

## SUPPORTING INFORMATION

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**1. The optimized structures obtained from density functional theory calculations.**

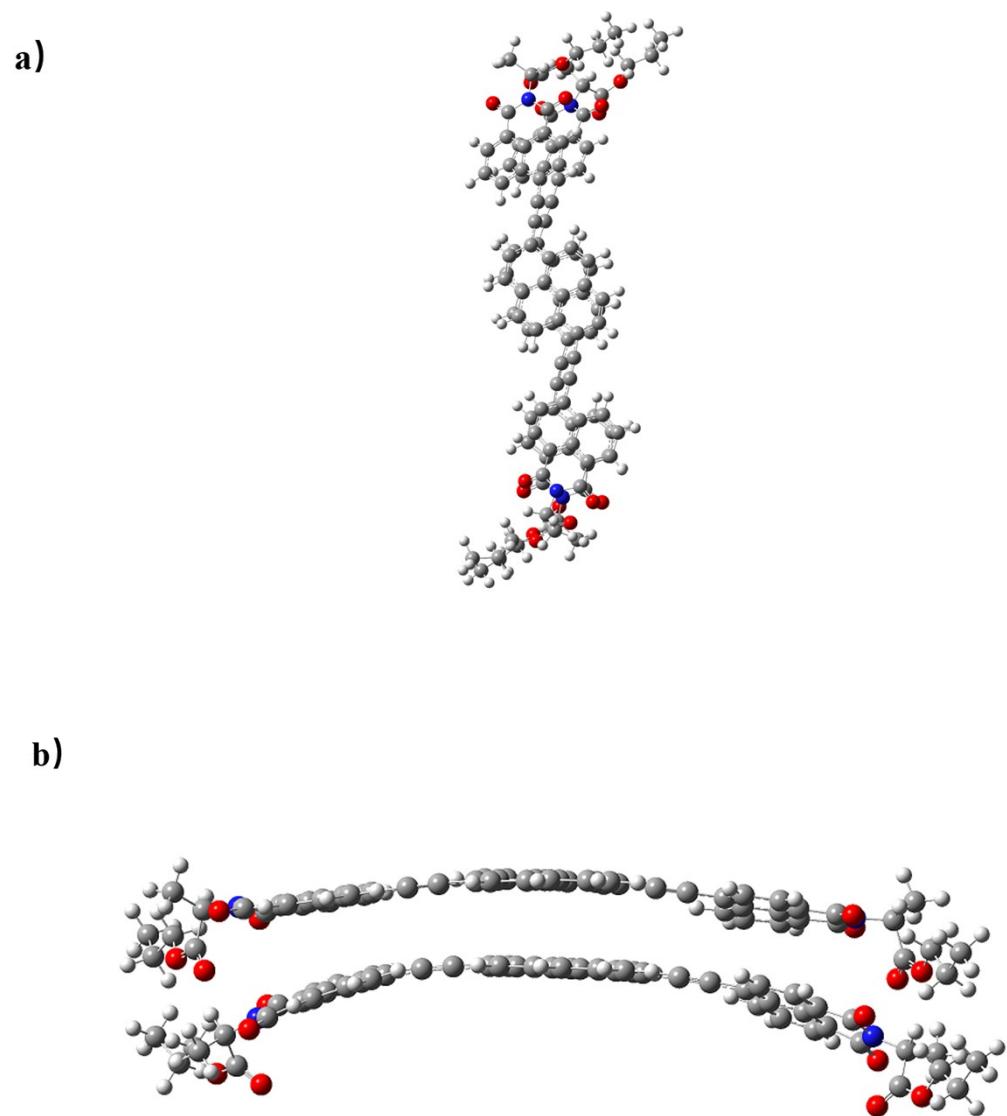


Figure S1. The optimized structures obtained from density functional theory calculations for two chiral molecules **D-1**: a) top viewport b) side viewport.

