

Supplementary Information

Figure. S1: ^1H nmr spectrum of H_2BPT ligand.

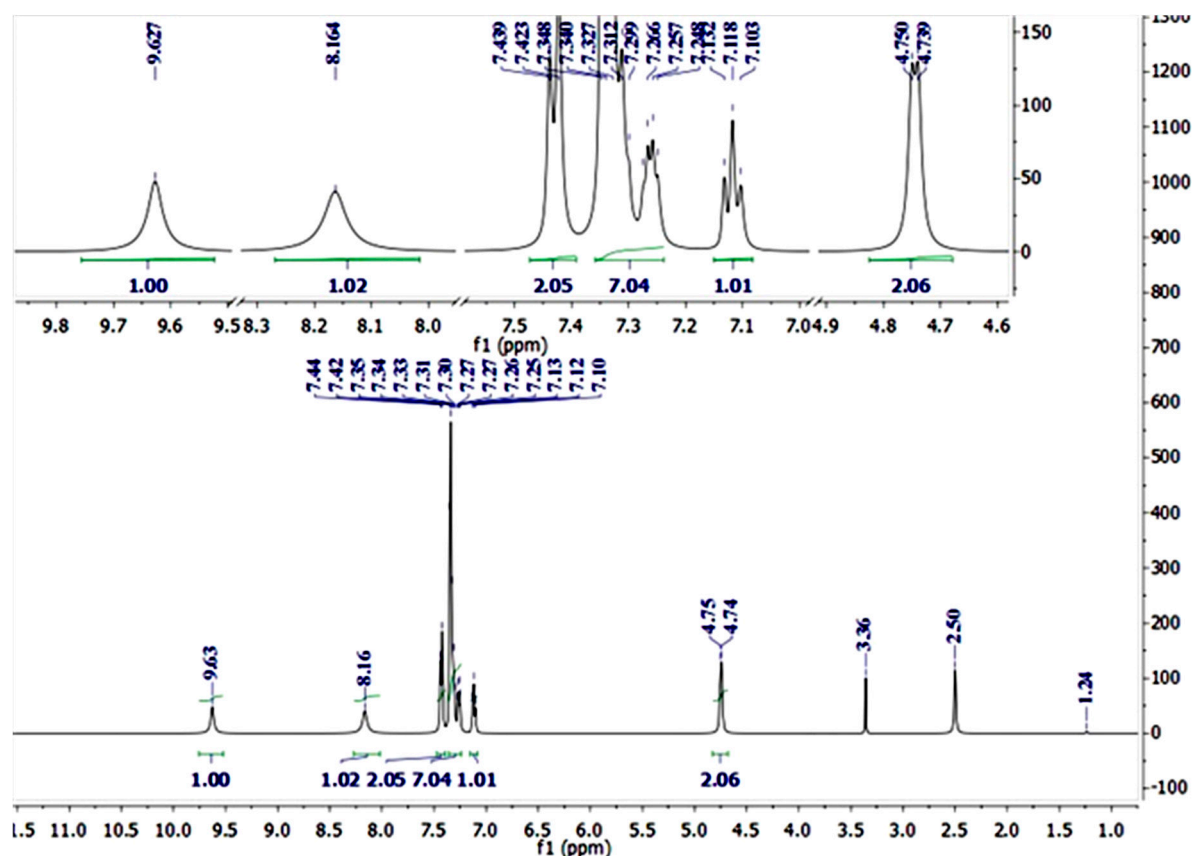
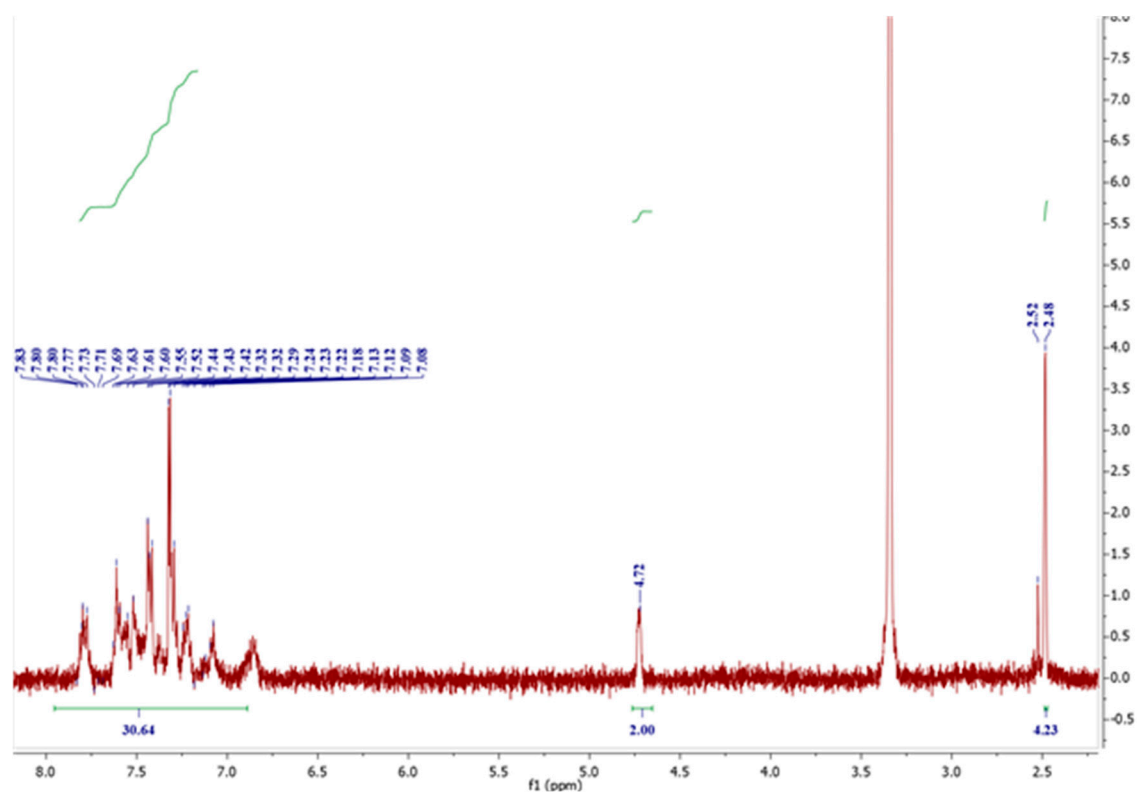


Figure. S2: ^1H nmr spectrum of complex 1.



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Figure. S3: ^1H nmr spectrum of complex 2.

