

SUPPLEMENTARY MATERIAL

New silver complexes with mixed thiazolidine and phosphine ligands as highly potent anti-malarial and anti-cancer agents

Nur Rahimah Fitrah Mohd Sofyan¹, Fariza Juliana Nordin², Mohd Ridzuan Mohd Abd Razak³, Syahrina Nur 'Ain Abdul Halim¹, Nur Adila Fatin Mohd Khir¹, Amirrudin Muhammad³, Nor Fadilah Rajab², and Rozie Sarip^{1,*}

¹ Department of Chemistry, Faculty of Science, University of Malaya, Lembah Pantai, 50603 Kuala Lumpur, Malaysia

² Faculty of Health Sciences, Universiti Kebangsaan Malaysia, Kuala Lumpur Campus, Jalan Raja Muda Abdul Aziz, 50300 Kuala Lumpur

³ Bioassay Unit, Herbal Medicine Research Centre, Institute for Medical Research, Jalan Pahang, 50588 Kuala Lumpur, Malaysia

*Correspondence Rozie Sarip; rozie@um.edu.my

FTIR

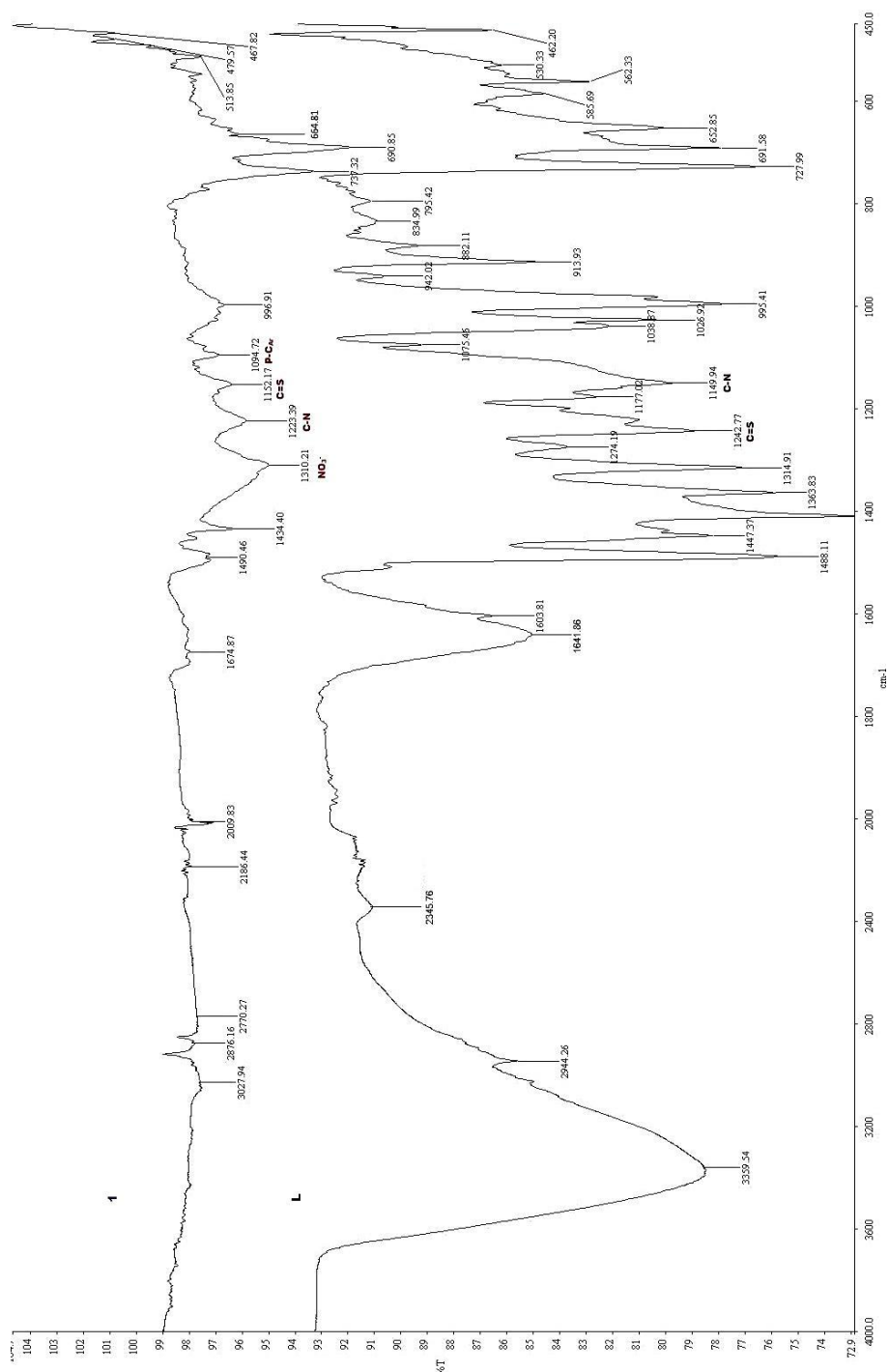


Figure S1: Comparison of the FTIR spectra for 3-benzyl-1,3-thiazolidine-2-thione (**L**) and complex **1**

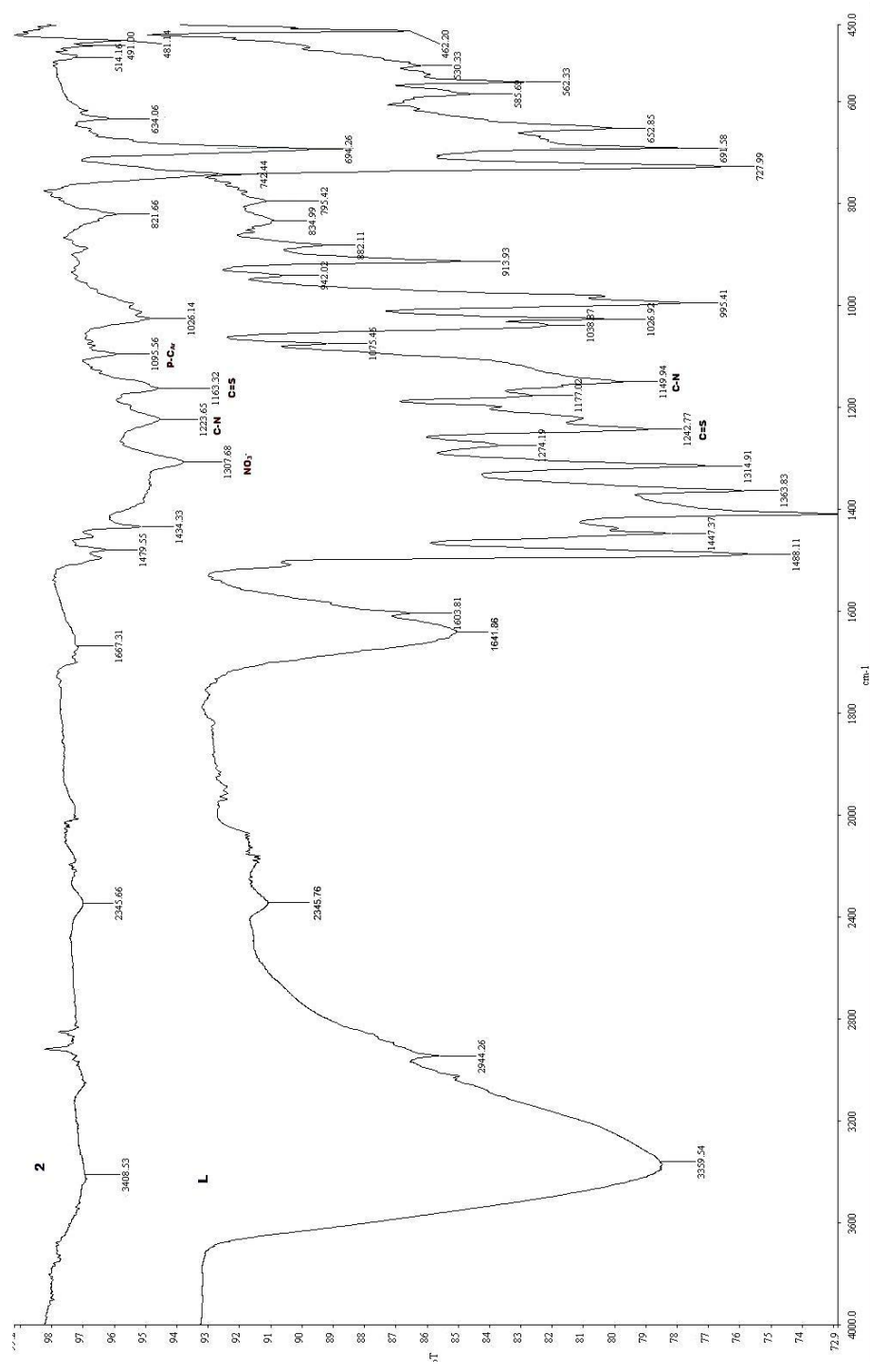


Figure S2: Comparison of the FTIR spectra for 3-benzyl-1,3-thiazolidine-2-thione (**L**) and complex **2**