## **2. Molecular orbital diagrams for the LUMOs and HOMOs.**

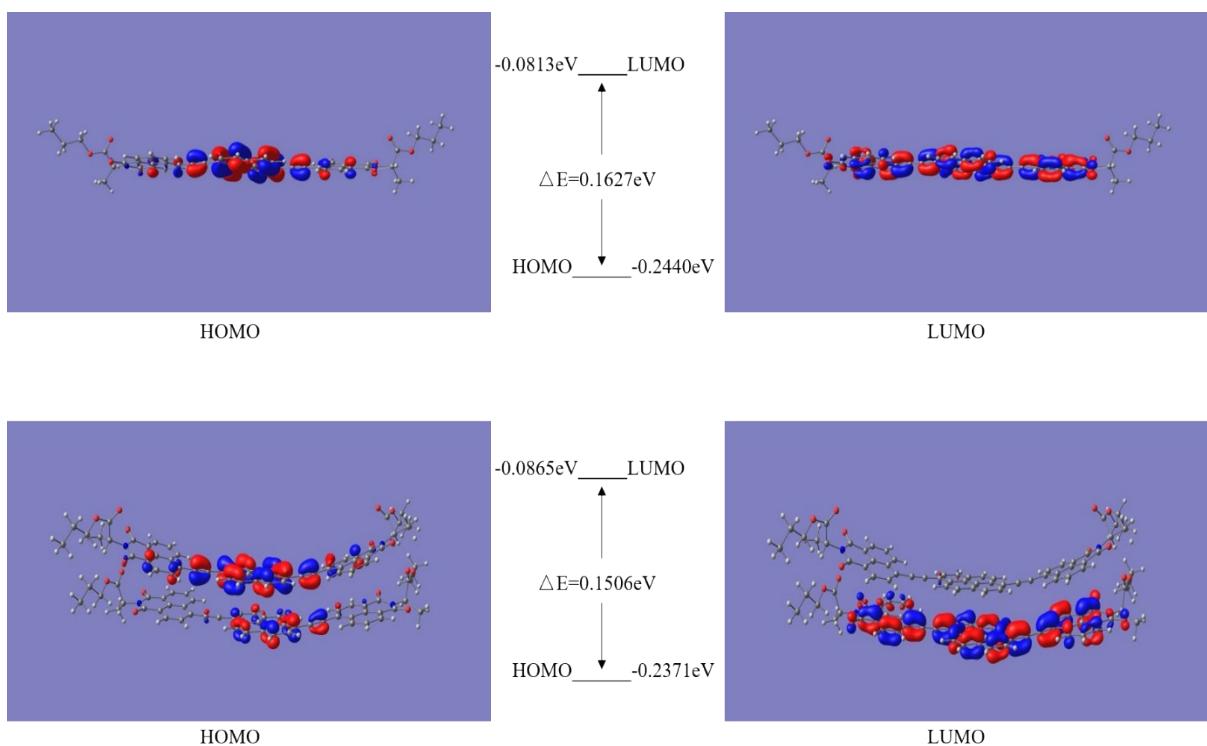
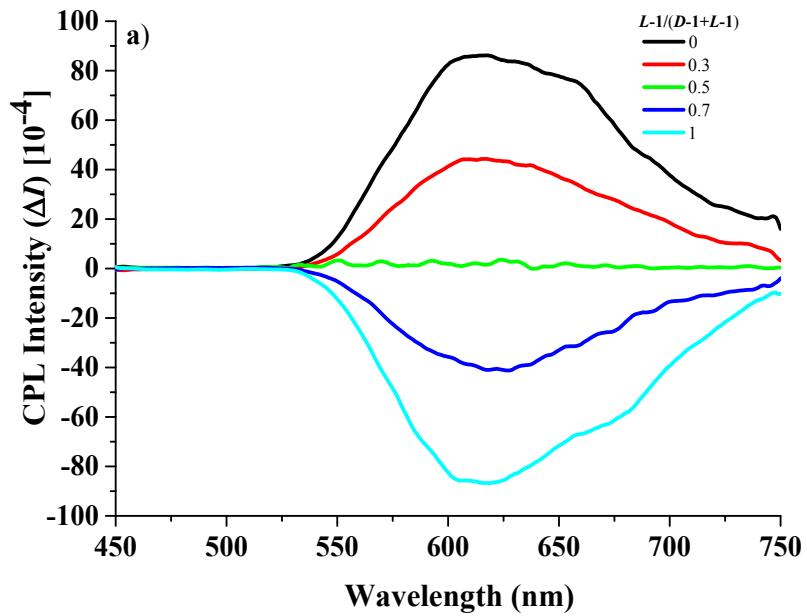


Figure S2. Molecular orbital diagrams for the LUMOs and HOMOs for both monomer and dimeric forms of **D-1** from DFT calculations.

### 3. CPL spectra of modified D/L ratio in CHCl<sub>3</sub>-MeOH mixtures.



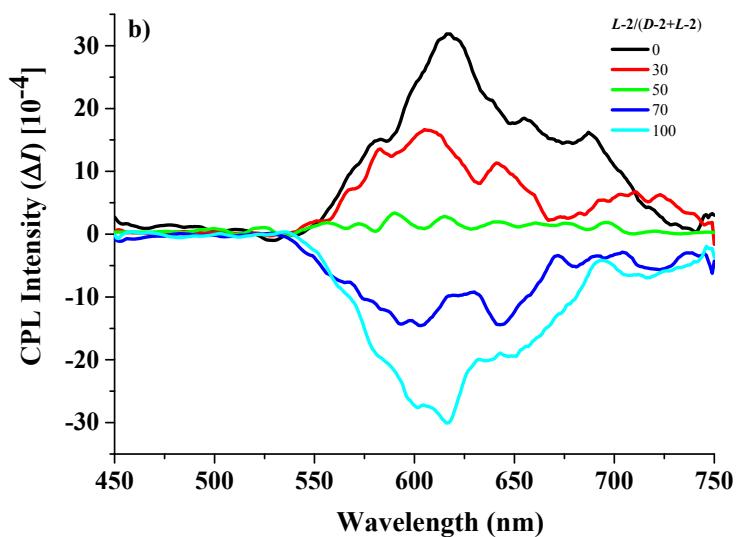


Figure S3. CPL spectra of modified  $D/L$  ratio of a)  $D/L\text{-}1$  and b)  $D/L\text{-}2$  in  $\text{CHCl}_3\text{-MeOH}$  mixtures at a fixed concentration( $5.0 \times 10^{-5}$  mol L $^{-1}$ ,  $f_m(\text{Vol}\%)=99$ ).

