

## SYNTHESIS AND CRYSTAL STRUCTURE OF NEW Zn(II) COMPLEX WITH *N*-[BIS(BENZYLAMINO)PHOSPHORYL]-2,2,2- TRICHLOROACETAMIDE

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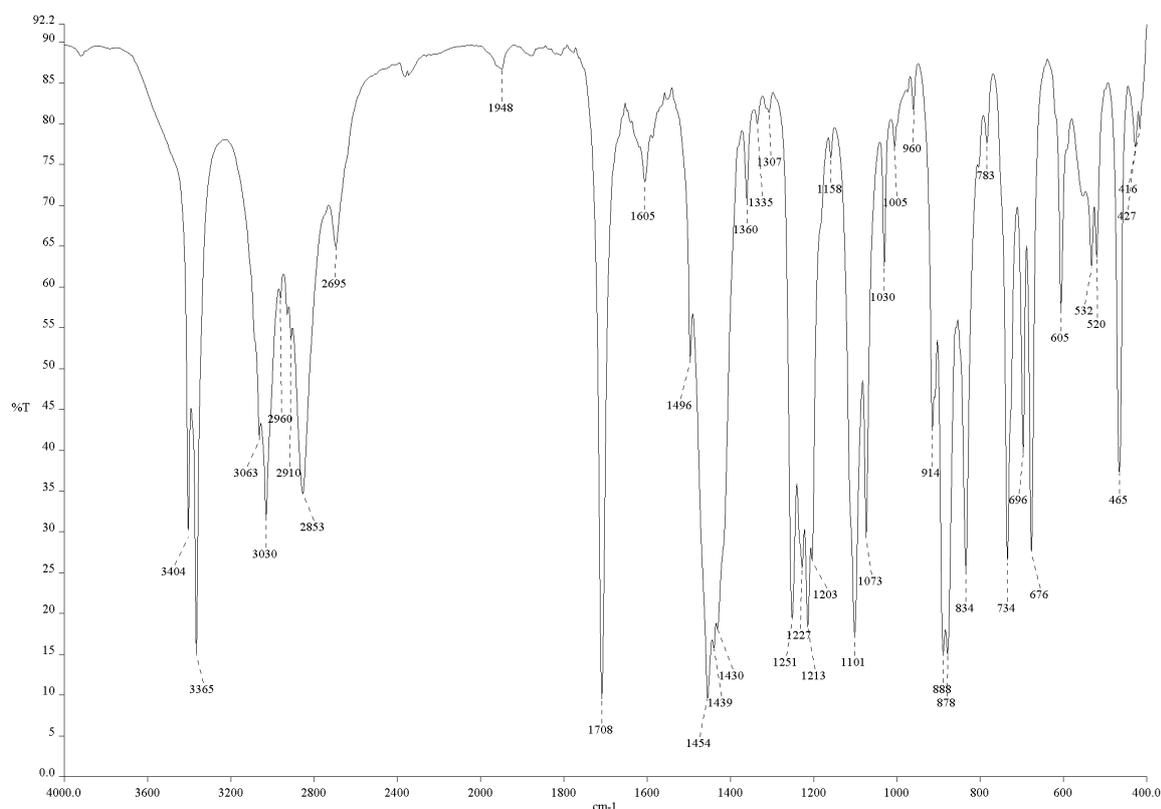


Figure S1. IR spectra of the *N*-[bis(benzylamino)phosphoryl]-2,2,2-trichloroacetamide (HL).