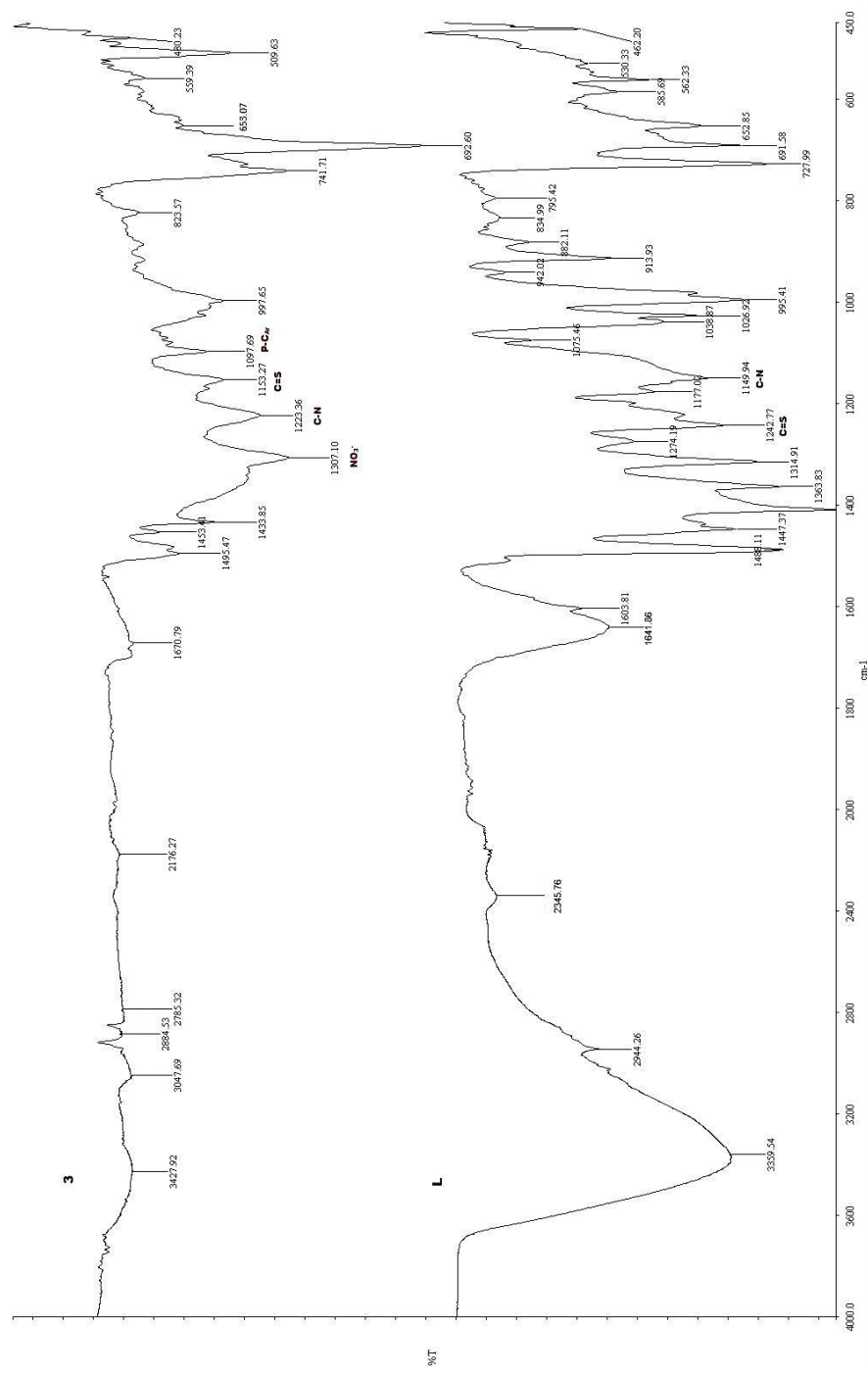


Figure S3: Comparison of the FTIR spectra for 3-benzyl-1,3-thiazolidine-2-thione (L) and complex 3

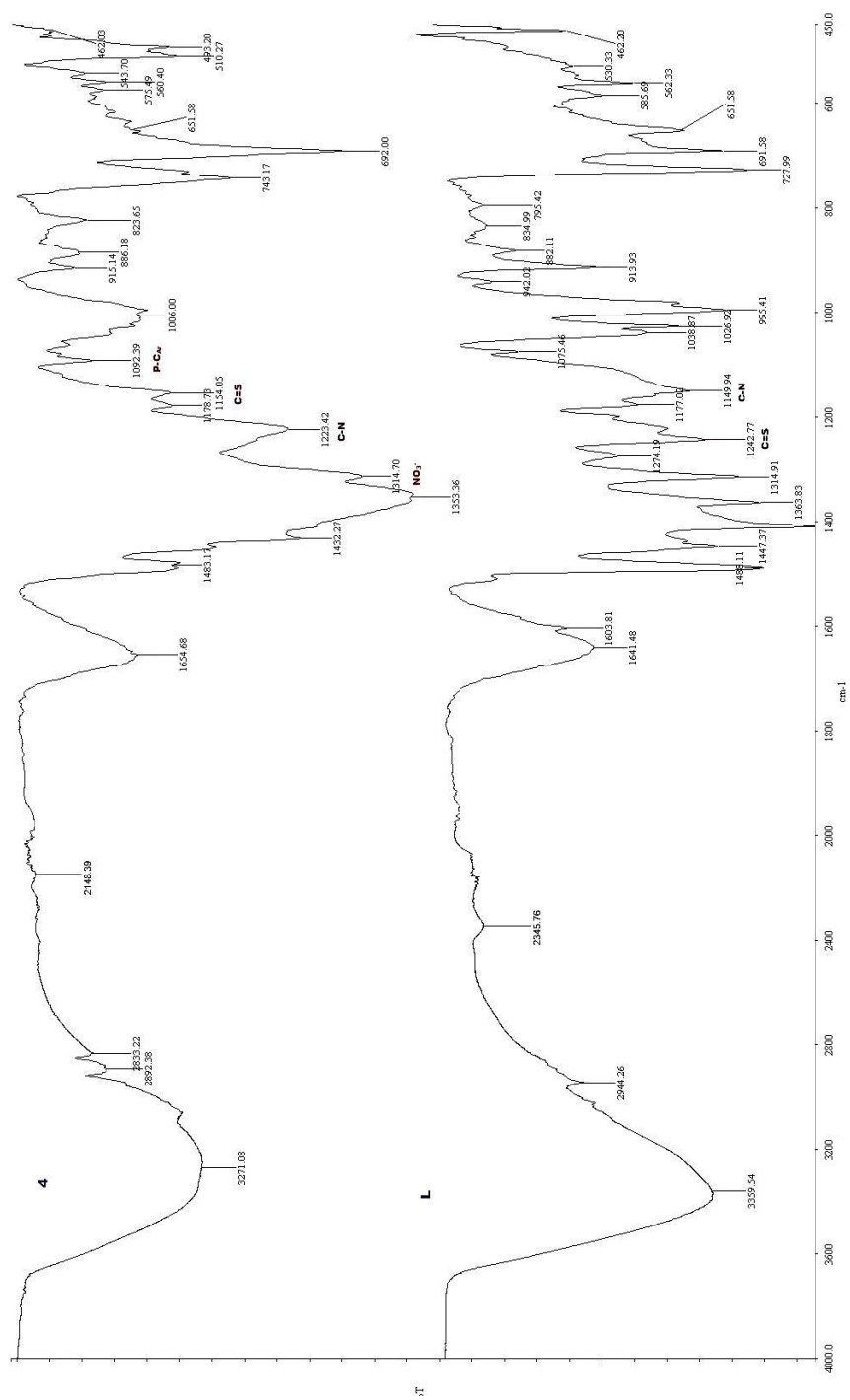


Figure S4: Comparison of the FTIR spectra for 3-benzyl-1,3-thiazolidine-2-thione (L) and complex 4

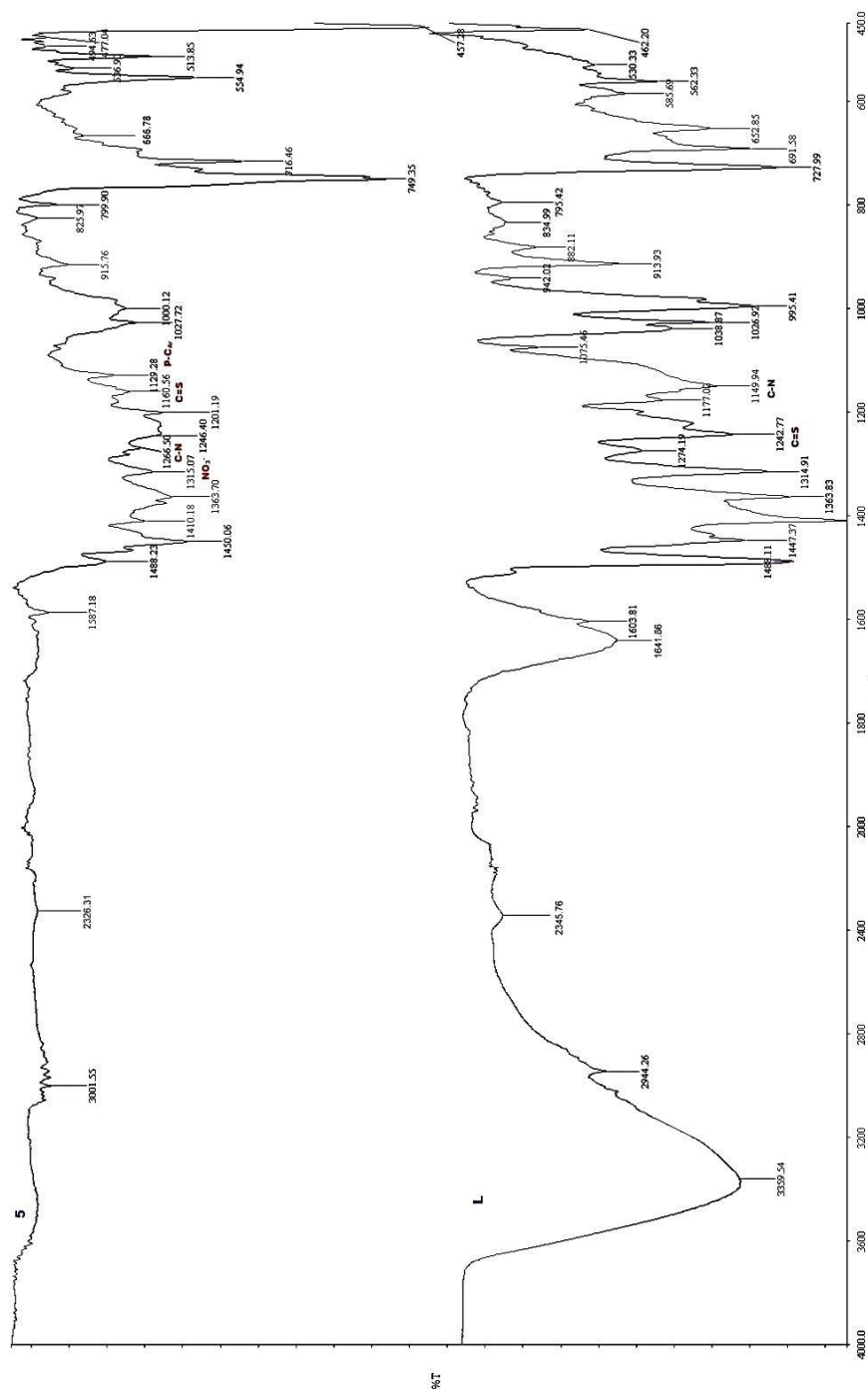


Figure S5: Comparison of the FTIR spectra for 3-benzyl-1,3-thiazolidine-2-thione (L) and complex 5

