

# Novel mesogenic vinyl ketone monomers and their based polymers

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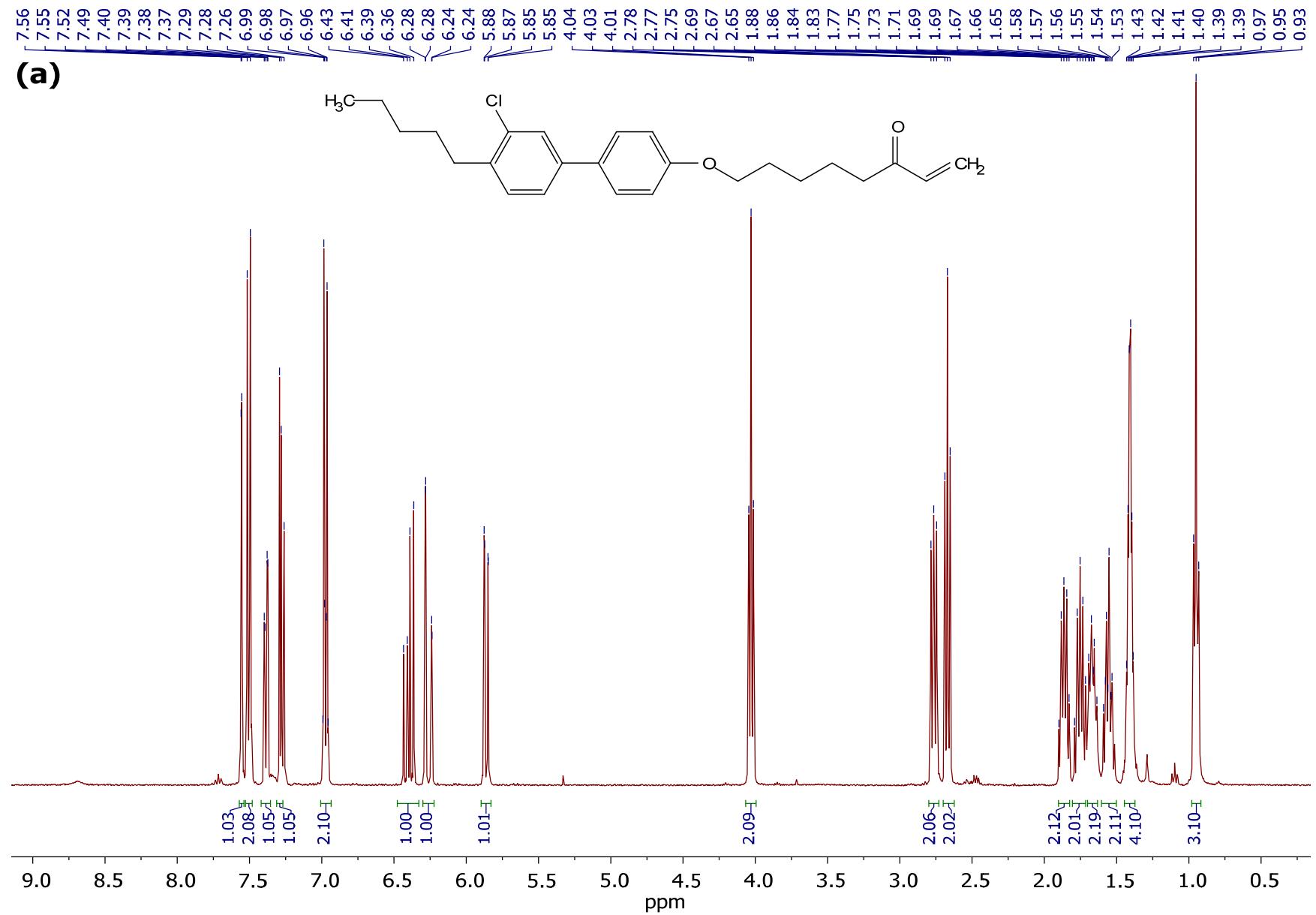
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