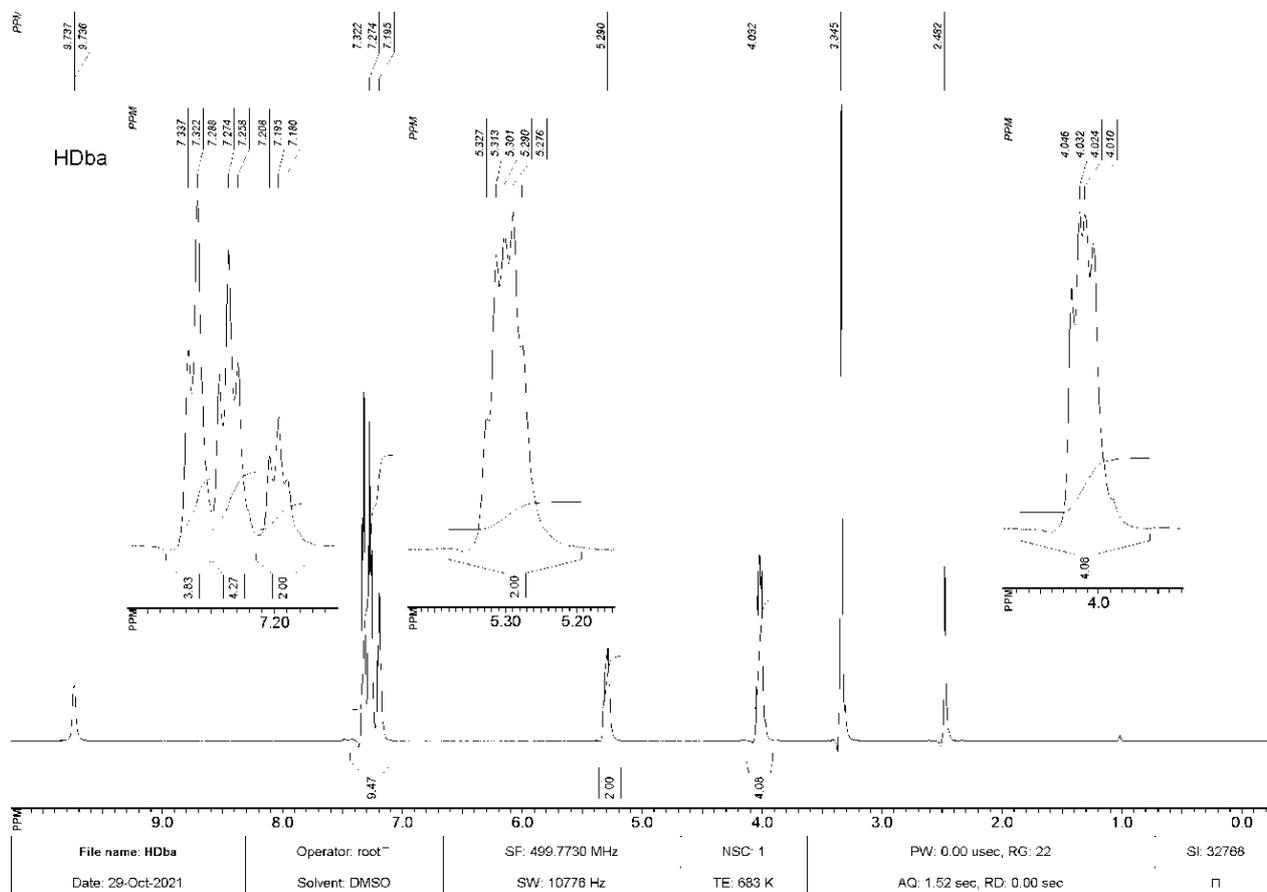


Figure S2. <sup>1</sup>H NMR spectra of the *N*-[bis(benzylamino)phosphoryl]-2,2,2-trichloroacetamide (HL).