#### 4. $^1\text{H}$ MR and $^{13}\text{C}$ NMR spectra of compounds.

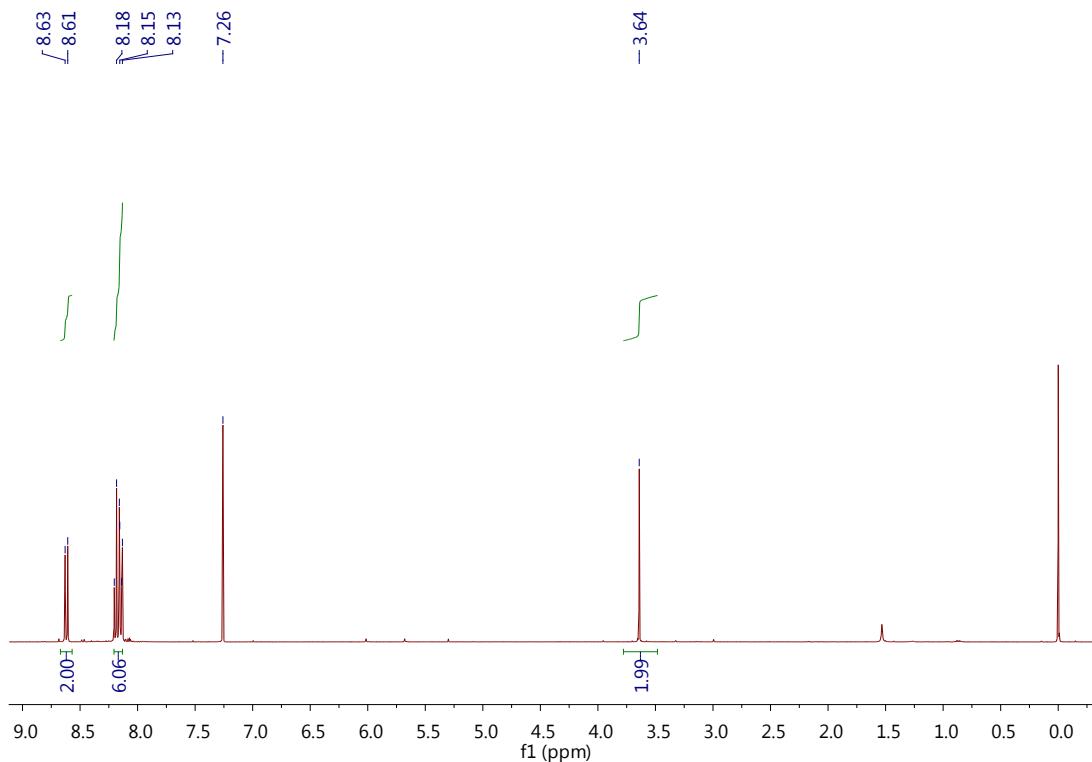


Figure S4.  $^1\text{H}$  NMR of **1** (400 MHz,  $\text{CDCl}_3$ ).

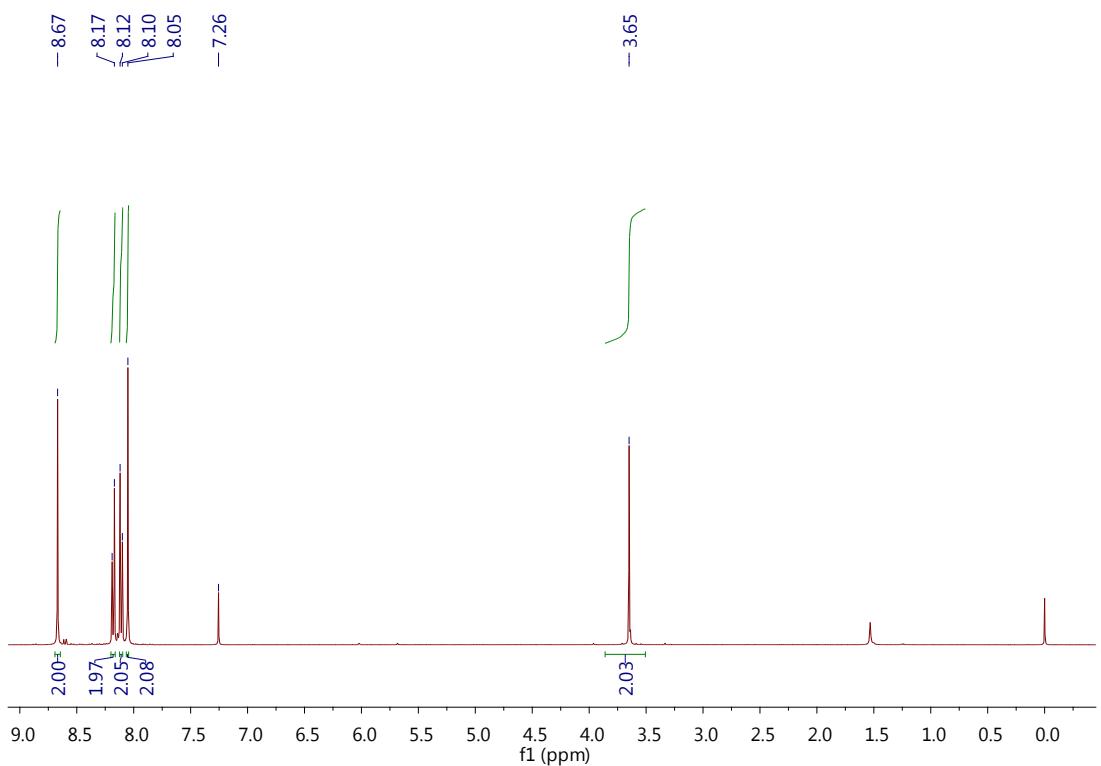


Figure S5.  $^1\text{H}$  NMR of **2** (400 MHz,  $\text{CDCl}_3$ ).

