

Electronic Supplementary Information (ESI) for

Control of circularly polarized luminescence from a boron ketoiminate-based π -conjugated polymer *via* conformational lock

Junfeng Li,^a Xuelei Peng,^a Chao Huang,^a Qi Qi,^{b*} Wen-Yong Lai,^{ac*} and Wei Huang^{ac}

^a Key Laboratory for Organic Electronics and Information Displays & Institute of Advanced Materials (IAM), Jiangsu National Synergetic Innovation Center for Advanced Materials (SICAM), Nanjing University of Posts & Telecommunications, 9 Wenyuan Road, Nanjing 210023, China

^b School of Chemistry and Chemical Engineering, Southeast University, Nanjing 211189, China

^c Shaanxi Institute of Flexible Electronics (SIFE), Northwestern Polytechnical University (NPU), 127 West Youyi Road, Xi'an 710072, Shaanxi, China

*Email: iamwylai@njupt.edu.cn (W.-Y. Lai); qiqi027@163.com (Q. Qi)

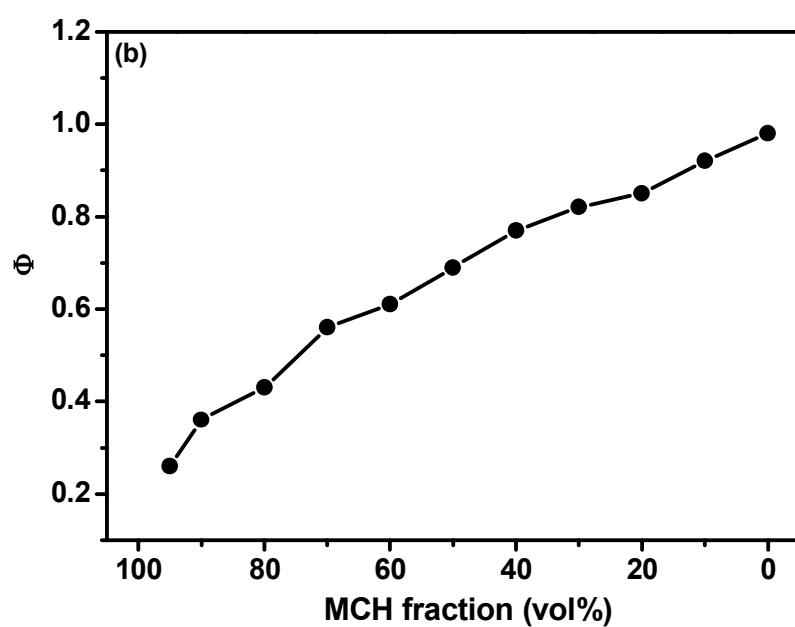
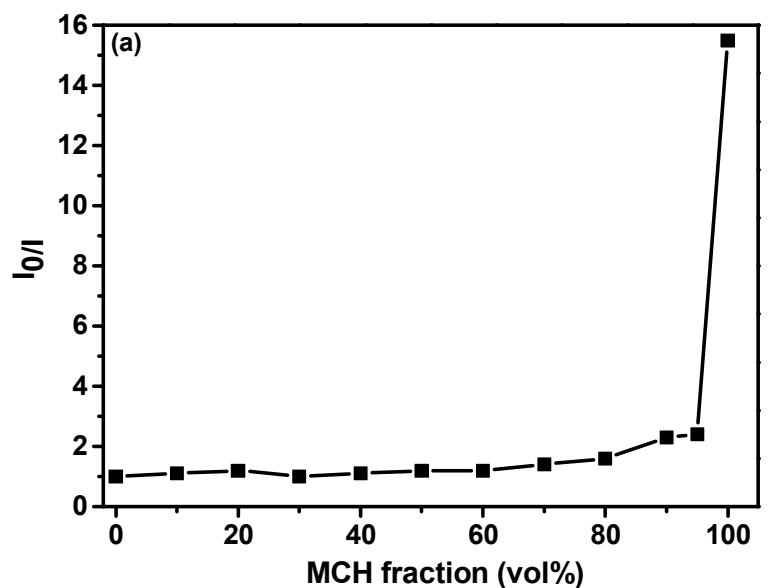


Fig. S1 (a) Plot of (I/I_0) values of polymer-1 versus the compositions of the aqueous mixtures; (b) Quantum yield (Φ_{EM}) changes of polymer-1, upon increasing the concentration water (0–95%), measured after 2 h.

