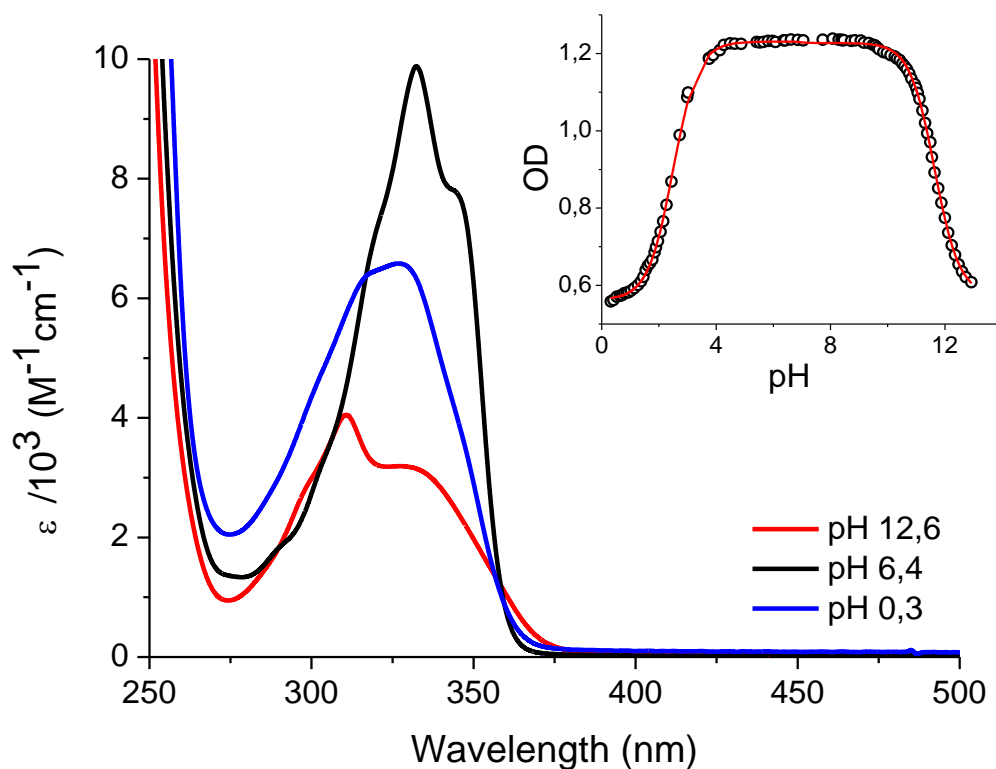
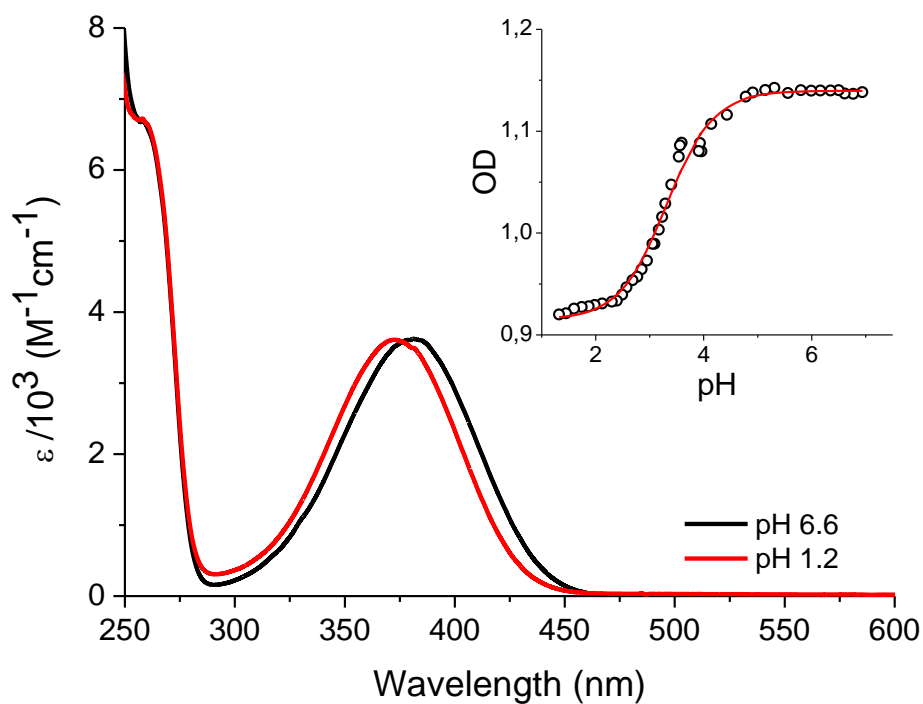