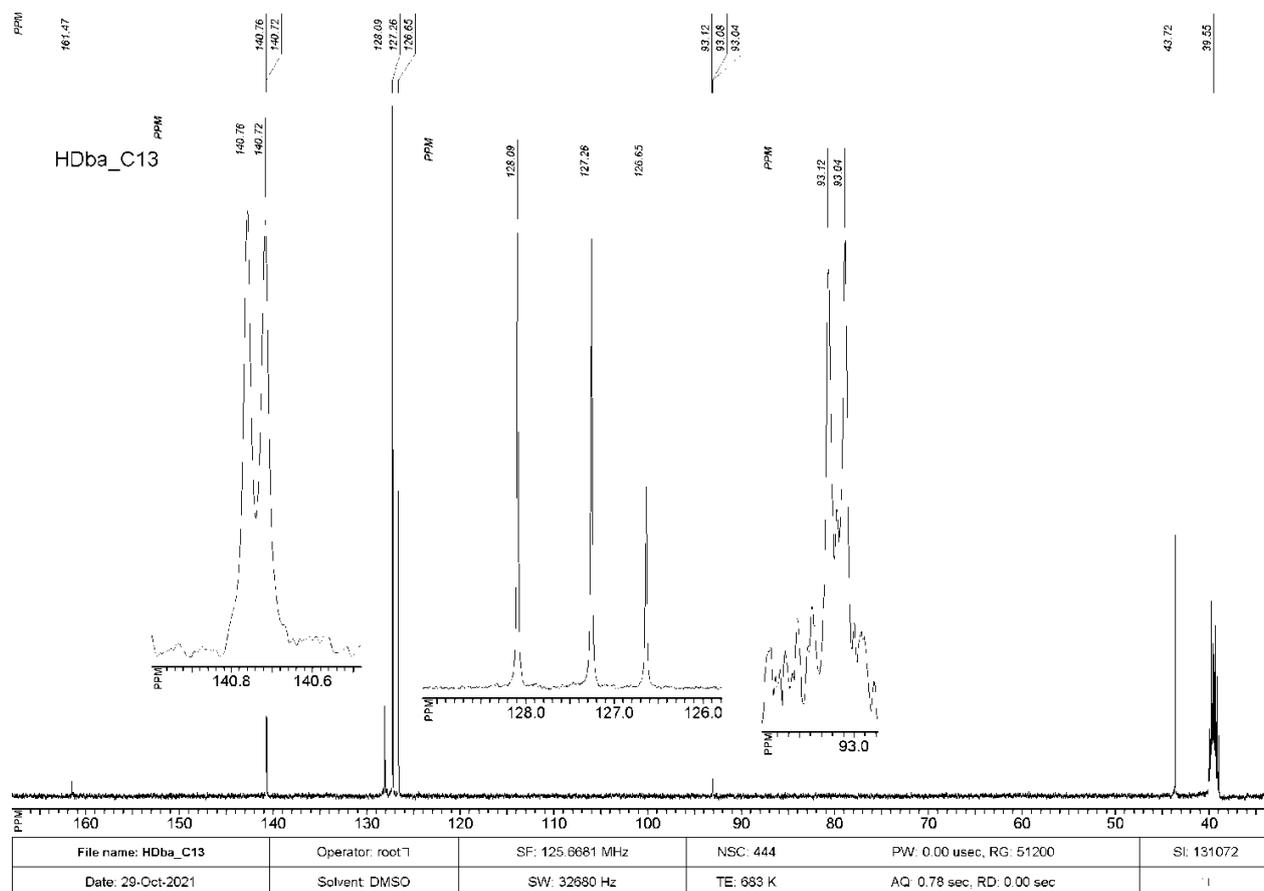


Figure S3.  $^{13}\text{C}$  NMR spectra of the *N*-[bis(benzylamino)phosphoryl]-2,2,2-trichloroacetamide (HL).

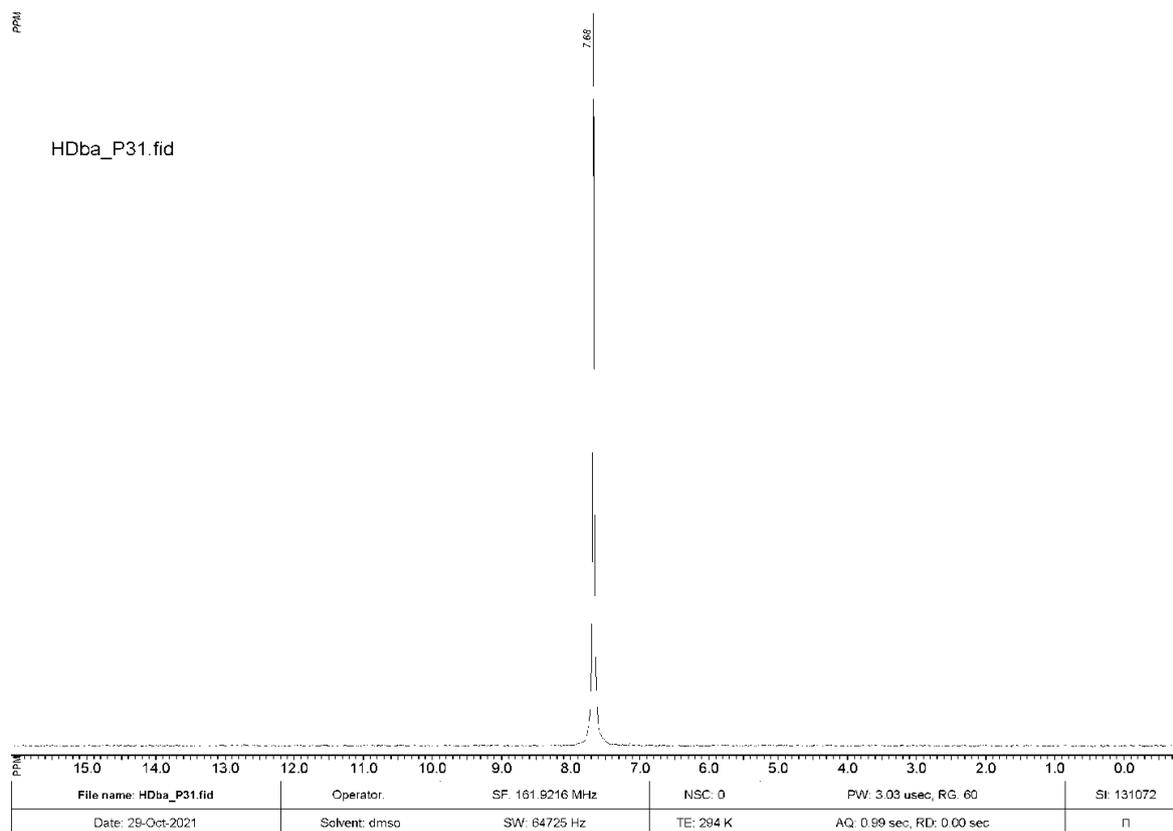


Figure S4.  $^{31}\text{P}$  NMR spectra of the *N*-[bis(benzylamino)phosphoryl]-2,2,2-trichloroacetamide (HL).

