

Figure S1 Infrared spectra for H_2L and its metal complexes.

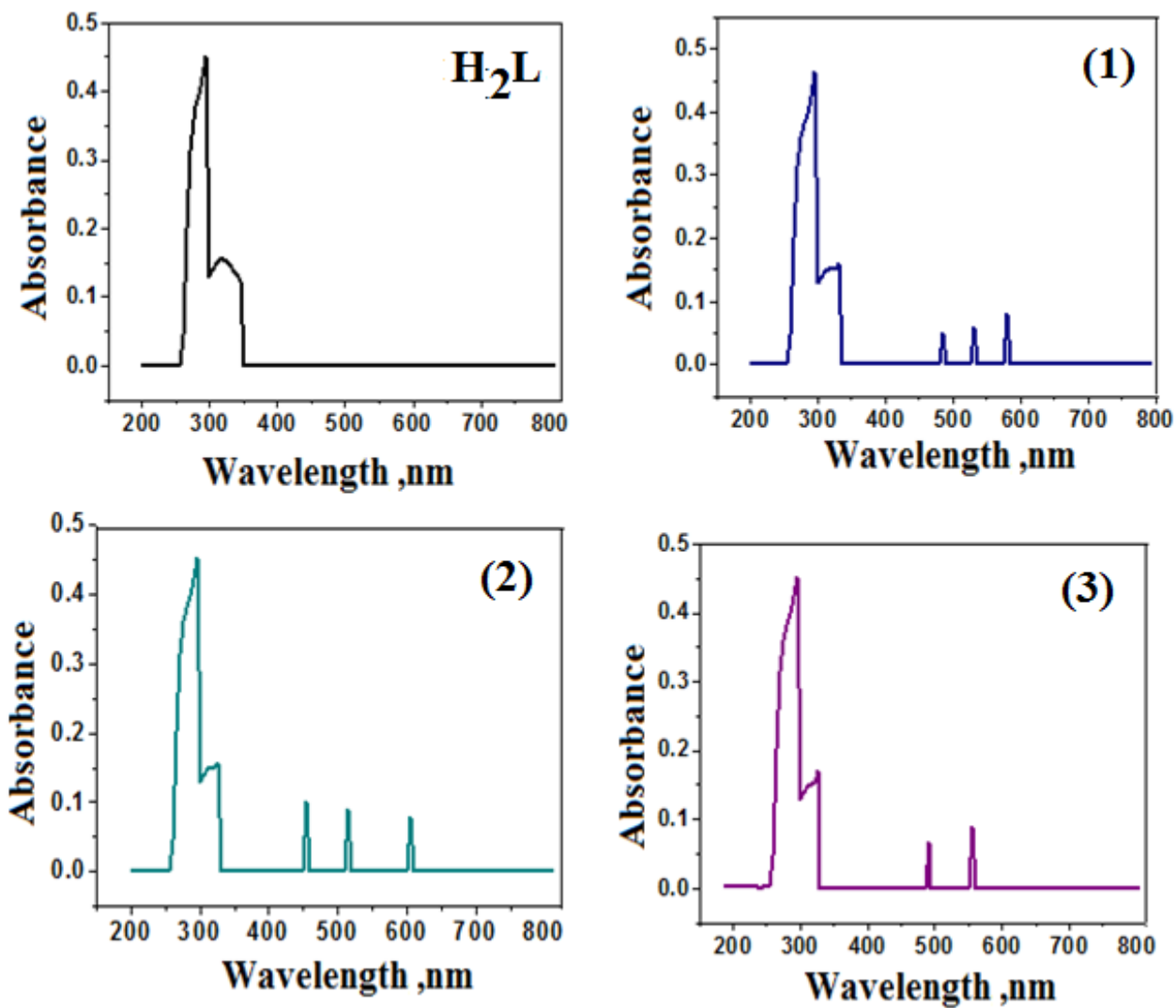


Figure S2 Electronic absorption spectra for H_2L and its metal complexes.