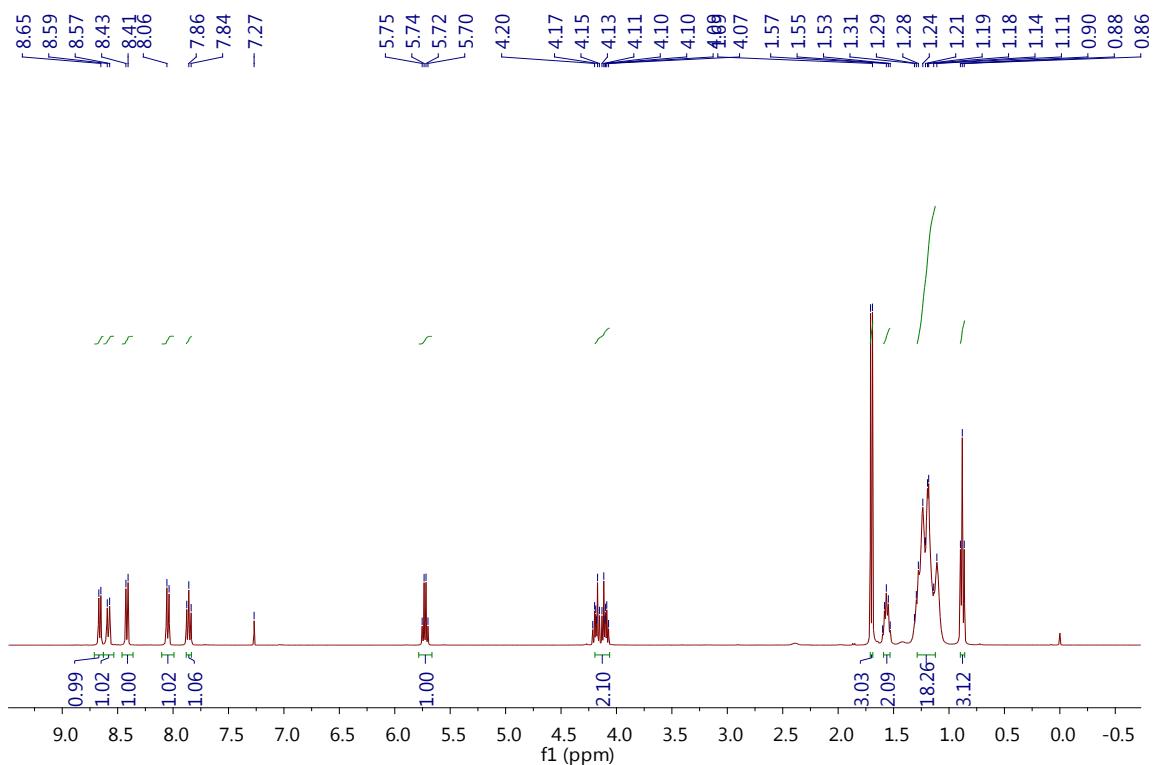


Figure S6.  $^1\text{H}$  NMR of **3** (400 MHz,  $\text{CDCl}_3$ ).

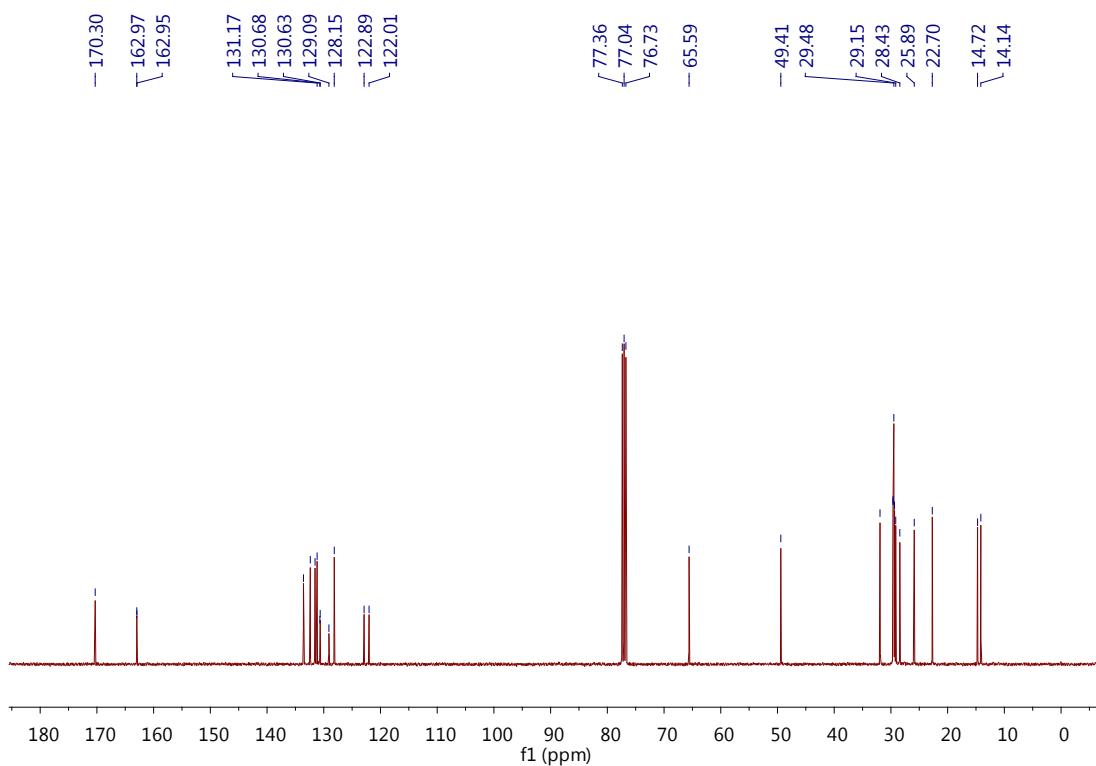


Figure S7.  $^{13}\text{C}$  NMR of **3** (100 MHz,  $\text{CDCl}_3$ ).