NMR

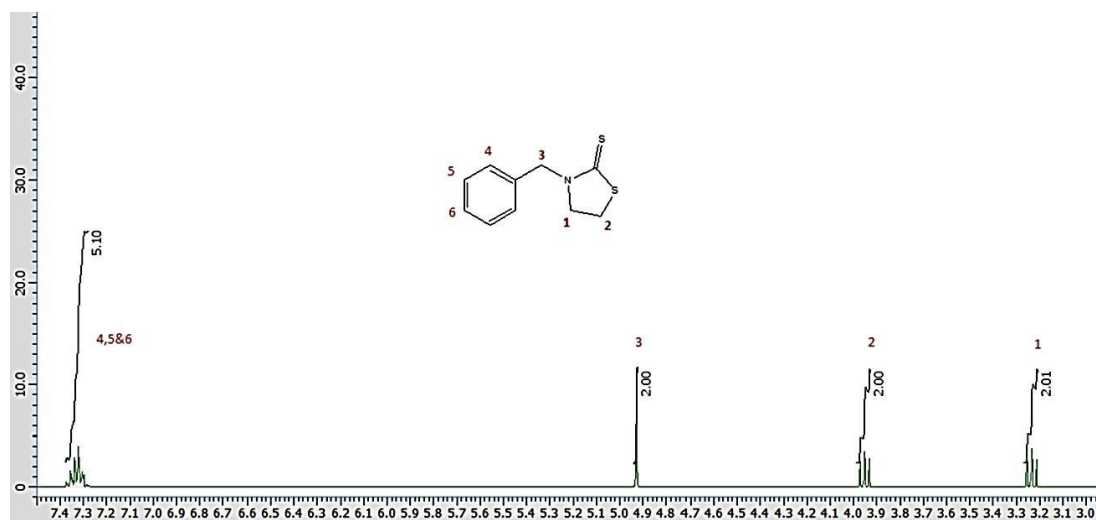


Figure S6: ^1H NMR spectrum for 3-benzyl-1,3-thiazolidine-2-thione (L)

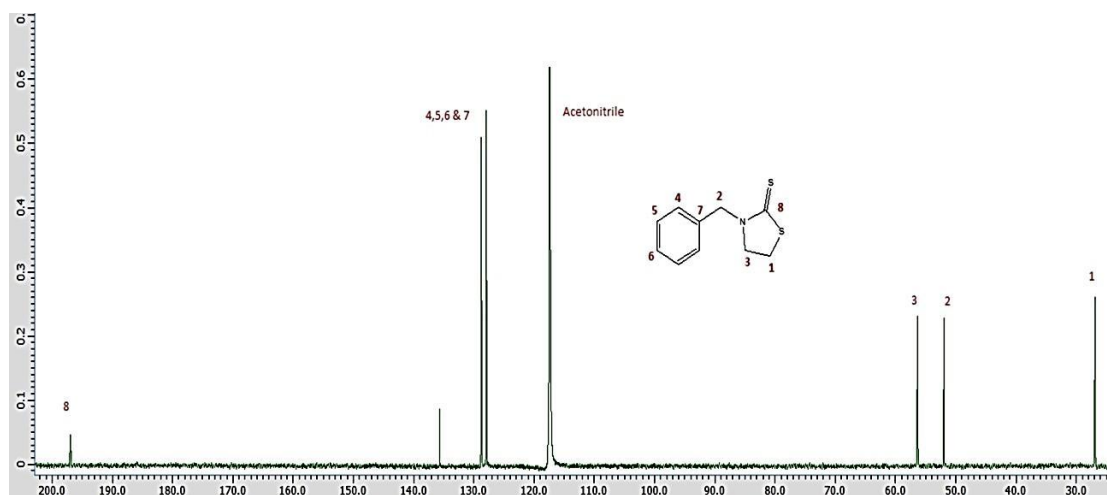


Figure S7: ^{13}C NMR spectrum for 3-benzyl-1,3-thiazolidine-2-thione (L)

