Supporting Information

A Novel Method for Cetylpyridinium Bromide Determination in Aqueous Solution Based on Fluorescence Quenching of Dye

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1. Fluorescence behavior of CXT vs. pH

2. Fluorescence decay profile of CXT

3. Fluorescence decay profile of CXT/CPB
1. Fluorescence behavior of CXT vs. pH

![Fluorescence spectra of CXT vs. pH](image)

**Fig. S11** Fluorescence spectra of the CXT (5.0 μM) in aqueous solution of Brij 35 (1.2 mM) at different pH values.

2. Fluorescence decay profile of CXT

![Fluorescence decay profile of CXT](image)

**Fig. S12** Fluorescence decay profile of CXT (5.0 μM) in aqueous solution of Brij 35 (1.2 mM) at pH 8.0. $\lambda_{em} = 444$ nm, EX/EM slit = 13.0 / 13.0 nm.

3. Fluorescence decay profile of CXT/CPB
**Fig. S13** Fluorescence decay profile of CXT/CPB (5.0 μM/ 20 μM) in aqueous solution of Brij 35 (1.2 mM) at pH 8.0. $\lambda_{em} = 444$ nm, EX / EM slit = 13.0 / 13.0 nm.