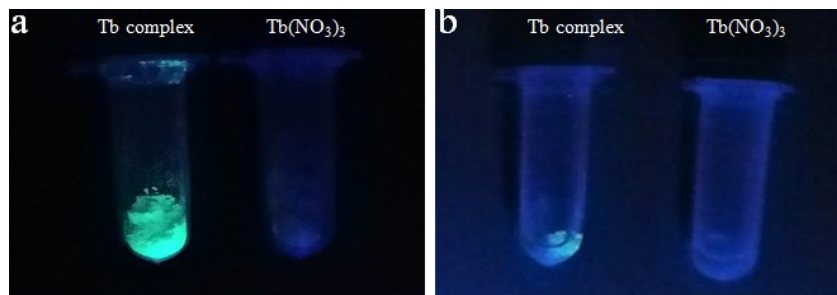


## Supporting information

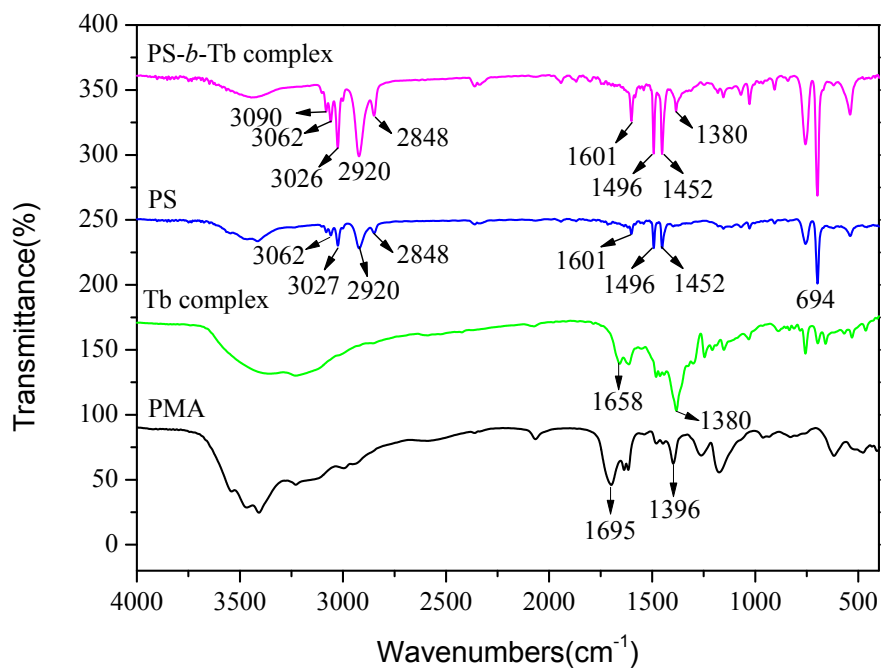
### **Honeycomb-patterned porous films fabricated via self-organization of Tb complex-loaded amphiphilic copolymers**

Qian Liu,<sup>a</sup> Chun-Na Yan,<sup>a</sup> Yu-Chao Li,<sup>a</sup> Mei-Fang Li,<sup>b</sup> Li-Ping Bai,<sup>a</sup> Li-Ping Wang<sup>\*a</sup> and Guang Li<sup>\*a</sup>

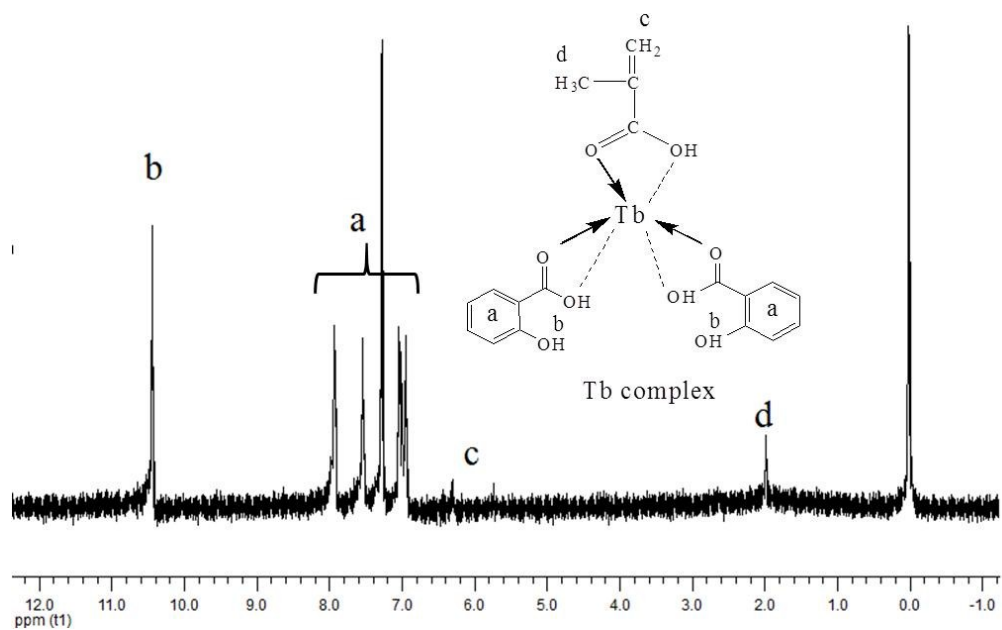
**Figure S1.** Photographs of Tb complex and  $\text{Tb}(\text{NO}_3)_3$  powder under UV lamp (254 nm) respectively (a), Tb complex and  $\text{Tb}(\text{NO}_3)_3$  in water under UV lamp (365 nm) respectively (b).