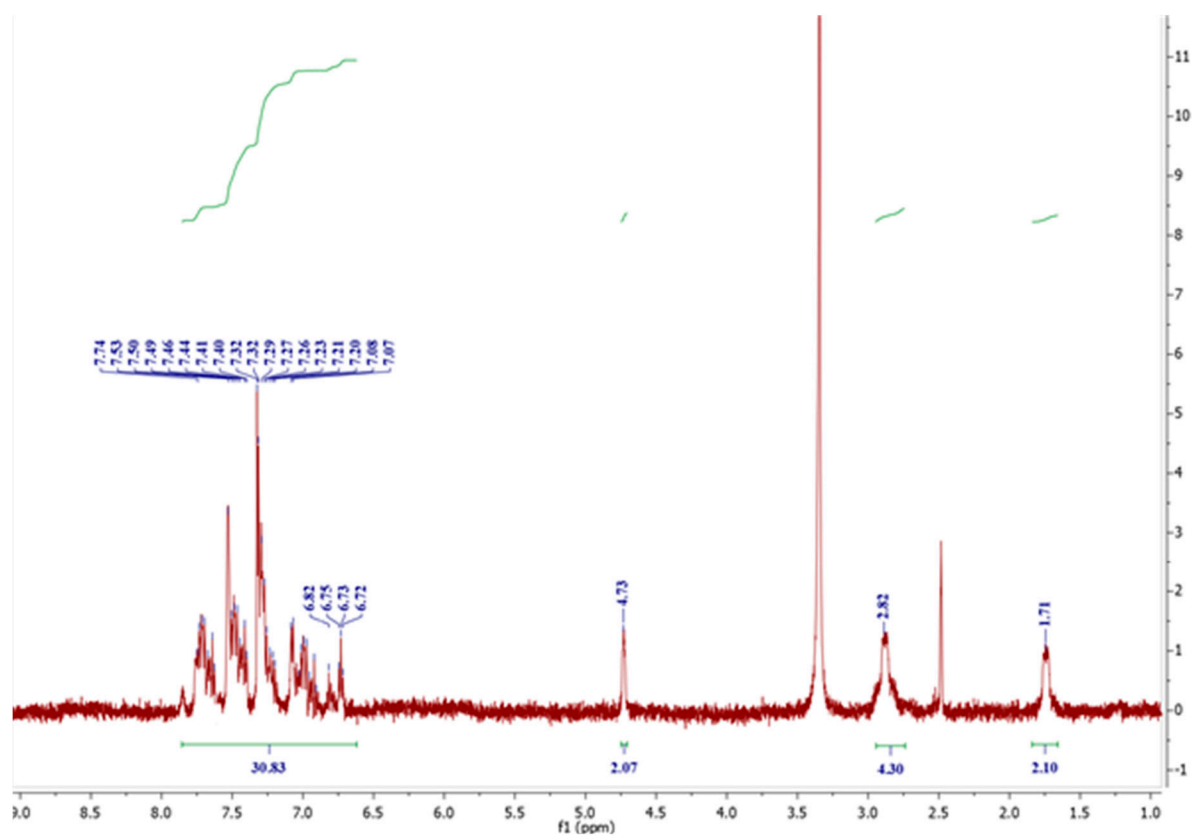
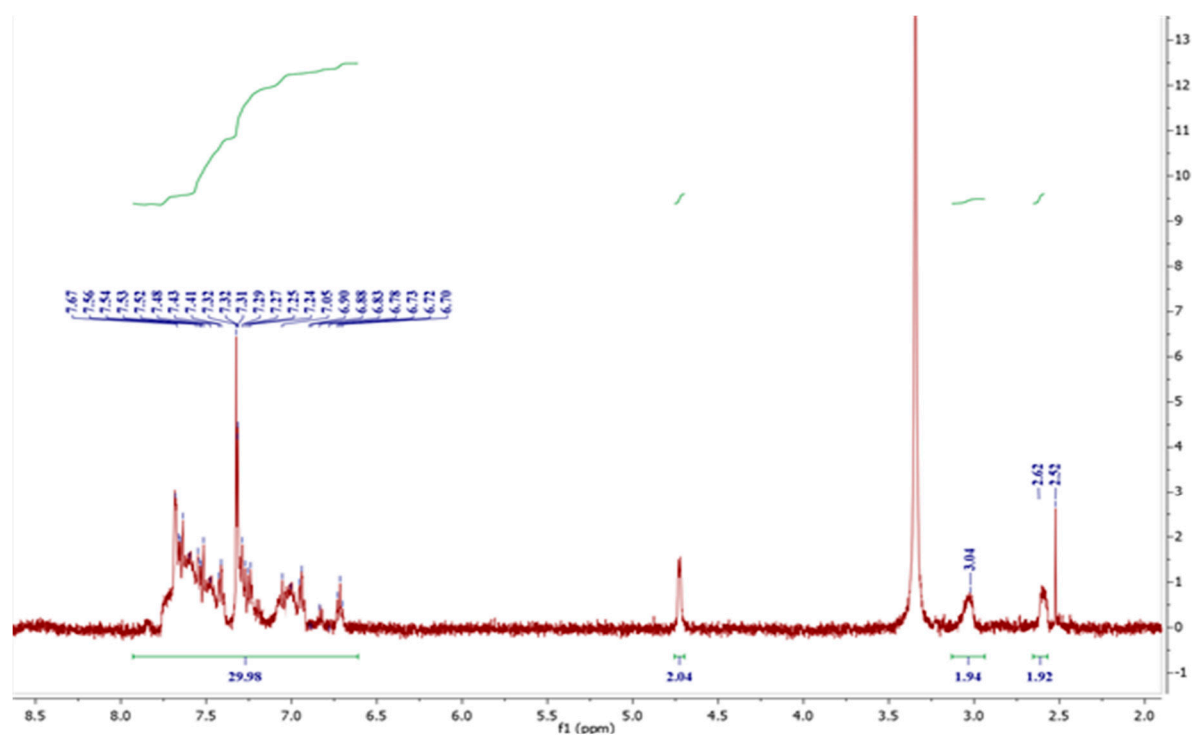


Figure. S4: ^1H nmr spectrum of complex 3.



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Figure. S5: ^1H nmr spectrum of complex 4

