

Chemosensing Test Paper Based on Aggregated Nanoparticles of a Barbituric Acid Derivative

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^1H NMR (400 MHz, Chloroform-*d*) δ 8.35 (s, 1H), 8.14 (d, $J = 8.8$ Hz, 2H), 7.36 (t, $J = 7.8$ Hz, 4H), 7.21 (d, $J = 7.6$ Hz, 6H), 6.95 (d, $J = 8.7$ Hz, 2H), 4.74 (dd, $J = 14.0, 10.5$ Hz, 2H), 2.37 (q, $J = 12.5$ Hz, 4H), 1.84 (s, 3H), 1.67 (s, 4H), 1.42 – 1.33 (m, 4H), 1.31 – 1.22 (m, 3H).

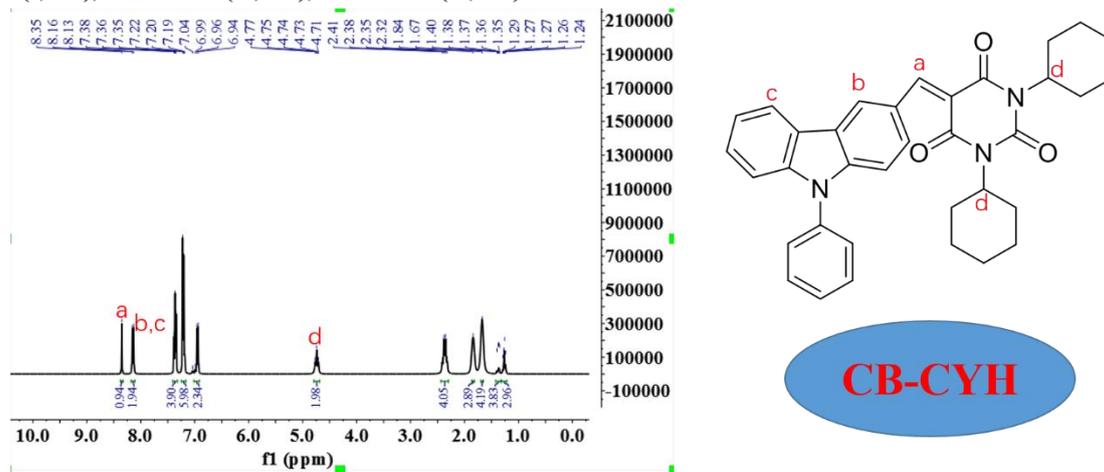


Fig. S1. ^1H NMR of CB-CYH in Chloroform-*d*

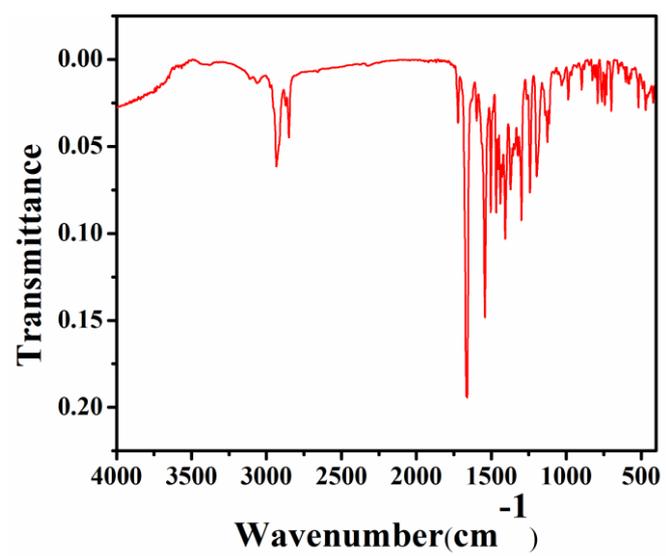


Fig. S2. FT-IR spectra of **CB-CYH**

Mass Spectrum List Report

Analysis Info				Acquisition Date	
Analysis Name	D:\Data\HYY\BS_003040.d			11/24/2019 5:14:46 PM	
Method	4_19_MassAccuNeg			Operator	
Sample Name	58			Instrument	solarix
Comment					
Acquisition Parameter					
Polarity	Positive	n/a	n/a	No. of Laser Shots	200
n/a	n/a	No. of Cell Fills	1	Laser Power	20.0 Ip
Broadband Low Mass	53.8 m/z	n/a	n/a	n/a	n/a
Broadband High Mass	1000.0 m/z	n/a	n/a	n/a	n/a
Acquisition Mode	Single MS	n/a	n/a	Calibration Date	Fri Feb 21 02:36:54 2014
Pulse Program	basic	n/a	n/a	Data Acquisition Size	1048576
Source Accumulation	0.020 sec	n/a	n/a	Apodization	Sine-Bell Multiplication
Ion Accumulation Time	0.200 sec	n/a	n/a	Apodization	Apodization
Flight Time to Acq. Cell	0.001 sec	n/a	n/a		