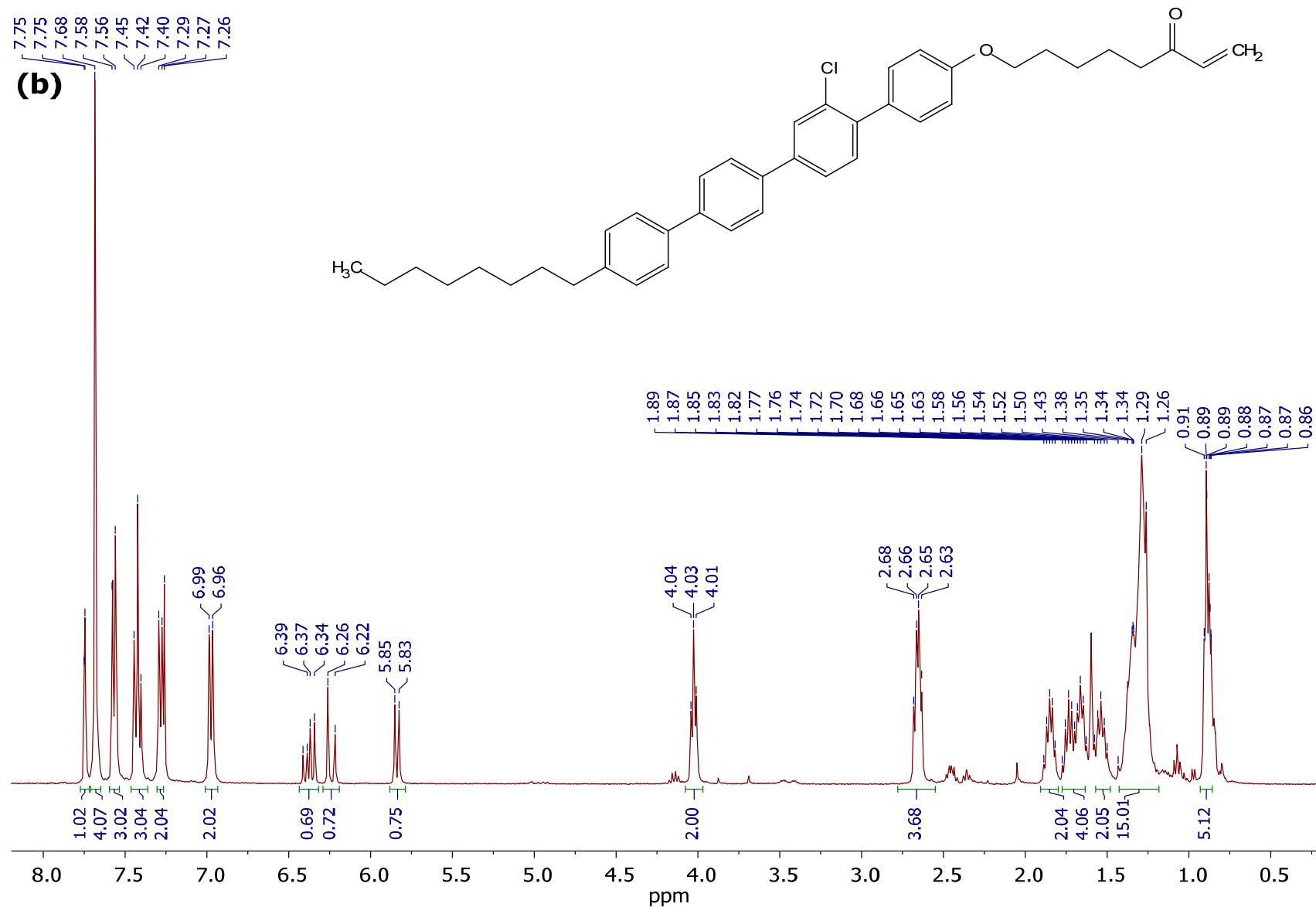
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