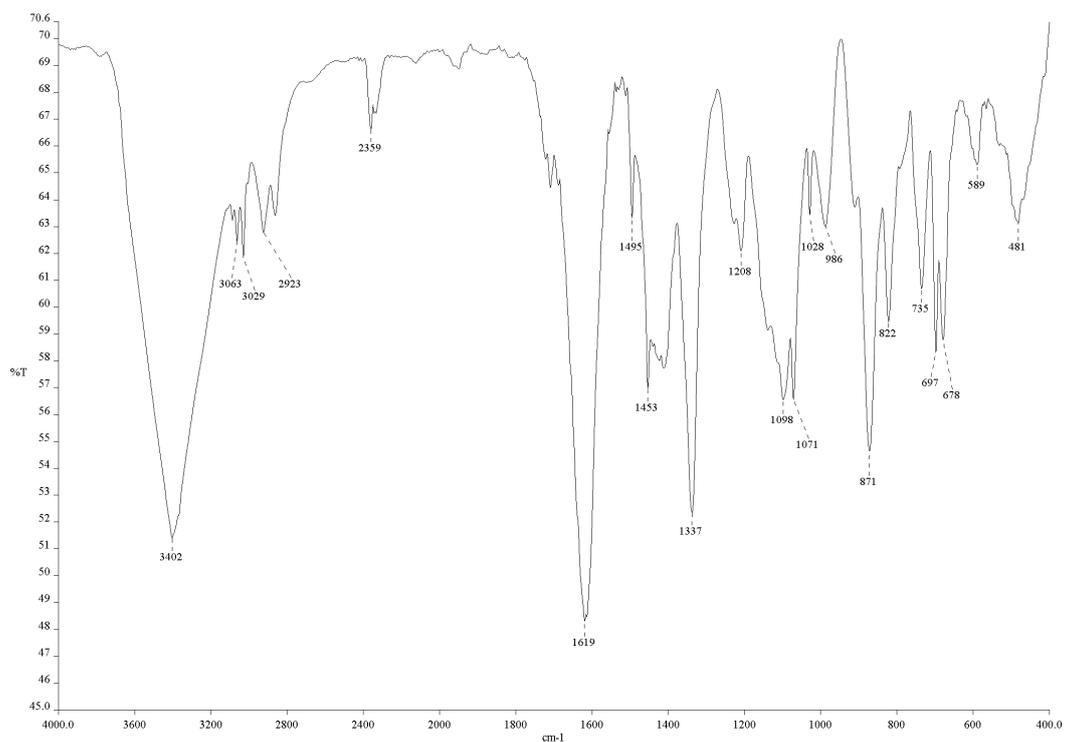


Figure S5. IR spectra of the NaL (HL= *N*-[bis(benzylamino)phosphoryl]-2,2,2-trichloroacetamide).