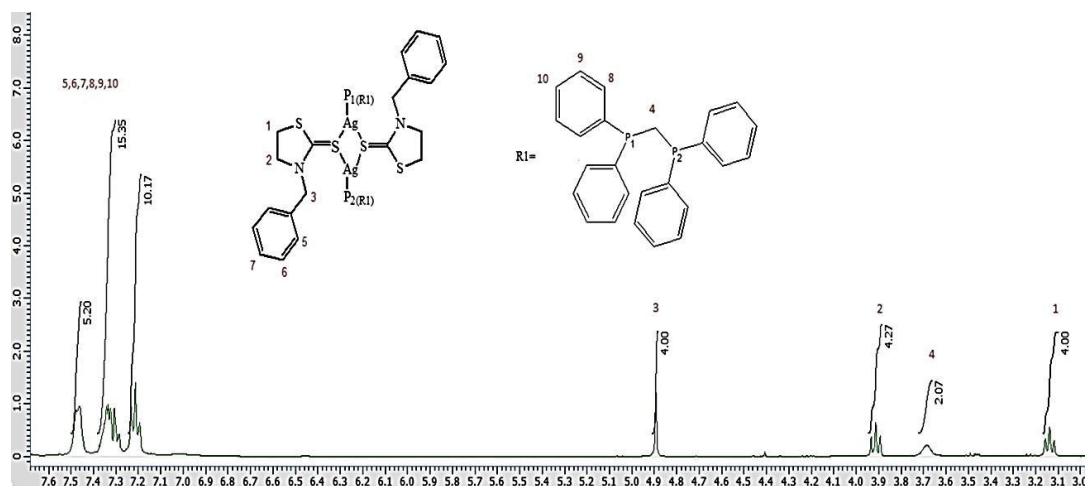


Figure S8: ^1H NMR spectrum for complex **1**

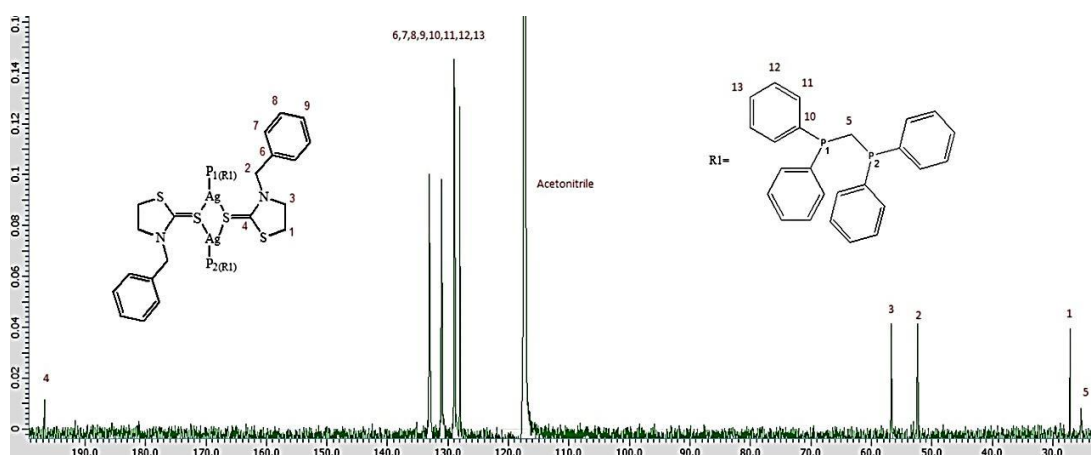


Figure S9: ^{13}C NMR spectrum for complex **1**

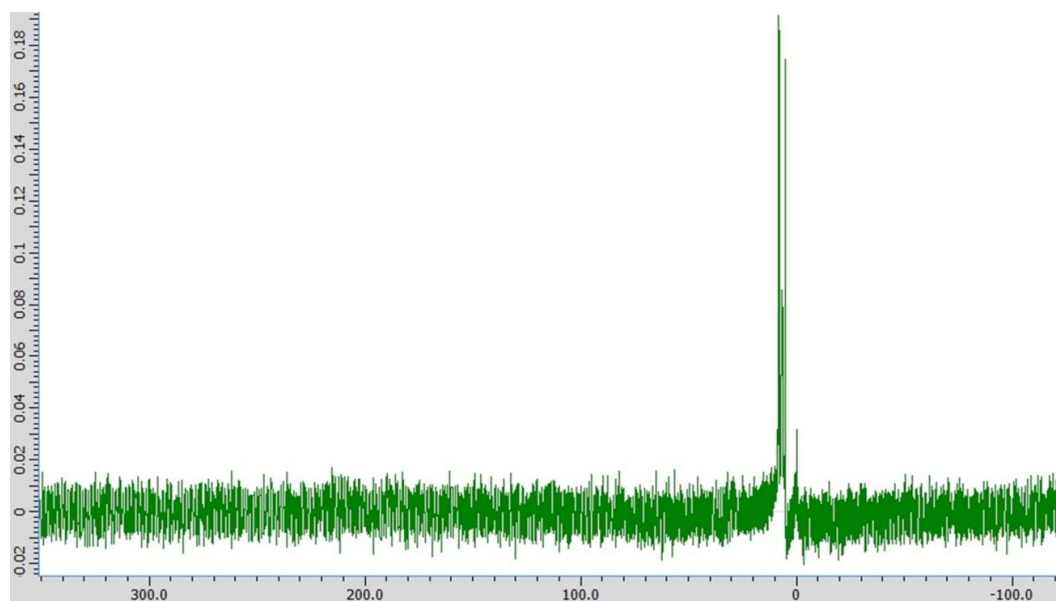


Figure S10: ^{31}P NMR spectrum for complex **1**

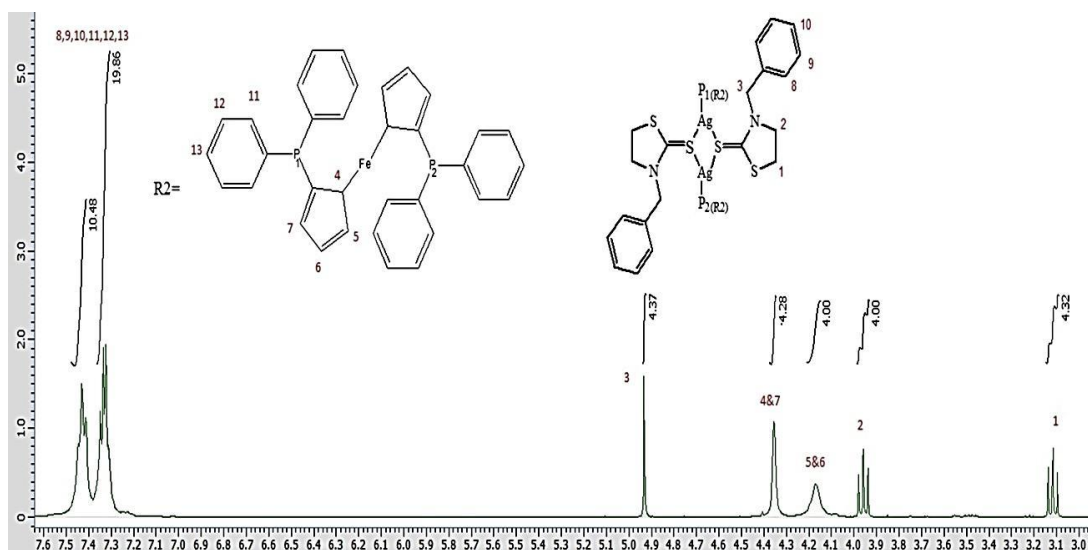


Figure S11: ^1H NMR spectrum for complex **2**

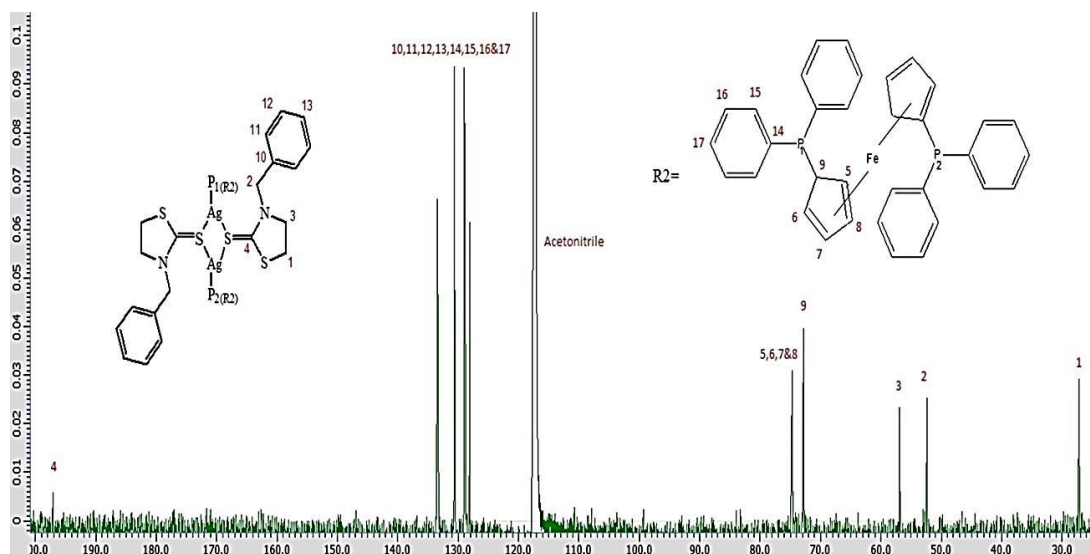


Figure S12: ^{13}C NMR spectrum for complex **2**

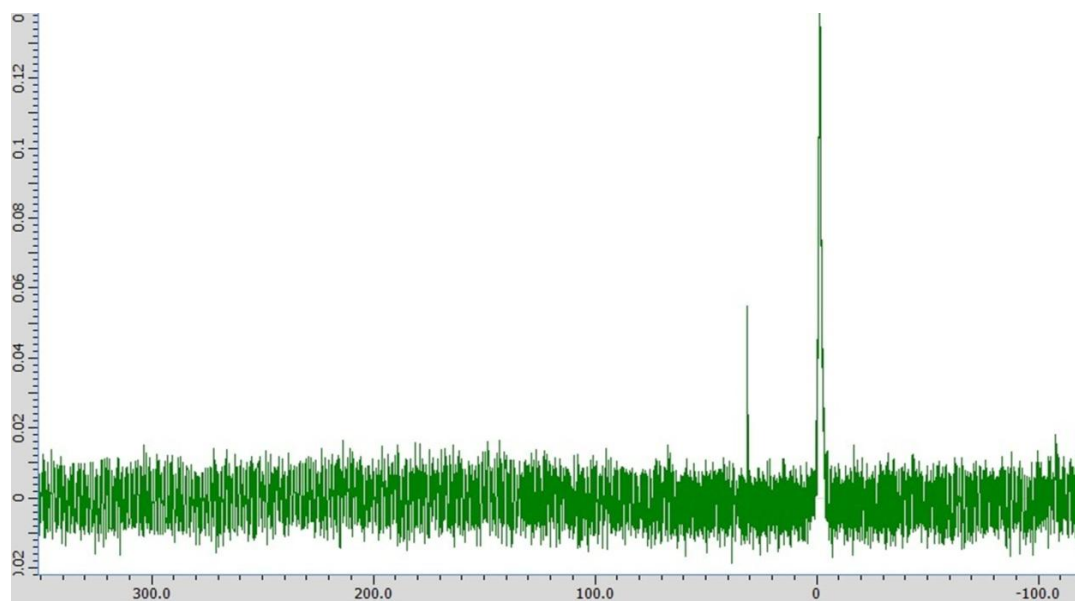