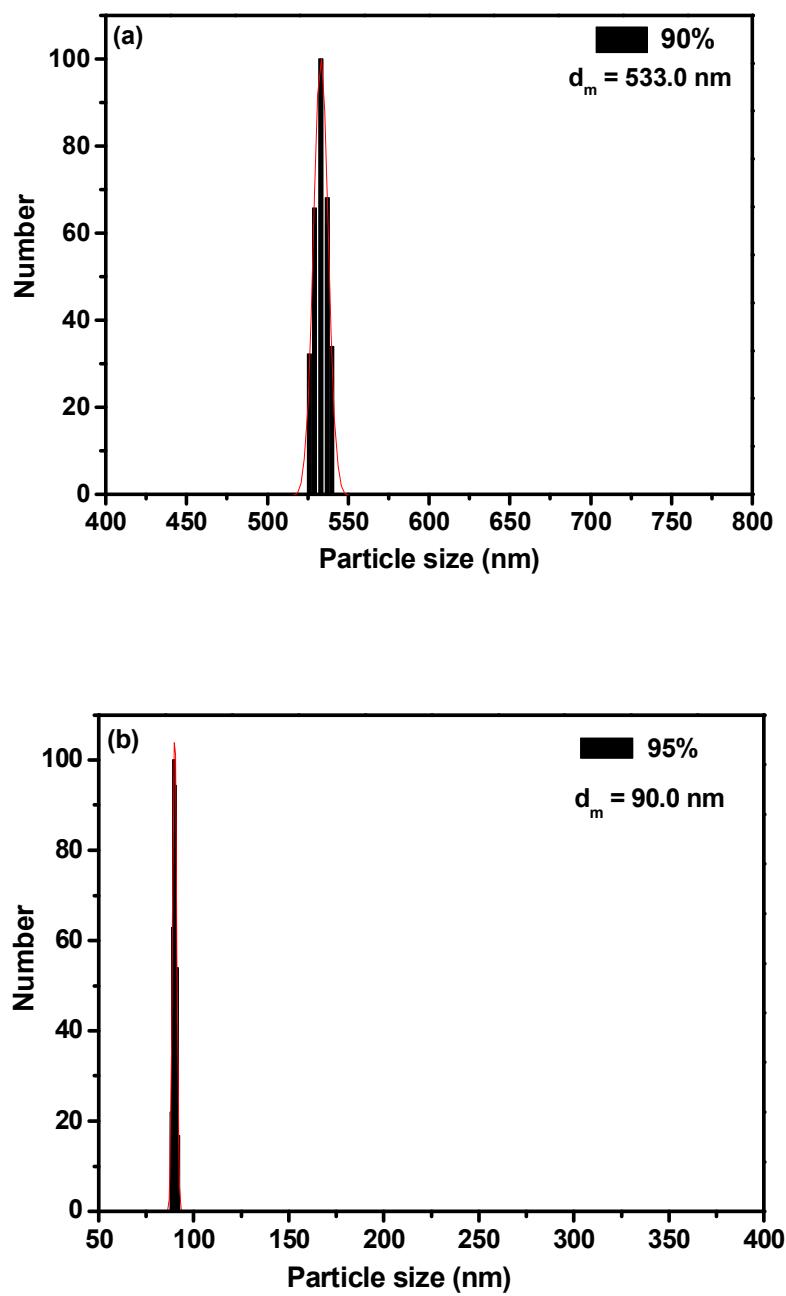


Fig. S2 Dynamic light scattering (DLS) results showing the variation in particle size diameter with increasing the MCH content in the CHCl_3 solution of polymer-1: (a) 90% and (b) 95%.