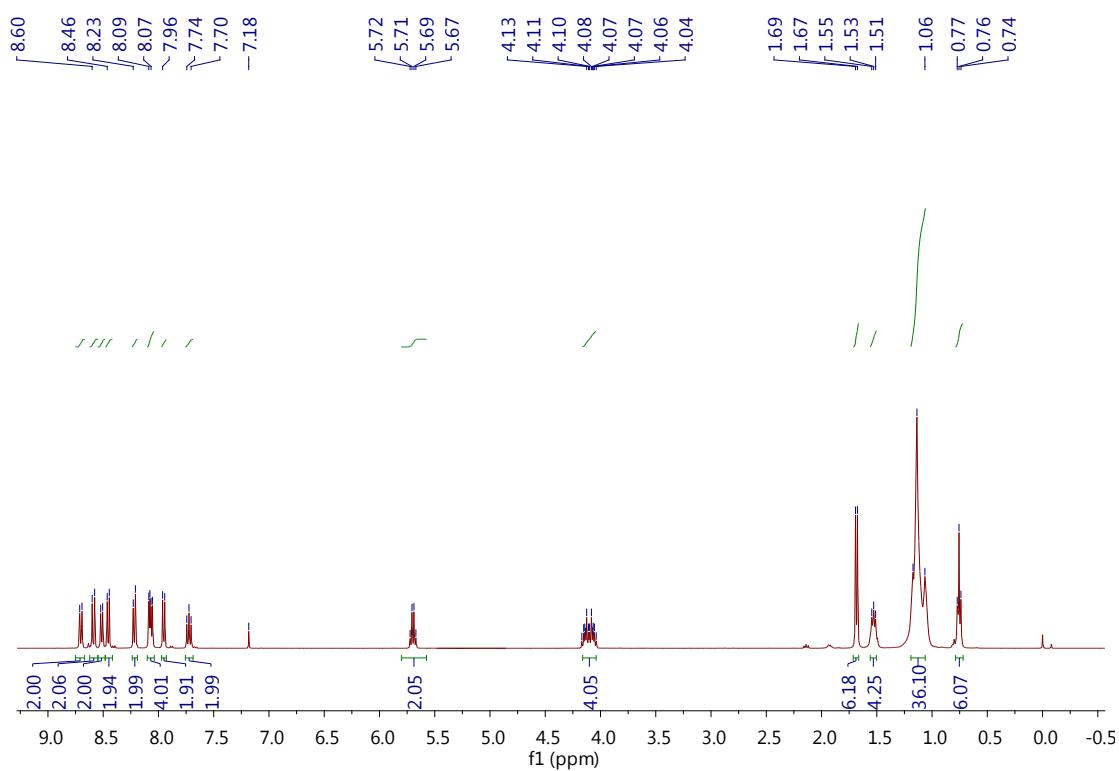


Figure S8.  $^1\text{H}$  NMR of **D/L-1** (400 MHz,  $\text{CDCl}_3$ ).

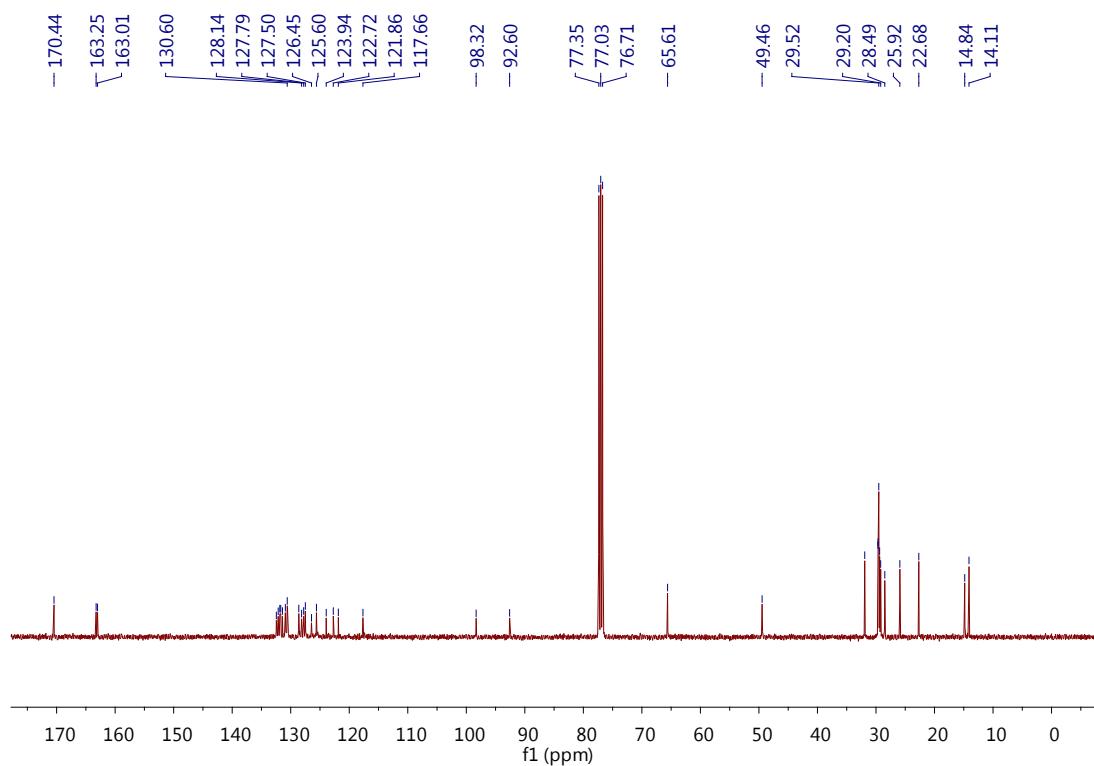


Figure S9.  $^{13}\text{C}$  NMR of **D/L-1** (100 MHz,  $\text{CDCl}_3$ ).

