

## Article

# Synthesis and Characterization of New Cyclam-Based Zr(IV) Alkoxido Derivatives

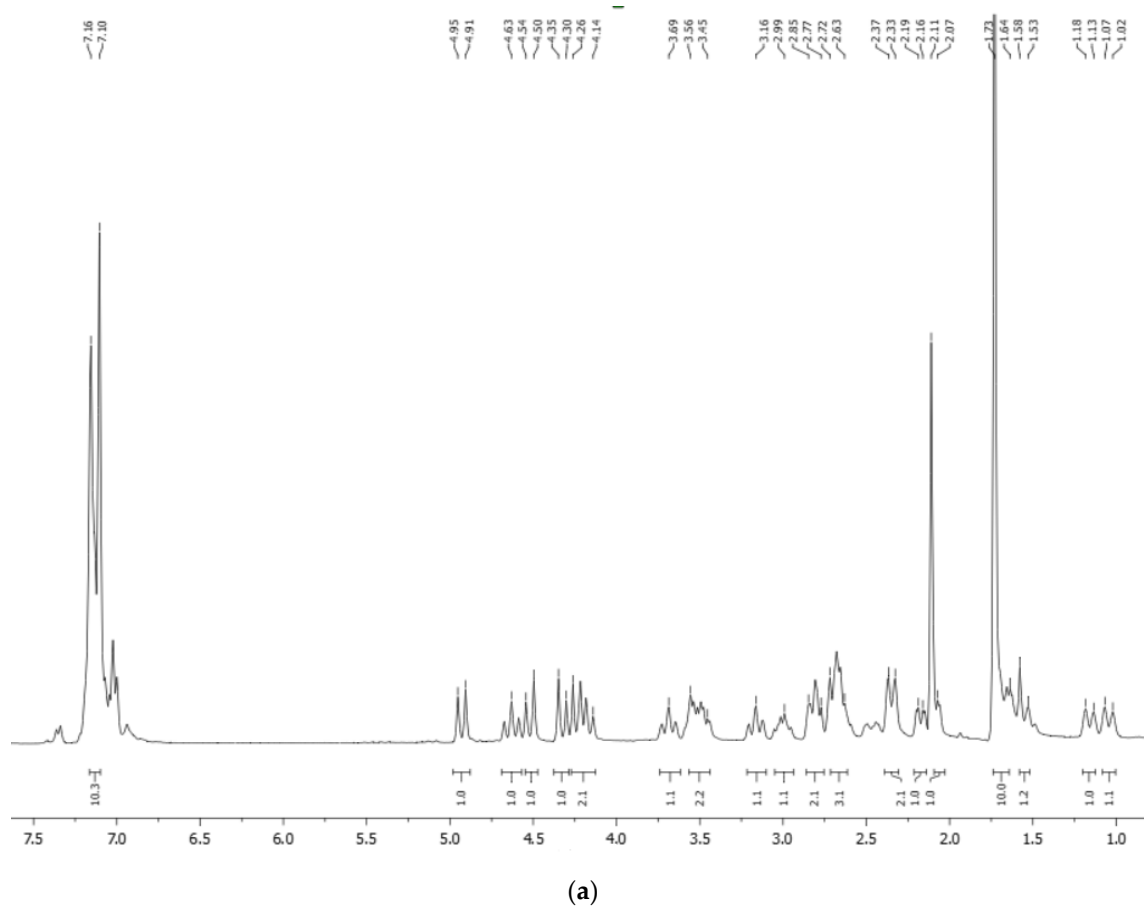
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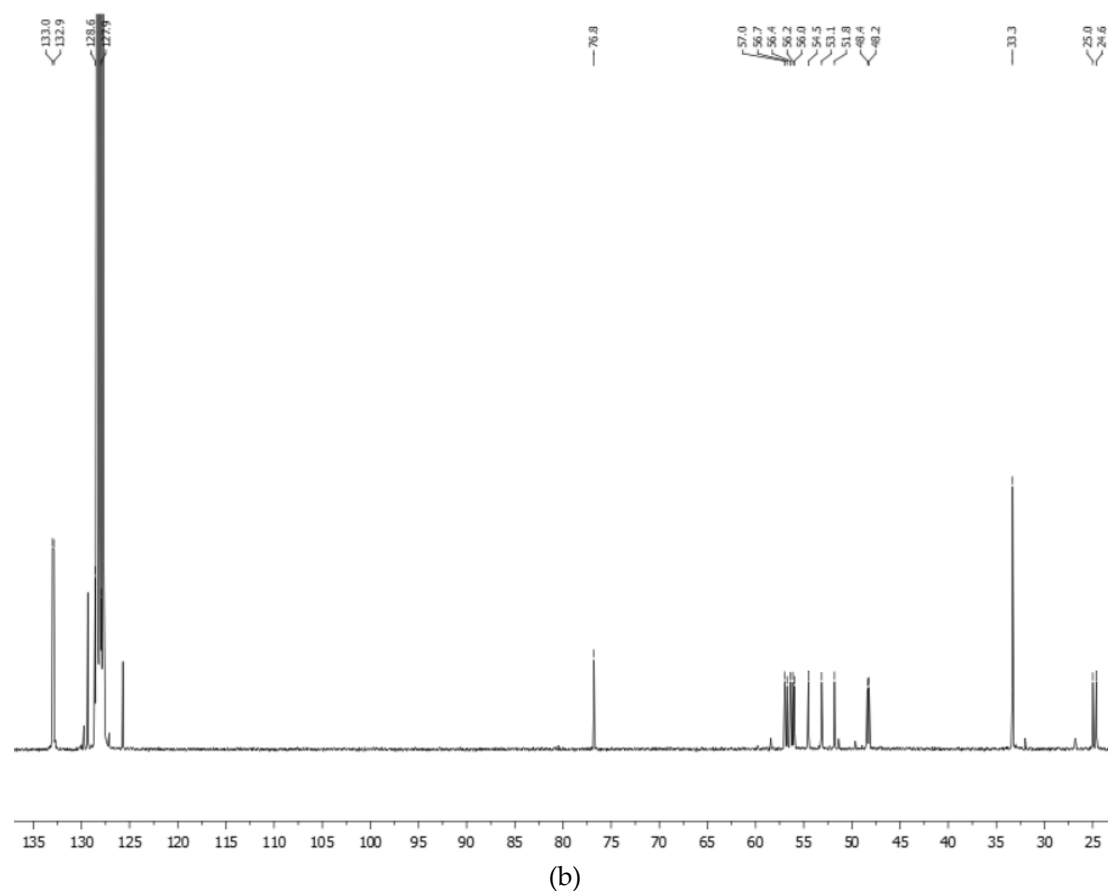
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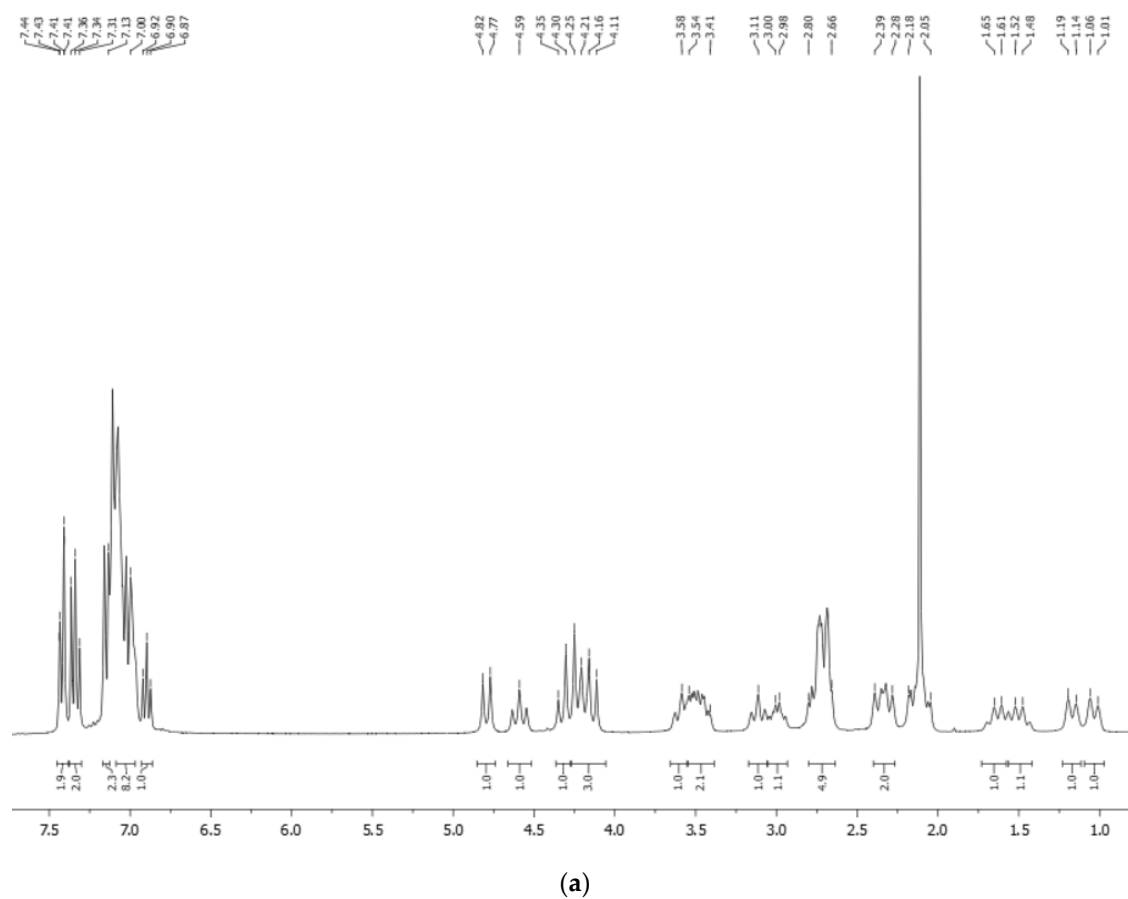
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## Supplementary Information





**Figure S1.** (a) <sup>1</sup>H NMR spectrum of compound 2 in C<sub>6</sub>D<sub>6</sub> at 296K; (b) <sup>13</sup>C{<sup>1</sup>H} NMR spectrum of compound 2 in C<sub>6</sub>D<sub>6</sub> at 296K.