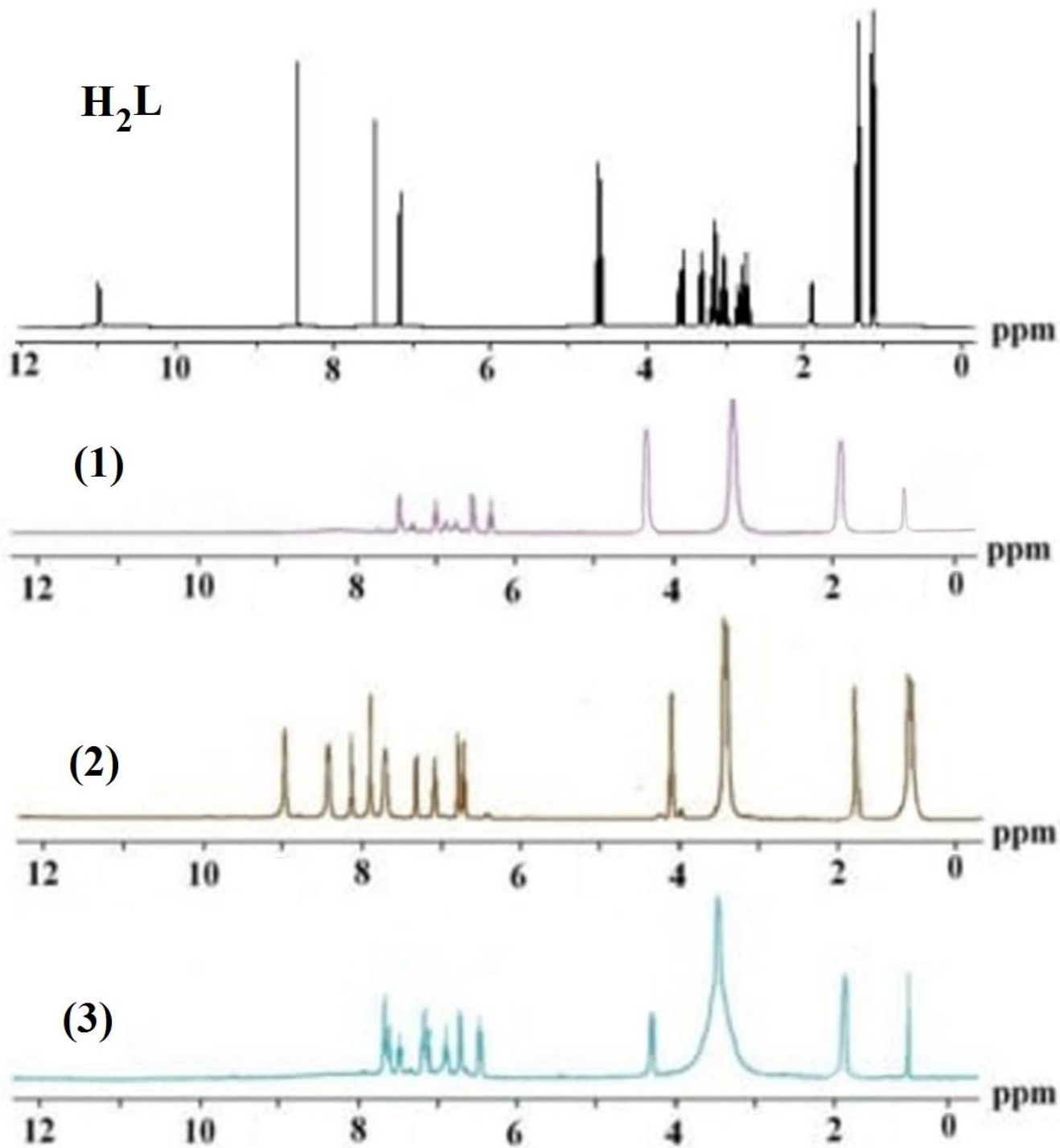


Figure S3 ¹H NMR spectra for **H₂L** and its metal complexes.