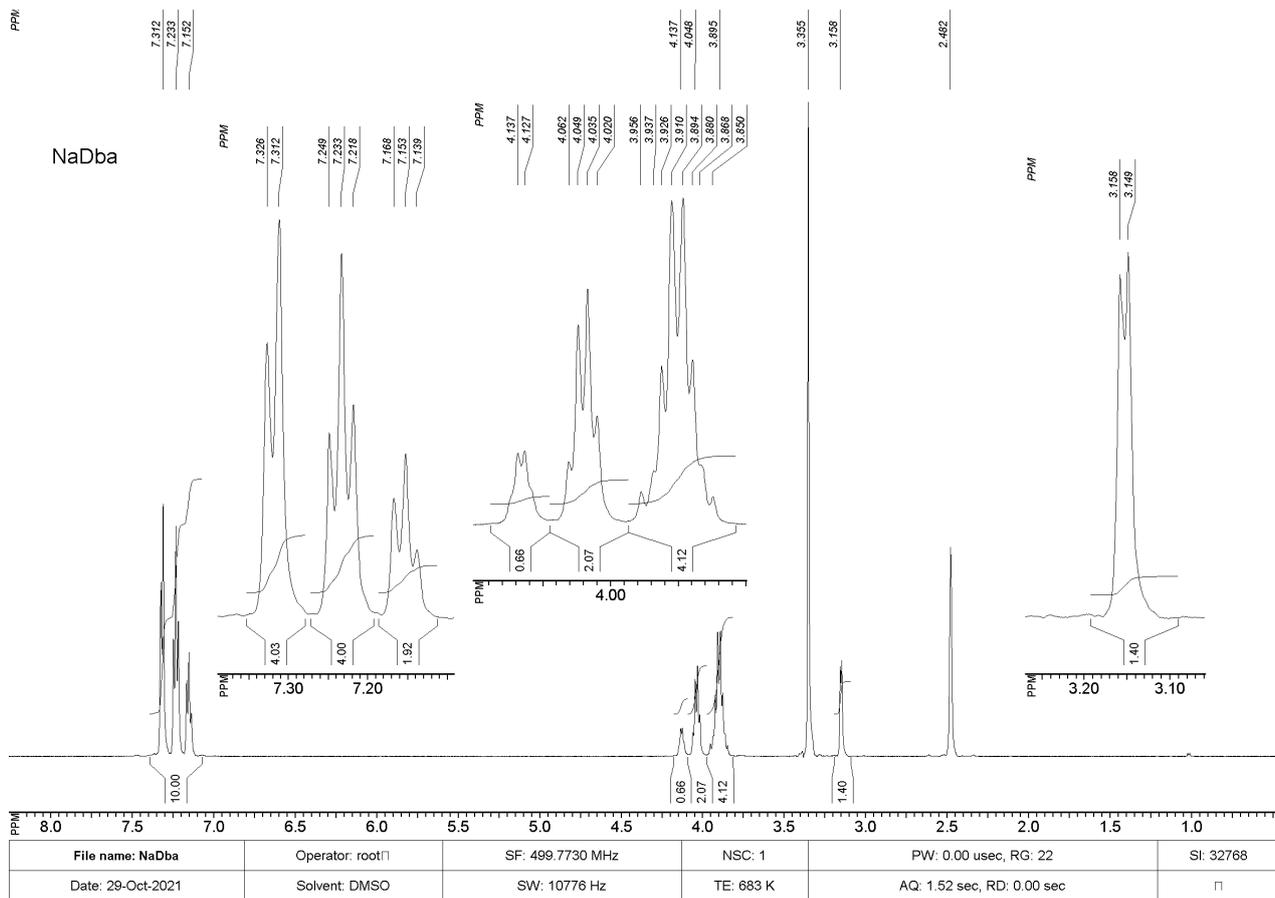
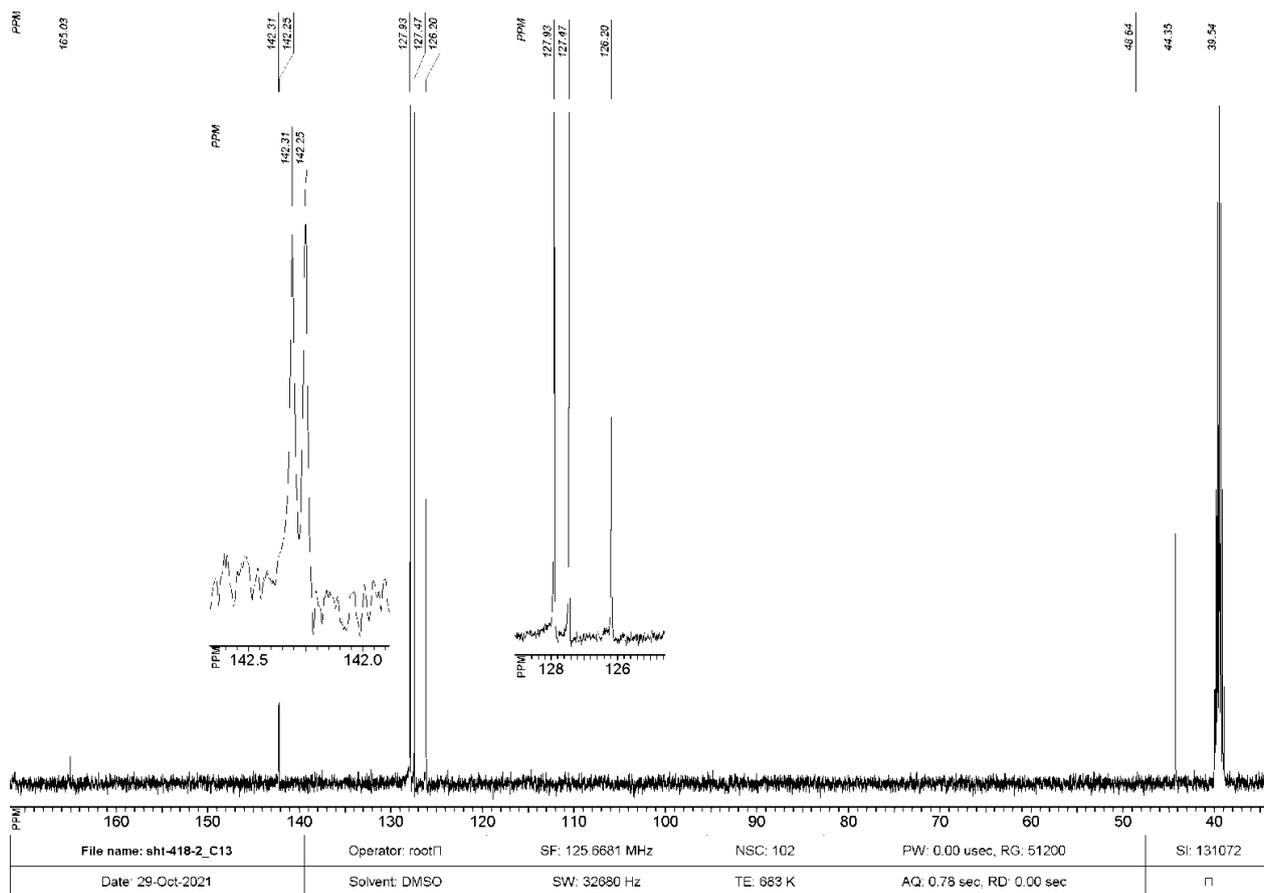


Figure S6. <sup>1</sup>H NMR spectra of the NaL (HL= *N*-[bis(benzylamino)phosphoryl]-2,2,2-trichloroacetamide).