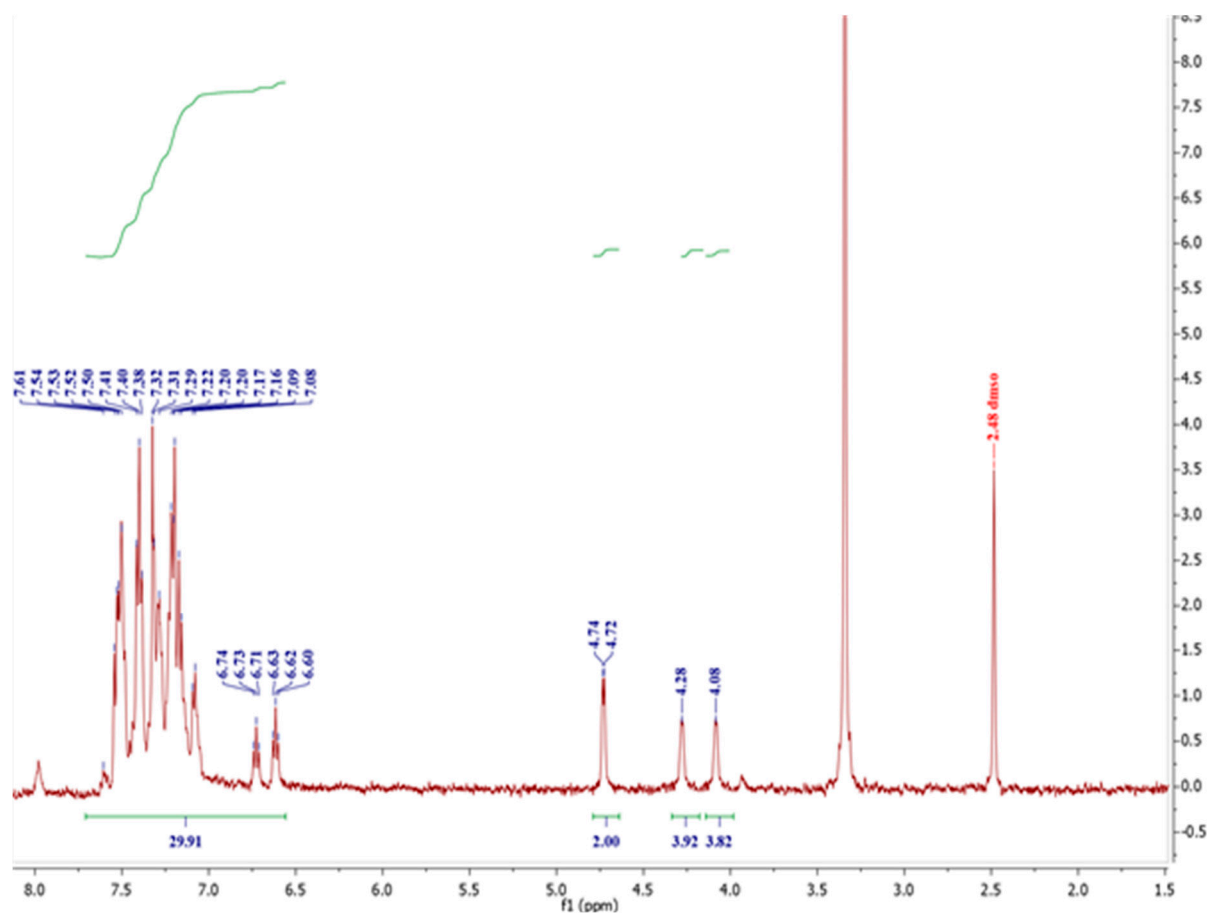
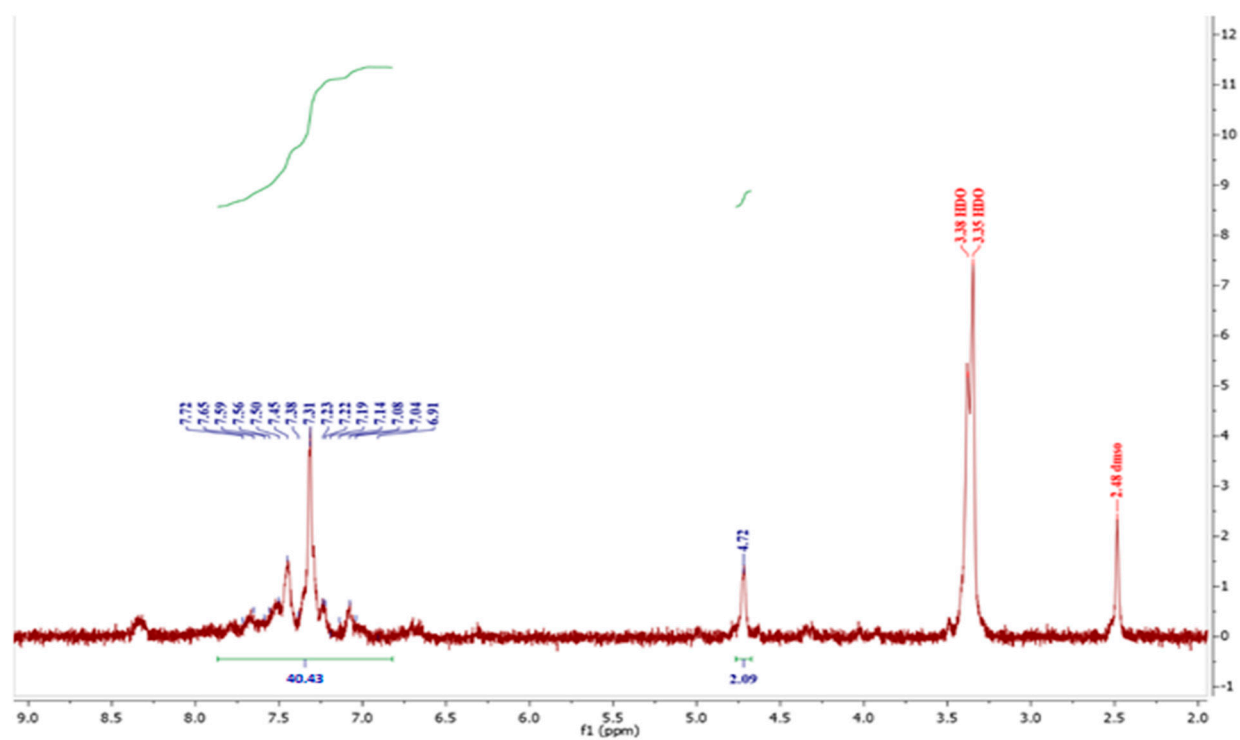


Figure. S6: ^1H nmr spectrum of complex 5



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Figure. S7: ^1H nmr spectrum of complex 6