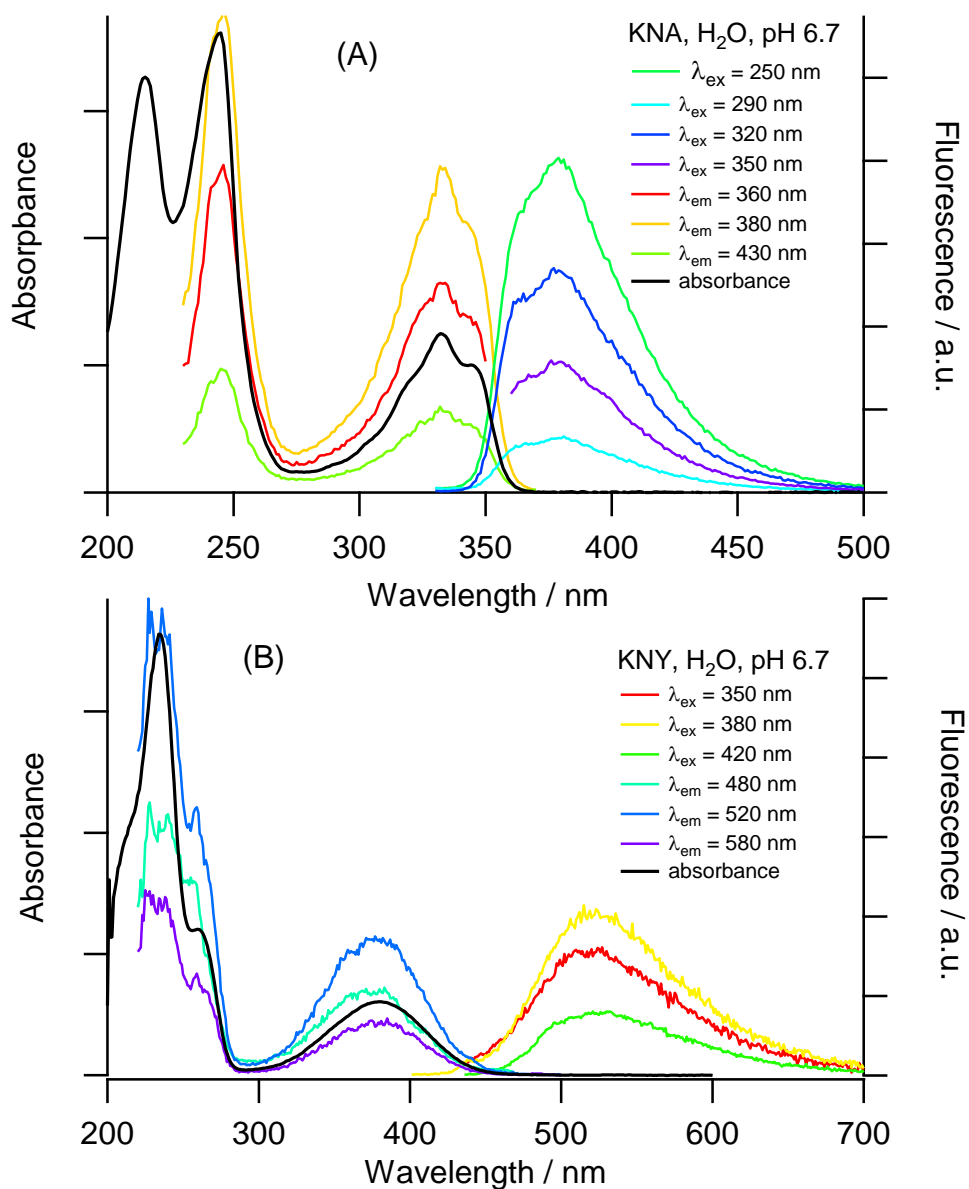
## Electronic Support Information



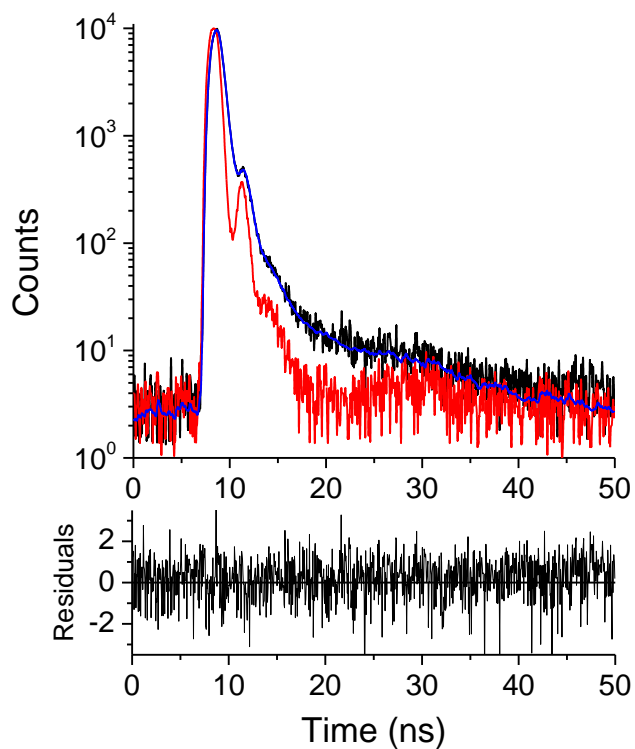
**Figure S1.** KNA absorption spectra at various pH values. Inset: the titration curve obtained by the absorption at 345 