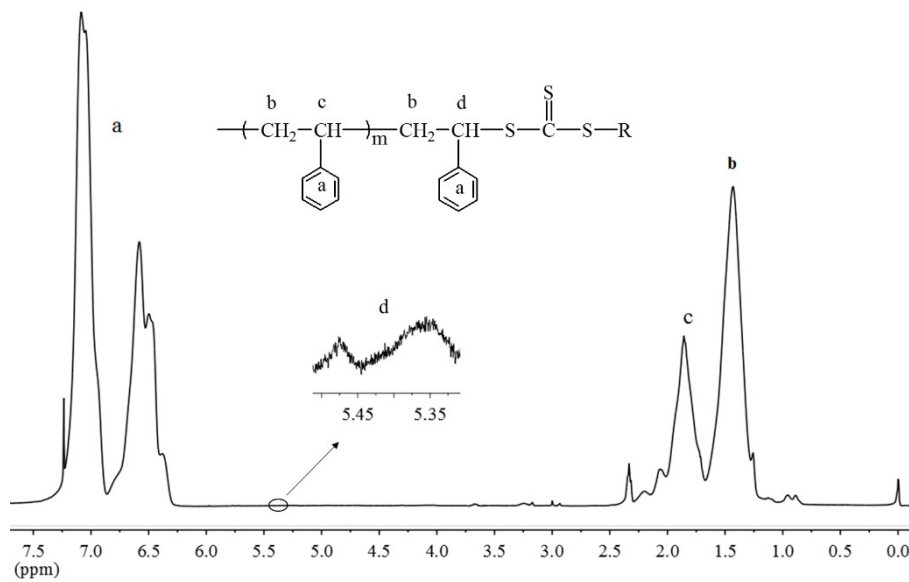
**Figure S2.** FT-IR spectra of PMA, Tb complex, PS and PS-*b*-Tb complex.



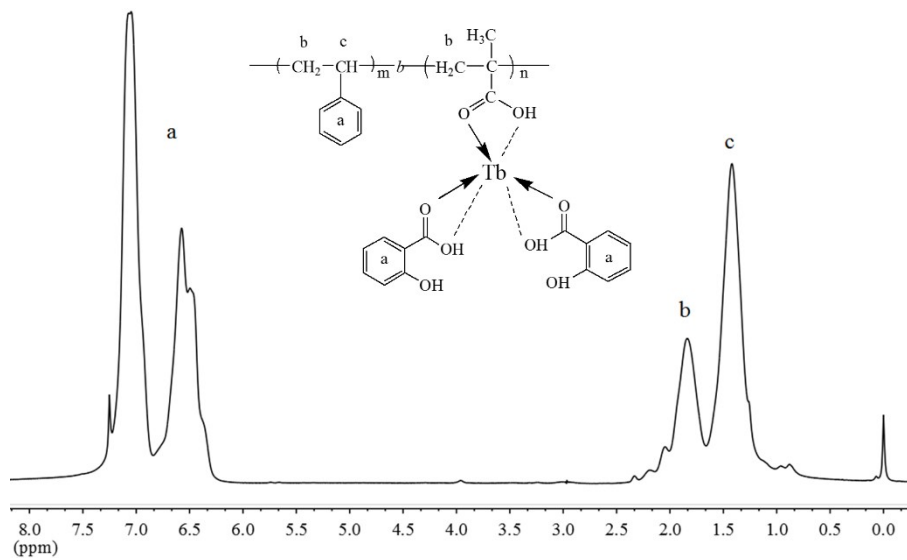
**Figure S3.**  $^1\text{H}$  NMR spectrum of Tb complex with  $\text{CDCl}_3$  as solvent.



**Figure S4.**  $^1\text{H}$  NMR spectrum of polystyrene (PS) with  $\text{CDCl}_3$  as solvent.



**Figure S5.**  $^1\text{H}$  NMR spectrum of PS-*b*-Tb complex-1 with  $\text{CDCl}_3$  as solvent.



**Figure S6.** FESEM images of porous films generated from 6 mg/mL solution of PS-*b*-Tb complex-2 in (a) CHCl<sub>3</sub>, (b) CH<sub>2</sub>Cl<sub>2</sub>, (c) CS<sub>2</sub> and (d) THF.