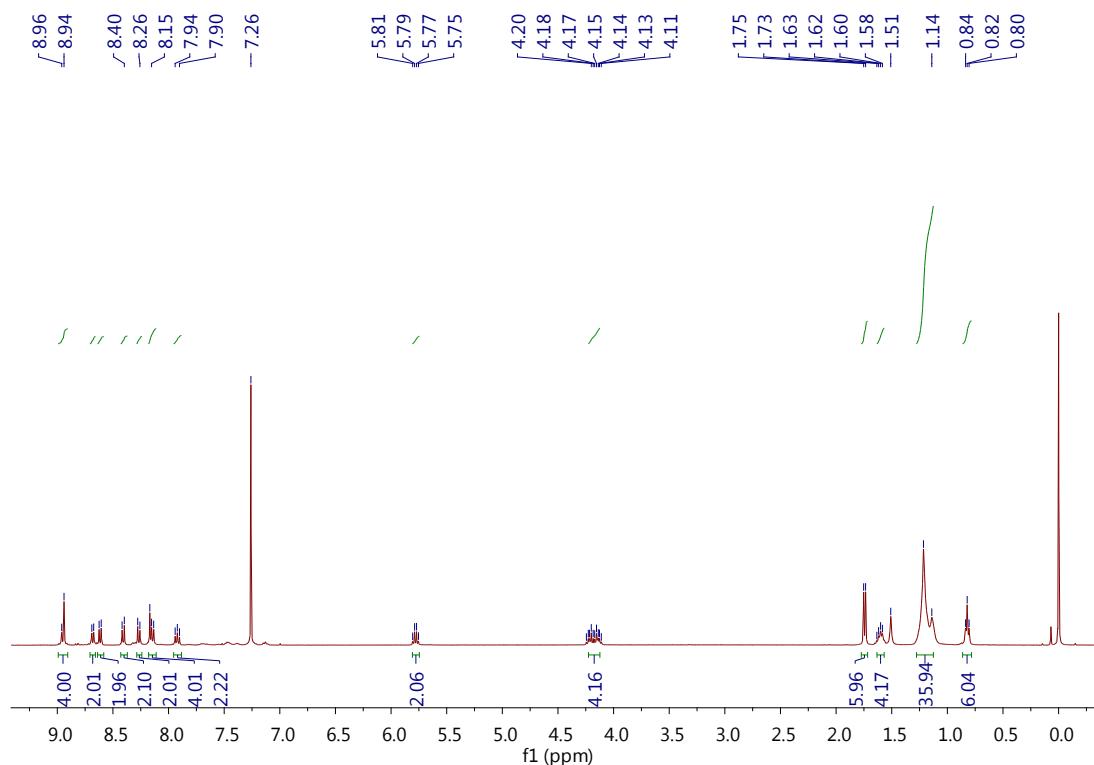


Figure S10.  $^1\text{H}$  NMR of **D/L-2** (400 MHz,  $\text{CDCl}_3$ ).

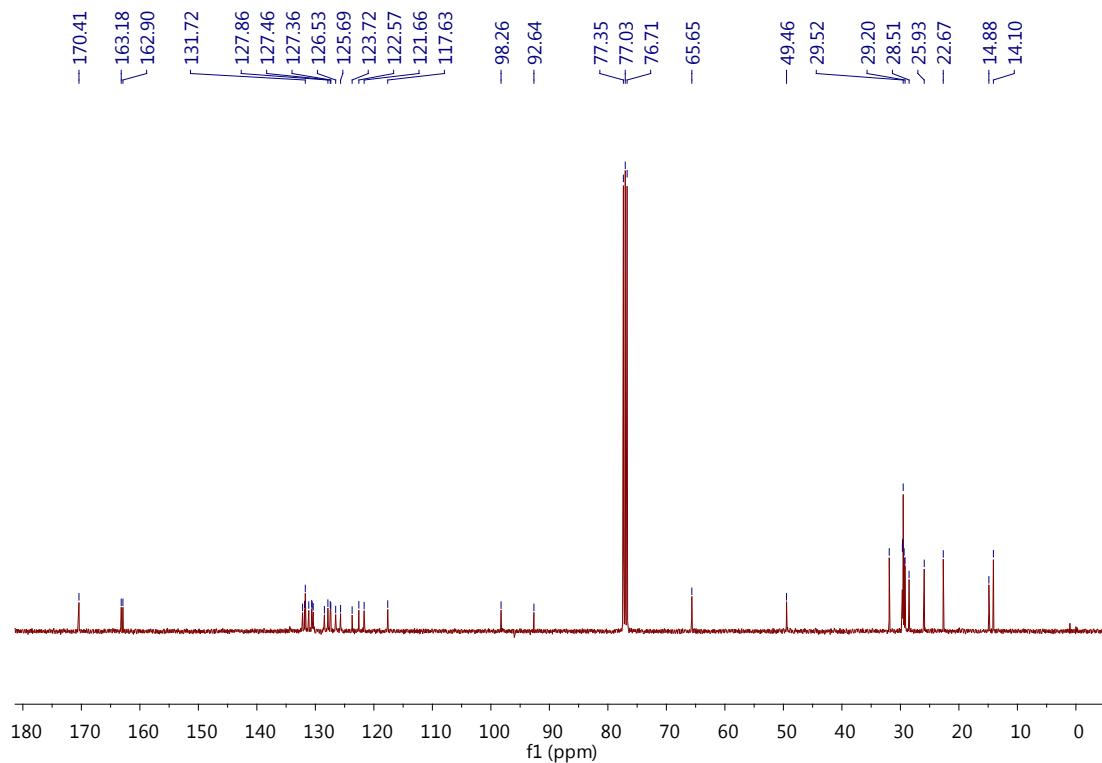


Figure S11. <sup>13</sup>C NMR of **D/L-2** (100 MHz, CDCl<sub>3</sub>).

## 6. SEM images of **L-1** and **D/L-2**.

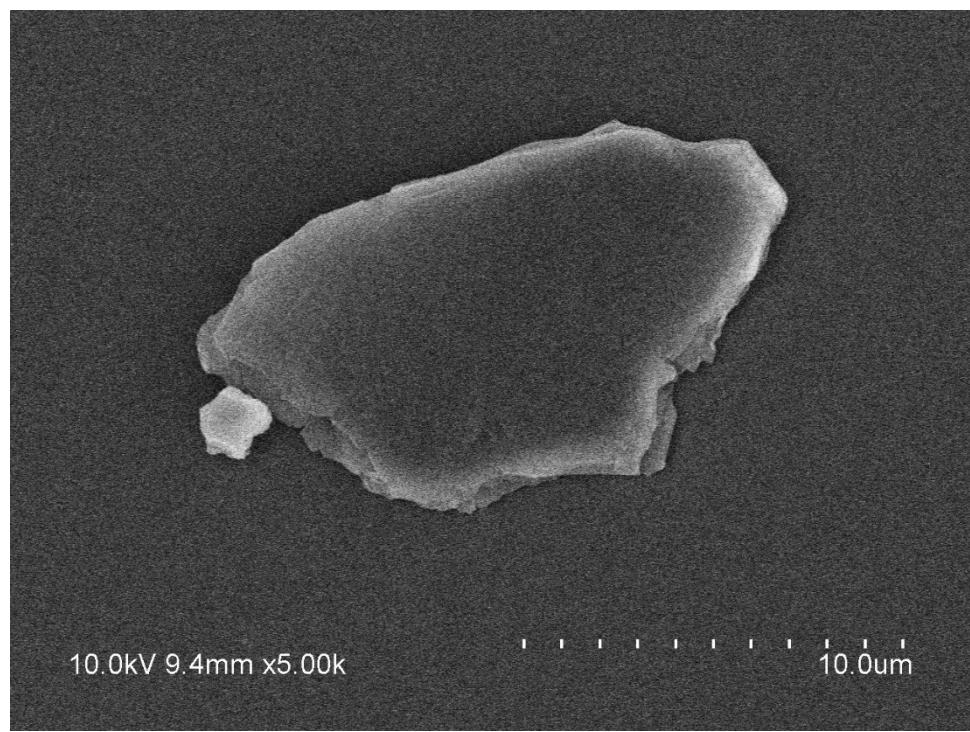


Figure S12. SEM image of **L-1** obtained from CHCl<sub>3</sub>.