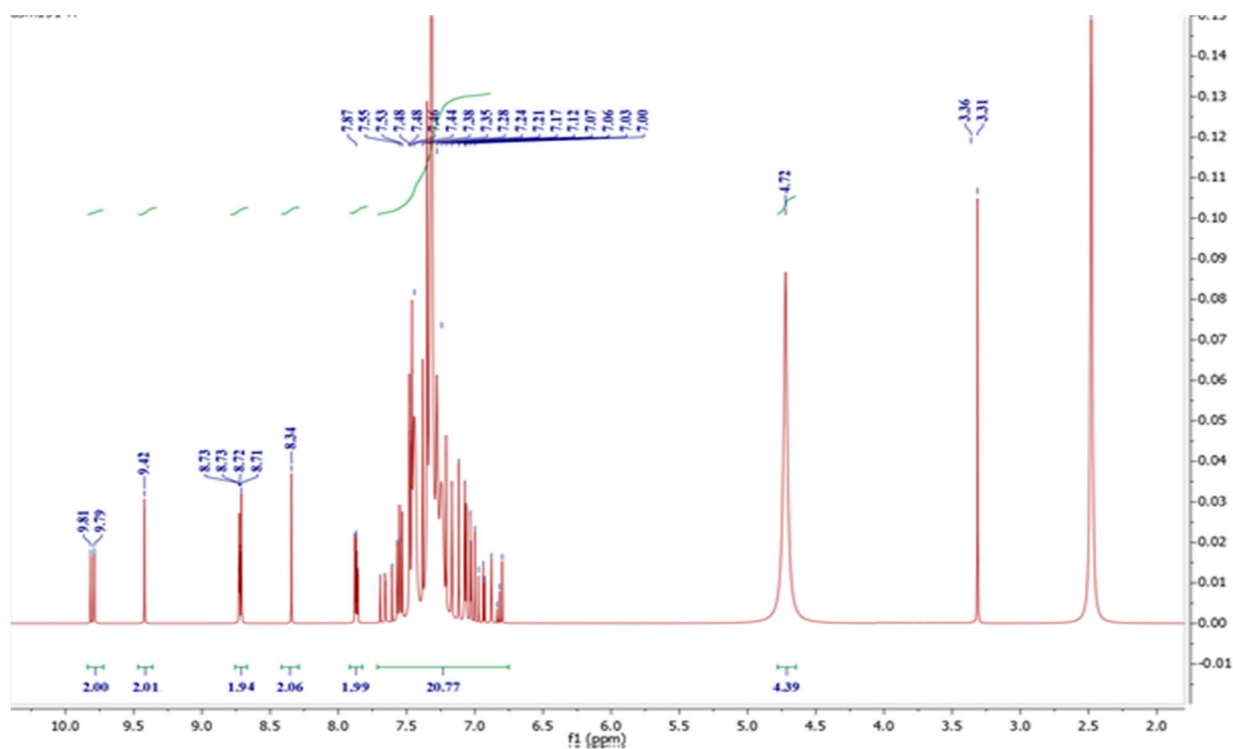
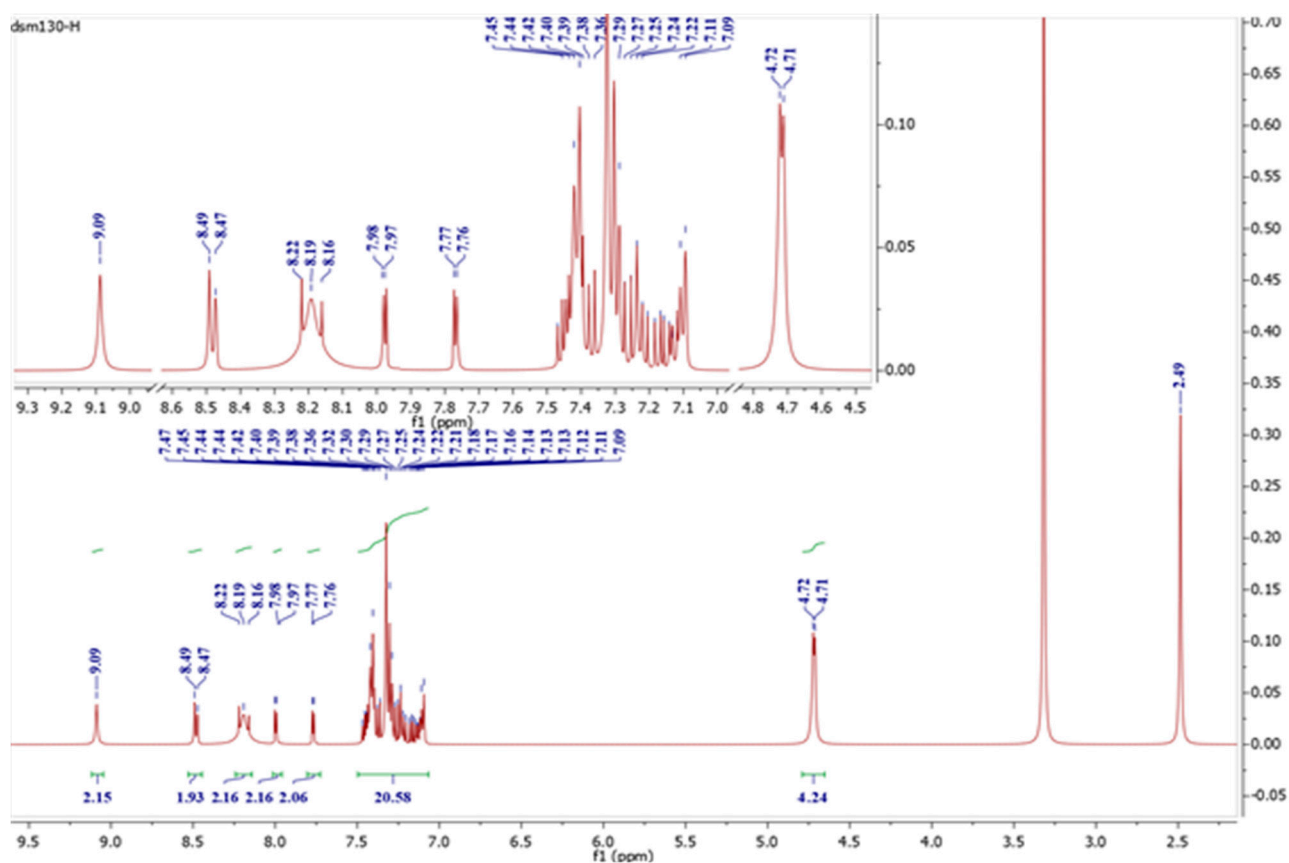


Figure. S8: ^1H nmr spectrum of complex 7



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Figure. S9: ^{31}P nmr spectrum of complex 1

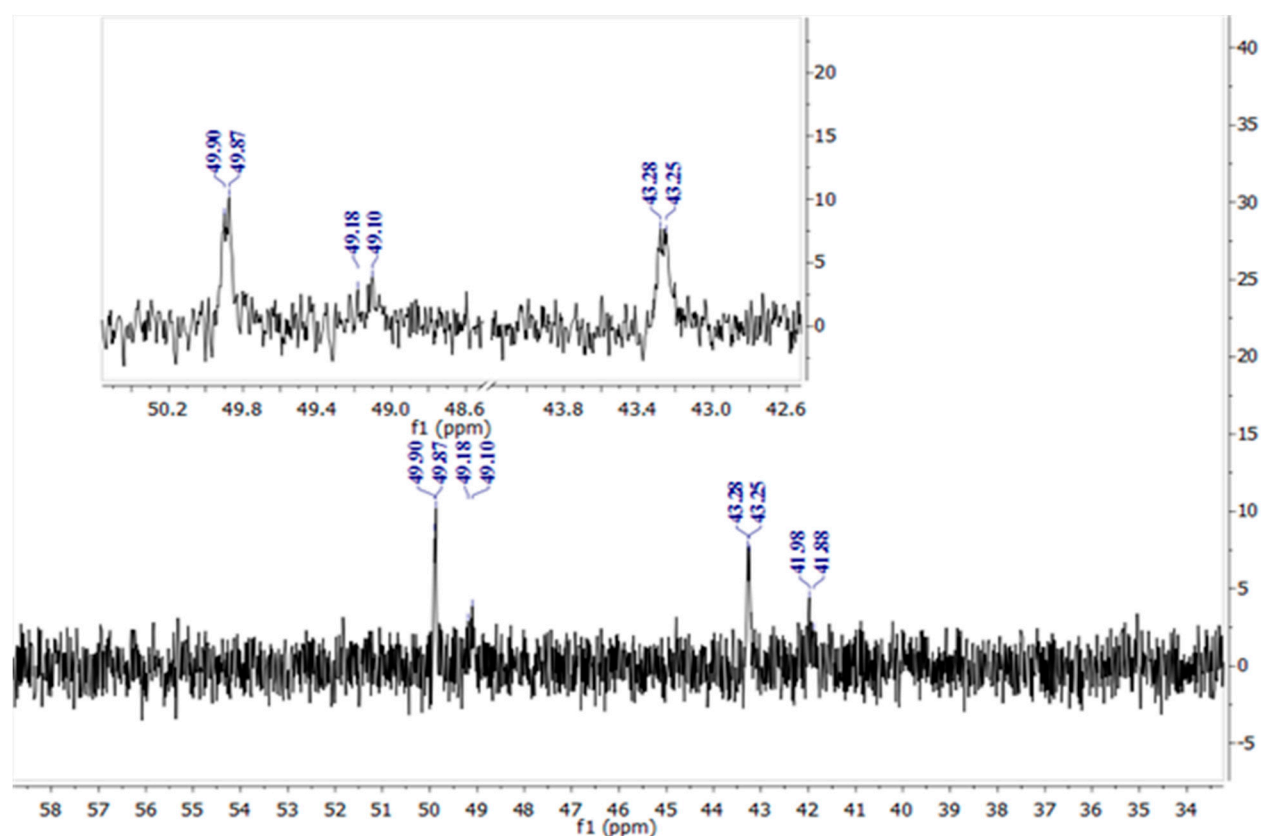
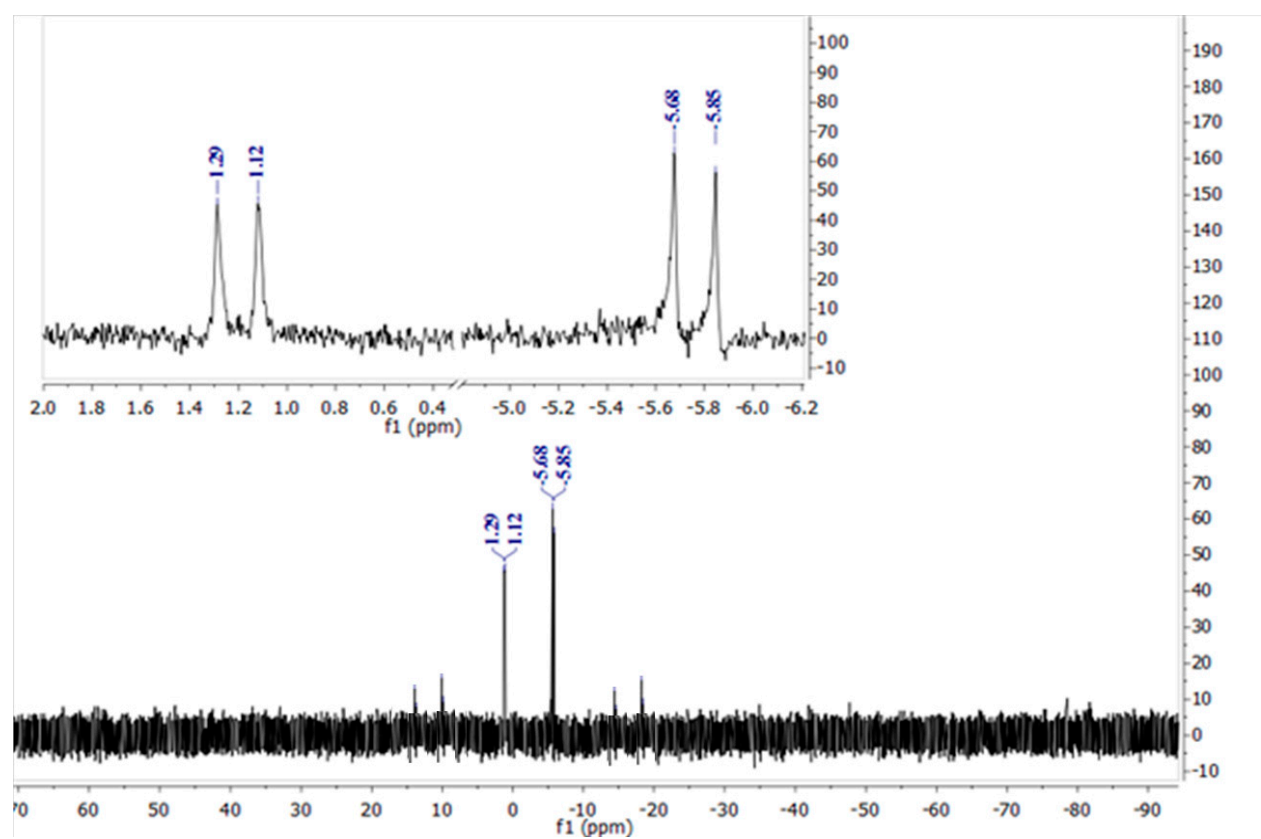


