Electronic Supplementary Information (ESI)

Disaggregation-induced resurgence of quenched emission of a self-assembled bis-indole system: Photophysics, energetics, and dynamics

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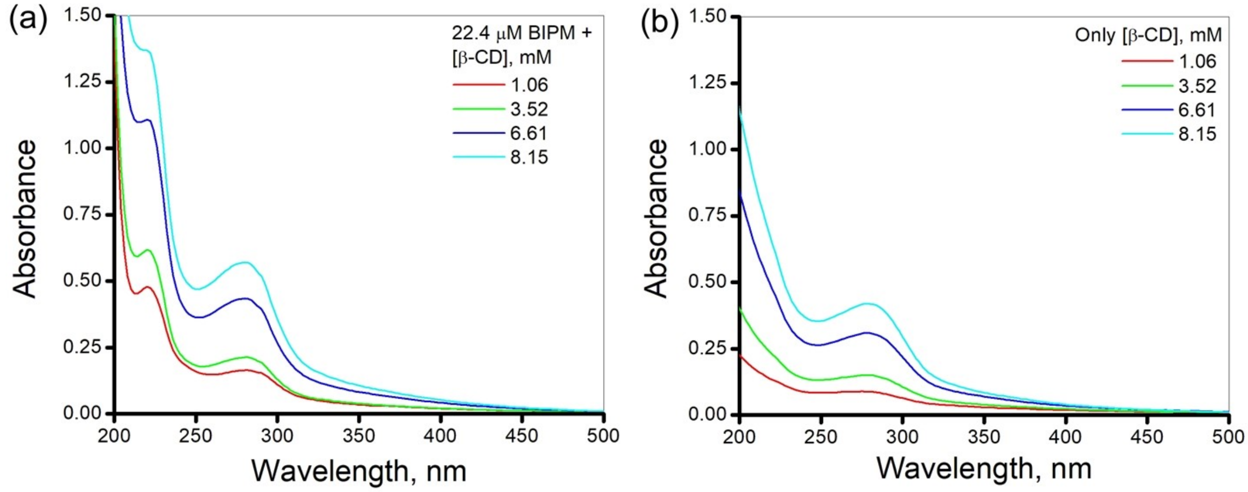

Fig. S1 (a) Change in the absorption spectrum of BIPM with gradual addition of β-CD and (b) absorption spectrum of only β-CD with its increasing concentration; in pure water, Temp. 298 K.

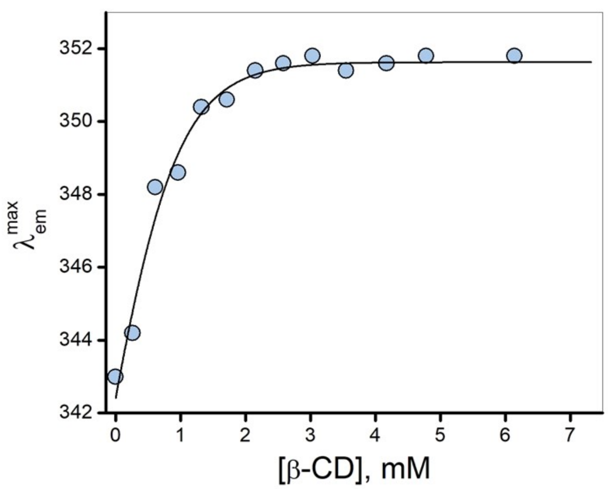

Fig. S2 Shift in the emission maximum of BIPM with gradual addition of β-CD in pure water; λ_{ex} = 280 nm, [BIPM] = 22.4 μM, Temp. 298 K.