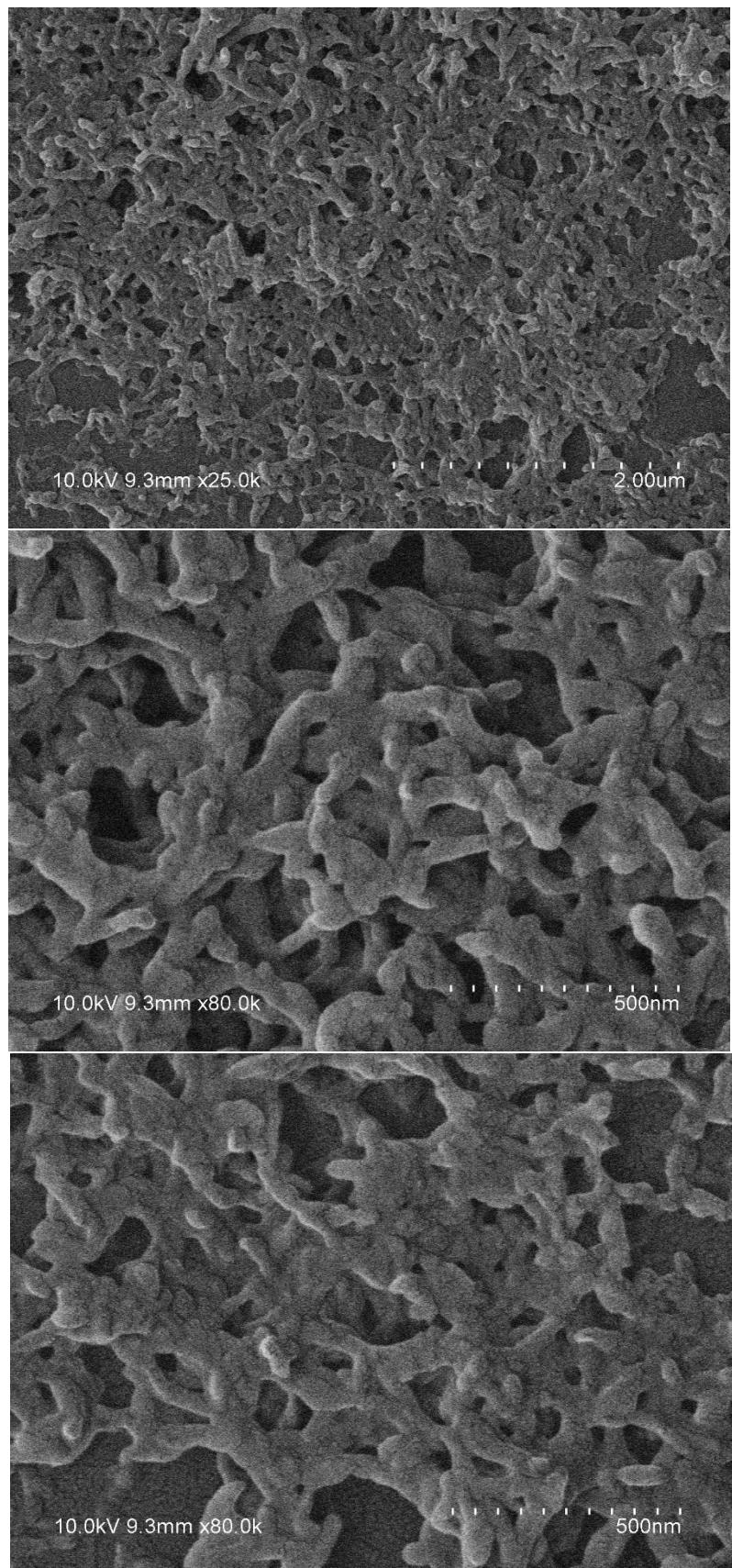


Figure S13. SEM images of **L-1** at  $f_m = 99\%$ .