nm; smooth red line: the best fit.



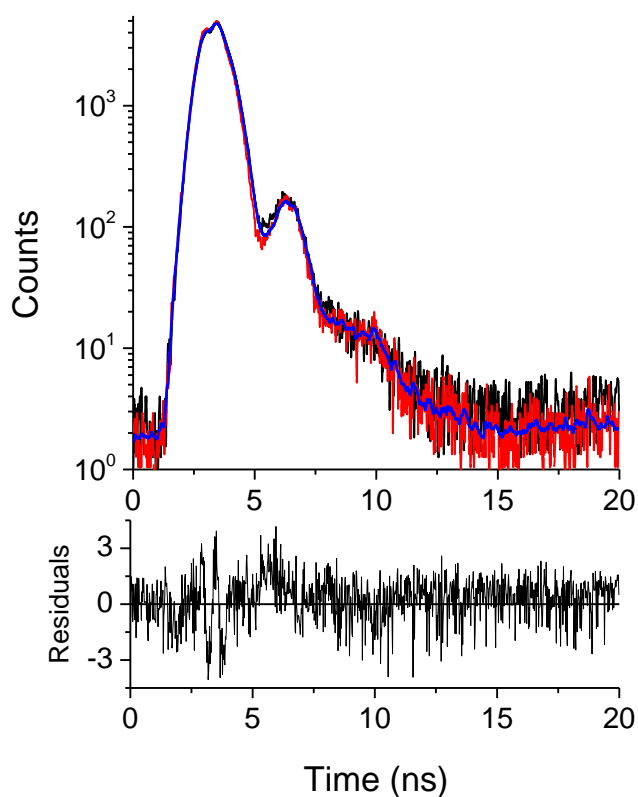
**Figure S2.** KNY absorption spectra at various pH values. Inset: the titration curve obtained by the absorbance at 400 nm; smooth red line: the best fit.