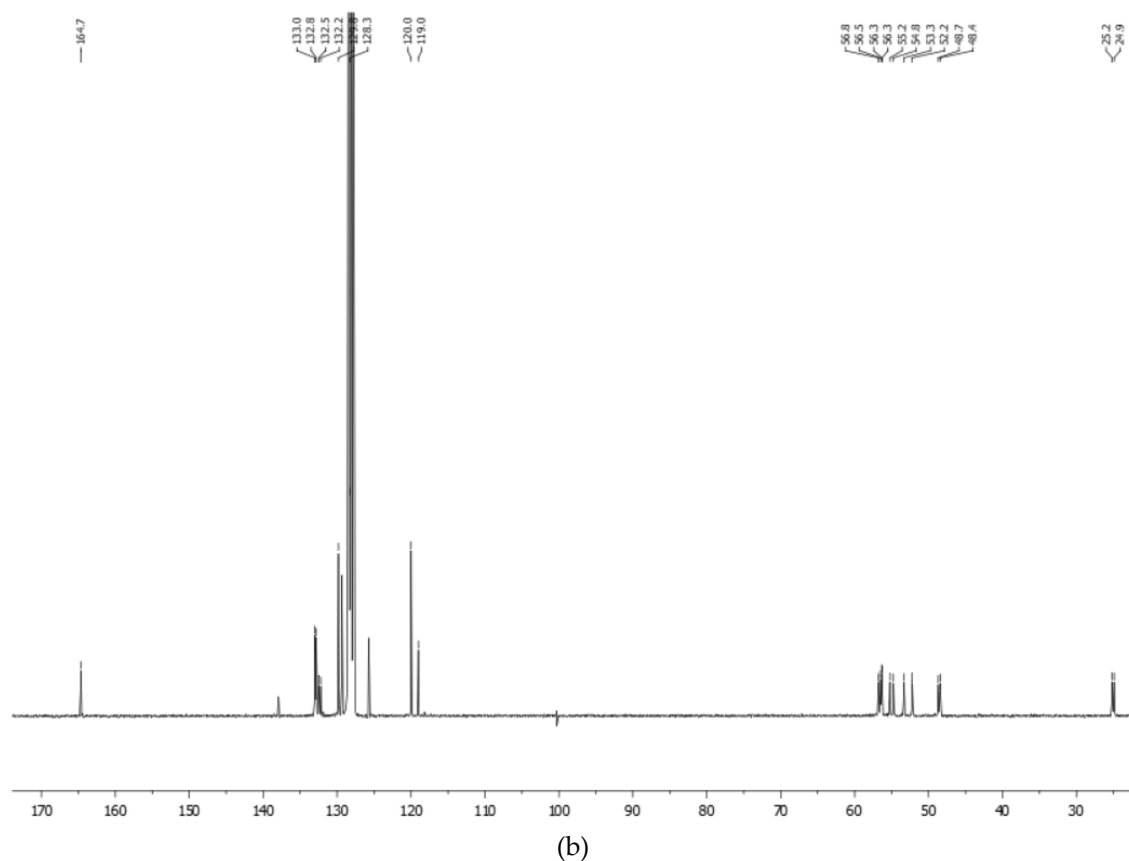
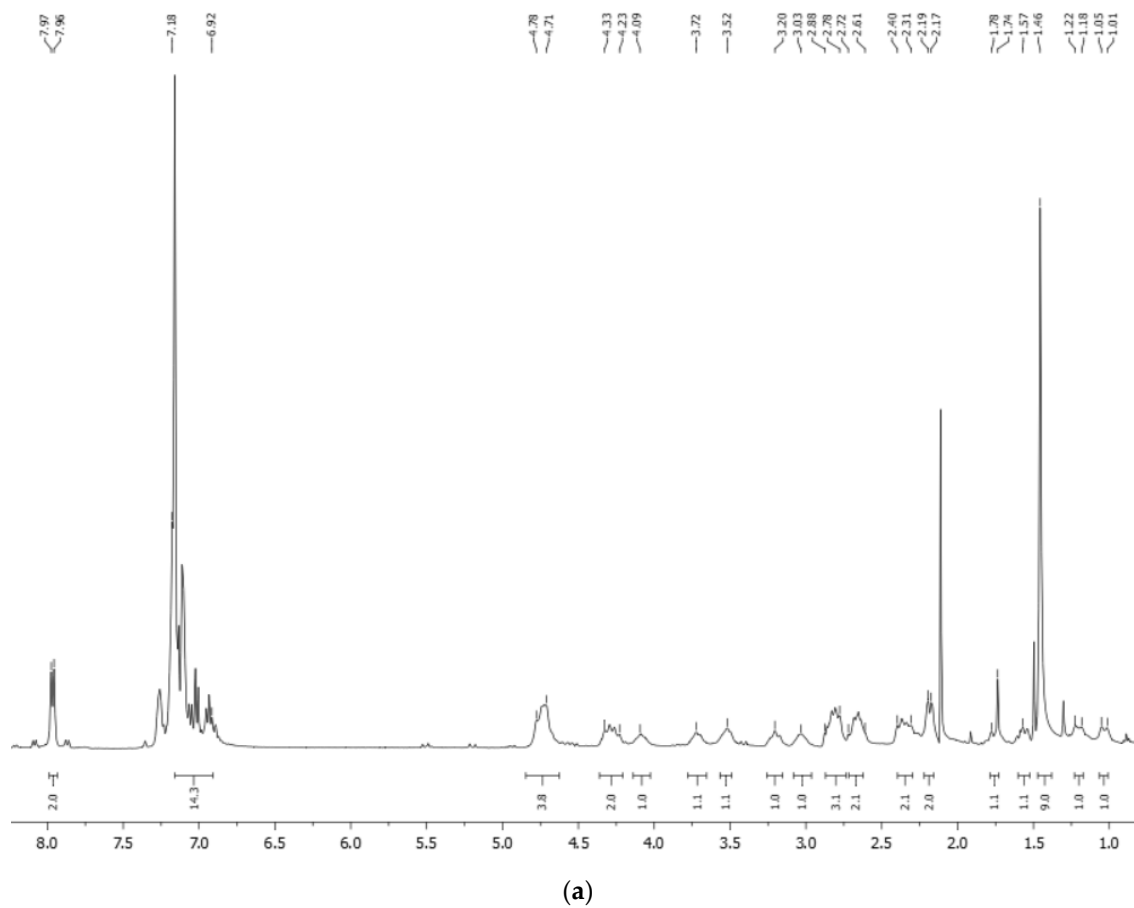
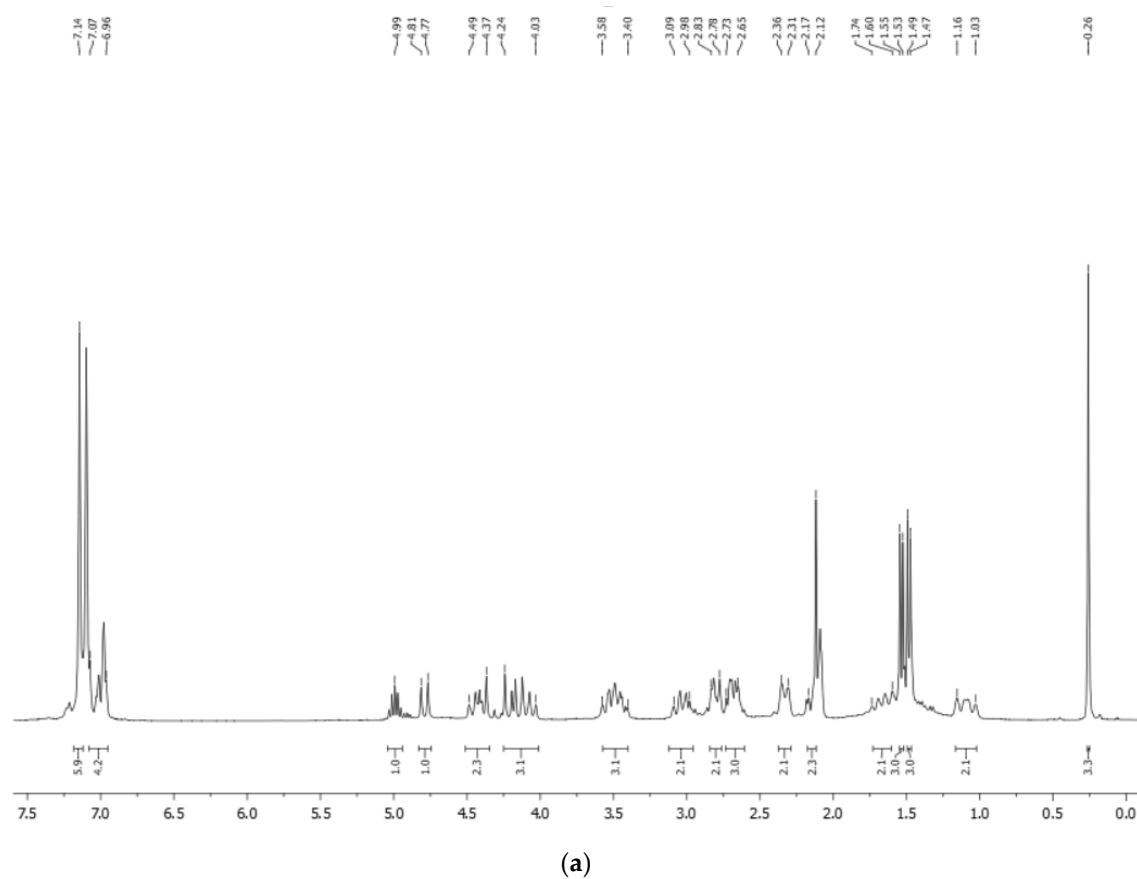