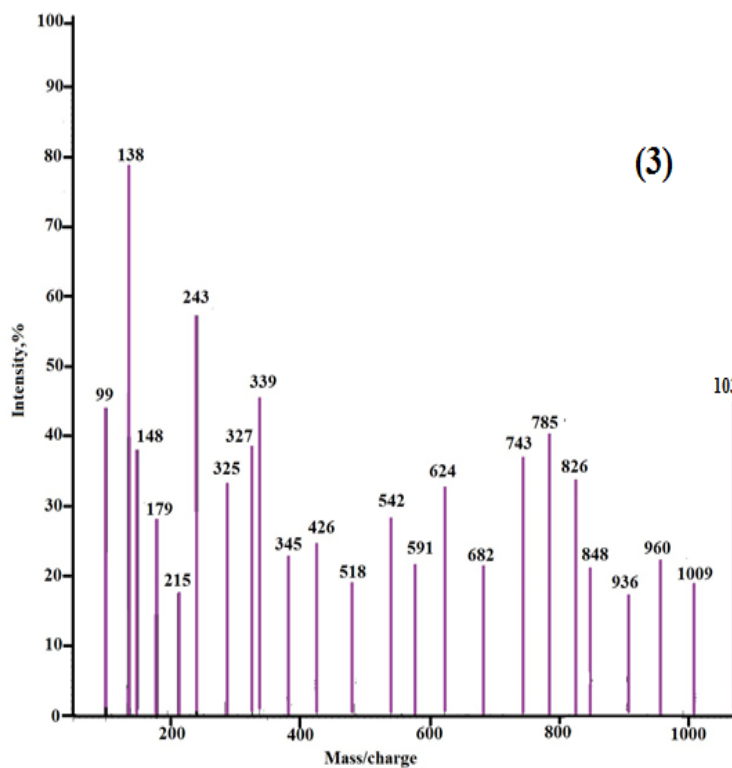
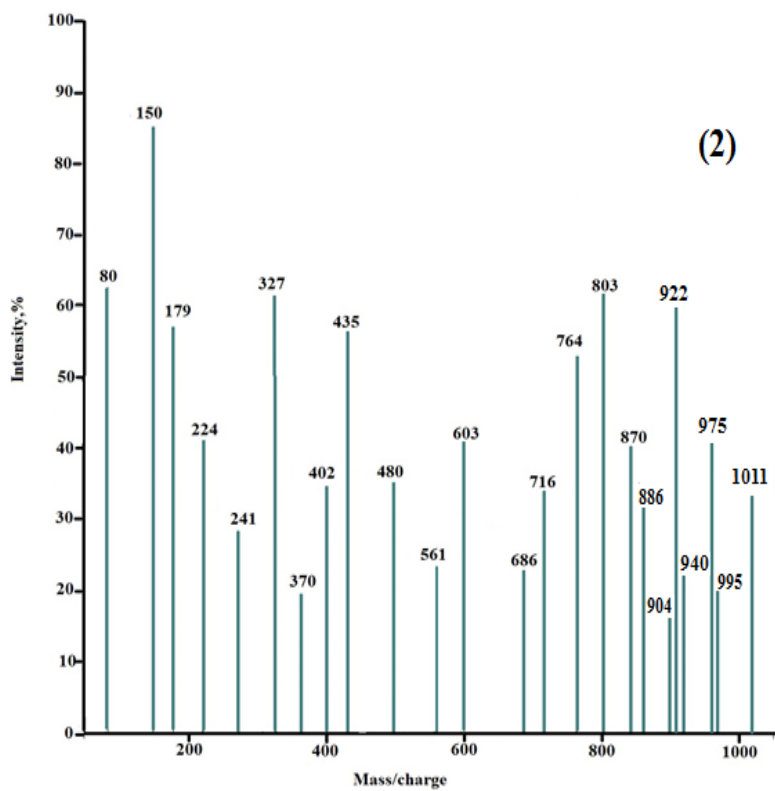
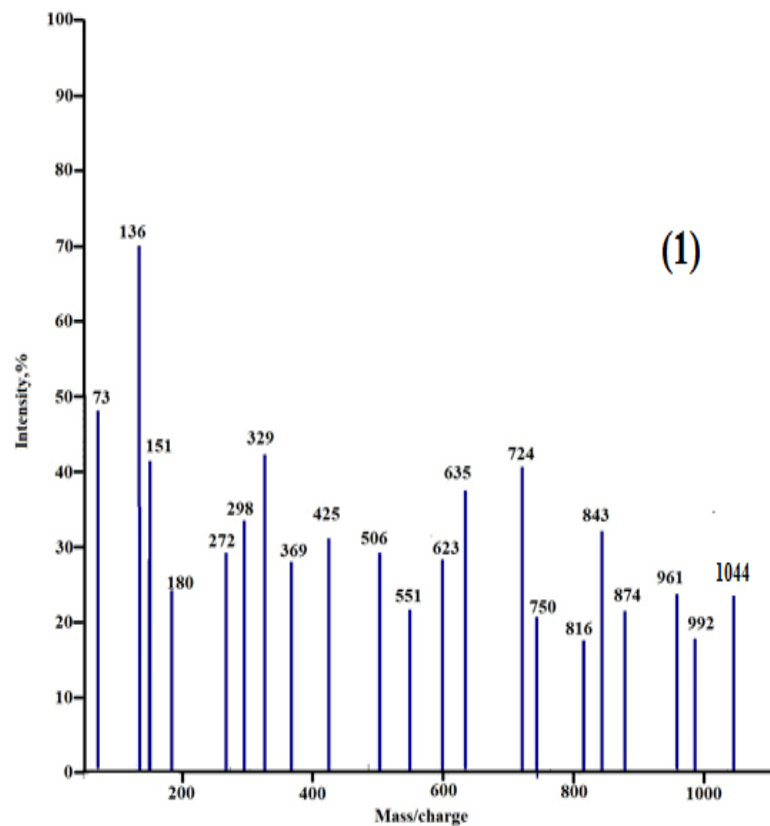