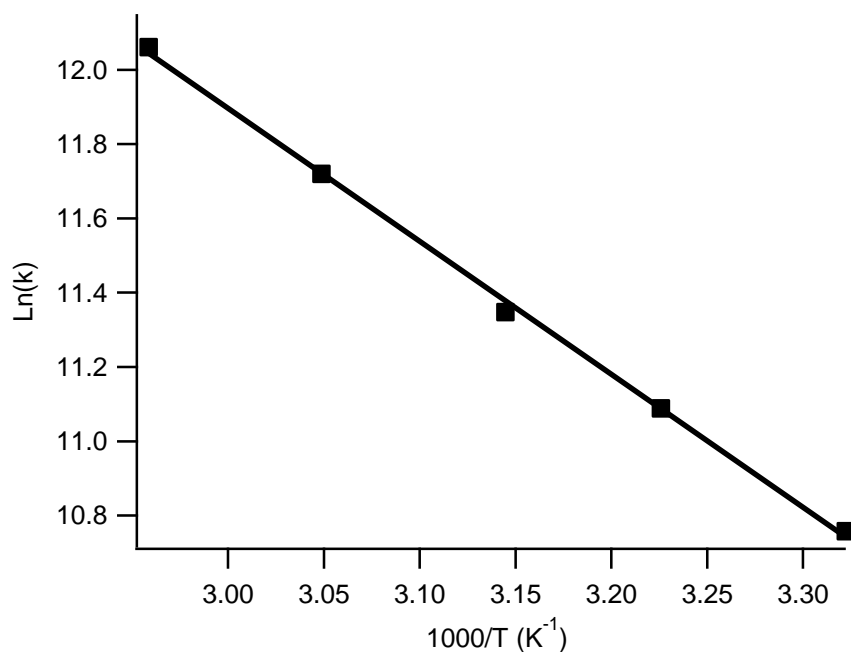
**Figure S3.** Absorption and fluorescence emission and excitation spectra recorded with (A) KNA and (B) KNY in aqueous solution, pH 6.7 at various excitation and emission wavelengths.



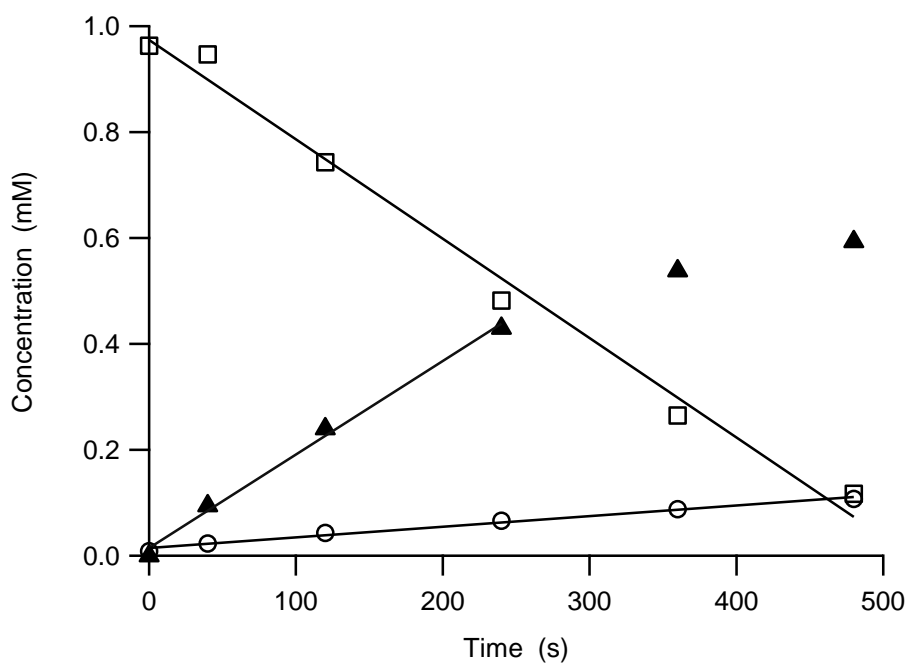
**Figure S4.** Fluorescence time profiles recorded with KNY in H<sub>2</sub>O (pH 6.7, excitation at 375 nm, detection at 510 nm). Black line – fluorescence time profile; red line – instrument response function; blue line – bi-exponential fit convolved with IRF.



**Figure S5.** Fluorescence time profiles recorded with KNA in H<sub>2</sub>O (pH 6.7, excitation at 330 nm, detection at 380 nm). Black line – fluorescence time profile; red line – instrument response function; blue line – exponential fit convolved with IRF.



**Figure S6.** Linear plot of Ln(k) versus 1000/T for KNY aqueous solution.



**Figure S7.** Kinetics of anaerobic decomposition of  $3.4 \times 10^{-4}$  M KNY in presence of 1.4 M acetone in buffered solution, pH 7.2, under irradiation by laser pulses at 308 nm with energy 0.5 mJ/pulse with repetition rate 5 Hz: KNY (squares), DHQN (triangles), 4HQ (circles)