Figure. S10: ^{31}P nmr spectrum of complex 2



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Figure. S11: ^{31}P nmr spectrum of complex 3

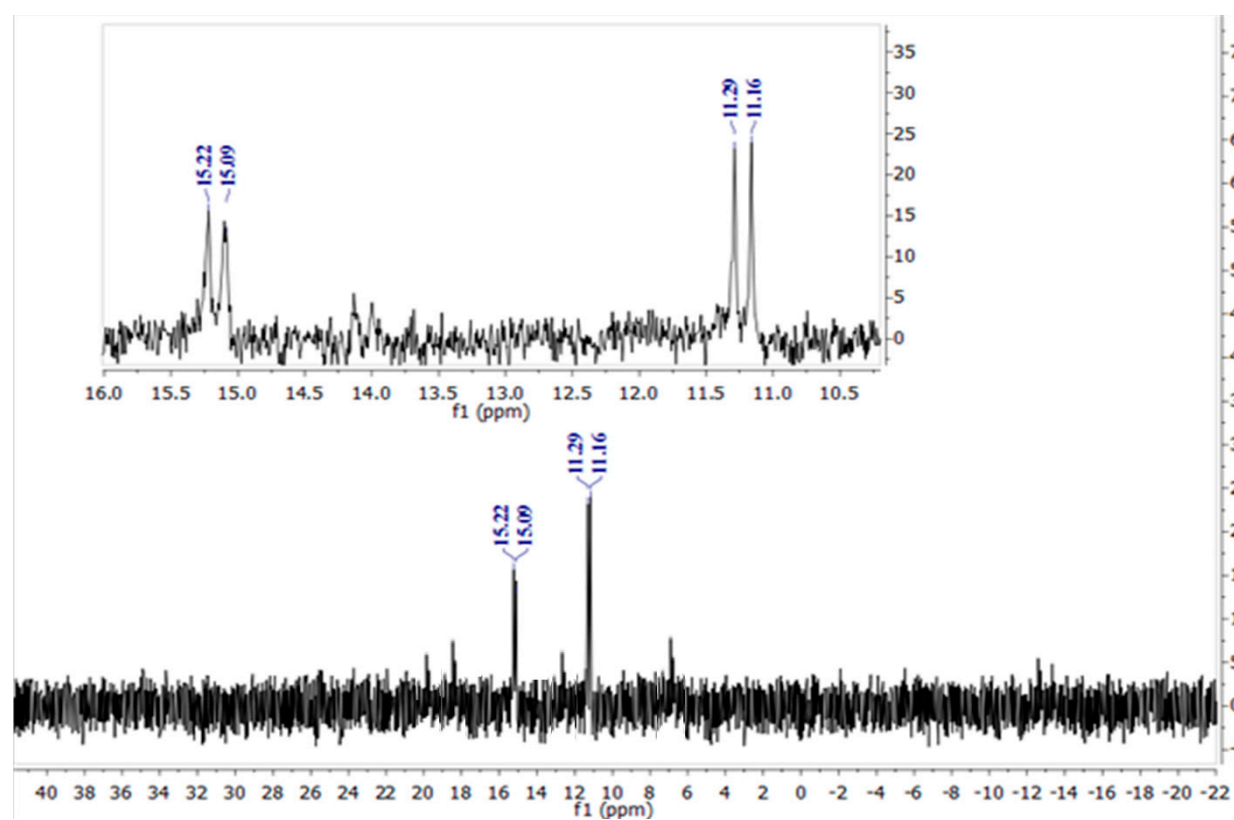
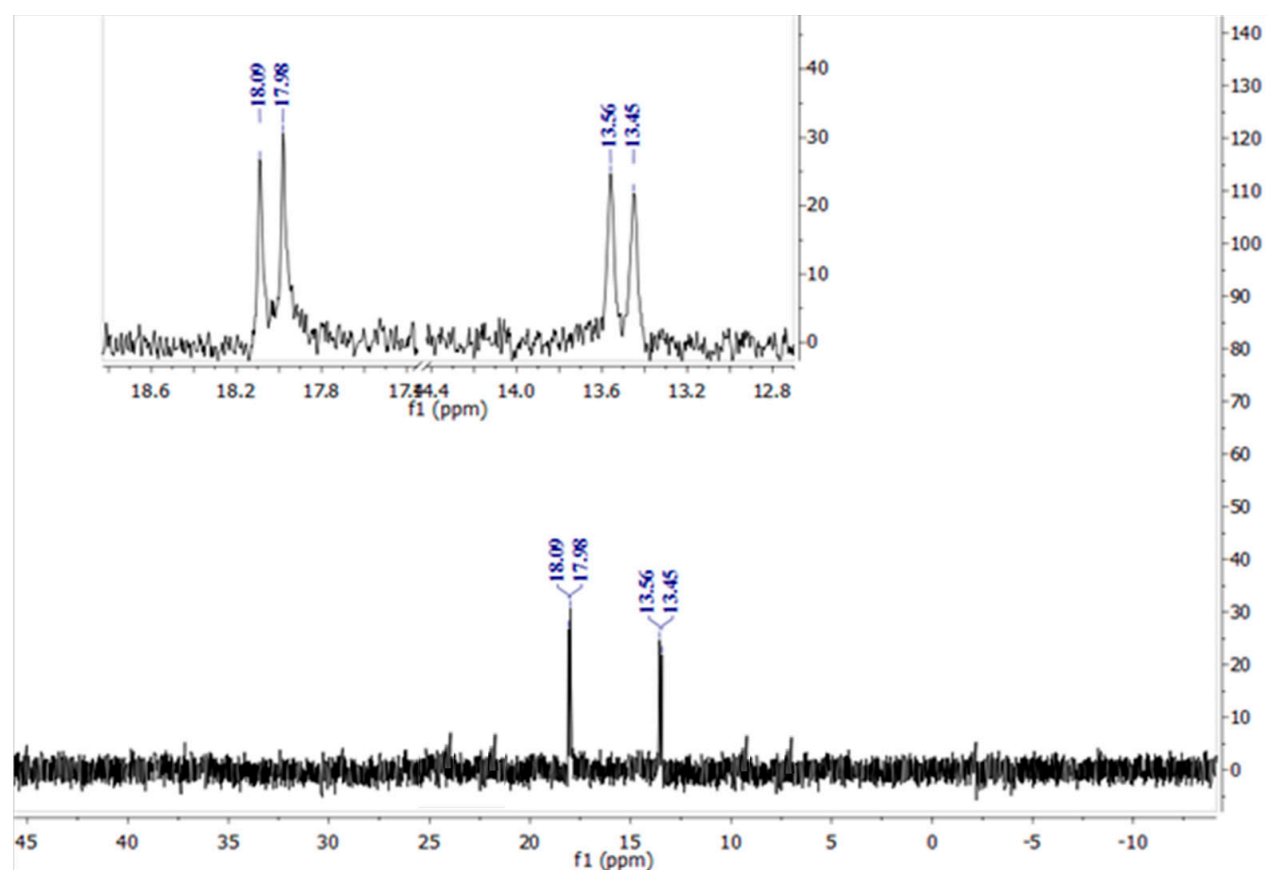