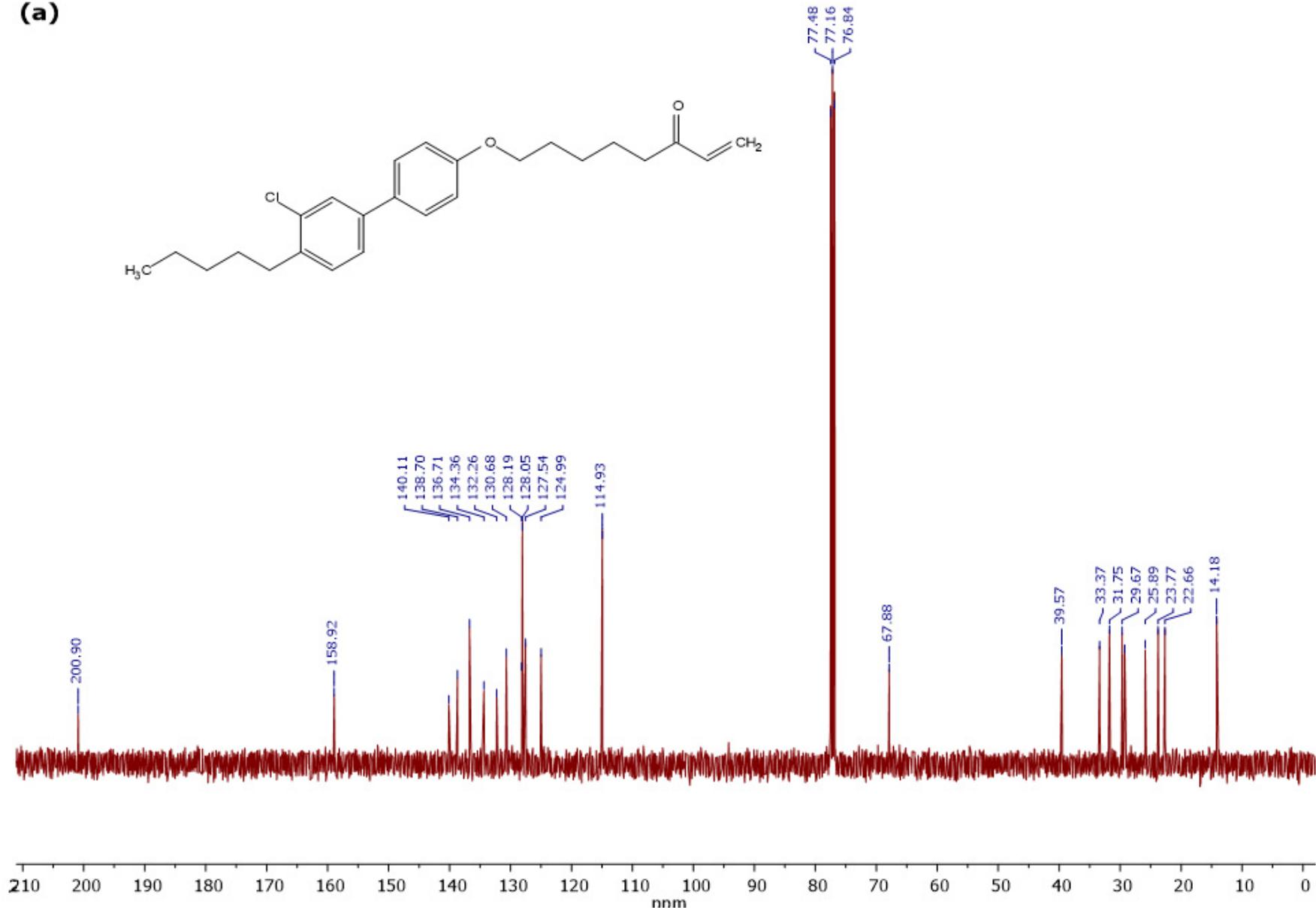




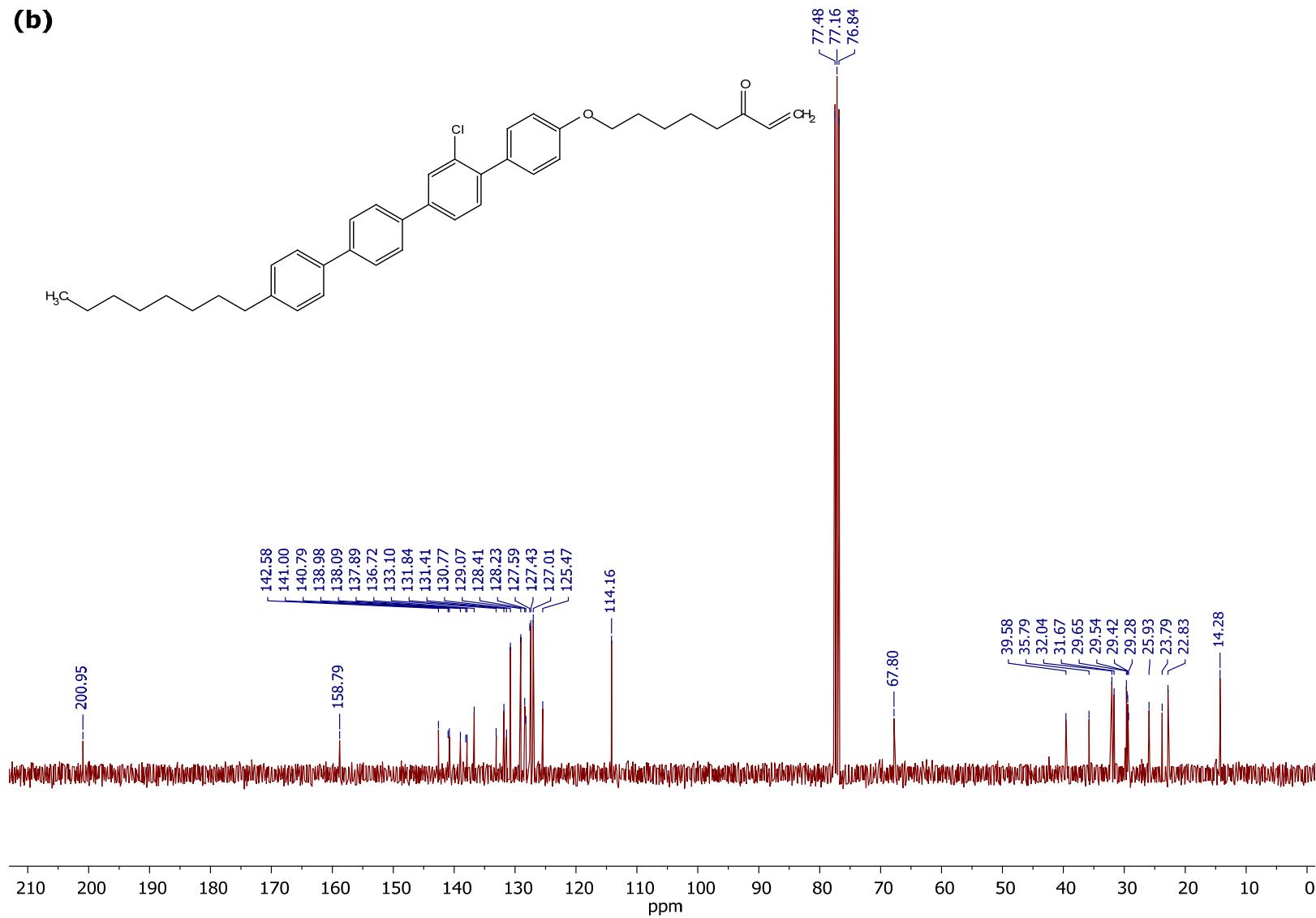


