

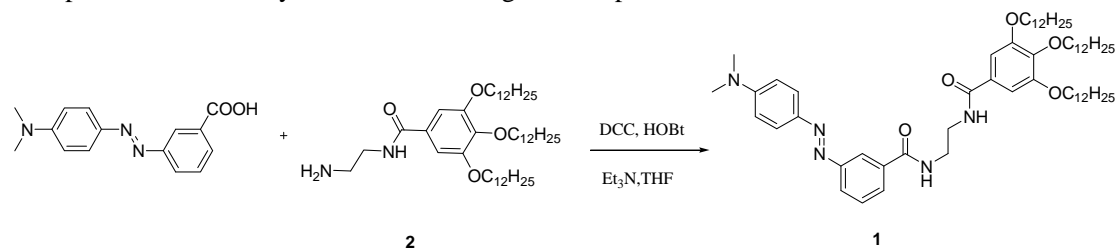
Supporting Information

Light and Acid Dual-responsive Organogel Formation Based on M-methyl Red Derivative

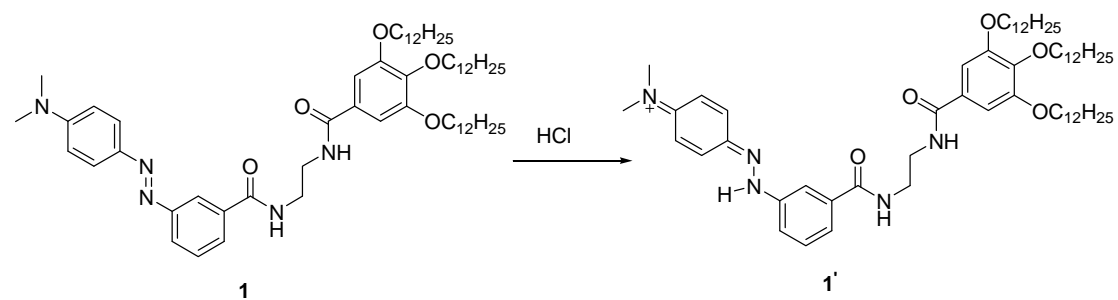
Xinhua Cao*, Aiping Gao, Haiting Lv, Minghui Zhang, Xiuxiu Wang and Yang Fan*

Scheme:

Compound **2** has been synthesized according to the reported method.^[1]



Scheme S1. Synthesis route of molecule **1**.



Scheme S2. Chemical structure of molecule **1** and **1'**.

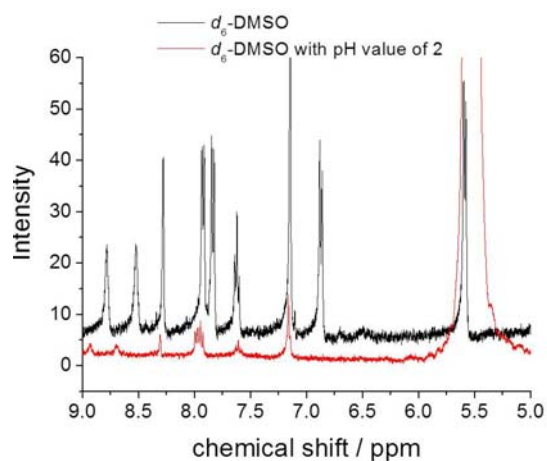


Figure S1. ¹H NMR spectra of compound **1** in d₆-DMSO with the different pH value.



Figure S2. Images of solution of **1** at different condition: a) the solution of **1** in DMSO under the irradiation of 254 nm for one hour; b) the solution of **1** in DMSO; c) the solution of **1** formation in DMSO with the pH value of 2 ($c_1 = 25 \text{ mg mL}^{-1}$).

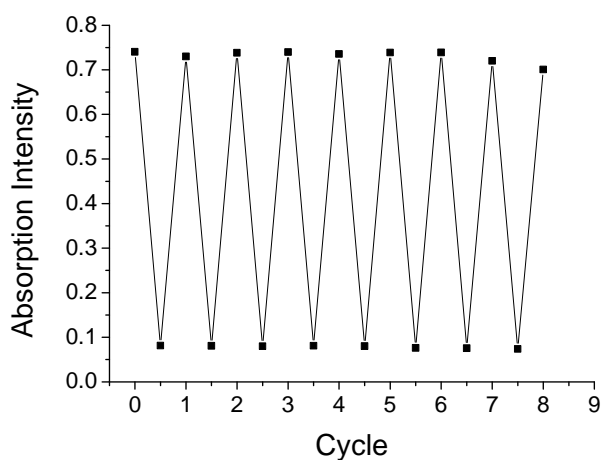


Figure S3. The absorption intensity at 427 nm change cycle experiment by changing UV/visible light irradiation.

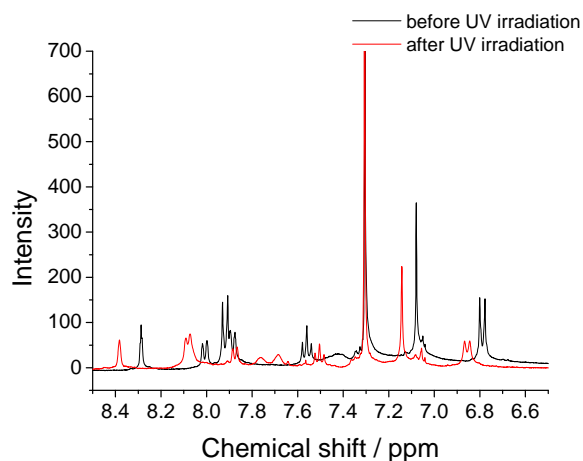


Figure S4. ^1H NMR spectra of compound **1** in CDCl_3 before and after irradiation by 254 nm light.

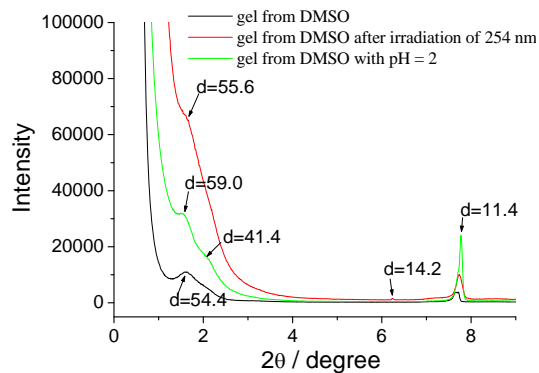


Figure S5 Small angle XRD spectra of gel **1** obtained in DMSO (25 mg mL^{-1}) under different conditions at room temperature.

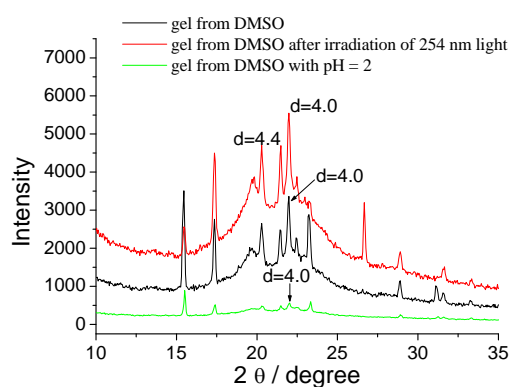


Figure S6 Large angle XRD spectra of gel **1** obtained in DMSO (25 mg mL^{-1}) under different conditions at room temperature.

References:

- 1 X. Cao, J. Zhou, Y. Zou, M. Zhang, X. Yu, S. Zhang, T. Yi and C. Huang, *Langmuir*, 2011, **27**, 5090–5097.