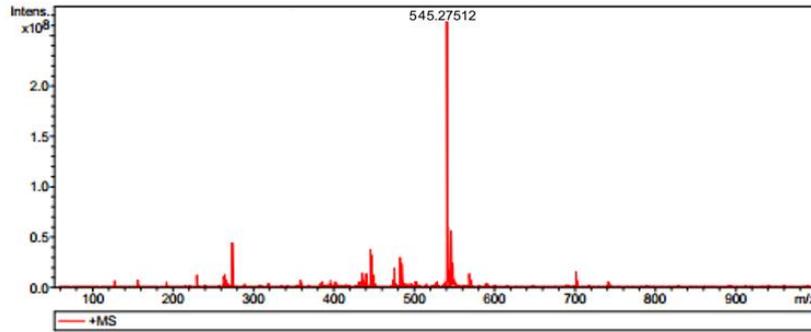


Fig. S3. HRMS spectra of **CB-CYH**

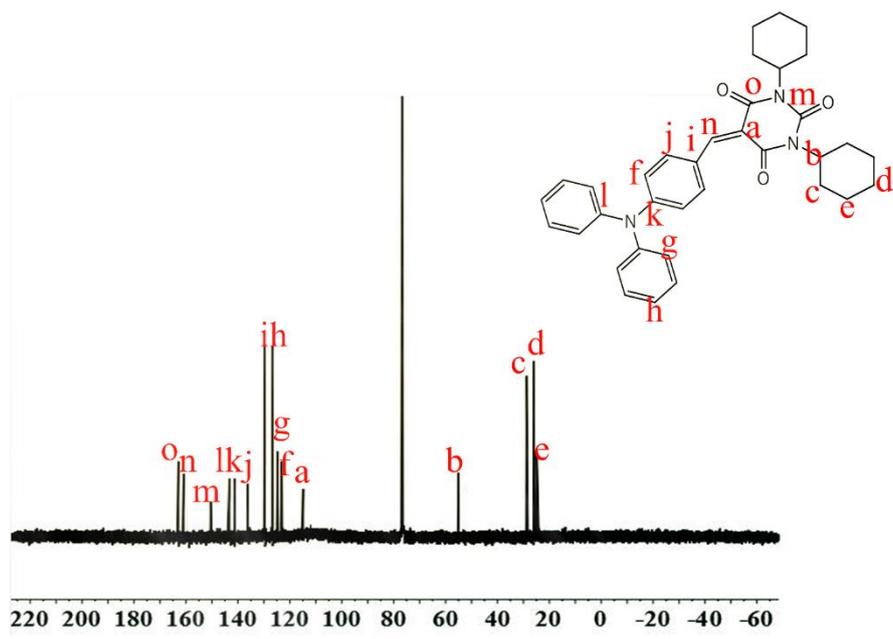


Fig. S4. ^{13}C NMR of CB-CYH in Chloroform-*d*.

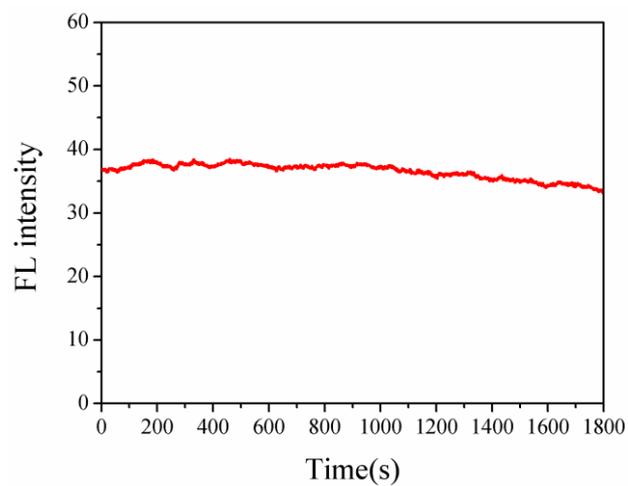


Fig. S5. CB-CYH light stability in nano-aggregates state.

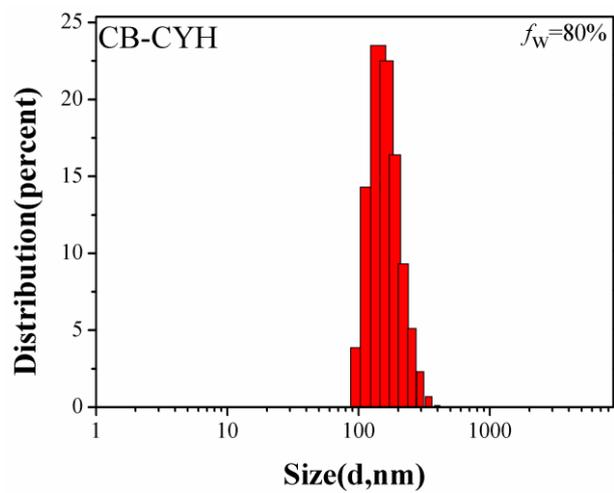


Fig. S6. Particle size distribution histograms of **CB-CYH** in a THF/H₂O mixture ($f_w = 80\%$) was left at room temperature for half an hour (Solution concentration: 10^{-4}M).