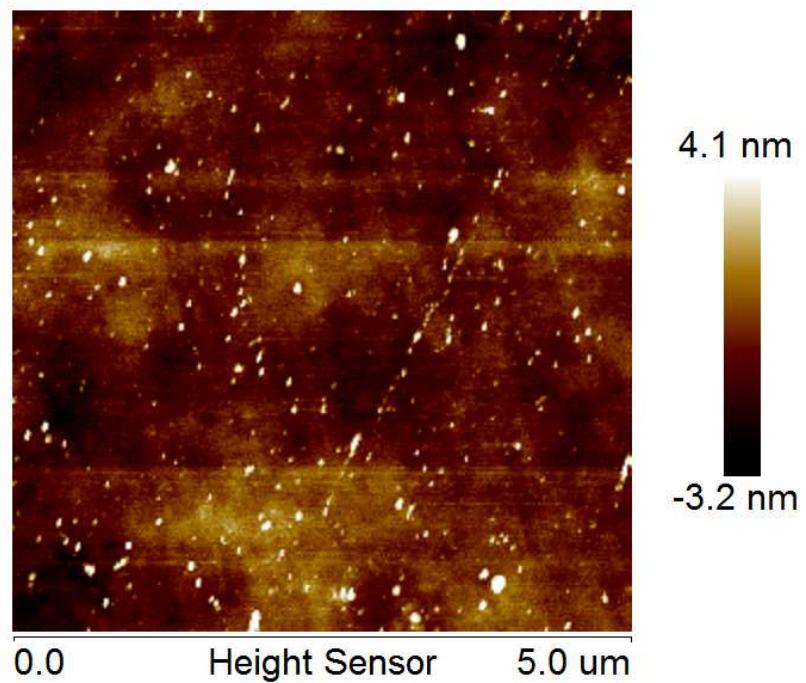


Fig. S3 AFM image of nanoparticles assembled from polymer-1 for 2 h in the MCH/CHCl₃ solution

(v/v, 95:5).

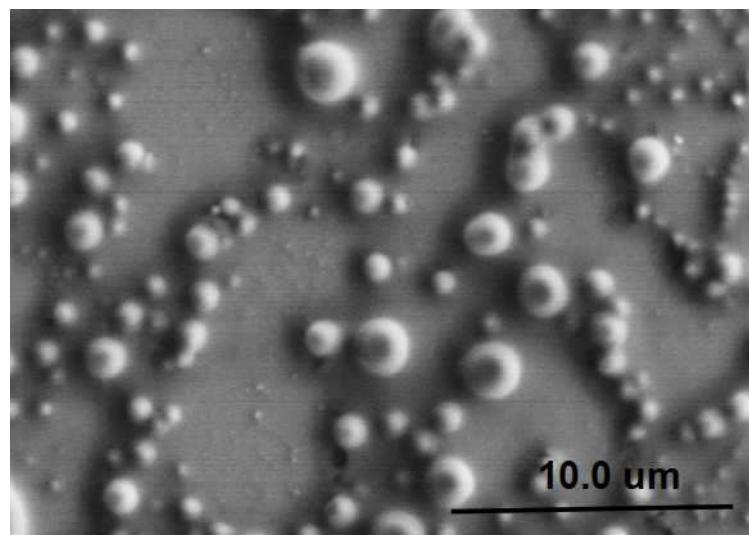


Fig. S4 SEM image of nanoparticles assembled from polymer-1 for 2 h in the MCH/CHCl₃ solution

(v/v, 95:5).