Figure S13: ^{31}P NMR spectrum for complex **2**

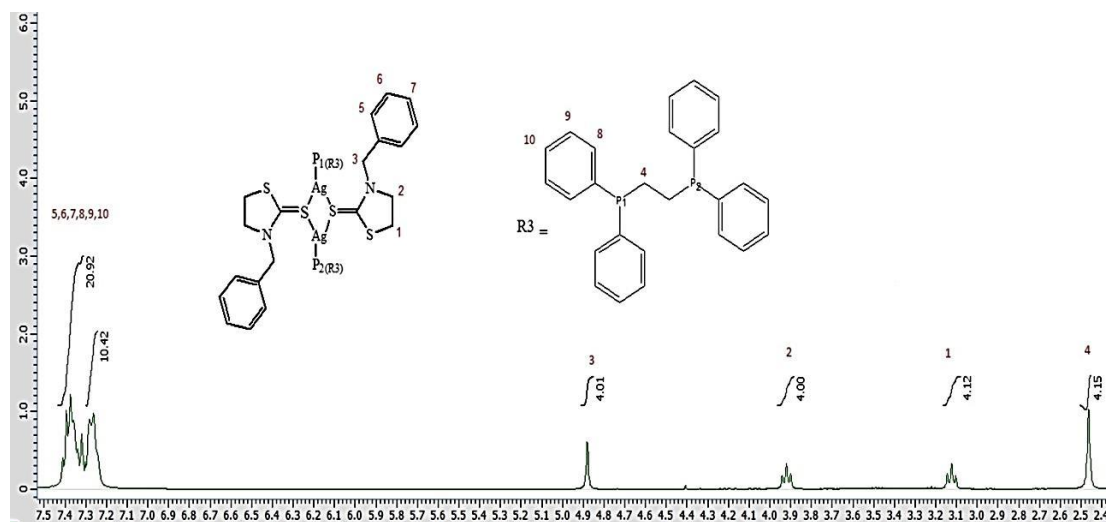


Figure S14: ¹H NMR spectrum for complex **3**

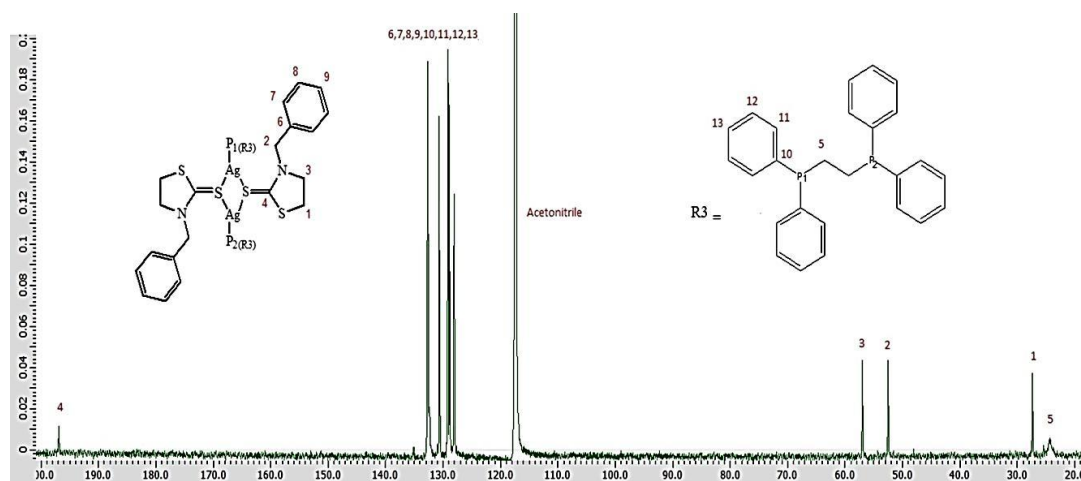


Figure S15: ¹³C NMR spectrum for complex **3**

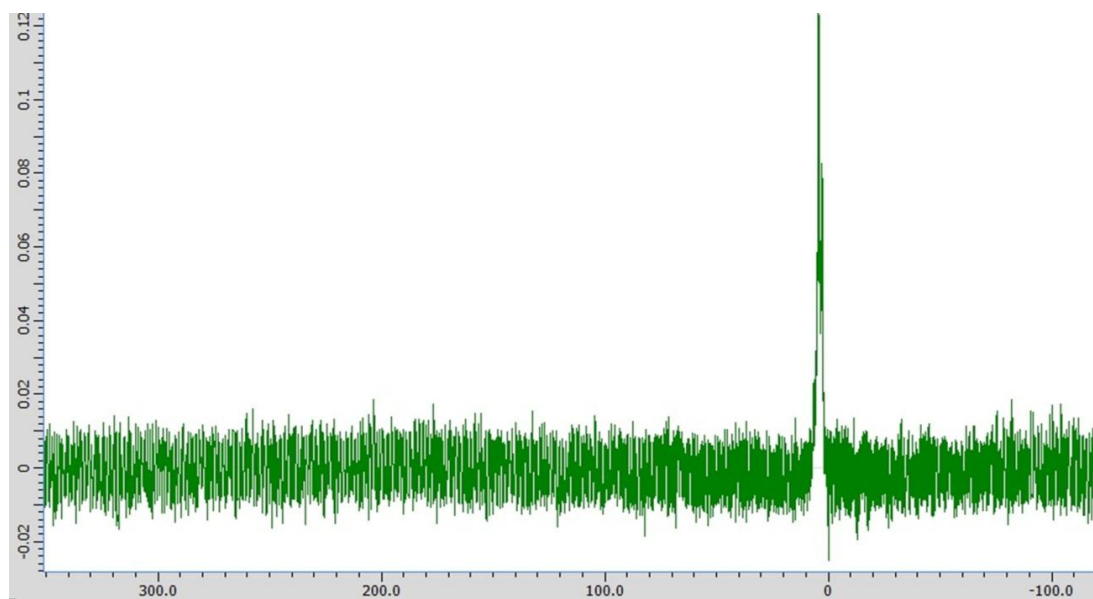


Figure S16: ^{31}P NMR spectrum for complex **3**

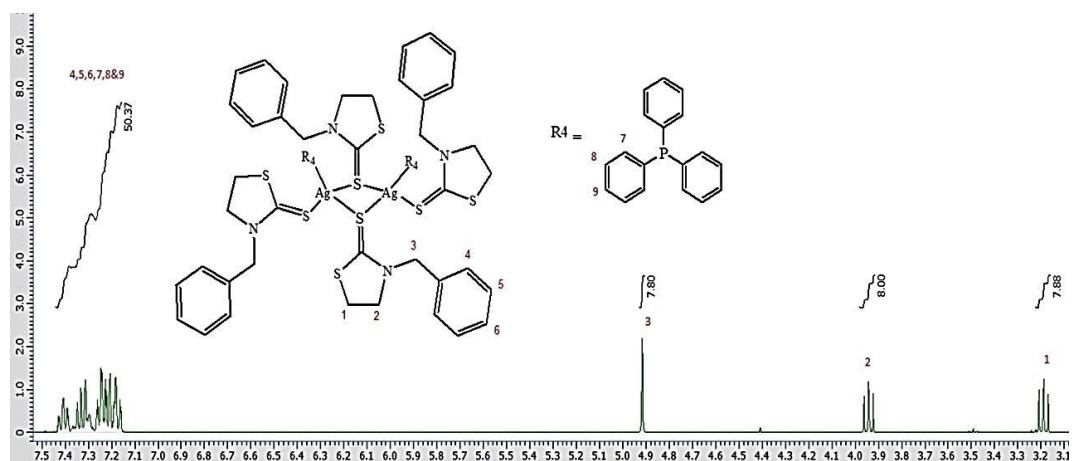


Figure S17: ^1H NMR spectrum for complex **4**

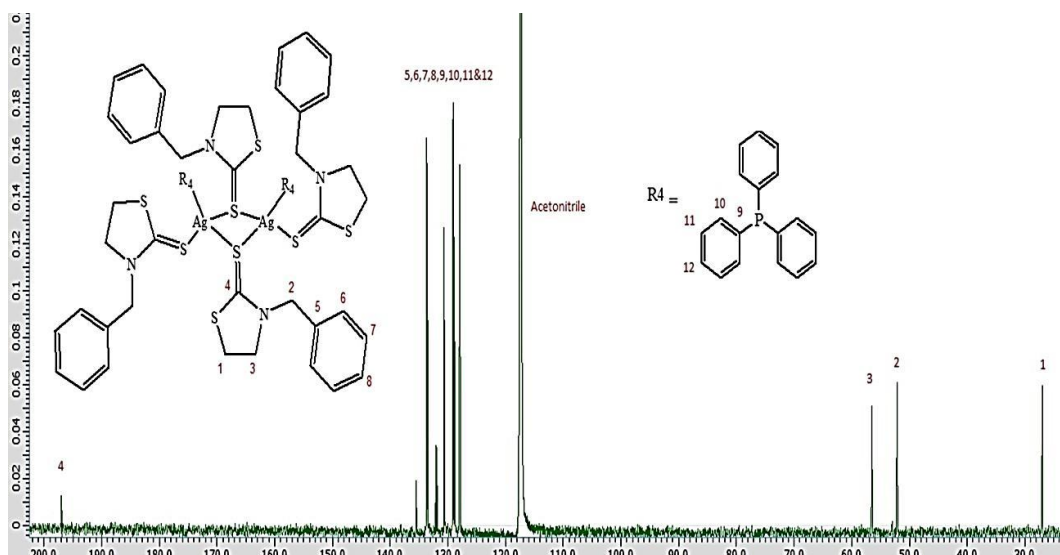


Figure S18: ^{13}C NMR spectrum for complex **4**