Figure. S12: ^{31}P nmr spectrum of complex 4



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Figure. S13: ^{31}P nmr spectrum of complex 5

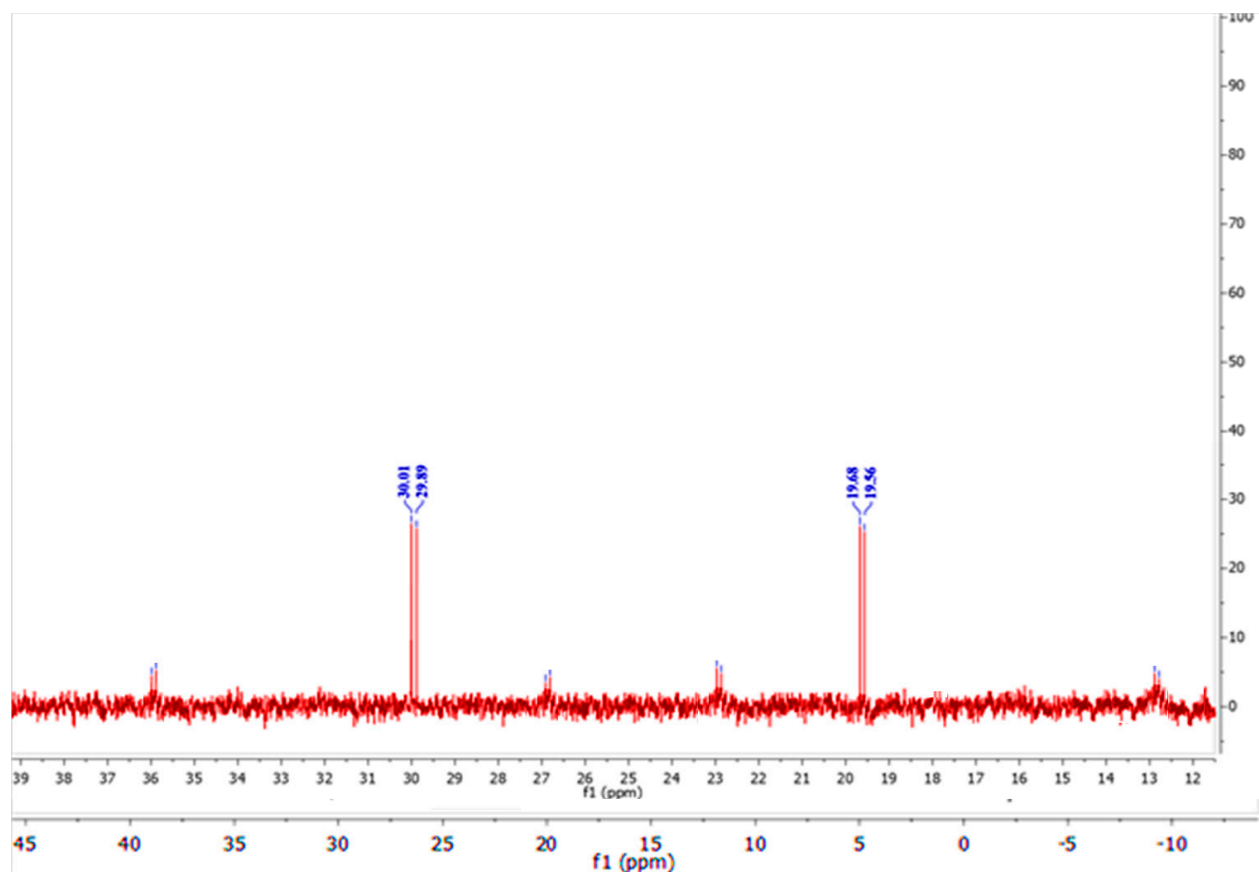
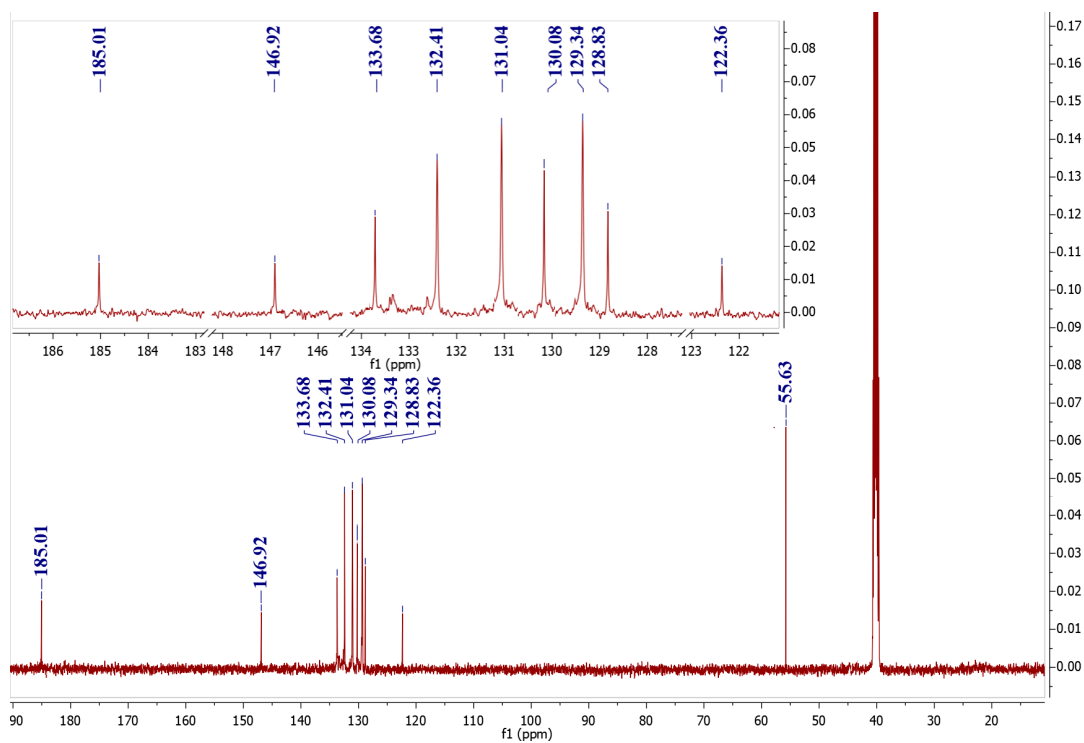