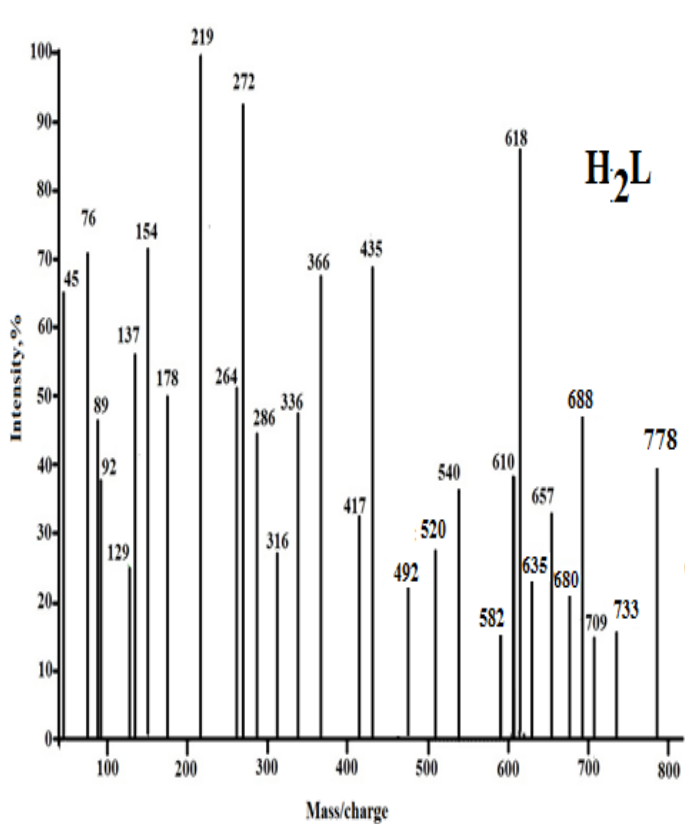


Figure S4 Mass spectra diagrams for **H₂L** and its metal complexes.