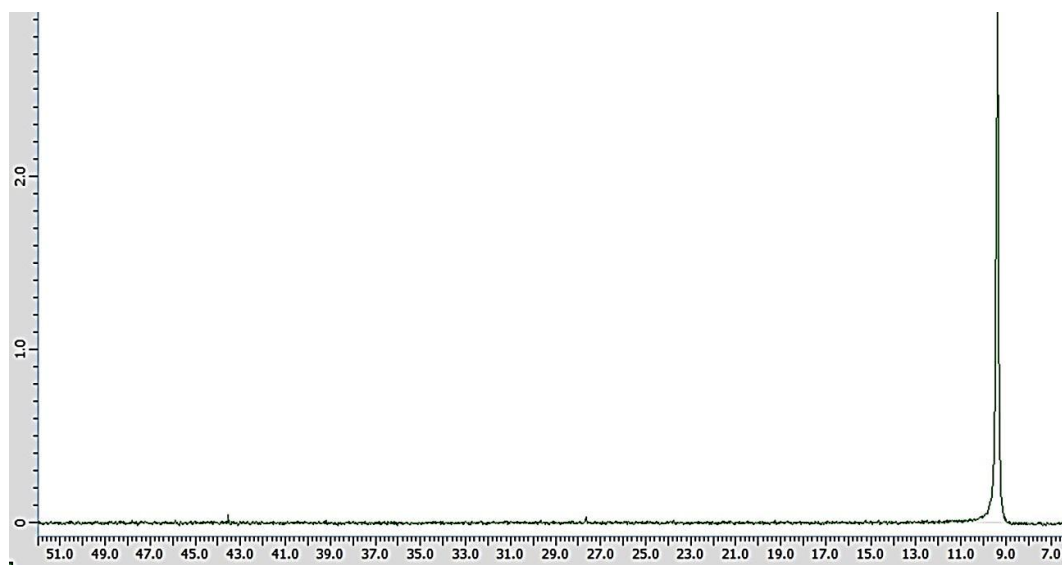


Figure S19: ^{31}P NMR spectrum for complex **4**

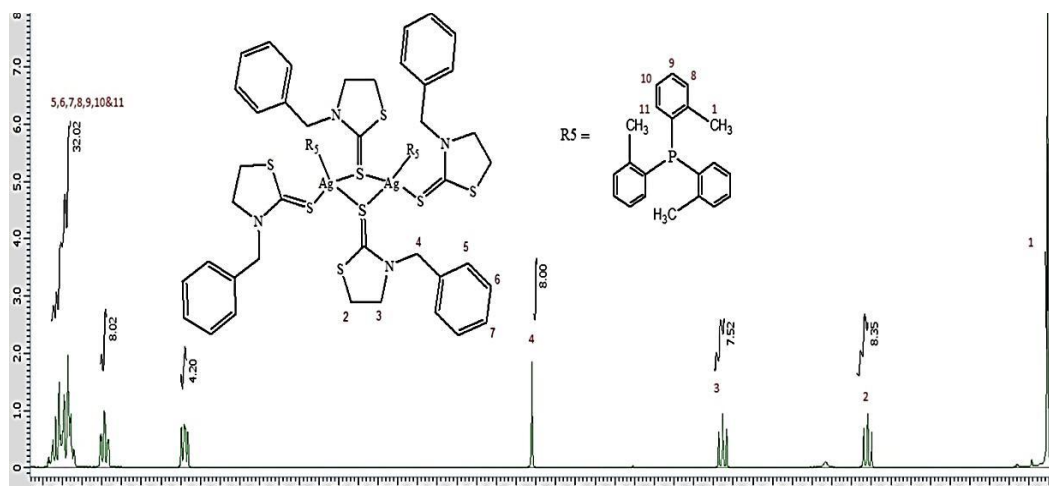


Figure S20: ^1H NMR spectrum for complex **5**

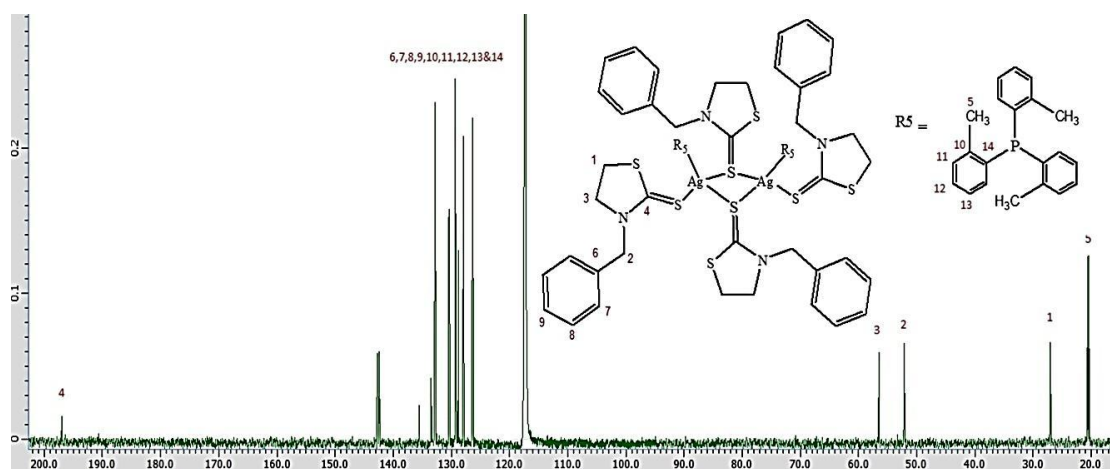


Figure S21: ^{13}C NMR spectrum for complex **5**

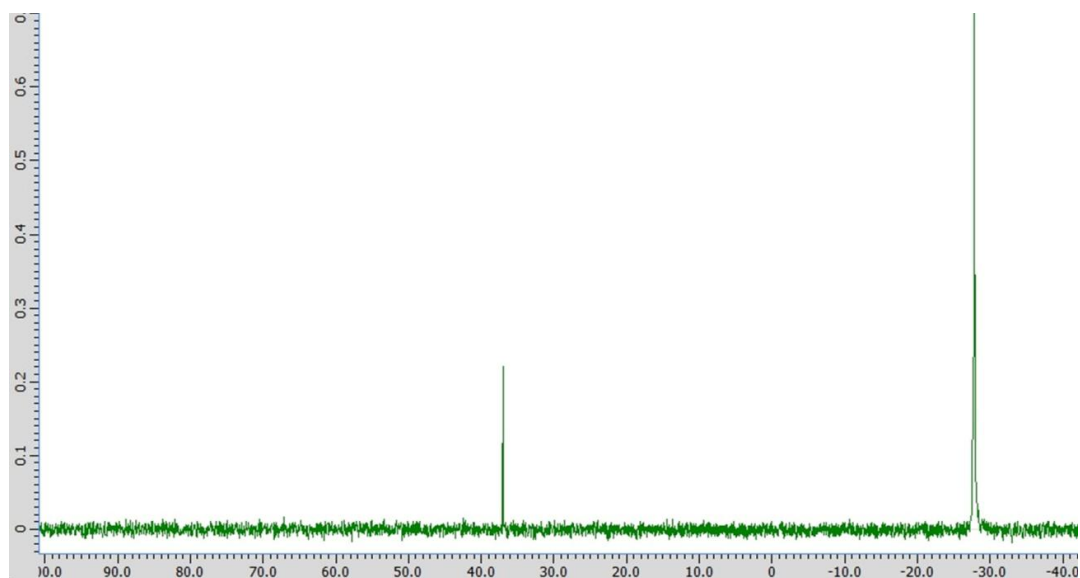


Figure S22: ^{31}P NMR spectrum for complex **5**

EDX

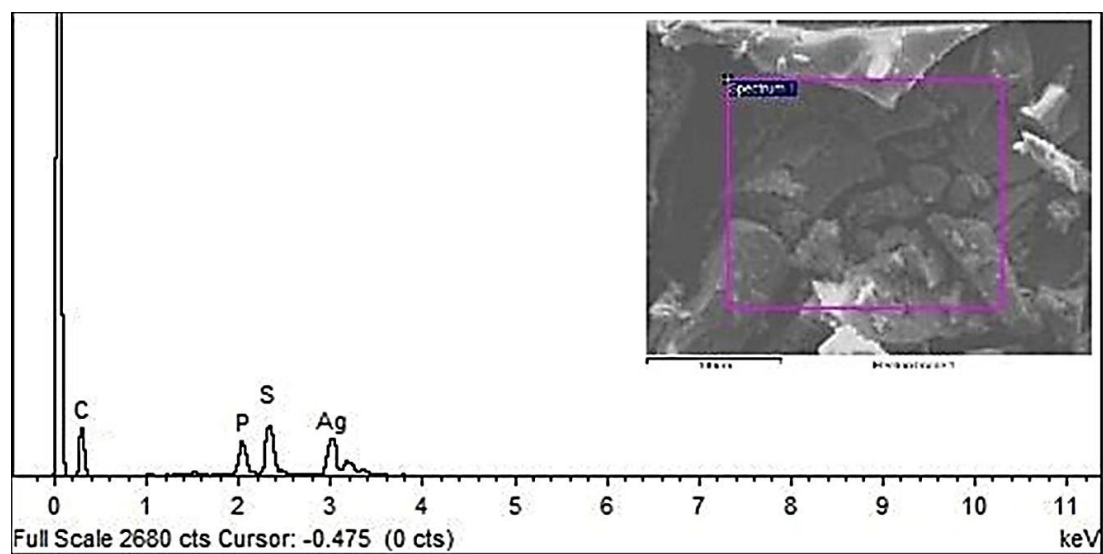


Figure S23: EDX analysis for complex 1

