

Electronic Supplementary Information

**Photo-controlled metal-ion ( $\text{Zn}^{2+}$  and  $\text{Cd}^{2+}$ ) release in aqueous  
Tween-20 micelle solution**

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Contents

1. Absorption and fluorescence spectral of sample **3** in aqueous Tween-20 micelle solution. (Fig. 1)
2. Absorption spectral changes of complex **2** in aqueous Tween-20 micelle solution upon irradiation with 365 nm light. (Fig. 2)
3. Fluorescence spectral changes of **2** in aqueous Tween-20 micelle solution upon irradiation with 365 nm light. (Fig. 3)
4. The plot of fluorescence intensity vs irradiation time for  $\text{Cd}^{2+}$ -release. (Fig. 4)
5. Titration of ligand with  $\text{Cd}^{2+}$  in DMSO. (Fig. 5)
6. Absorption spectral of sample **3** in aqueous Tween-20 micelle solution with and without addition of  $\text{Cd}^{2+}$  (Fig. 6).
7. Absorption spectral of **3** in DMSO with and without addition of  $\text{Cd}^{2+}$ . (Fig. 7)

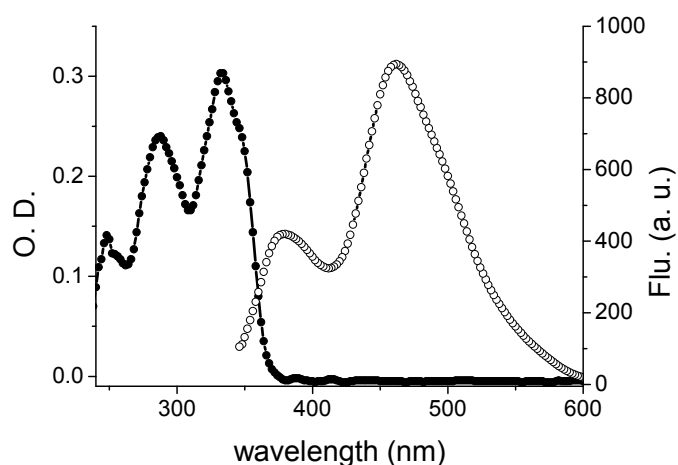


Fig. 1. Absorption (black) and fluorescence (white) of sample **3** (20  $\mu\text{M}$ ) aqueous Tween-20 micelle solution (tris-HCl, 50 mM, pH = 7.4,  $\text{KNO}_3 = 0.1\text{M}$ ) ( $\lambda_{\text{ex}} = 328$  nm).

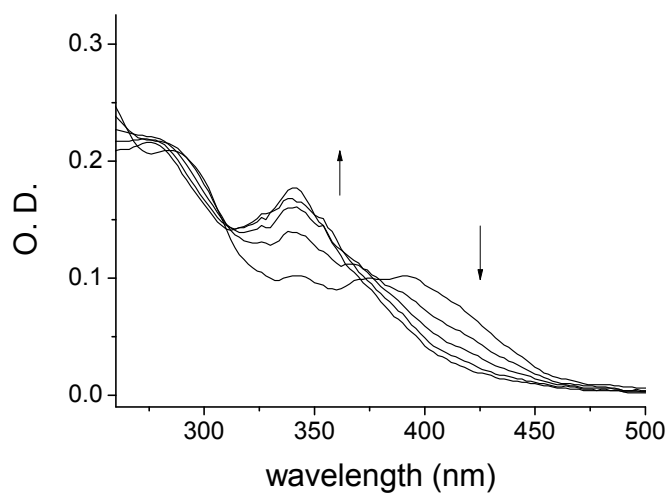


Fig. 2. Absorption changes of **2** (20  $\mu\text{M}$ ) in aqueous Tween-20 micelle solution (tris-HCl, pH = 7.4,  $\text{KNO}_3 = 0.1\text{M}$ ) upon 365 nm light irradiation (periods: 0, 4, 8, 12, 16 min).

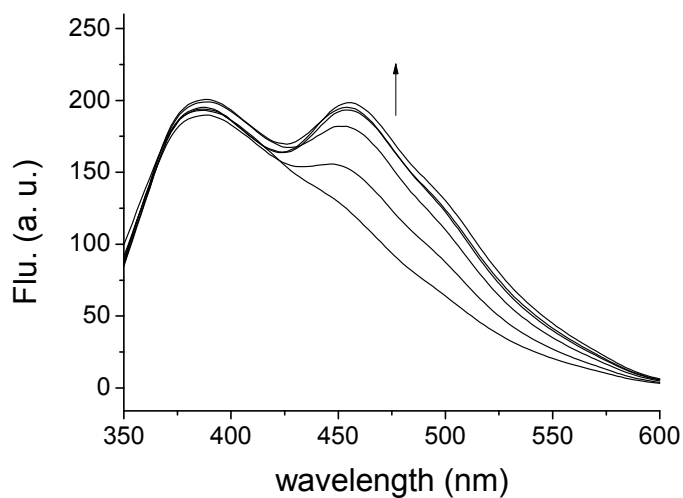


Fig. 3. Fluorescence changes of complex **2** in aqueous Tween-20 micelle solution (tris-HCl, pH = 7.4, KNO<sub>3</sub> = 0.1M) upon 365 nm light irradiation ( $\lambda_{\text{ex}} = 328$  nm, periods: 0, 4, 8, 12, 16 min).