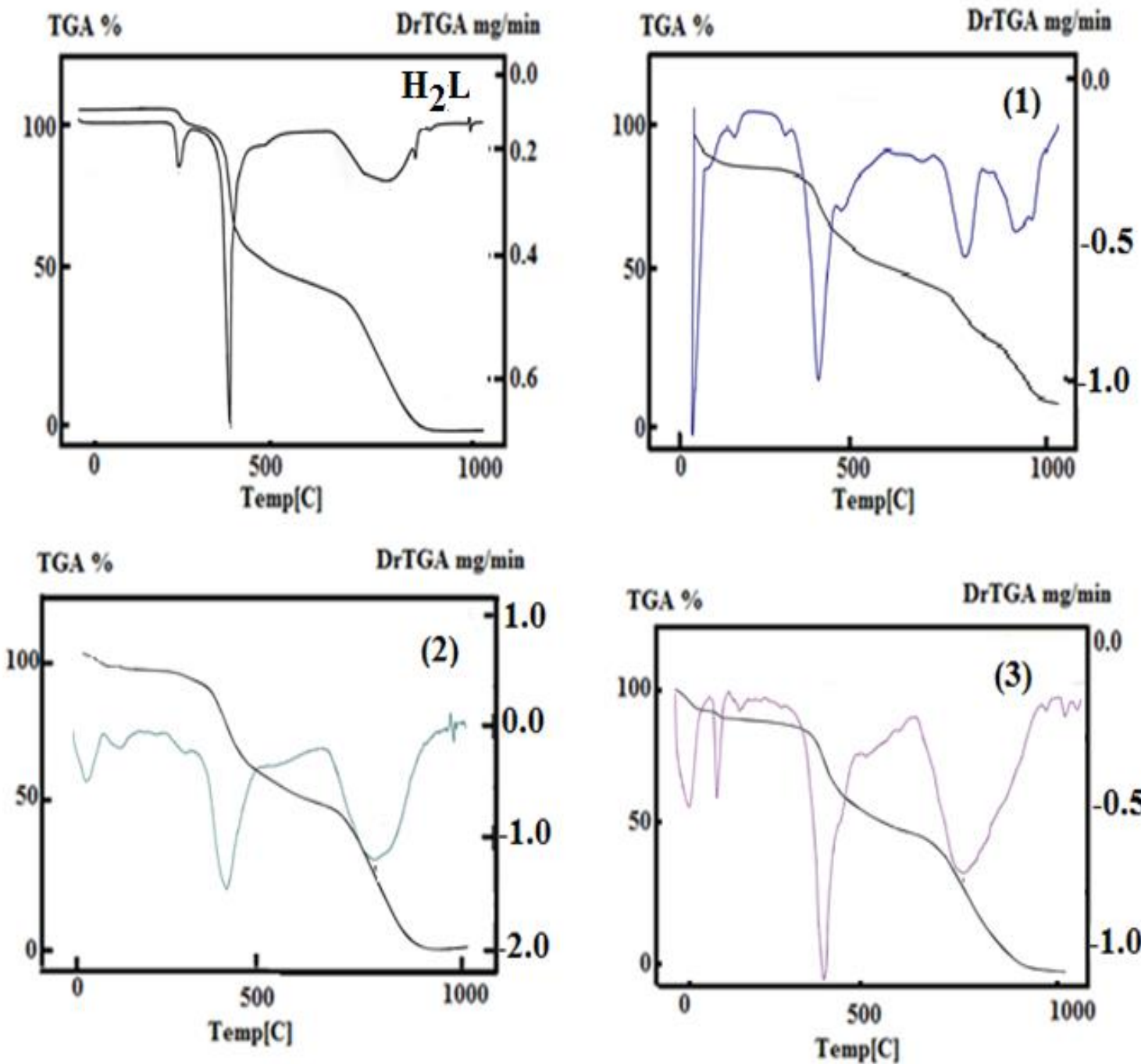
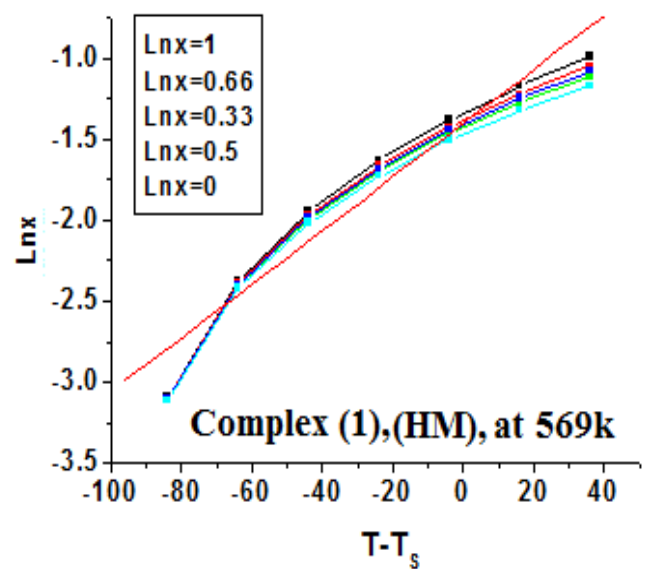
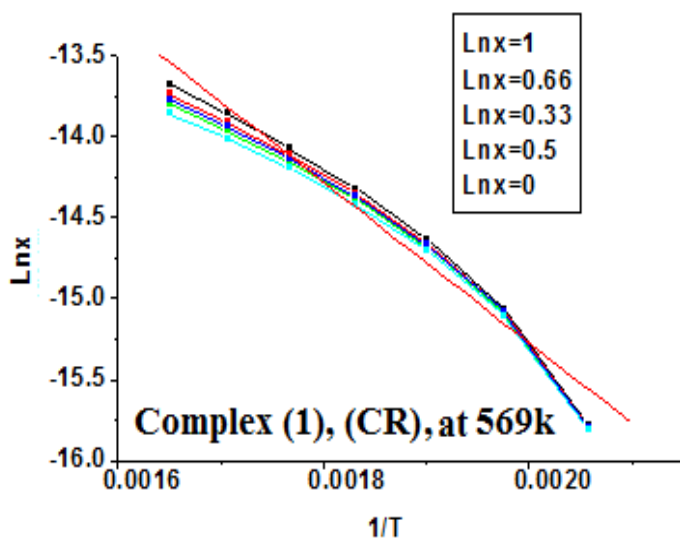