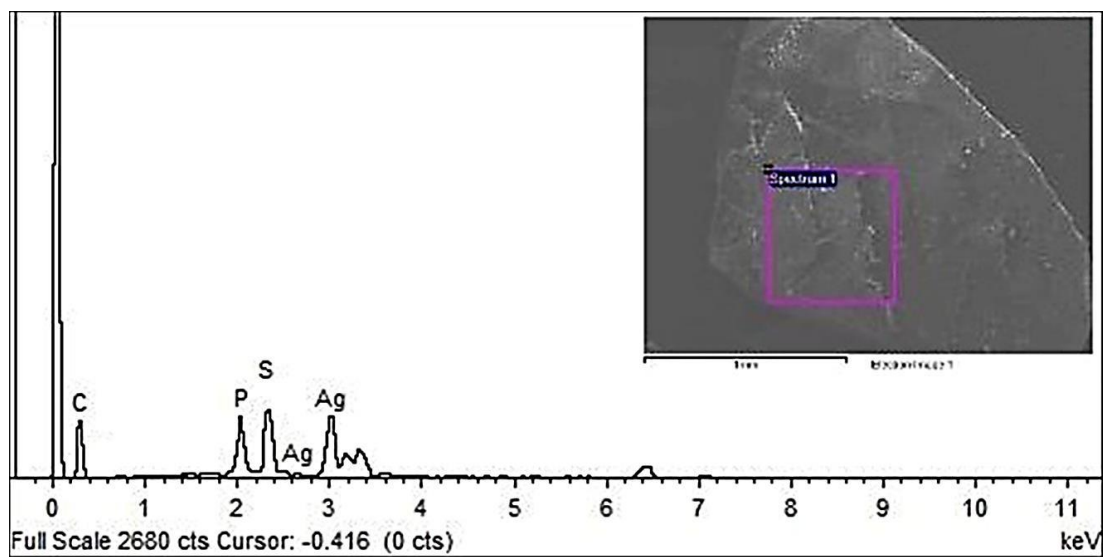


Figure S24: EDX analysis for complex 2

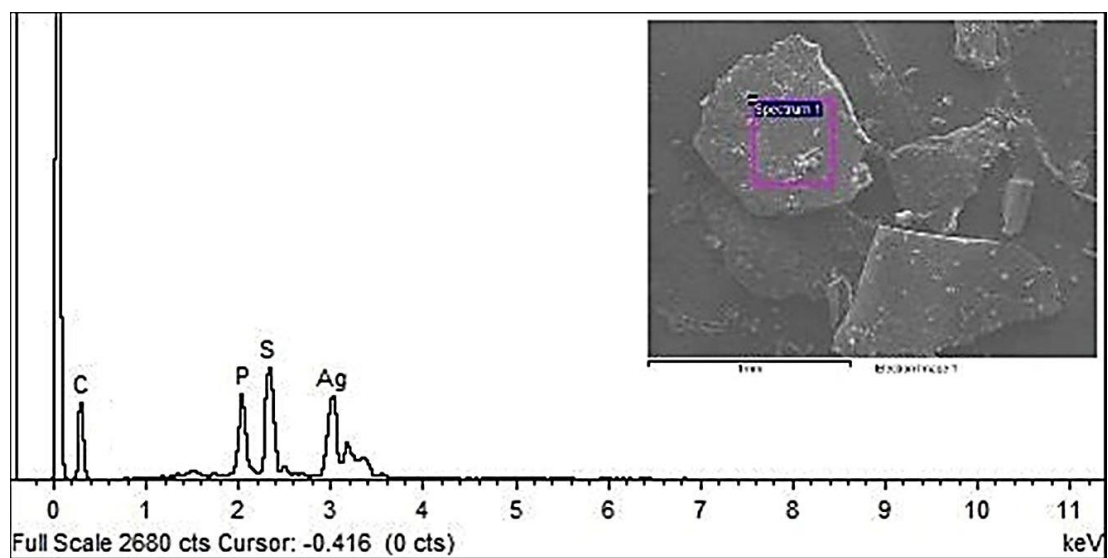


Figure S25: EDX analysis for complex 3

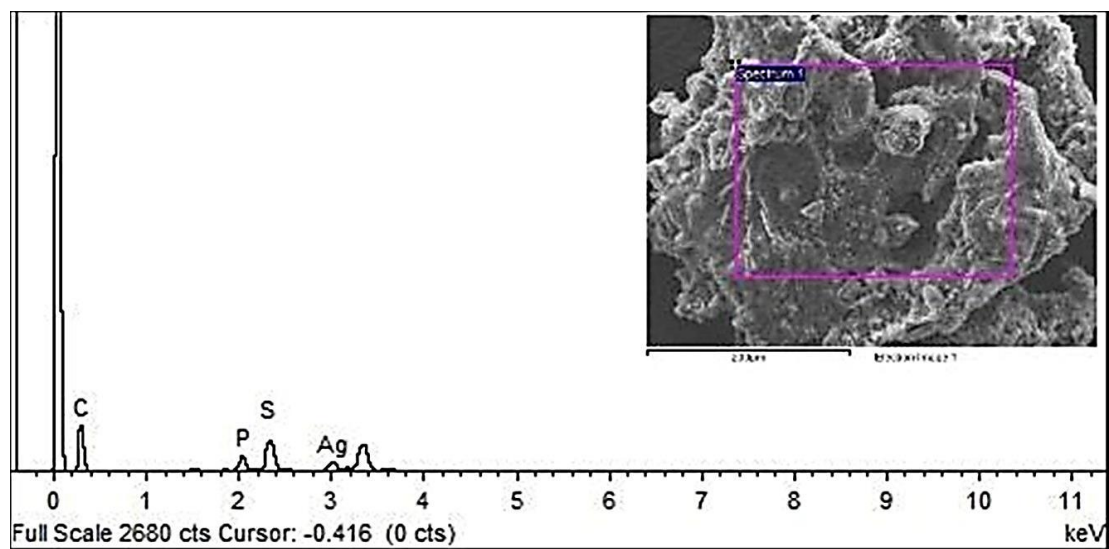


Figure S26: EDX analysis for complex 4

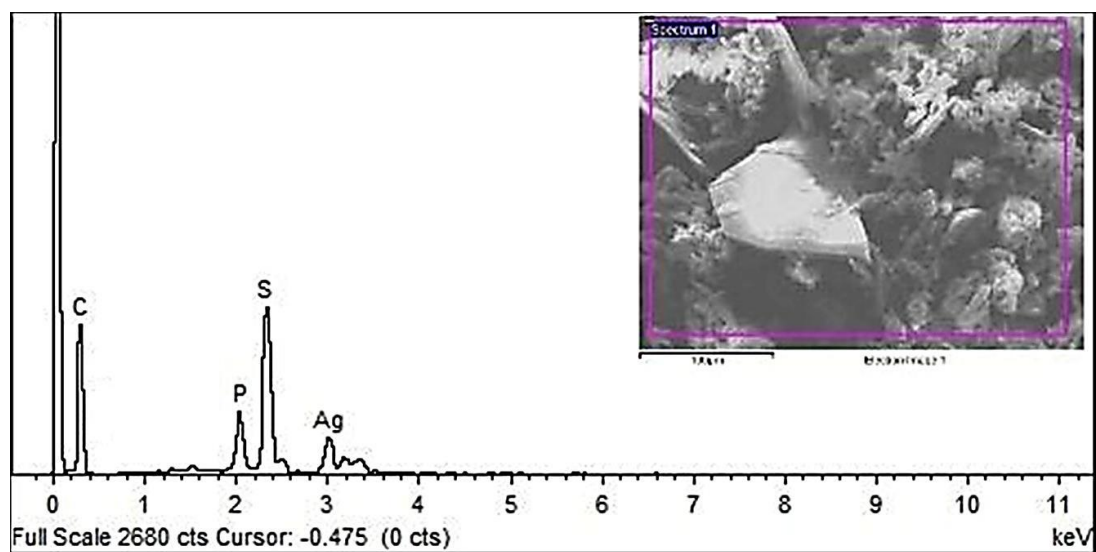


Figure S27: EDX analysis for complex **5**

PXRD

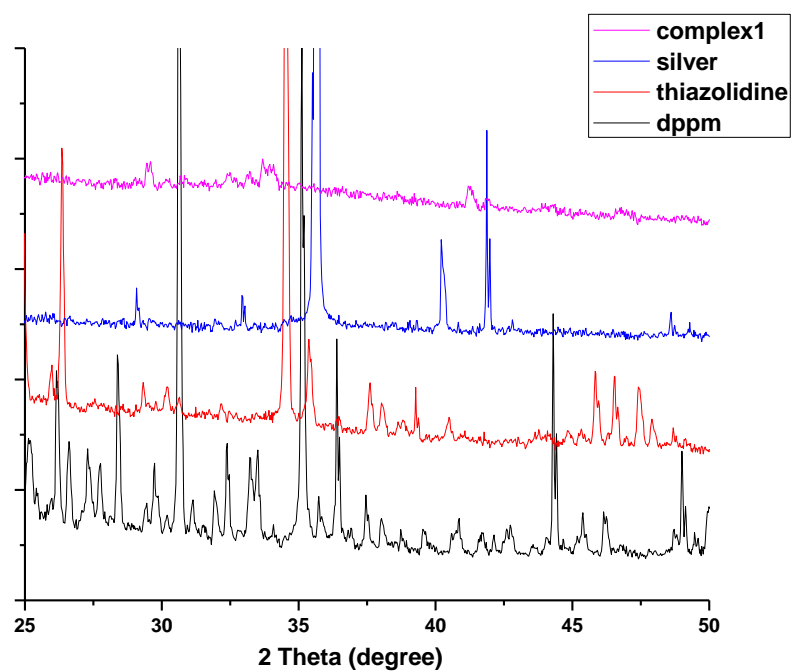


Figure S28: PXRD results for complex 1

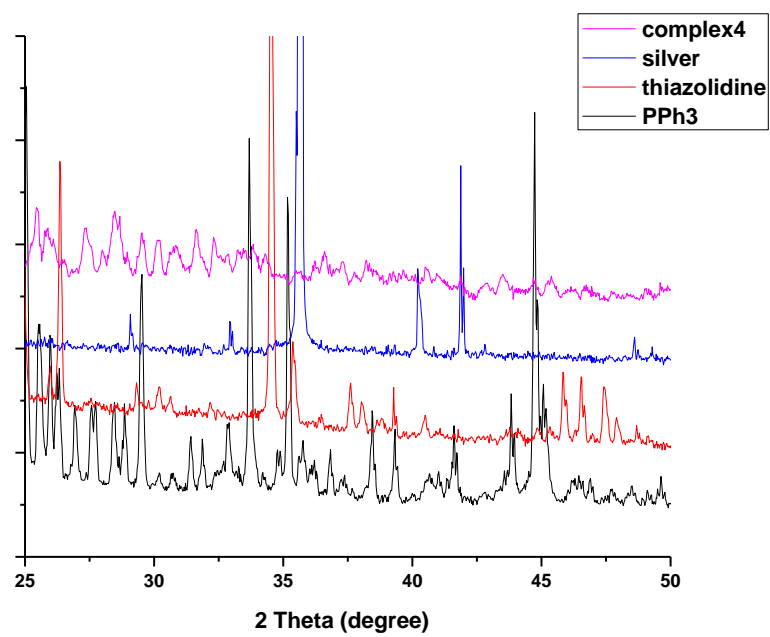


Figure S29: PXRD results for complex 4