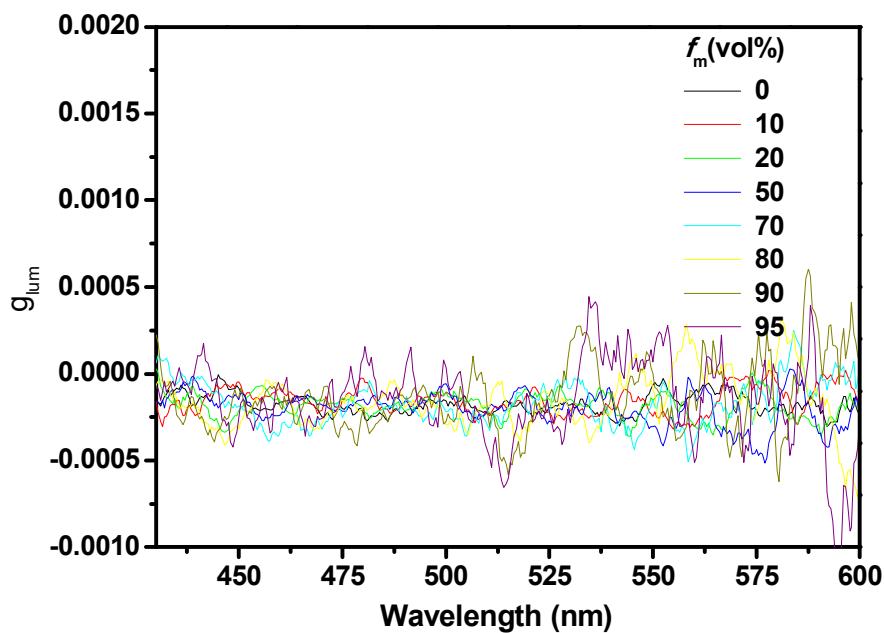


Fig. S5 g_{lum} spectra of polymer-1 in the pure CHCl_3 solution and in the MCH/ CHCl_3 system (v/v , 10:90, 20:80, 50:50, 70:30, 80:20, 90:10, 95:5). Solution concentration: 10 μM .

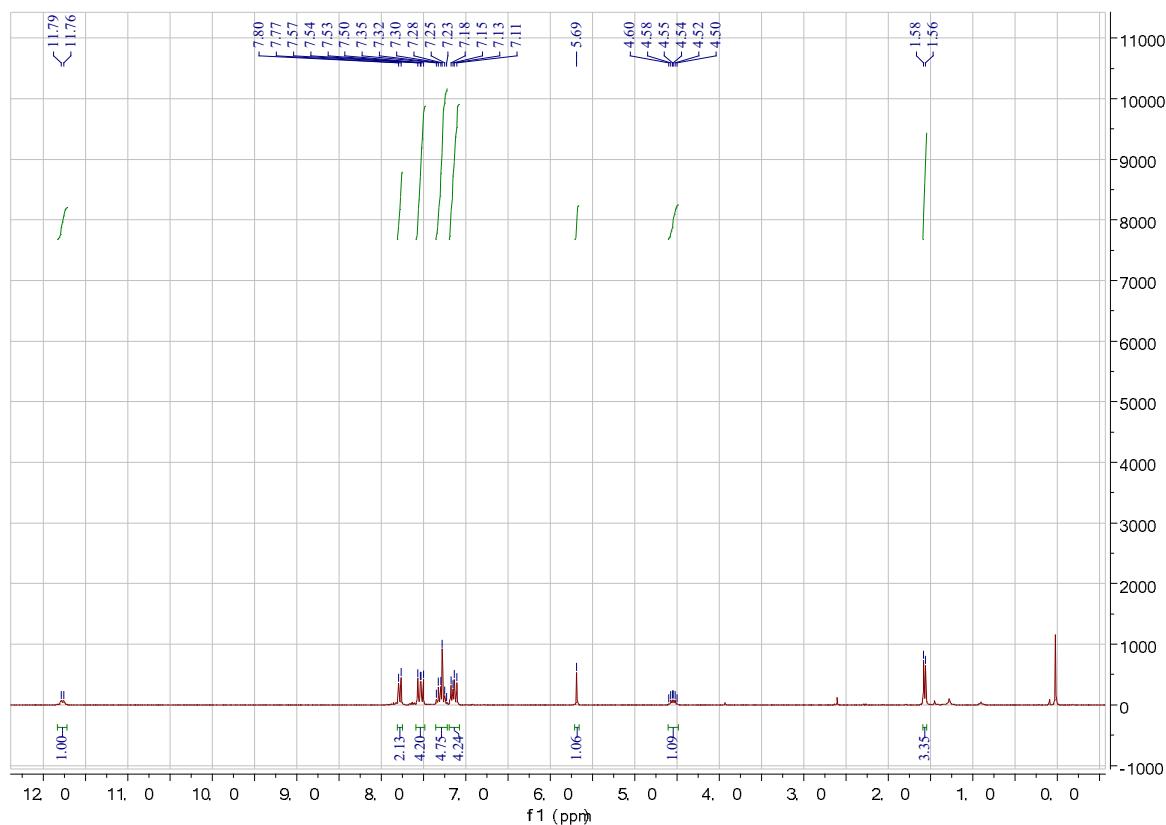


Fig. S6 ^1H NMR spectra of **4** in the CDCl_3 solution.