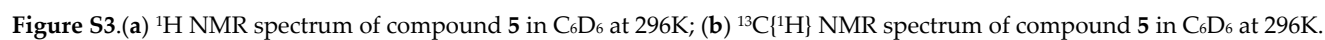
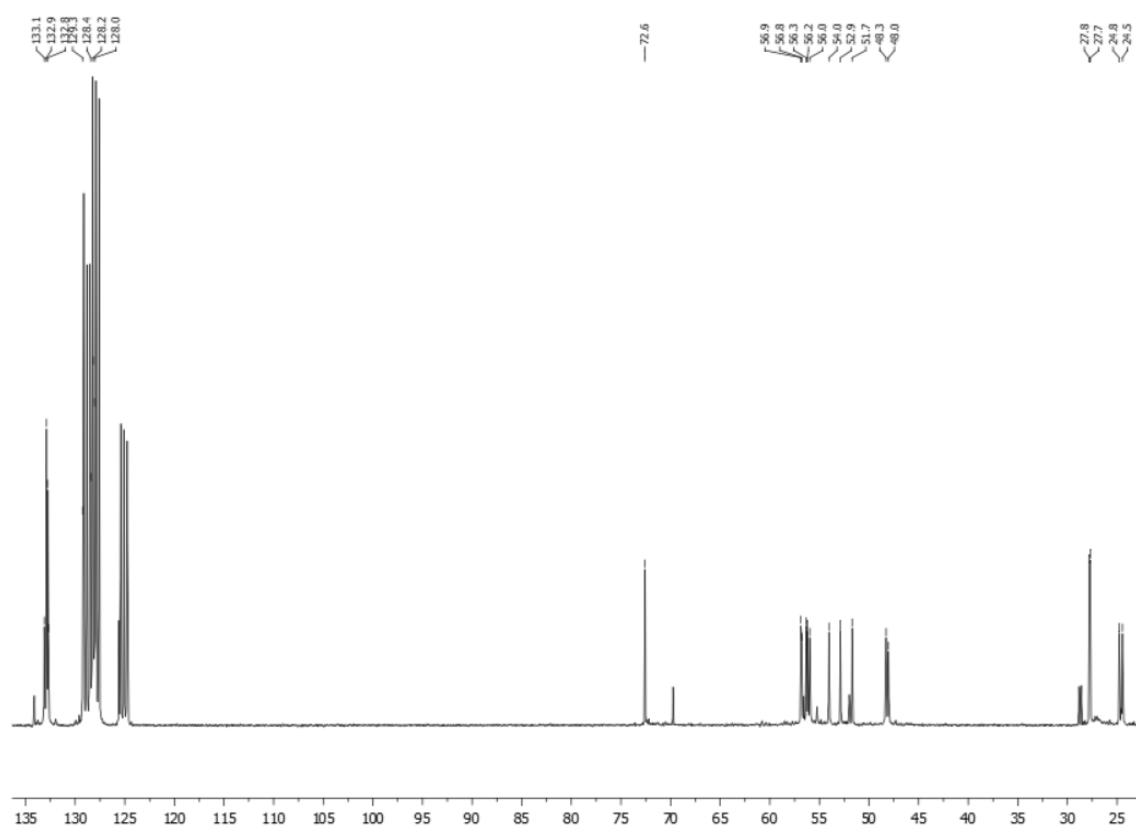