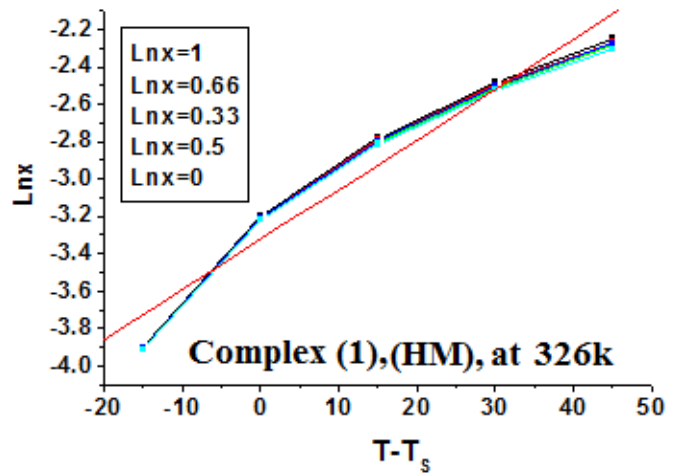
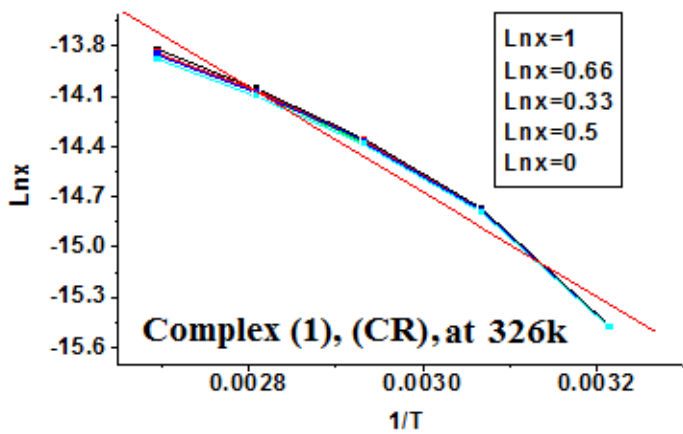
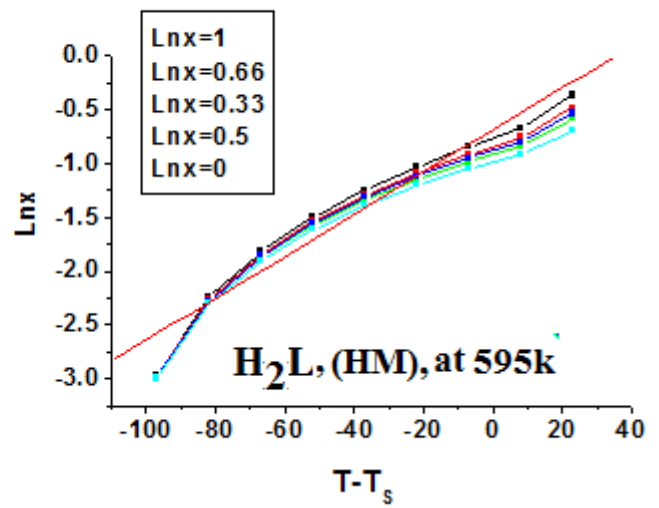
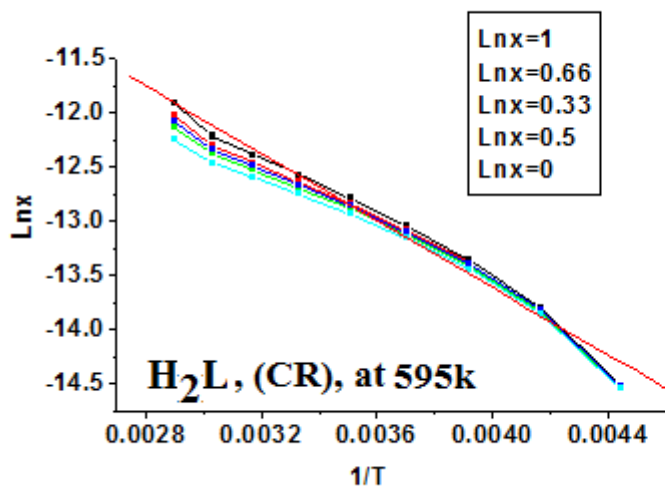