**Figure S7.**  $^{13}\text{C}$  NMR spectra of the NaL (HL= *N*-[bis(benzylamino)phosphoryl]-2,2,2-trichloroacetamide).

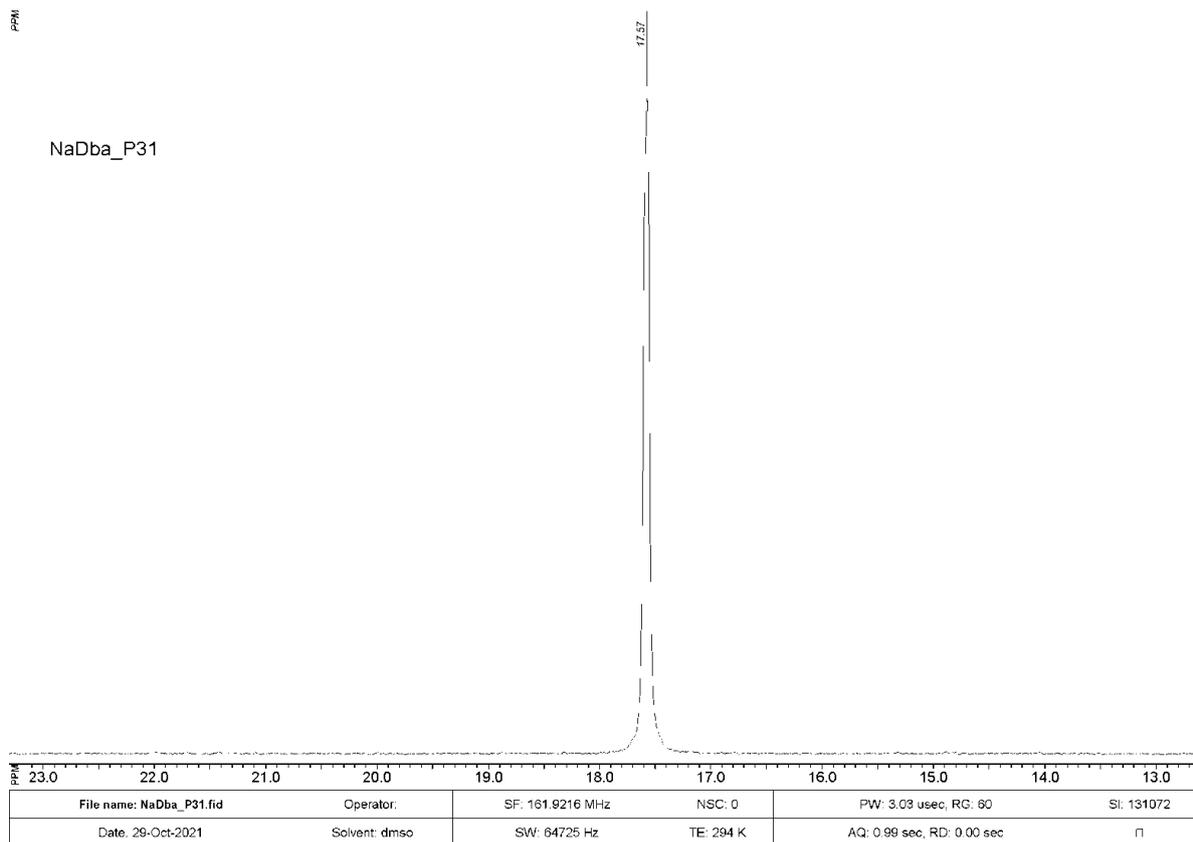


Figure S8.  $^{31}\text{P}$  NMR spectra of the NaL (HL= *N*-[bis(benzylamino)phosphoryl]-2,2,2-trichloroacetamide).