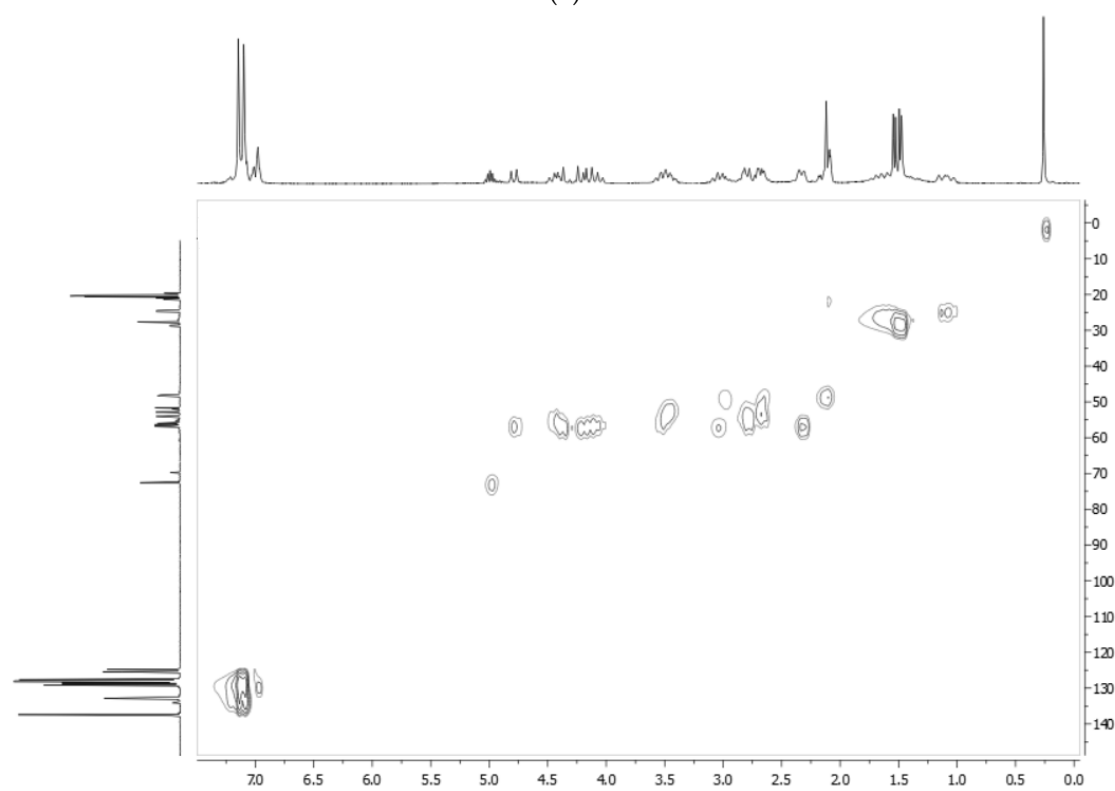
Figure S2. (a)  $^1\text{H}$  NMR spectrum of compound 4 in  $\text{C}_6\text{D}_6$  at 296K; (b)  $^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of compound 4 in  $\text{C}_6\text{D}_6$  at 296K.