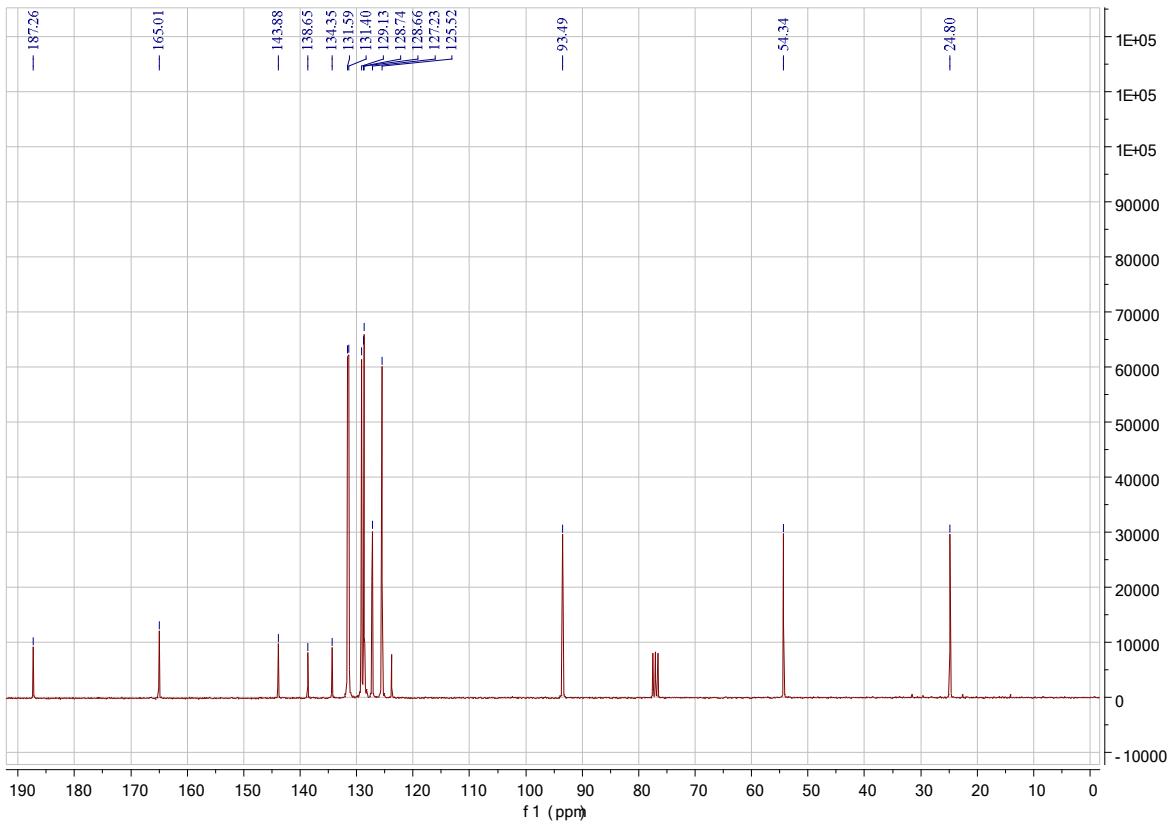


Fig. S7 ^{13}C NMR spectra of **4** in the CDCl_3 solution.

