

Electronic Supplementary Information (ESI)

A diethylaminophenol functionalized Schiff base:
crystallization-induced emission-enhancement,
switchable fluorescence and application for security
printing and data storage

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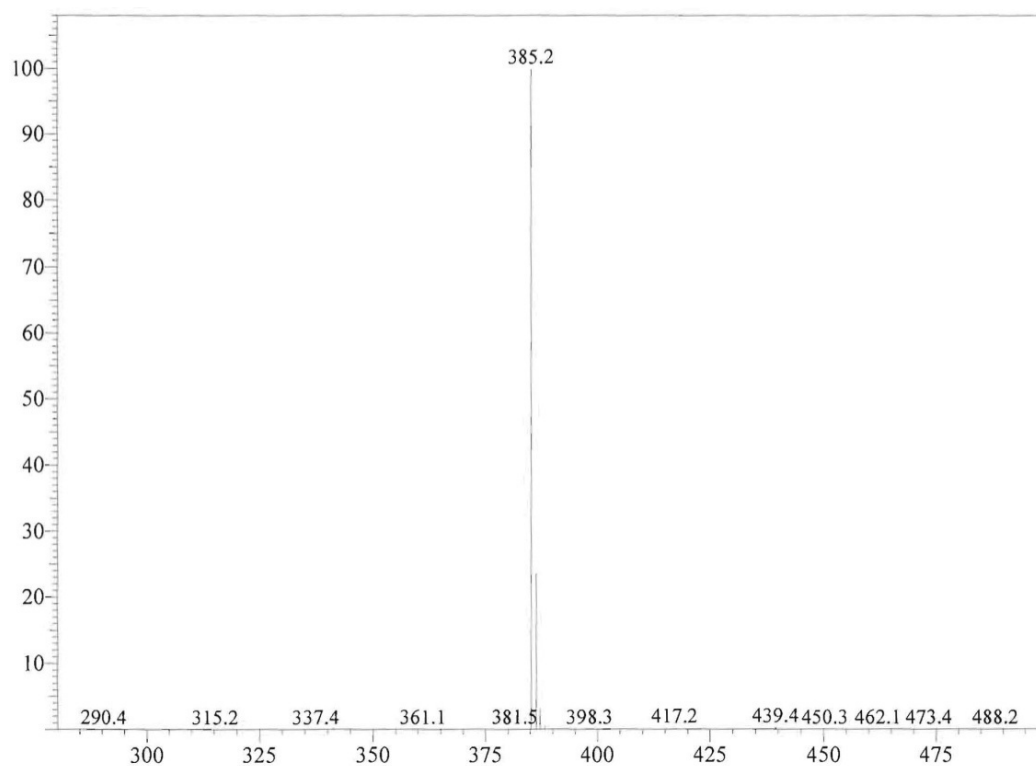


