

Accessory Publication**Femtosecond Fluorescence Upconversion Investigations on the Excited-State Photophysics of Curcumin**

Tak W. Kee,^{1,3} Ramkrishna Adhikary,² Philip J. Carlson,² Prasun Mukherjee,² and Jacob W. Petrich^{2,3}

¹Department of Chemistry, University of Adelaide, Adelaide, SA, 5005, Australia.

²Department of Chemistry, Iowa State University, Ames, Iowa 50011-3111, USA.

³Corresponding authors. Email: tak.kee@adelaide.edu.au, jwp@iastate.edu

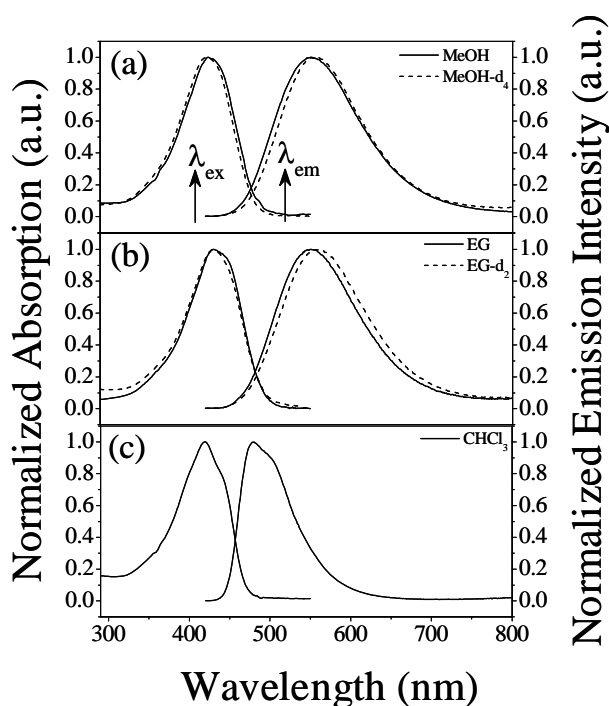


Figure 1. Normalized absorption and fluorescence spectra of curcumin in (a) methanol (MeOH), deuterated methanol (MeOH- d_4), (b) ethylene glycol (EG), deuterated ethylene glycol (EG- d_2) and (c) chloroform (CHCl_3). This figure is adapted from ref 44 in the main text and used with permission of the ACS.

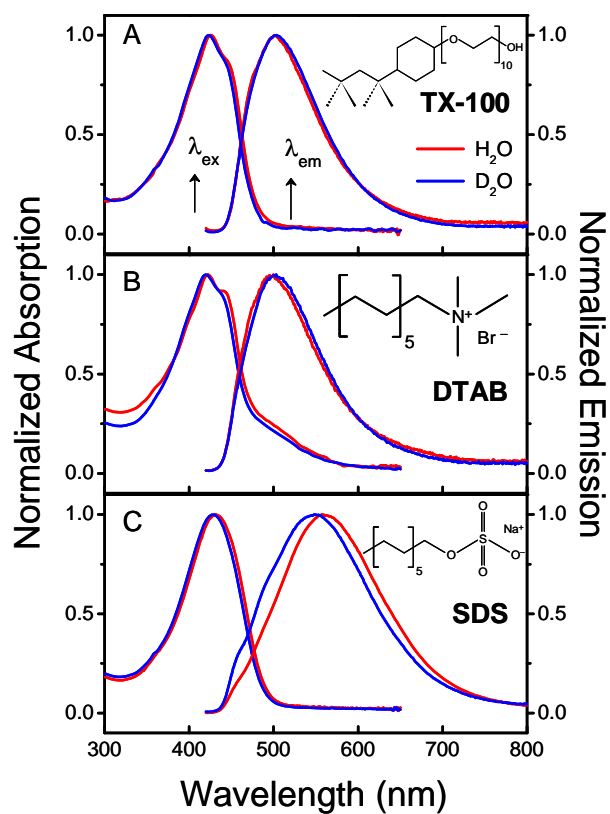


Figure 2. UV-Vis absorption and emission spectra of curcumin in (A) TX-100, (B) DTAB, and (C) SDS in H₂O (red) and D₂O (blue). This figure is adapted from ref 45 in the main text and used with permission of the ACS.

