Supporting Information

Efficient phase-selective gelator for aromatic solvents recovery based on cyanostilbene amide derivative

Yuping Zhang, Yao Ma, Mengyu Deng, Hongxing Shang, Chunshuang Liang and Shimei Jiang*

State Key Laboratory of Supramolecular Structure and Materials, College of

Chemistry, Jilin University, 2699 Qianjin Avenue, Changchun 130012, P. R. China

Corresponding Author: E-mail: smjiang@jlu.edu.cn. Tel: +86-431-85168474. Fax:

+86-431-85193421.



Scheme S1 Synthesis route of cyanostilbene amide derivatives 1 and 2.



Fig. S1 Photographs of the gels of 2 in different solvents under daylight. From left to right: toluene, *p*-xylene, xylene, mesitylene, *p*-chlorotoluene, bromobenzene, chlorobenzene, 1,2-dichlorobenzene, chloroform.



Fig. S2 SEM images of 2 xerogels formed from (a) toluene, (b) xylene, (c) *p*-chlorotoluene, (d) chlorobenzene, (e) bromobenzene and (f) 1,2-dichlorobenzene.



Fig. S3 Phase-selective gelation of 2 from different the ratio of toluene and water, (a) 0.4 mL : 2 mL, (b) 0.4 mL : 4 mL, (c) the toluene gel of 2.



Fig. S4 SEM images of 2 xerogel formed from *p*-xylene via a room-temperature phase-selective gelation process.



Fig. S5 Phase-selective gelation of 2 for a little aromatic solvents at room temperature, (a) 0.2 mL xylene and 4 mL water mixture, (b) the inclined tube after selective gelation after upon addition of 2, (c) the xylene gel of 2 scooped out with a spatula.



Fig. S6 ¹H NMR (500 MHz) spectrum of compound 1 in CDCl₃.



Fig. S7 ¹³C NMR (125 MHz) spectrum of compound 1 in CDCl₃.



Fig. S8 ¹H NMR (500 MHz) spectrum of compound 2 in CDCl₃.



Fig. S9 ¹³C NMR (125 MHz) spectrum of compound 2 in CDCl₃.



Fig. S10 ¹H NMR (500 MHz) spectrum of compound 5 in CDCl₃.



Fig. S11 ¹H NMR (500 MHz) spectrum of compound 6 in CDCl₃.