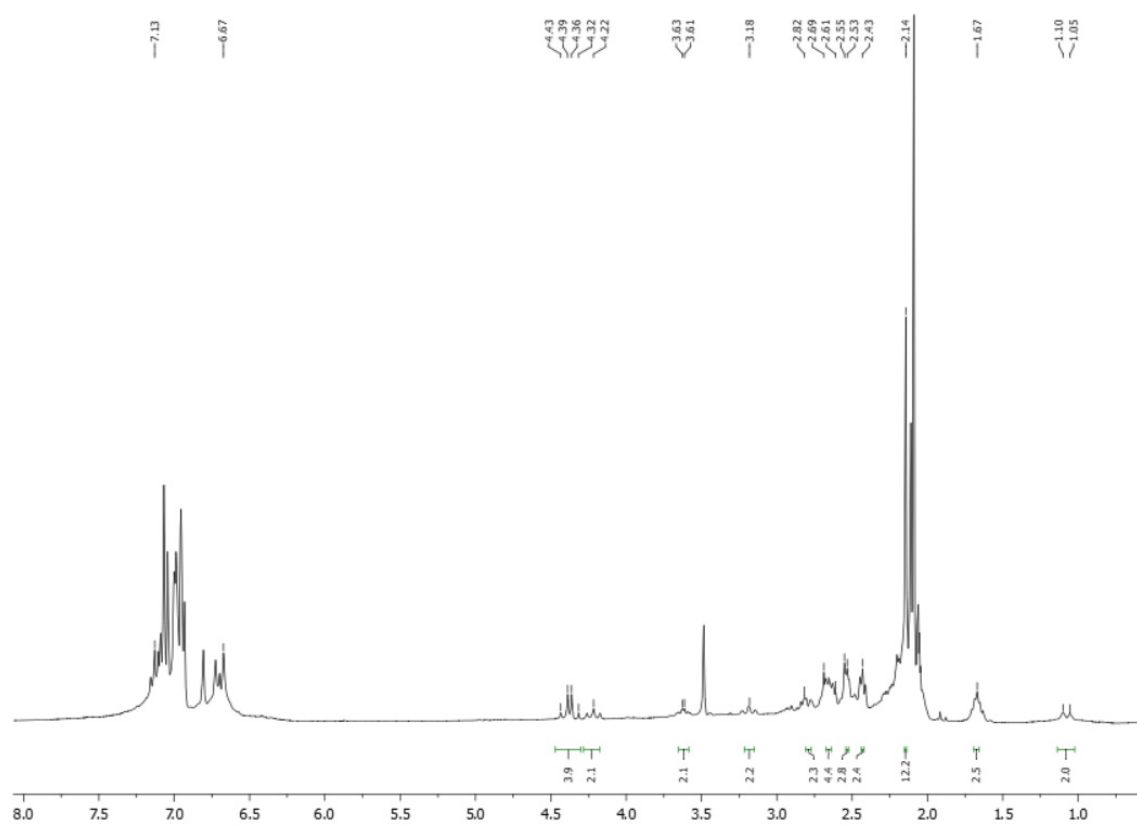


(b)