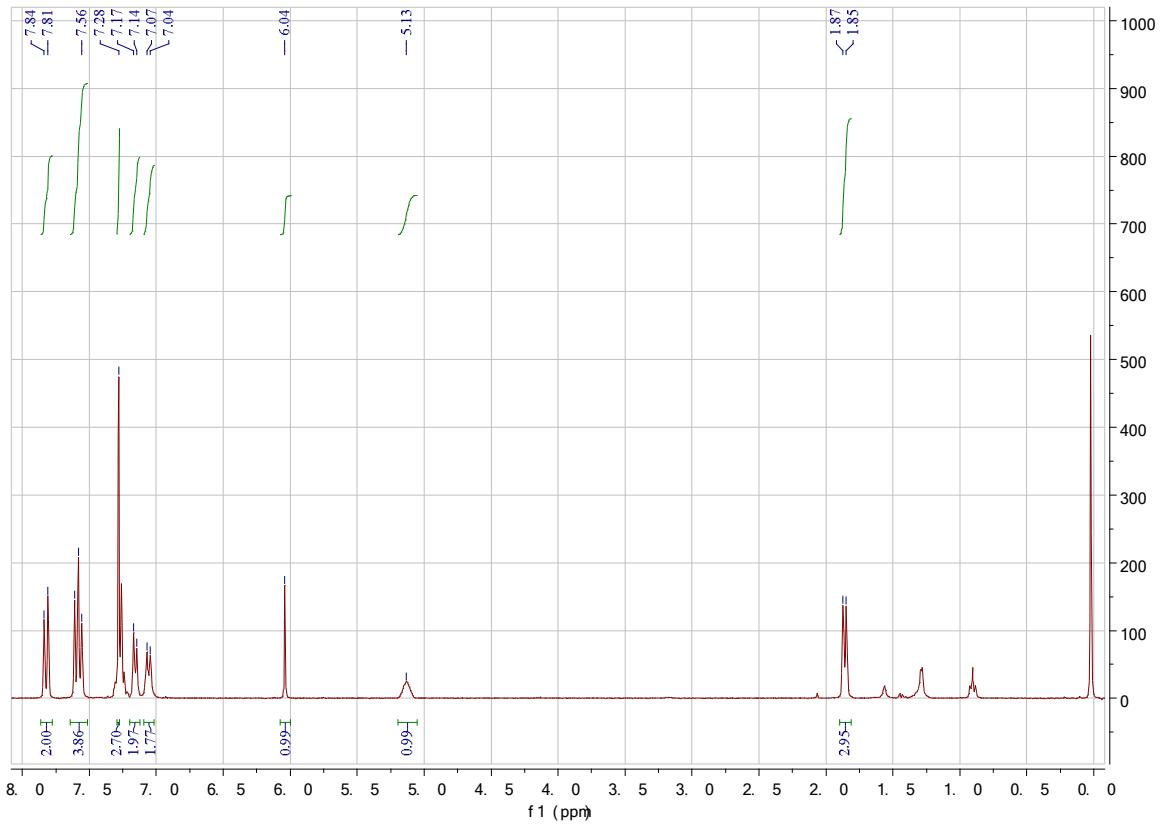


Fig. S8 ^1H NMR spectra of **M-1** in the CDCl_3 solution.