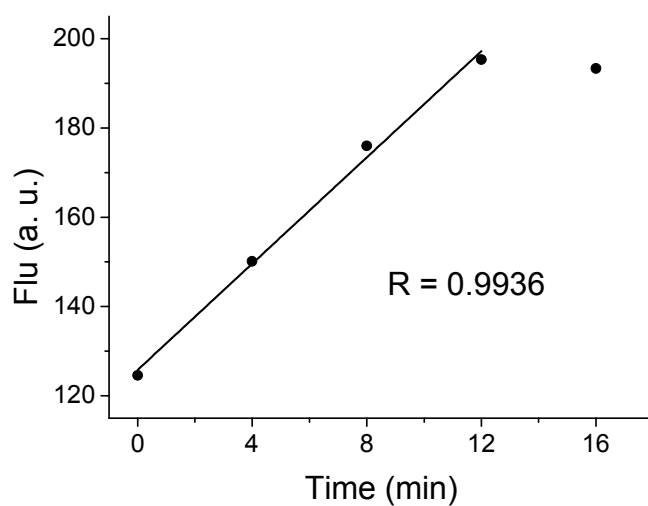


Fig. 4. The kinetics of Cd<sup>2+</sup>-release with different irradiation times (monitoring fluorescence intensity of **3** at 454 nm)

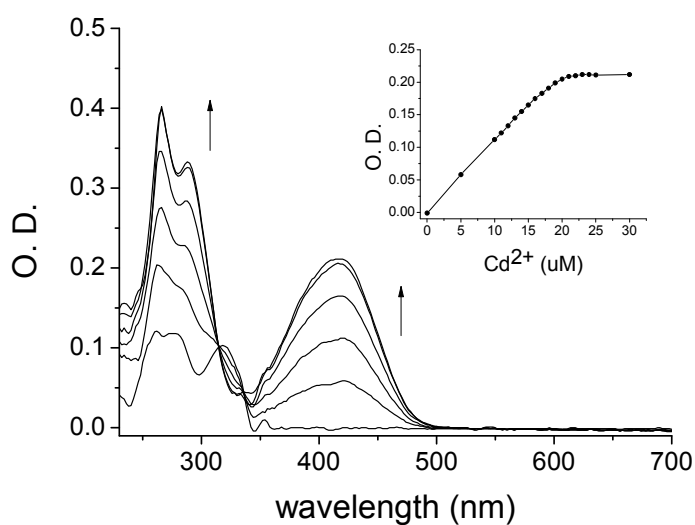


Fig. 5. Titration of 20  $\mu\text{M}$  of ligand with  $\text{Cd}^{2+}$  in DMSO. The inset is the plot of the optical density of complex **2** at 418 nm against the amount of  $\text{Cd}^{2+}$ .

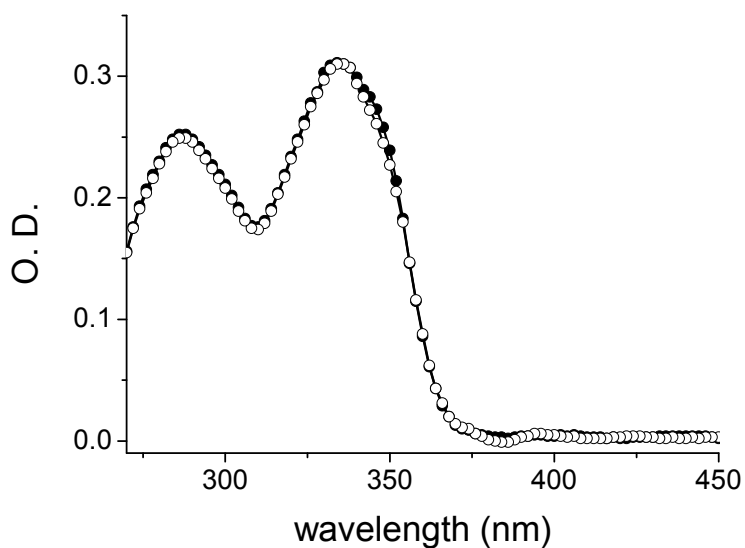


Fig. 6. Absorption spectral of sample **3** (20  $\mu\text{M}$ ) in aqueous Tween -20 micelle solution (tris-HCl, pH = 7.4,  $\text{KNO}_3 = 0.1\text{M}$ ) with (white) and without (black) addition of  $\text{Cd}^{2+}$  (20  $\mu\text{M}$ ).

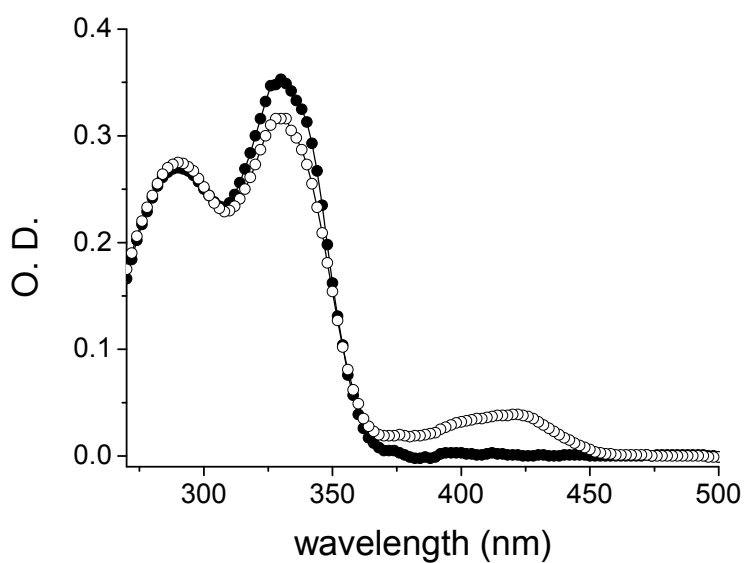


Fig. 7. Absorption spectral of **3** (20  $\mu\text{M}$ ) in DMSO with (white) and without (black) addition of  $\text{Cd}^{2+}$  (20  $\mu\text{M}$ ).