Figure. S14: $^{13}\text{C}\{-^1\text{H}\}$ nmr spectrum of H_2BPT



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Figure. S15: $^{13}\text{C}\{-^1\text{H}\}$ nmr spectrum of complex(1)

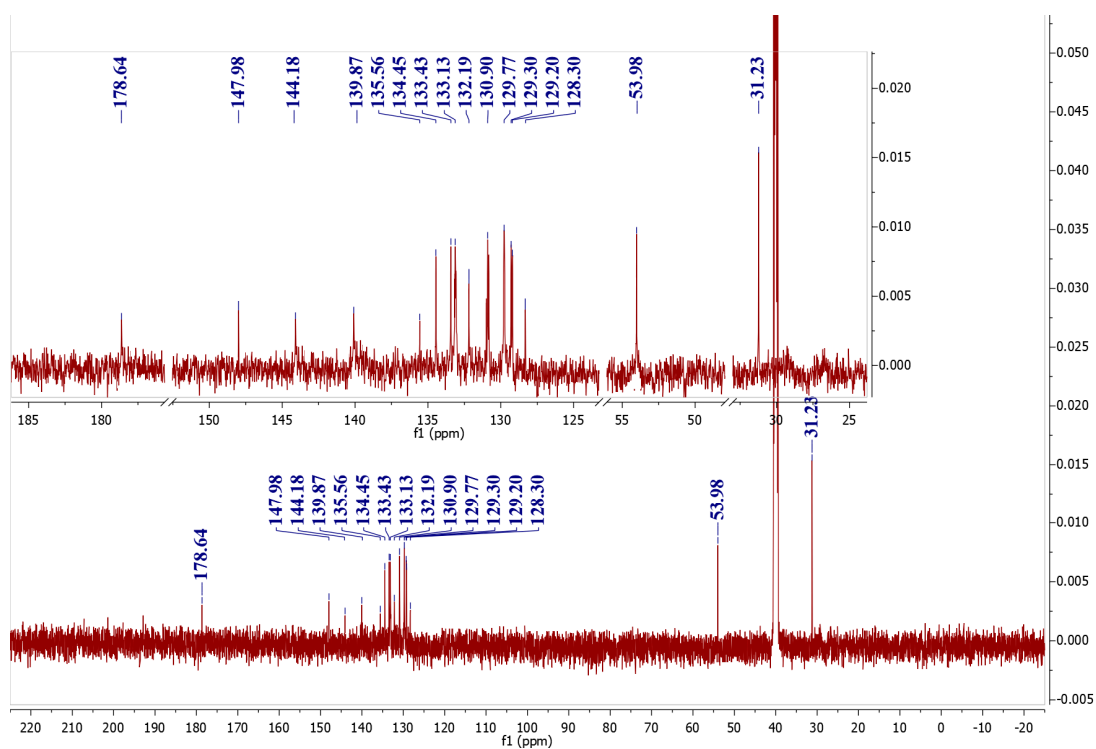


Figure. S16: $^{13}\text{C}\{-^1\text{H}\}$ nmr spectrum of complex (2)

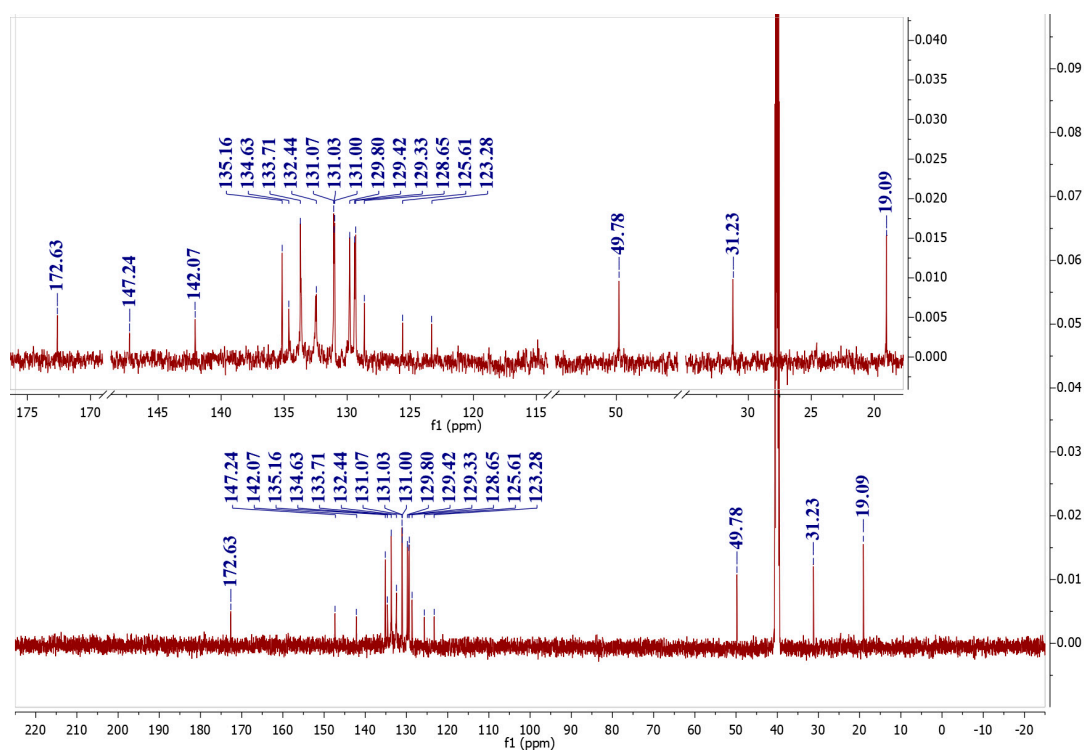


Figure. S17: $^{13}\text{C}\{-^1\text{H}\}$ nmr spectrum of complex (6)