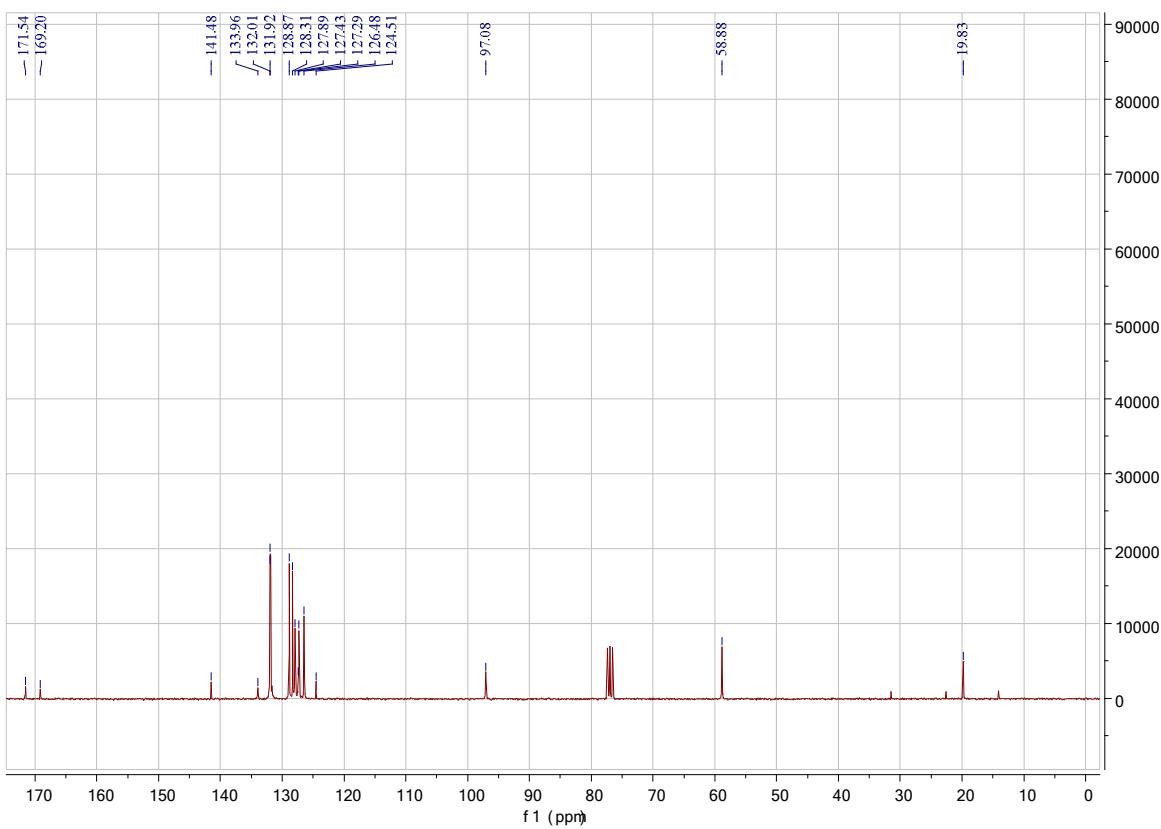


Fig. S9 ^{13}C NMR spectra of **M-1** in the CDCl_3 solution.