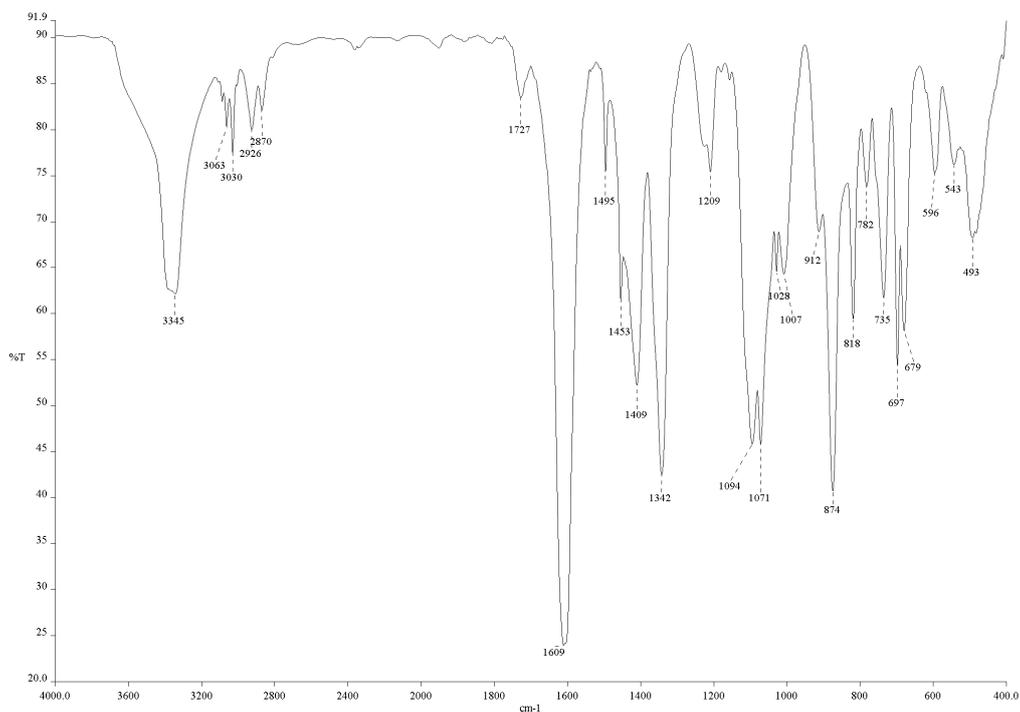


Figure S9. IR spectra of the  $\text{Zn}_2(\text{L})_4(\text{CH}_3\text{OH})_2$ .

