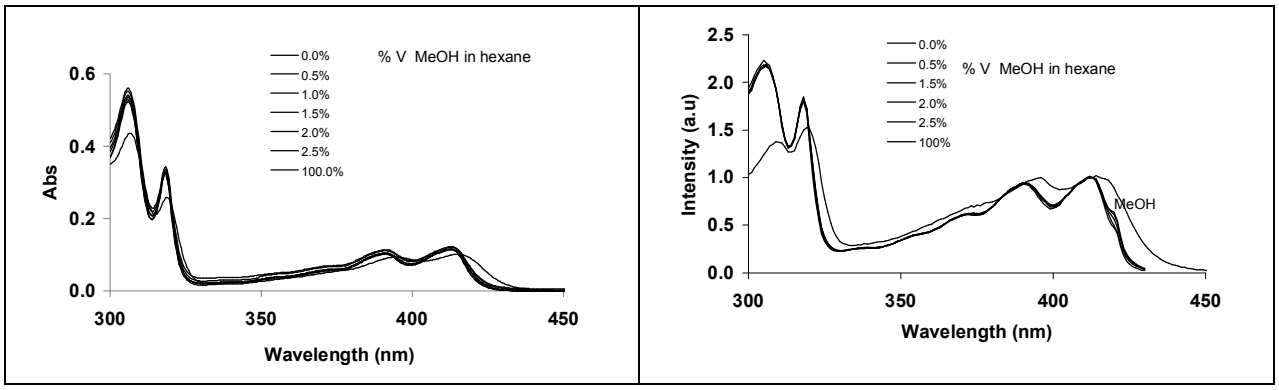

Figure S4: Absorption and excitation (λ_{em}= 420 nm) and spectra of **1** in hexane/methanol mixtures (v/v) ([**1**]=6.0 ×10^{-6} M, l = 1cm).

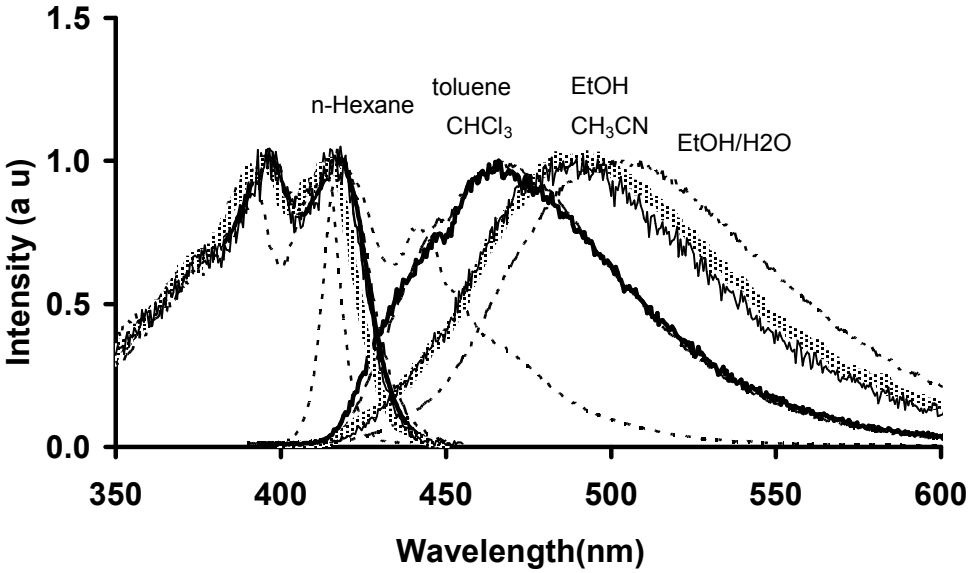

Figure S5: Excitation spectra (λ_{em} = 414, 440, 440, 466, 490, 490 and 550 nm in hexane, toluene, chloroform, ethanol, acetonitrile,and ethanol/water 63/37 (v/v) and emission spectra (λ_{ex} = 307 nm) of **1** at room temperature.

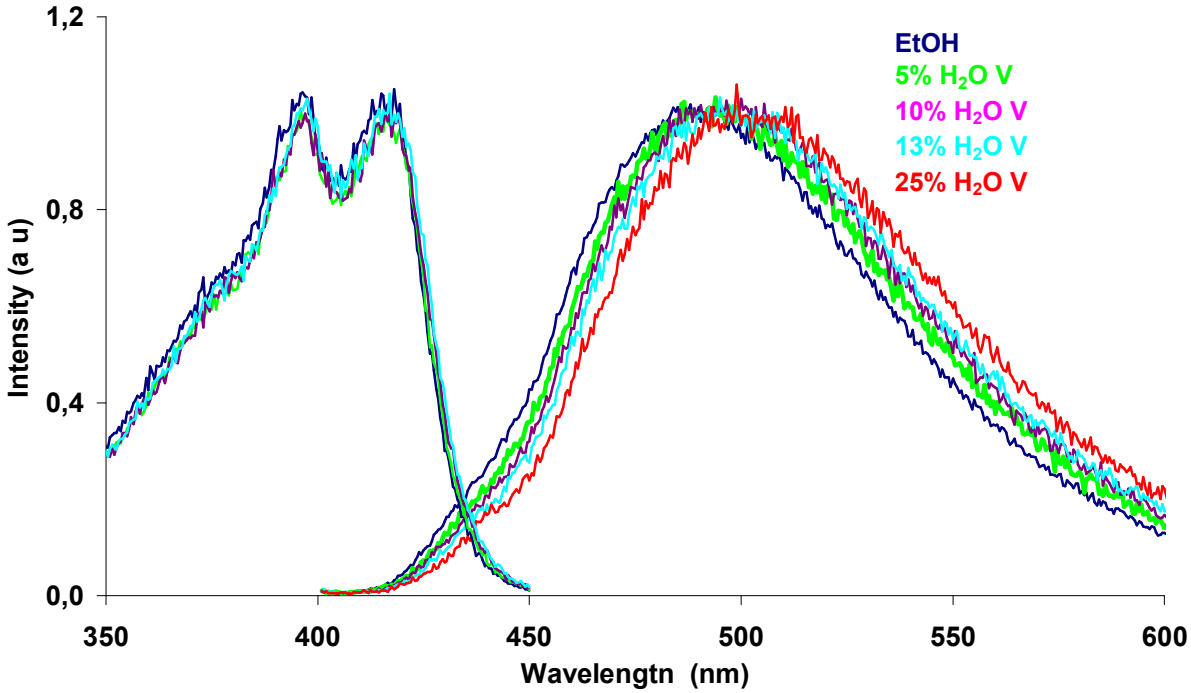

Figure S6: Excitation (λ_{em}= 490 nm) and emission (λ_{ex} = 396 nm) spectra of **1** in ethanol/water mixtures (v/v) (l = 1cm, absorbance at 396 nm = 0.06).