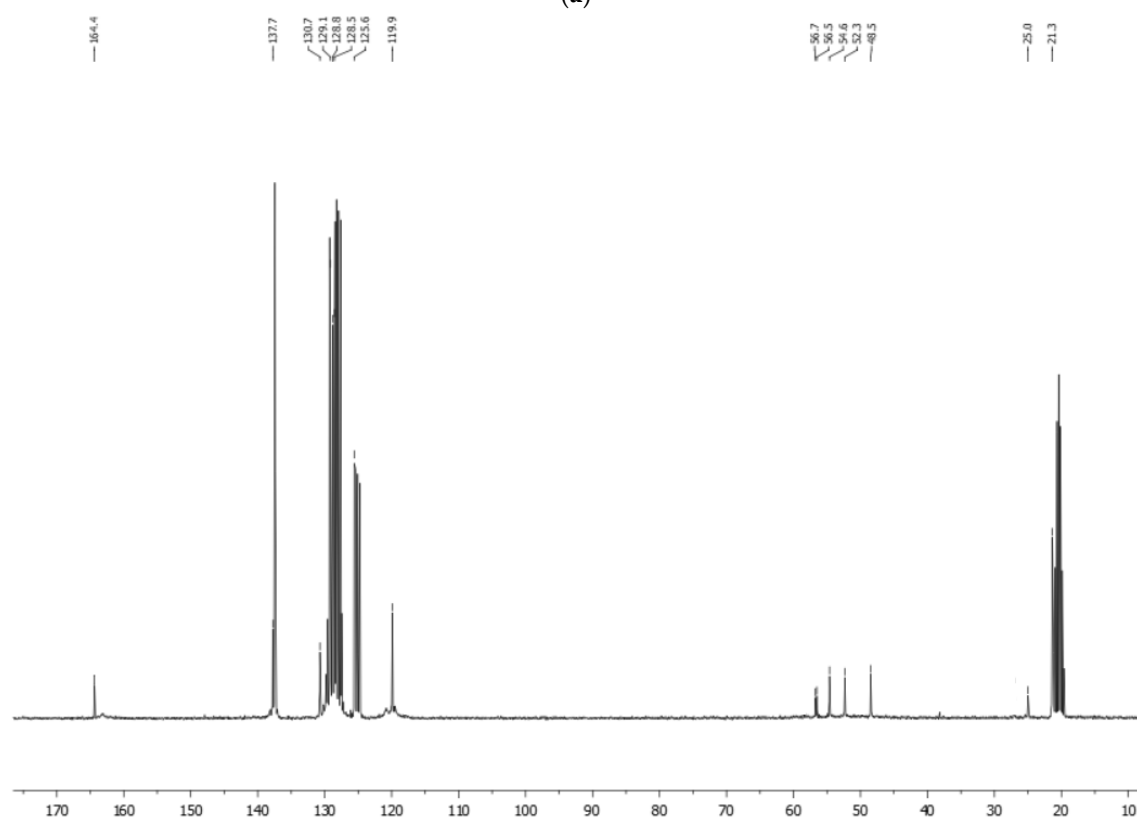


(c)

**Figure S4.** (a) <sup>1</sup>H NMR spectrum of compound 6 in Tol-d<sub>8</sub> at 296K; (b) <sup>13</sup>C{<sup>1</sup>H} NMR spectrum of compound 6 in Tol-d<sub>8</sub> at 296K; (c) <sup>13</sup>C{<sup>1</sup>H} HSQC spectrum of compound 6 in Tol-d<sub>8</sub> at 296K.



(a)



(b)

**Figure S5.**(a) <sup>1</sup>H NMR spectrum of compound 10 in Tol-d<sub>8</sub> at 296K; (b) <sup>13</sup>C{<sup>1</sup>H} NMR spectrum of compound 10 in Tol-d<sub>8</sub> at 296K.