Fig. S1 ESI-mass spectrum of SBOH

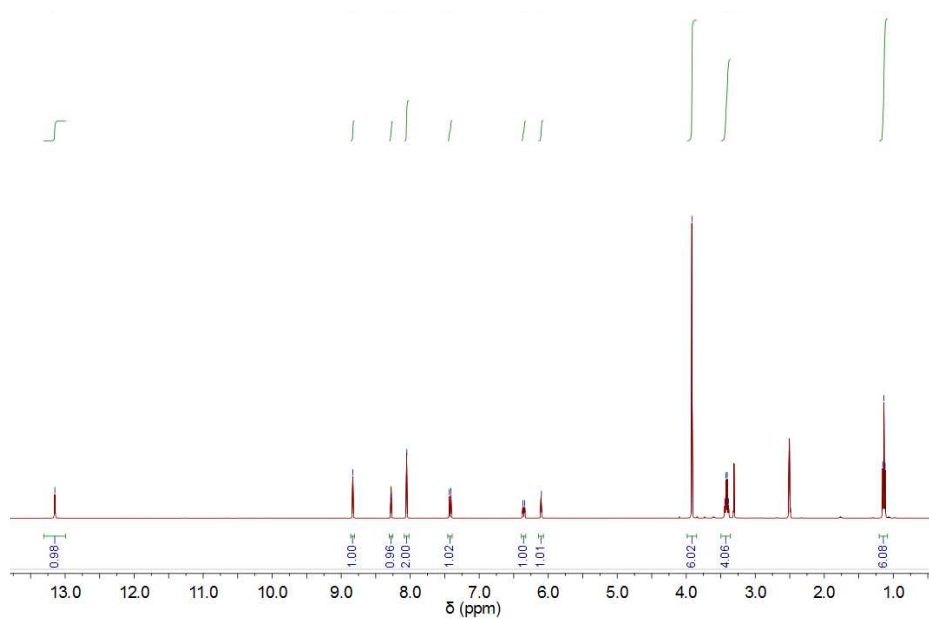


Fig. S2 ^1H NMR (600 MHz, 298 K) spectrum of SBOH in $\text{DMSO-}d_6$.

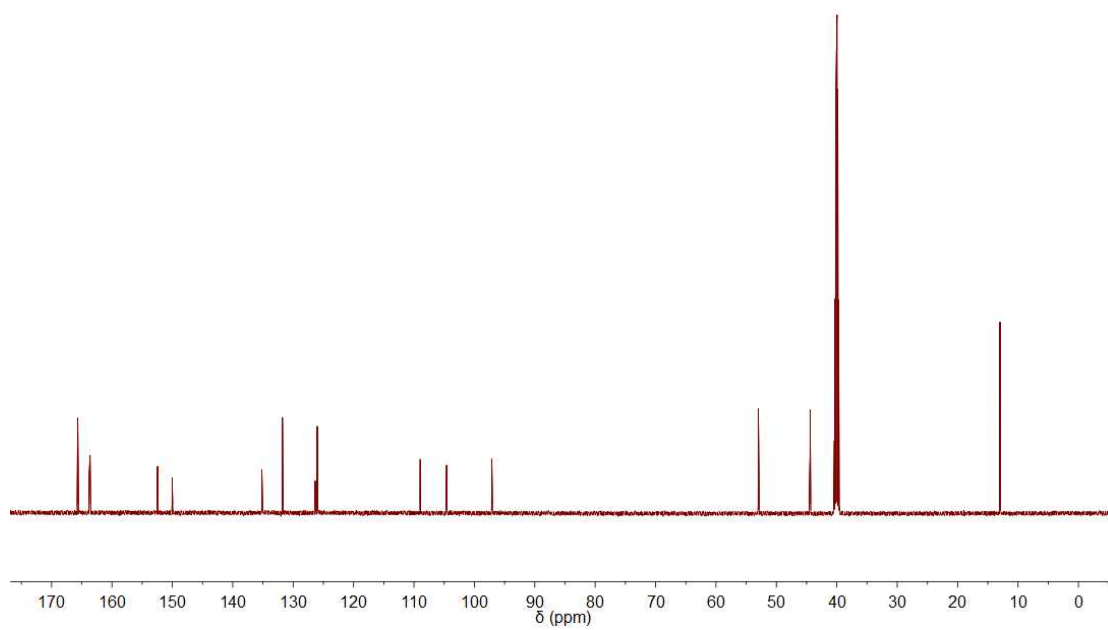


Fig. S3 ^{13}C NMR (600 MHz, 298 K) spectrum of SBOH in $\text{DMSO-}d_6$.

Table S1 Crystal data and structure refinement for A3MN

Identification code	SBOH
Empirical formula	C ₂₁ H ₂₄ N ₂ O ₅
Formula weight	384.43
Temperature	293 K
Wavelength	0.71073 Å
Crystal system	Monoclinic
Space group	P2(1)/c
Unit cell dimensions	a = 10.000(2) Å
	b = 28.000(6) Å
	c = 7.0000(14) Å
Volume	1893.2(7) Å ³
Z, Calculated density	38, 1.434 Mg/m ³
Absorption coefficient	0.129 mm ⁻¹
F(000)	836
Crystal size	0.35x 0.28x 0.14mm
Theta range for data collection	2.56-31.67 deg.
Limiting indices	-14<=h<=14, -39<=k<=40, -10<=l<=9
Reflections collected	21621 / 6170 [R(int) = 0.0479]
Completeness to theta = 31.67	96.3 %
Refinement method	Full-matrix least-squares on F ²
Data / restraints / parameter	6170 / 0 / 258
Goodness-of-fit on F ²	0.775
Final R indices [I>2sigma(I)]	R1 = 0.0640, wR2 = 0.1569
R indices (all data)	R1 = 0.0789, wR2 = 0.1728
Largest diff. peak and hole	0.347 and -0.298 e.Å ⁻³