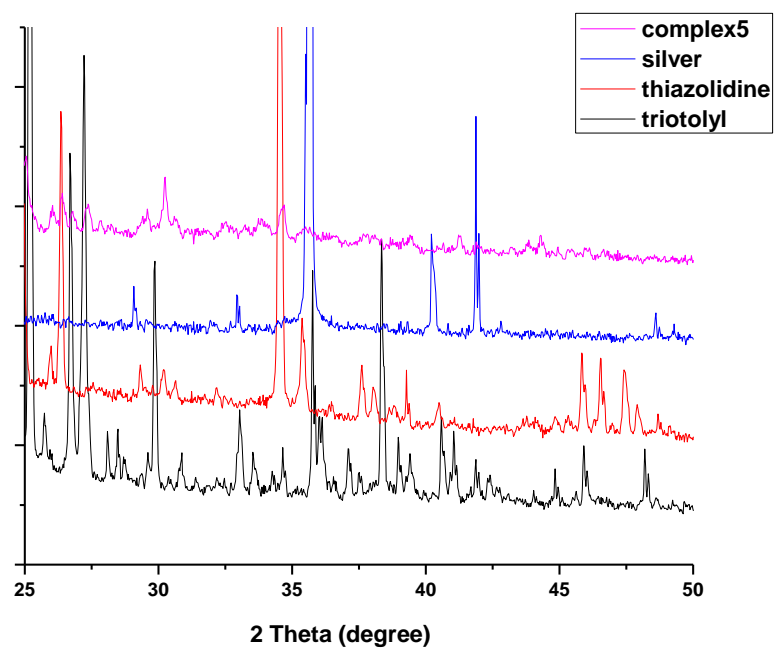


Figure S30: PXRD results for complex **5**

TGA

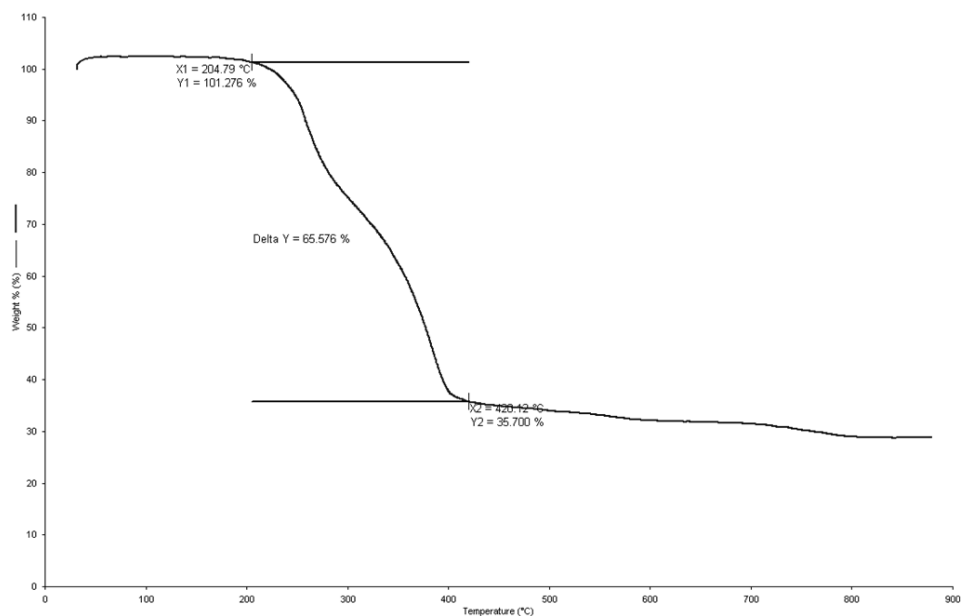


Figure S31: TGA results for complex 1

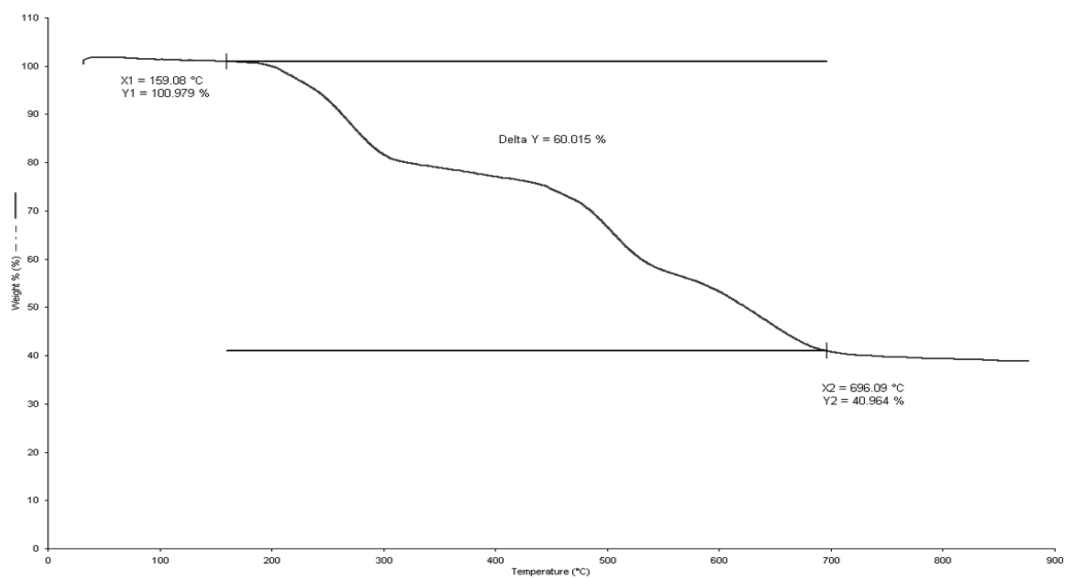


Figure S32: TGA result for complex 2

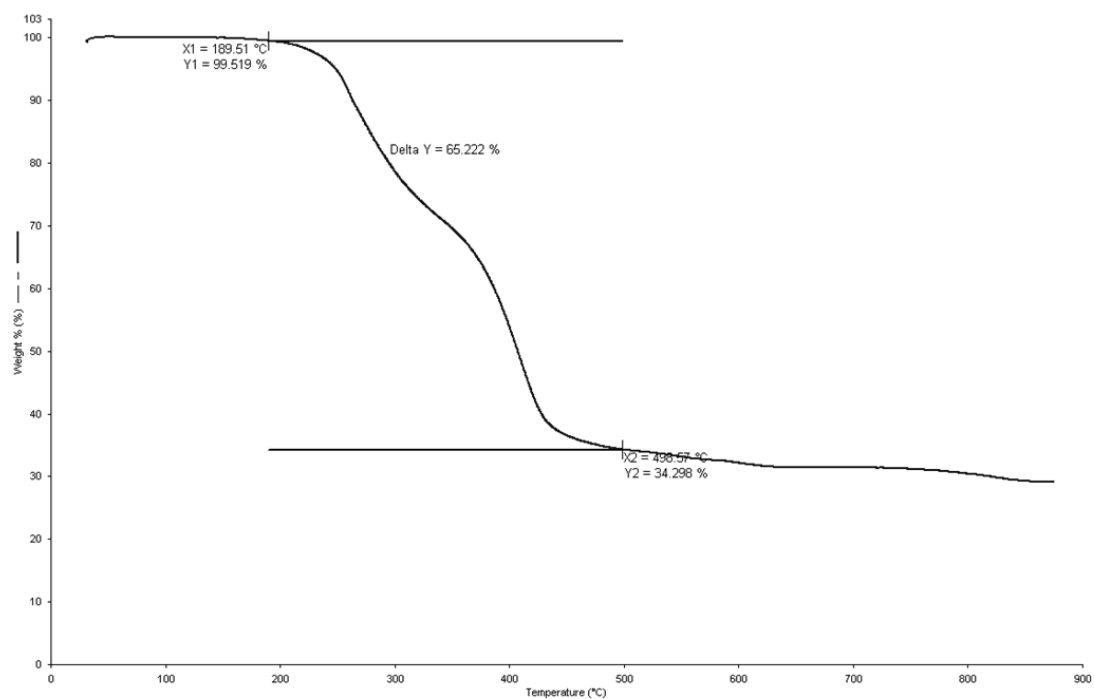


Figure S33: TGA result for complex 3

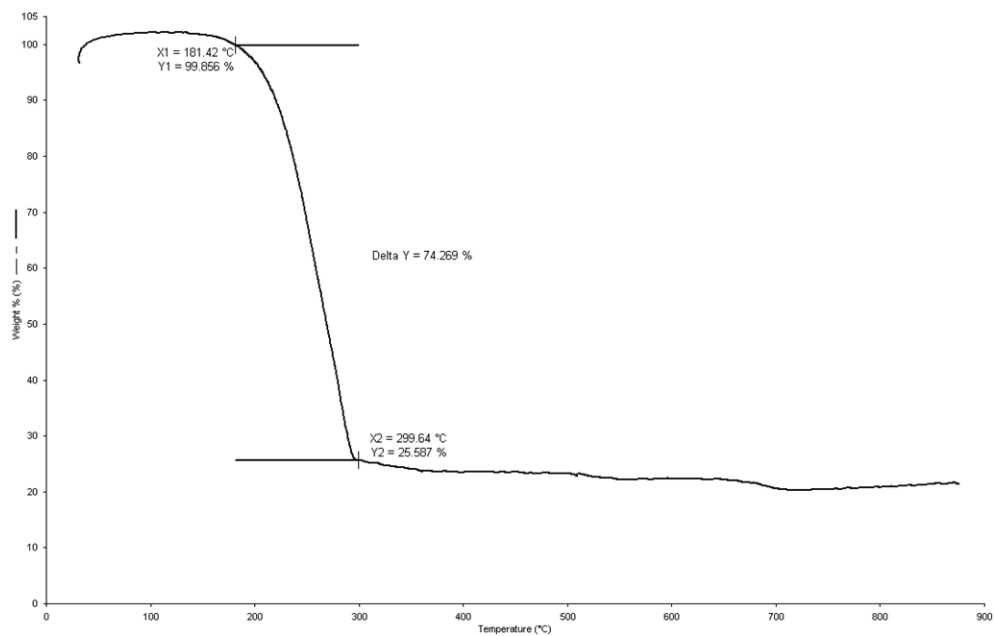


Figure S34: TGA result for complex 4

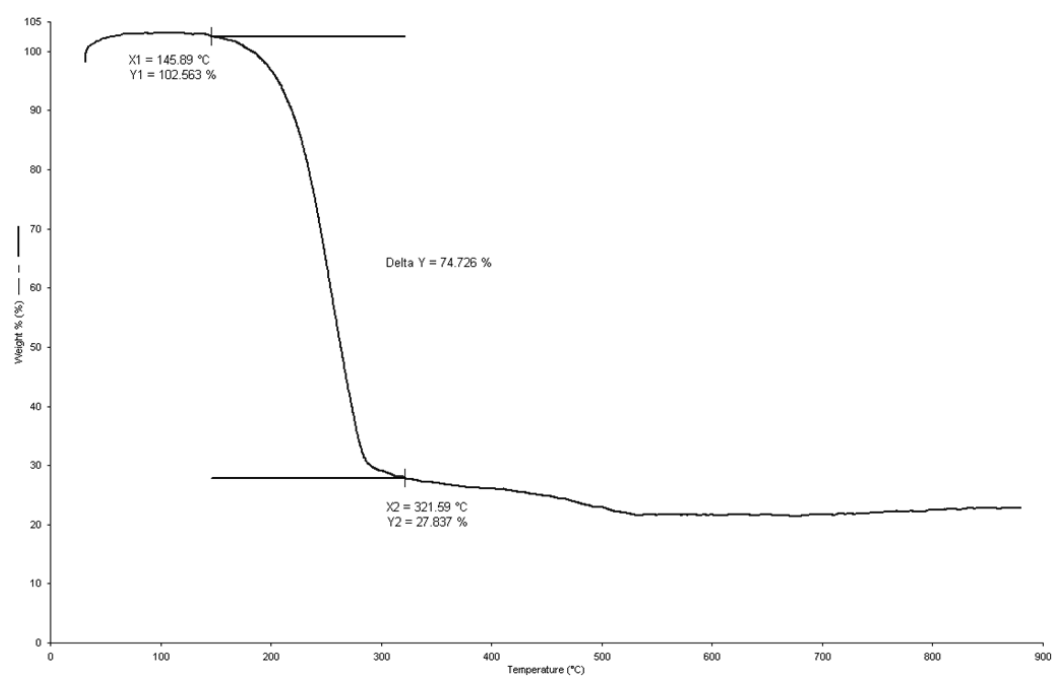


Figure S35: TGA result for complex **5**