

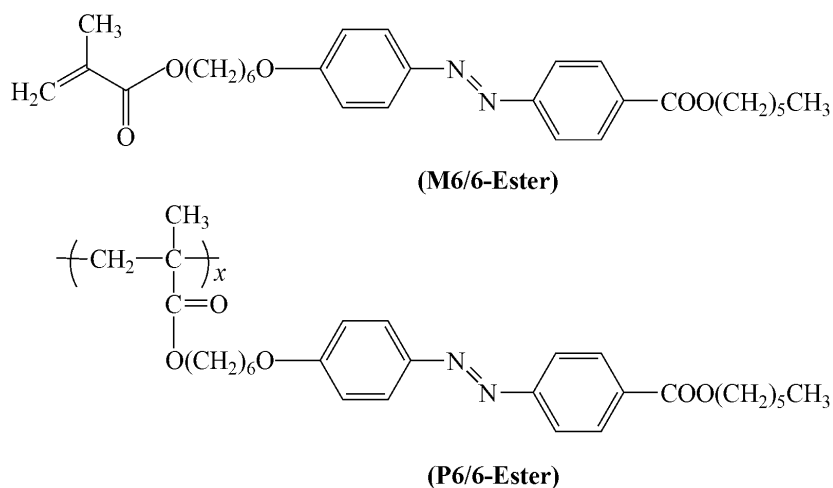
## Supporting Information

### Photoresponsive side-chain liquid crystalline polymers with amide group-substituted azobenzene mesogens: Effects of hydrogen bonding, flexible spacers, and terminal tails

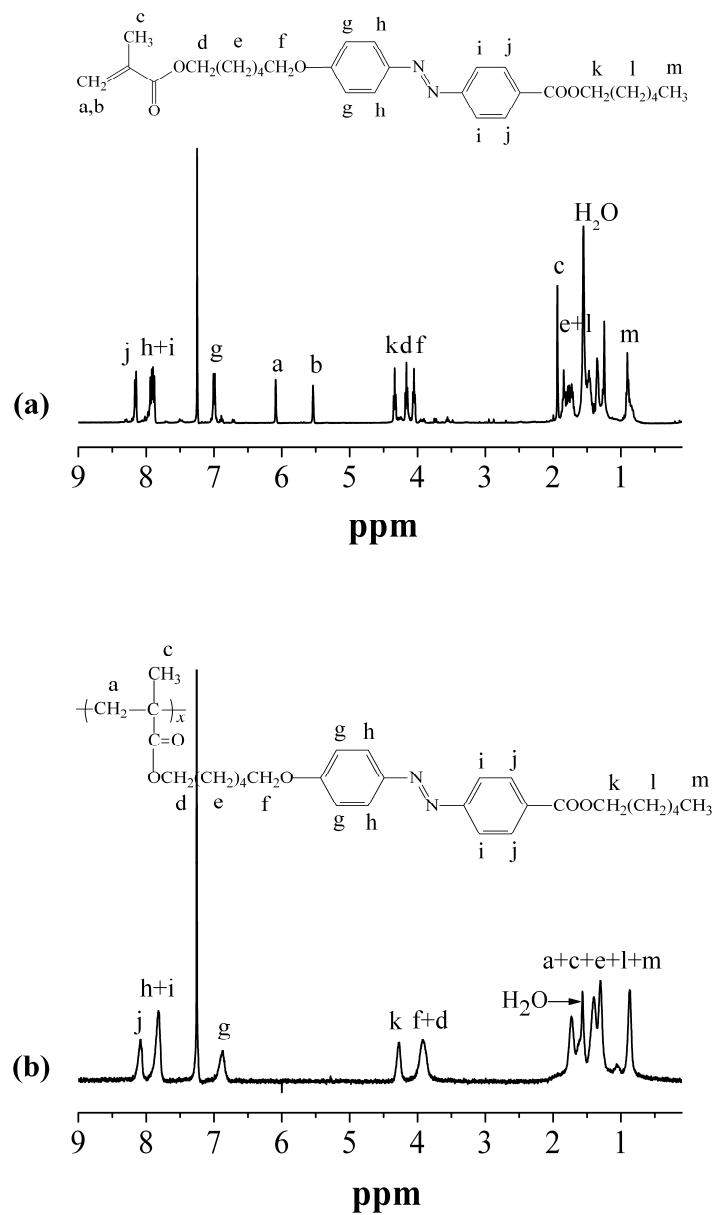
Xinjuan Li, Liangjing Fang, Leigang Hou, Lirong Zhu, Ying Zhang, Baolong Zhang and Huiqi Zhang\*

Key Laboratory of Functional Polymer Materials (Nankai University), Ministry of Education, Department of Chemistry, Nankai University, Tianjin 300071, P. R. China

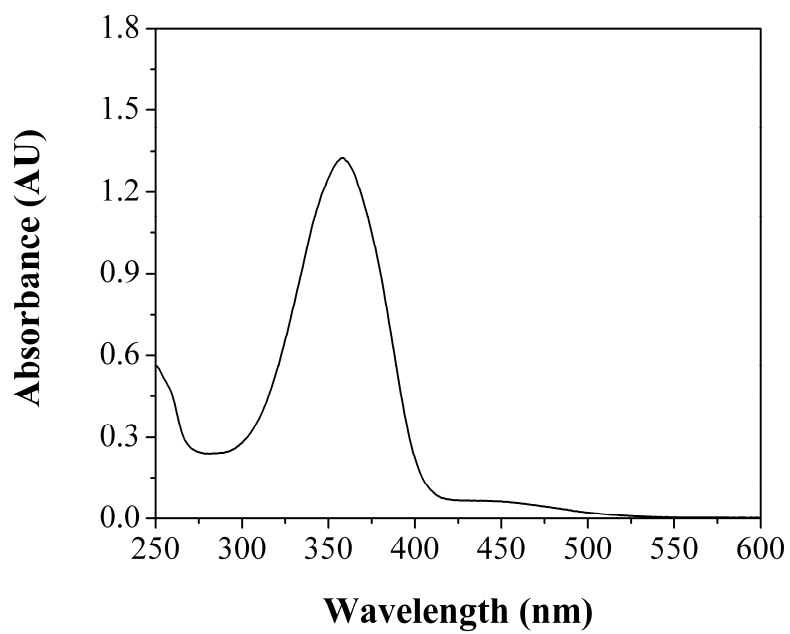
Tel/Fax: +86-2223507193; E-mail: zhanghuiqi@nankai.edu.cn



**Scheme S1** Chemical structures of M6/6-Ester and its corresponding homopolymer P6/6-Ester.



**Fig. S1**  $^1\text{H}$  NMR spectra of M6/6-Ester (a) and P6/6-Ester (b) in  $\text{CDCl}_3$ .



**Fig. S2** UV-vis spectrum of the solution of M6/6 in THF ( $C = 5 \times 10^{-5}$  mol/L = 0.0247 mg/mL) at 25 °C.