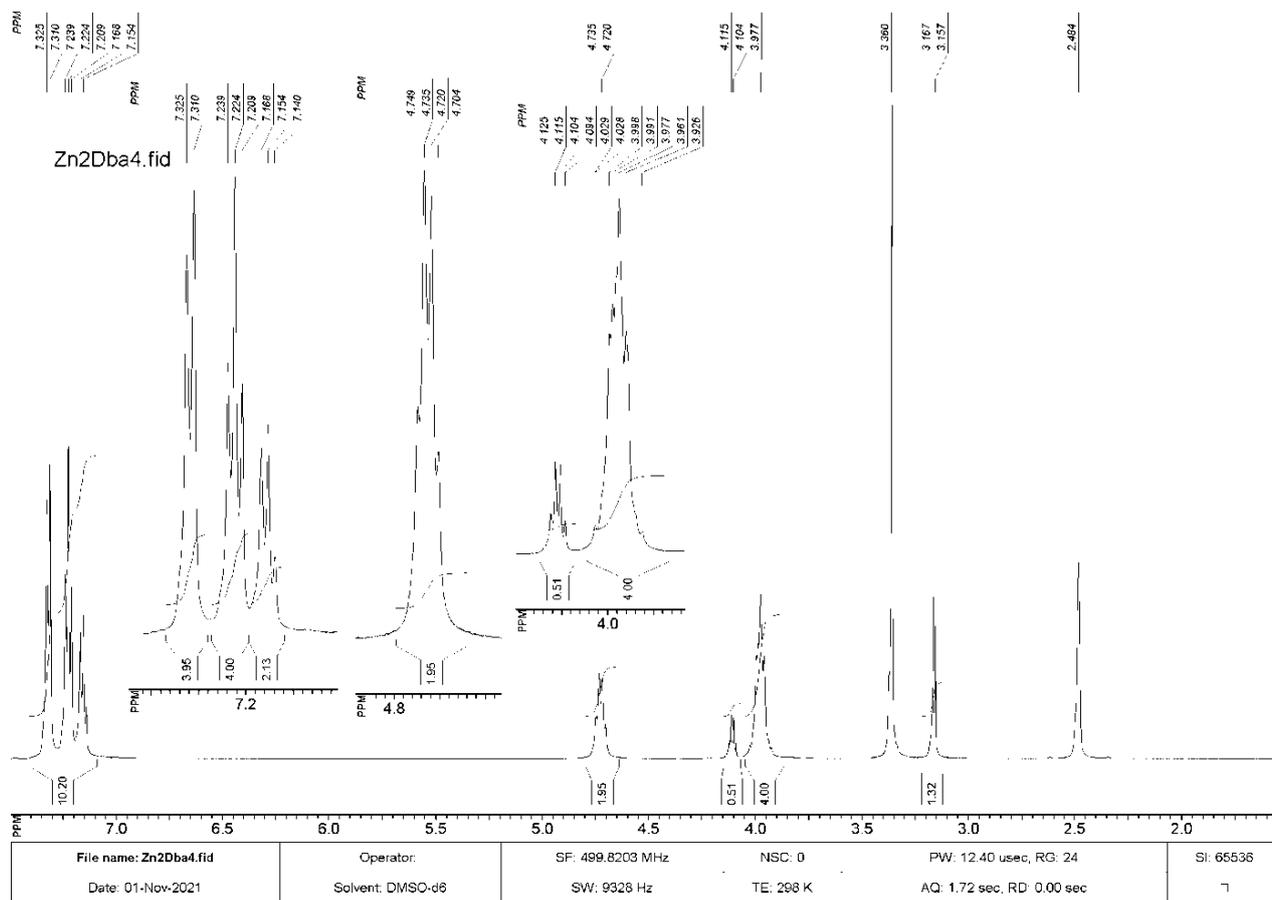


Figure S10. <sup>1</sup>H NMR spectra of the Zn<sub>2</sub>(L)<sub>4</sub>(CH<sub>3</sub>OH)<sub>2</sub>.

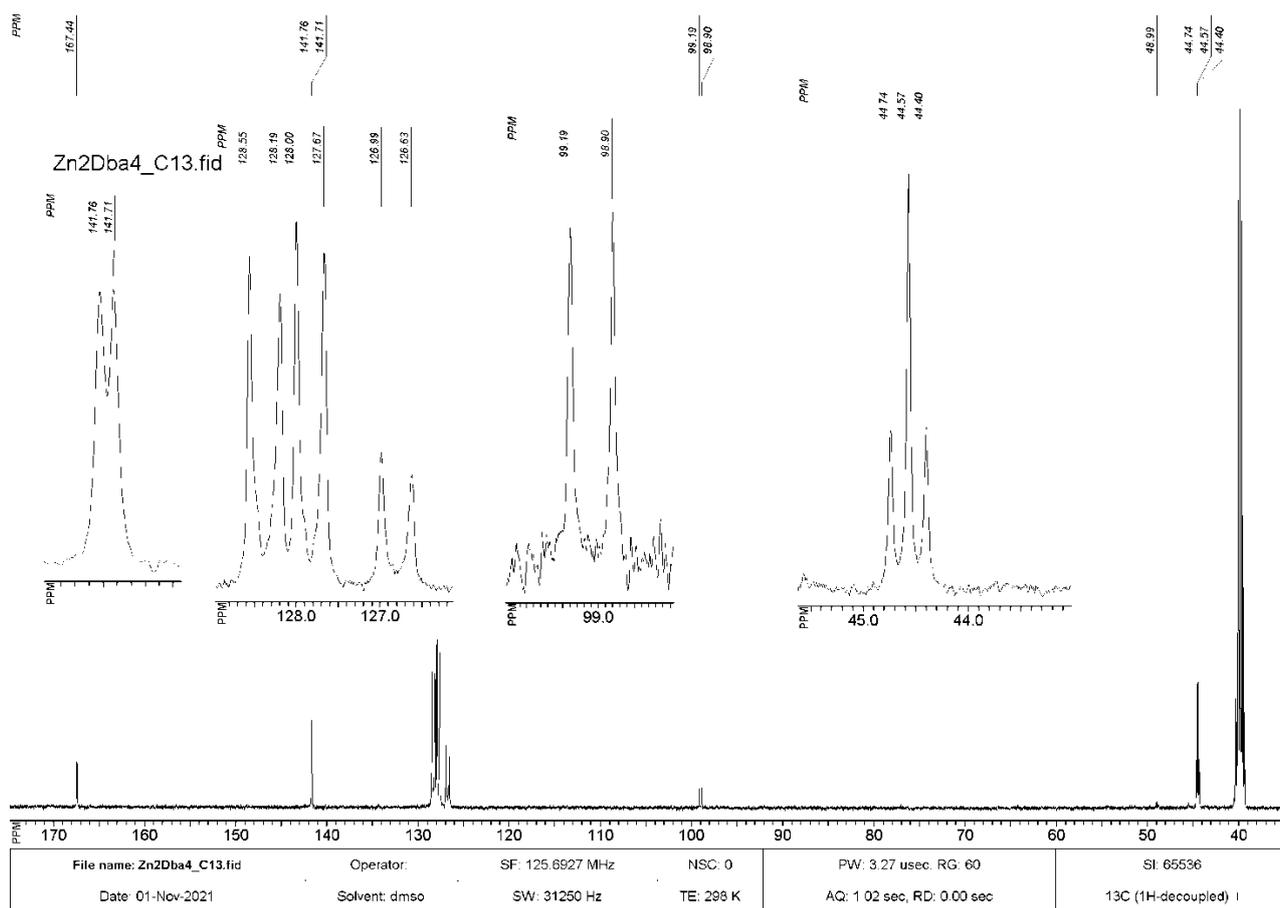


Figure S11. <sup>13</sup>C NMR spectra of the Zn<sub>2</sub>(L)<sub>4</sub>(CH<sub>3</sub>OH)<sub>2</sub>.