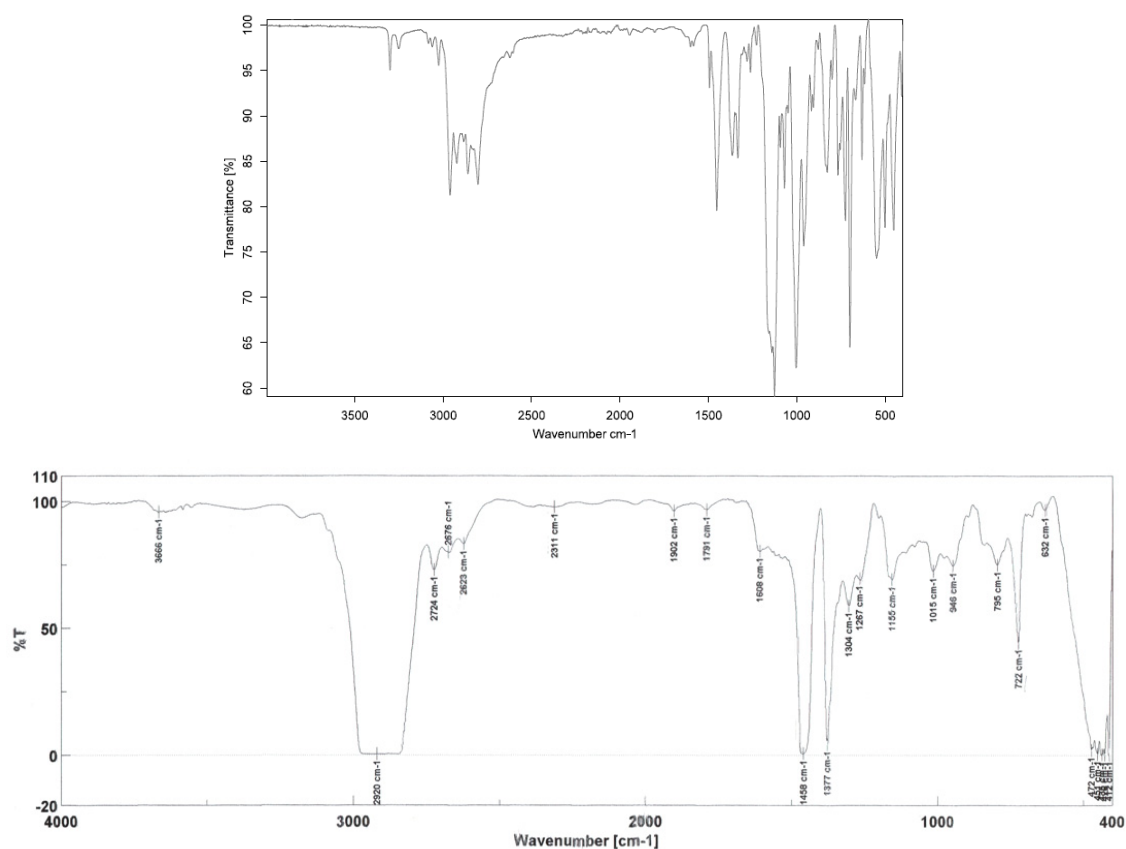


Figure S6. FT-IR spectra of 11 (top) and 13 (bottom).

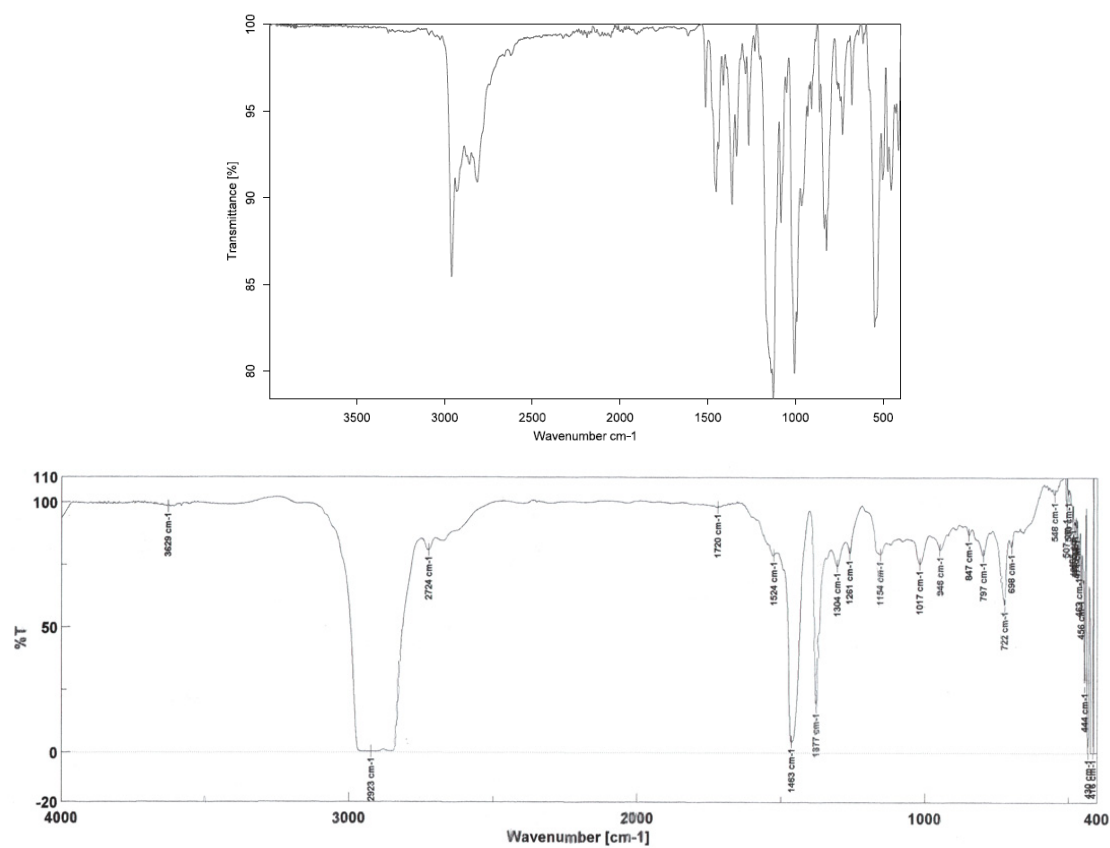


Figure S7. FT-IR spectra of 12 (top) and 14 (bottom).