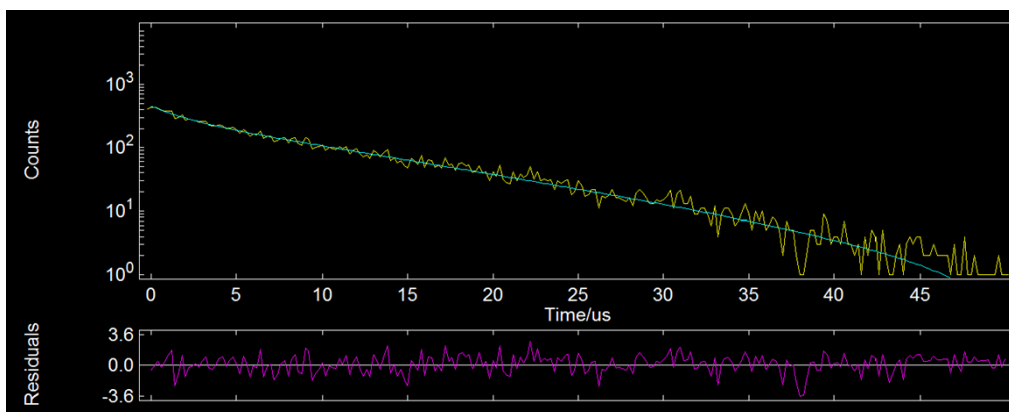


Fig. S4 Fluorescence lifetime decay curve of SBOH and its fitting to exponential decay function.

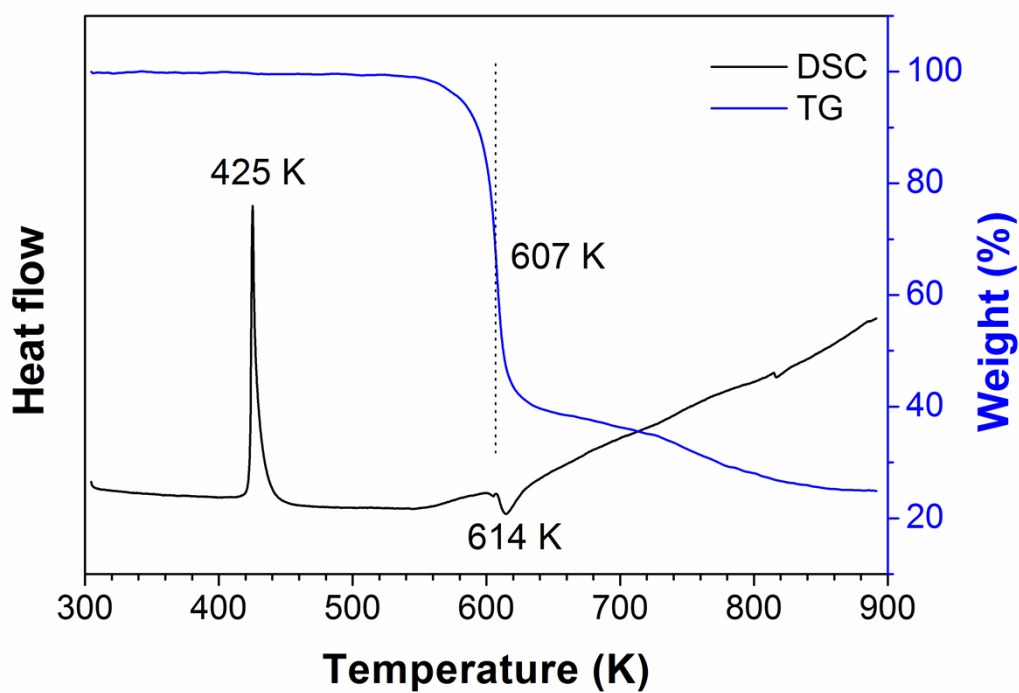


Fig. S5 TG-DSC analysis of SBOH recorded under nitrogen atmosphere at a heating rate of 10 K/min.