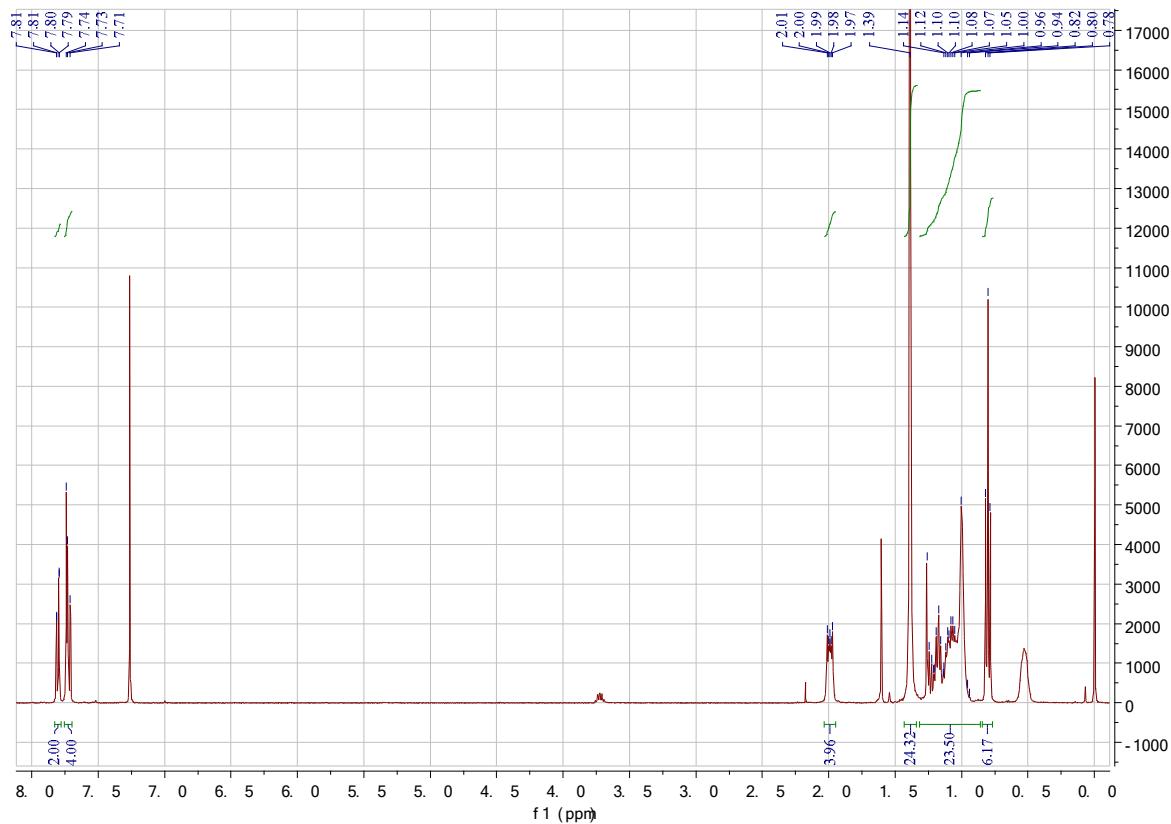


Fig. S10 ^1H NMR spectra of **M-2** in the CDCl_3 solution.

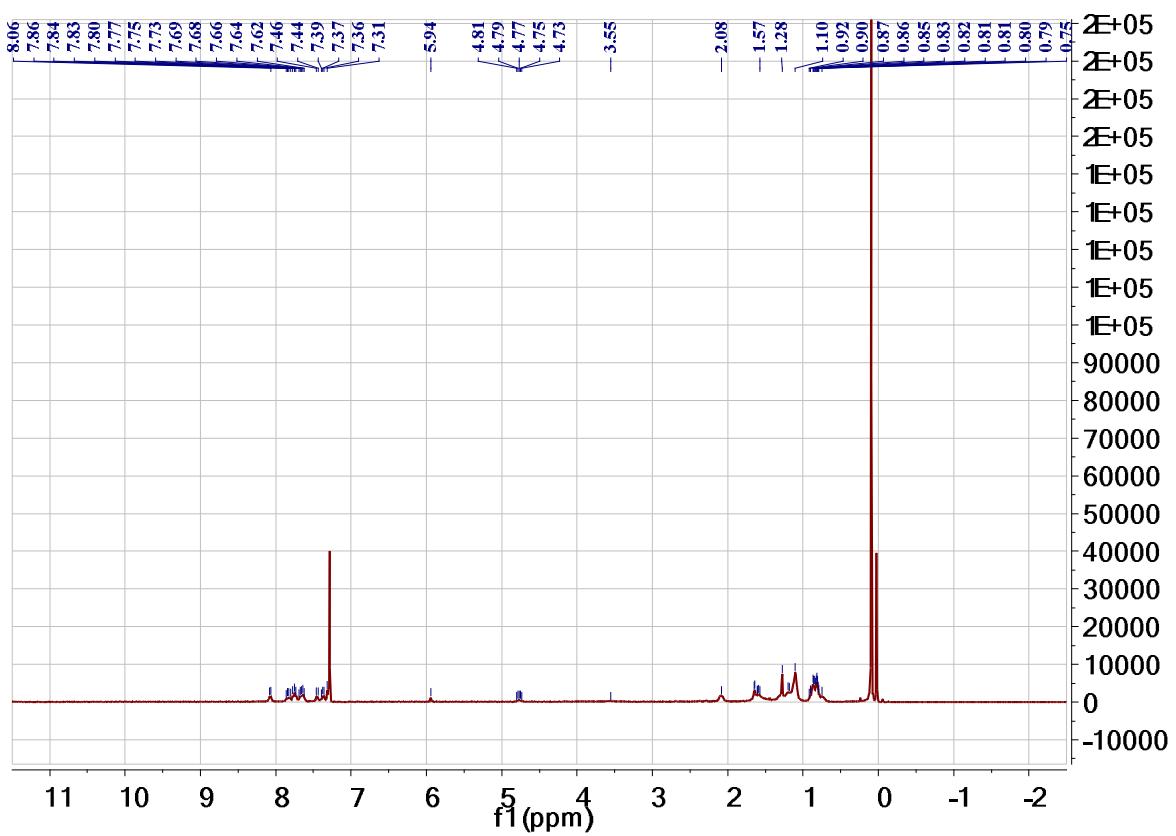


Fig. S11 ^1H NMR spectra of polymer-1 in the CDCl_3 solution.