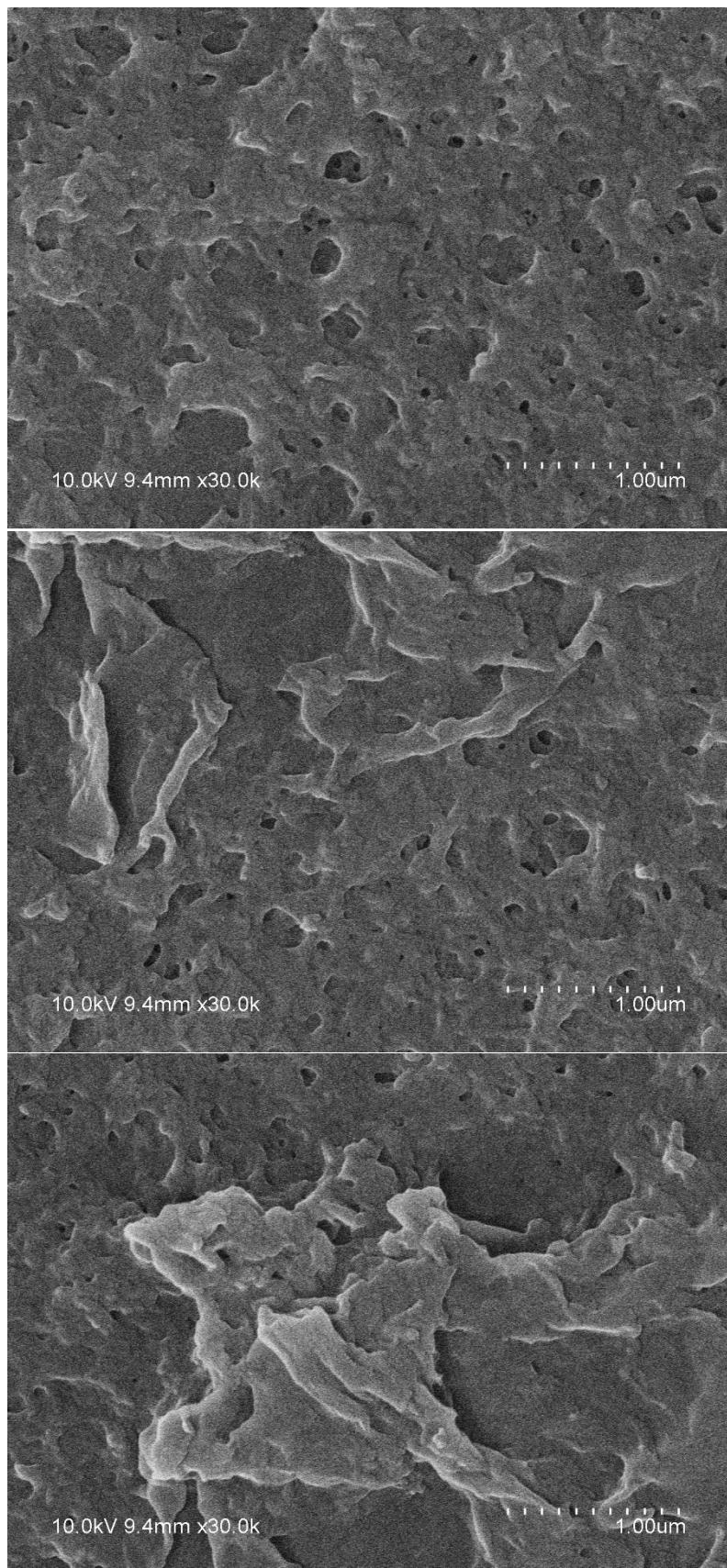


Figure S14. SEM images of **L-2** at  $f_m = 99\%$ .

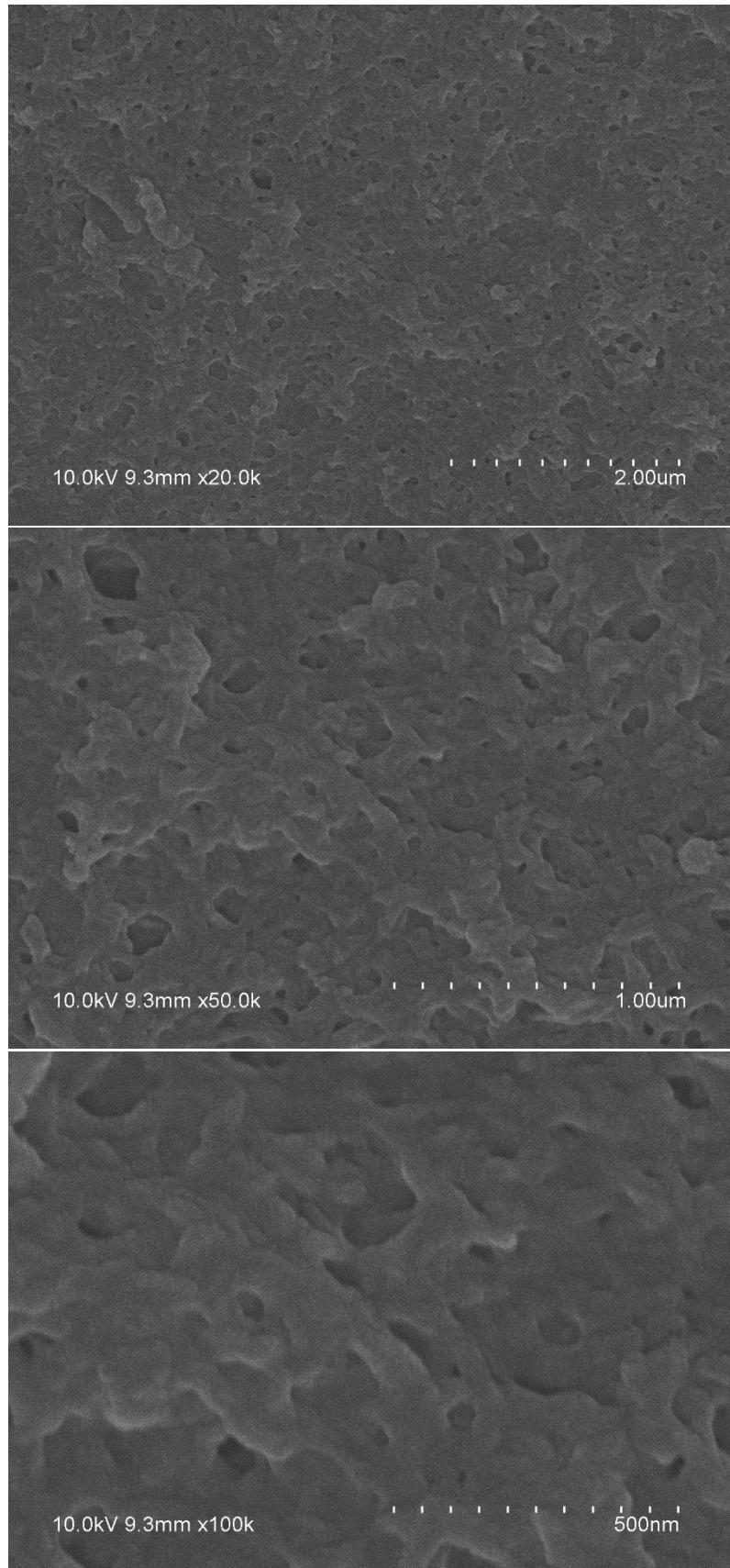


Figure S15. SEM images of **D-2** at  $f_m = 99\%$ .