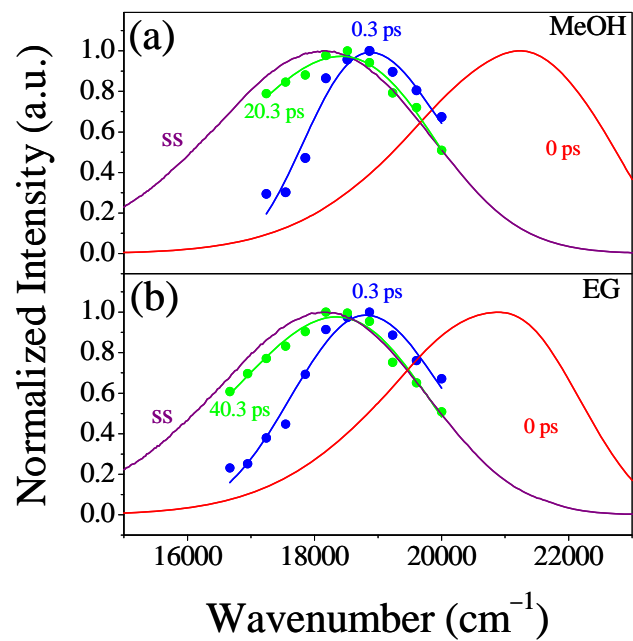


Figure 3. Normalized time resolved emission spectra of curcumin in methanol (MeOH) and ethylene glycol (EG). Steady-state (ss) and “zero-time” ($t = 0$ ps) spectra are included. Almost 70 % of the solvation is complete in both systems within the time resolution of our instrument (300 fs). This figure is adapted from ref 44 in the main text and used with permission of the ACS.

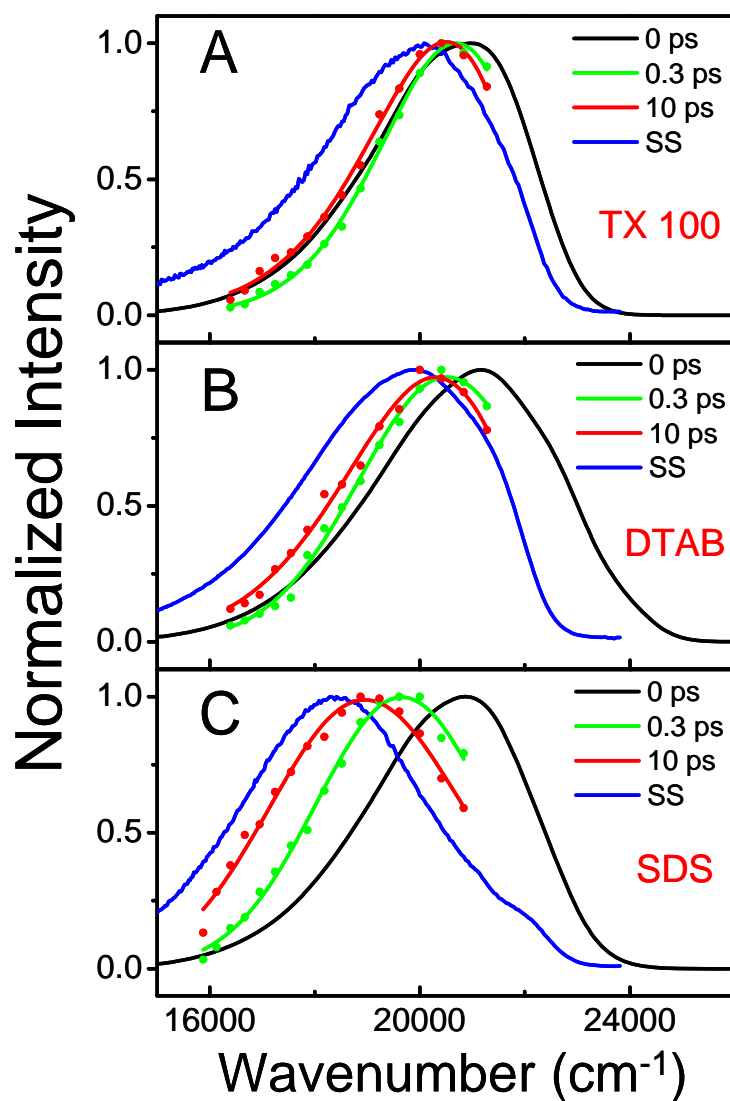


Figure 4. Time-resolved emission spectra of curcumin in TX-100, DTAB and SDS micelles. This figure is adapted from ref 45 in the main text and used with permission of the ACS.