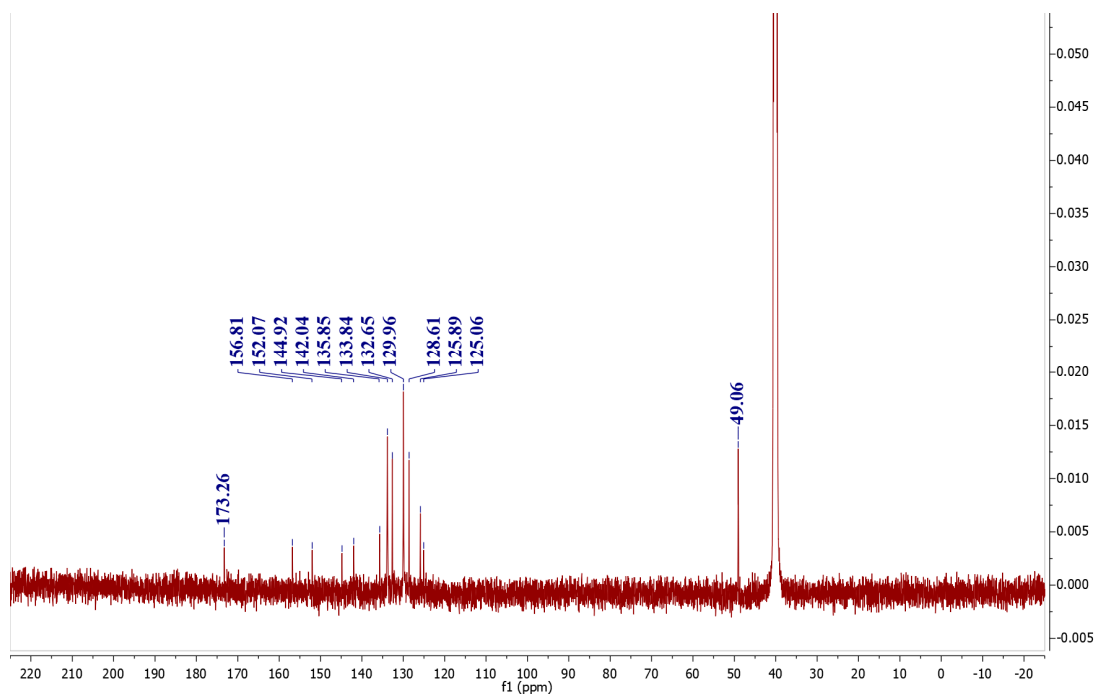
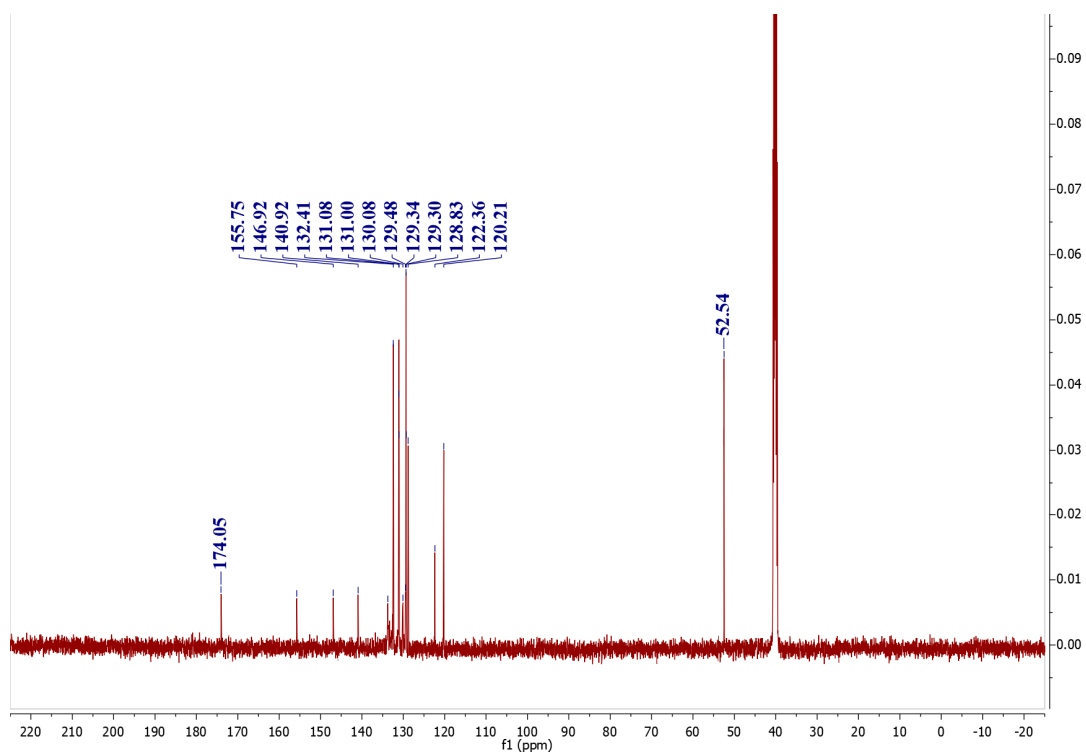


Figure. S18: $^{13}\text{C}\{-^1\text{H}\}$ nmr spectrum of complex (7)



1- Instrumentations

The prepared complexes are characterized with the following devices: the melting points are measured using SMP40 device. The molar conductivity is measured using (JENWEAY-Molar Conductivity meter) for a DMSO solution of the prepared complexes with 10^{-3} M at 25 °C . The UV-Vis spectra of the prepared complexes are recorded using Shimadzu, UV-1650 (Pc, UV-Visible Recording Spectrophotometer). DMSO is used as a solvent for the preparation of 10^{-3} M of each complex and the spectrum is recorded at room temperature using the quartz cell (1 cm in width) within the range (200-1100 cm^{-1}). The Fourier transform infrared spectra (FTIR) are measured using Shimadzu Fourier Transform Infrared Spectrophotometer FT- IR 8400. The samples are firstly mixed with KBr to prepare KBr-complex disks and then measured in the scale 4000-400 cm^{-1} . The NMR spectra were recorded (DMSO- d_6) on a Buker (400 MHz) NMR spectrometer using TMS as an internal standard in DMSO solvent. $\text{cis-}[\text{PtCl}_2(\text{DSMO})_2]$ [1] $[\text{PtCl}_2(\text{diphos})](\text{diphos} = \text{dppe}, \text{dppp}, \text{dppb}, \text{and dppf})$ [1], $[\text{PtCl}_2(\text{PPh}_3)_2]$ [1] and $[\text{PtCl}_2(\text{diamine})](\text{diamine} = \text{Bipy and Phen})$ [2] were prepared by literature methods

References

- (1) J.H. Price, A.N. Williamson, F. Schramm and B.B. Wayland, *Inorg. Chem.*, (1972) 1275.
- (2) B.H. Abdullah, M.A. Abdulla, S.A. Al-Jibori and T.A.K. Al-Allaf, *Asian J. of Chem.* 19 (2007) 1334.