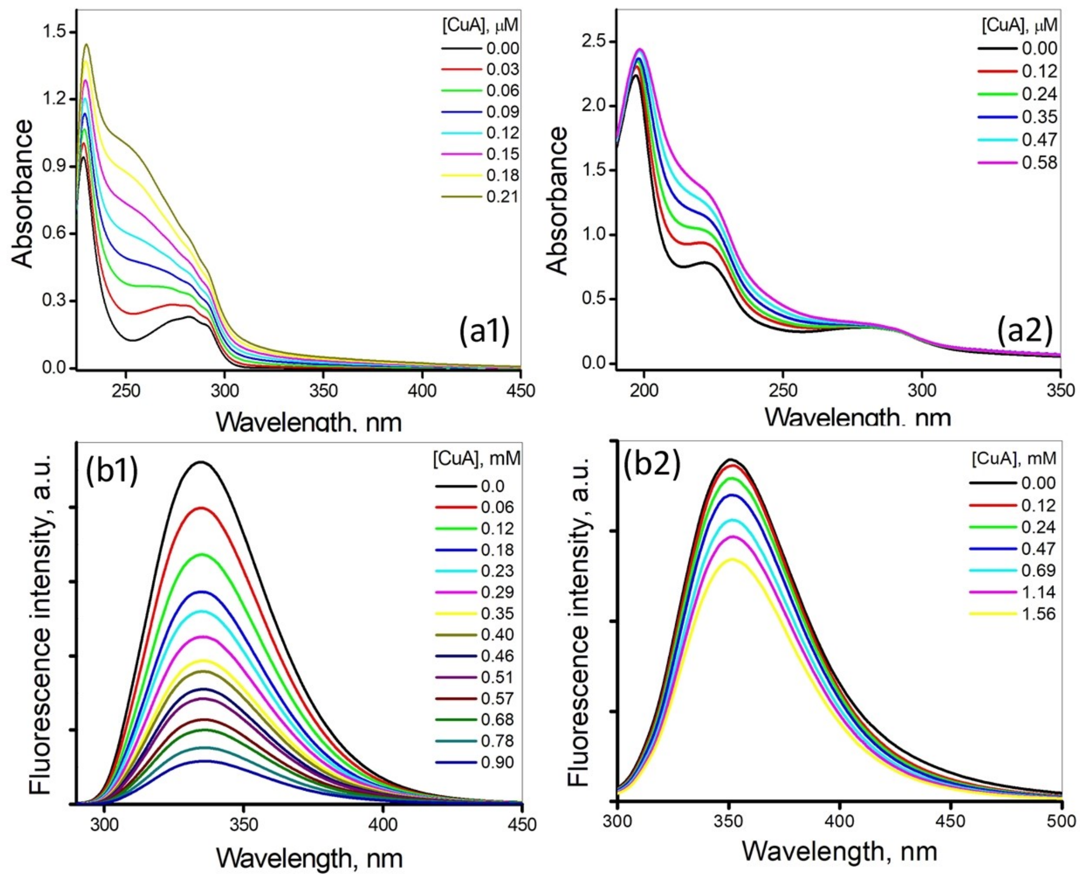

Fig. S3 Change in the absorbance of (a1) BIPM in pure DiOx and (a2) BIPM–β-CD in pure water on interaction with $Cu(OAc)_2$ quencher; Change in the fluorescence of (b1) BIPM in pure DiOx and (b2) BIPM–β-CD in pure water on interaction with $Cu(OAc)_2$ quencher; λ_{ex} = 280 nm, [BIPM] = 22.4 μM, [β-CD] = 4.75 mM, Temp. 298 K.

Table S1 Time-resolved decay parameters of BIPM at different β-CD concentration on excitation at 280 nm and monitoring at emission maxima. $\chi 2$ represents the goodness of fitting and the data are within ±5% error limit.

[β-CD], mM	T_1, ns	A_1	T_2, ns	A_2	T_{av}, ns	χ^2
0.00	0.25	70.27	1.36	29.73	1.03	1.27
0.61	0.85	45.09	2.90	54.91	2.49	1.20
1.71	0.89	24.79	2.85	75.21	2.66	1.17
2.58	1.21	21.35	2.92	78.65	2.75	1.18
3.60	1.31	20.15	2.93	79.85	2.77	1.16
4.81	0.94	12.16	2.79	87.84	2.71	1.15