**Figure S1.** The  $^1\text{H}$  spectra of BVK (a) and QVK (b) in  $\text{CDCl}_3$ .

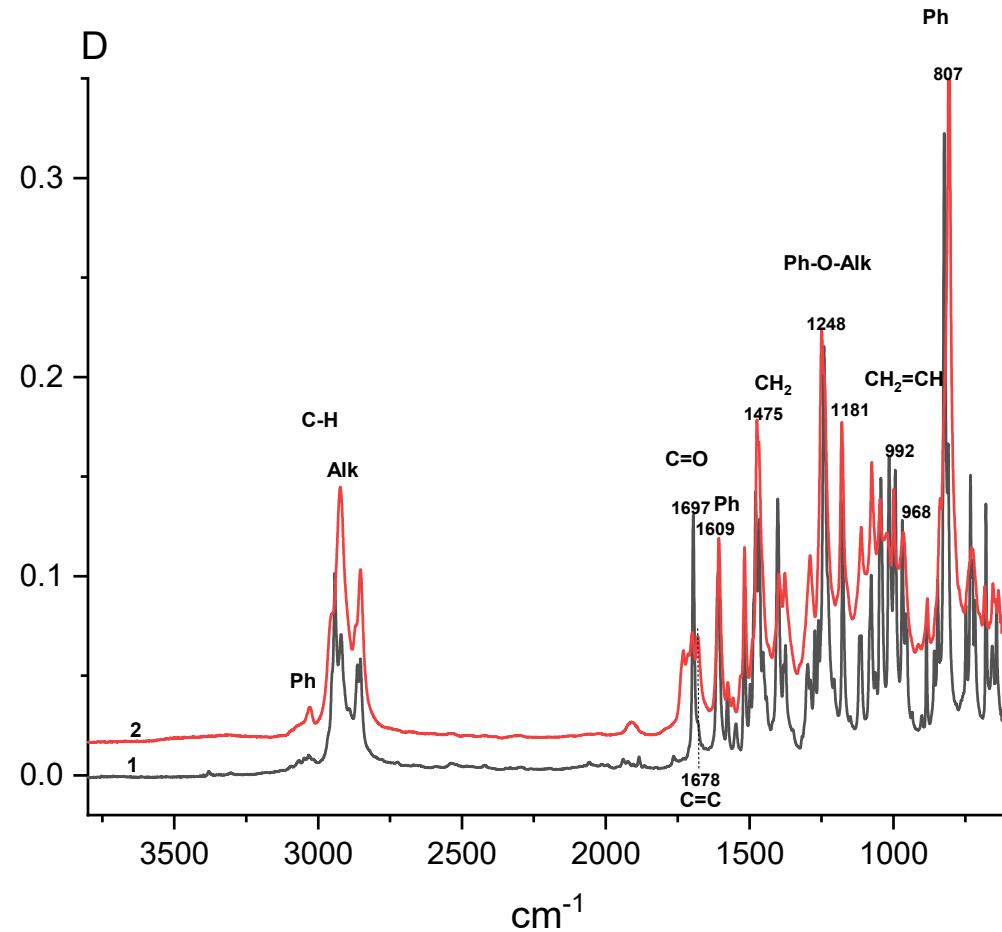
(a)



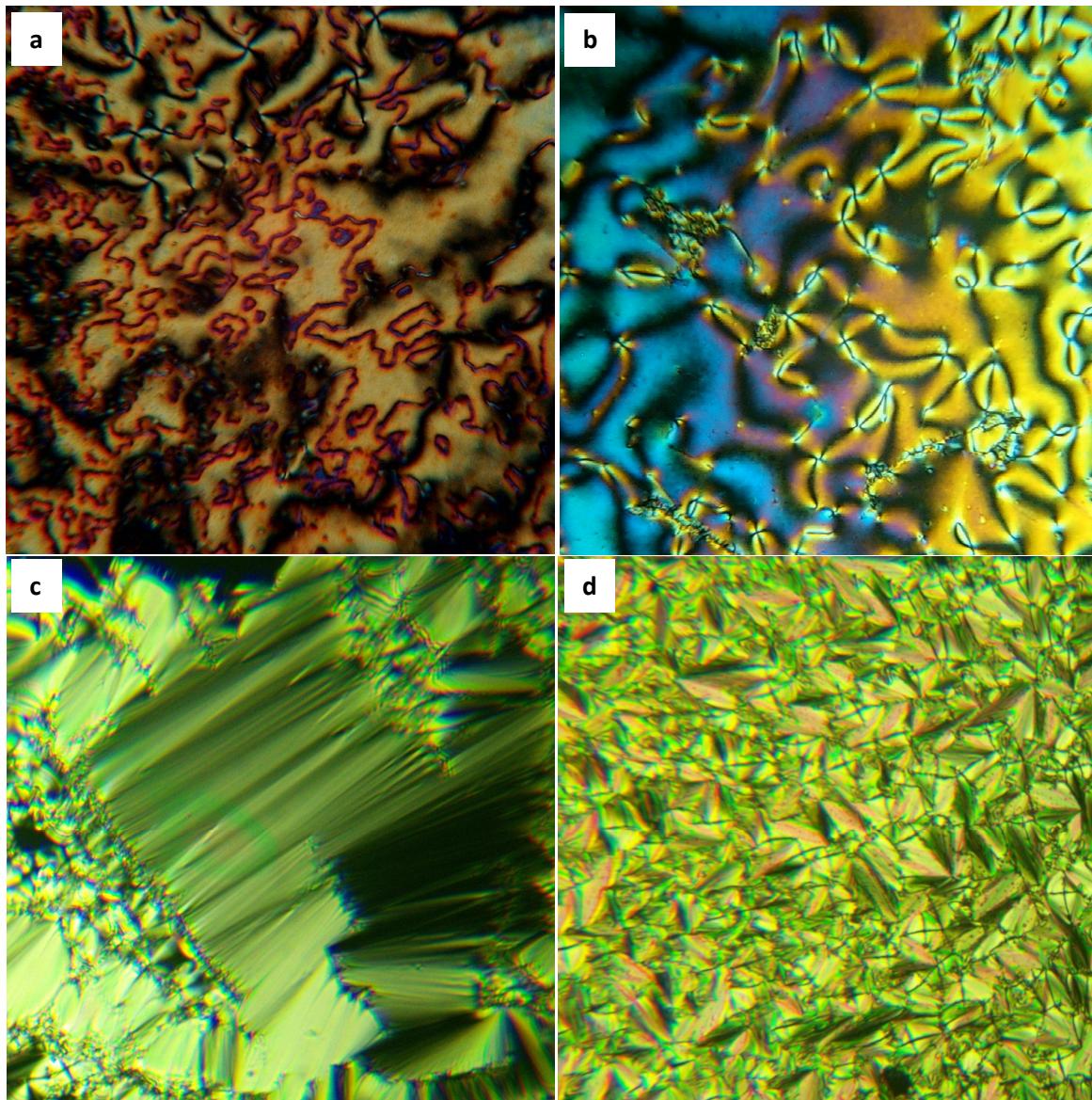
**(b)**



**Figure S2.** The  $^{13}\text{C}$  spectra of BVK (a) and QVK (b) monomers in  $\text{CDCl}_3$ .



**Figure S3.** IR spectra of BVK(1) and QVK (2)



**Figure S4.** Thread-like/schlieren mixed texture of TVK (a) and schlieren texture of poly(TVK) (b); fan-shaped texture of QVK (c) and focal conic texture of poly(QVK)