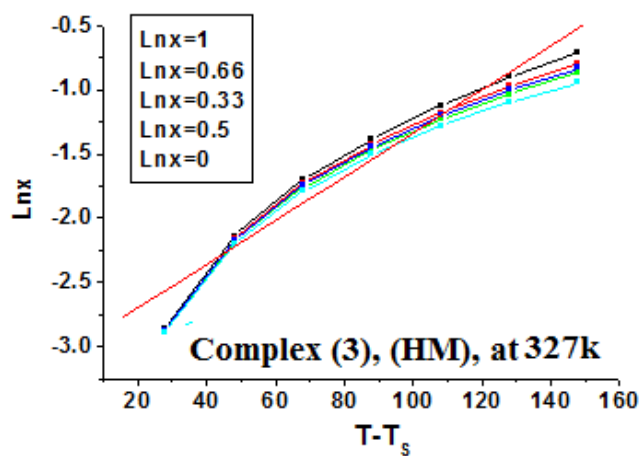
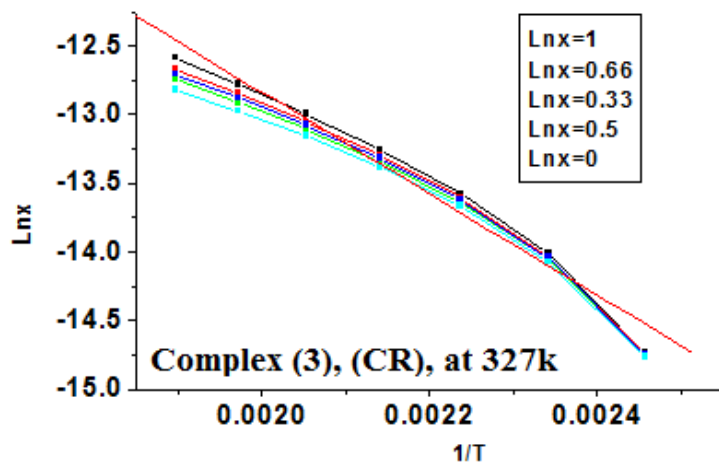
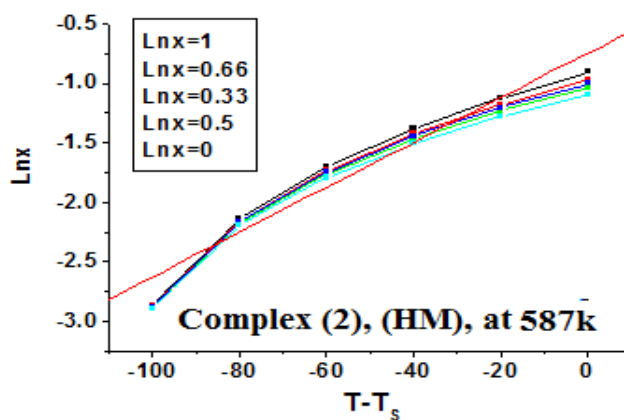
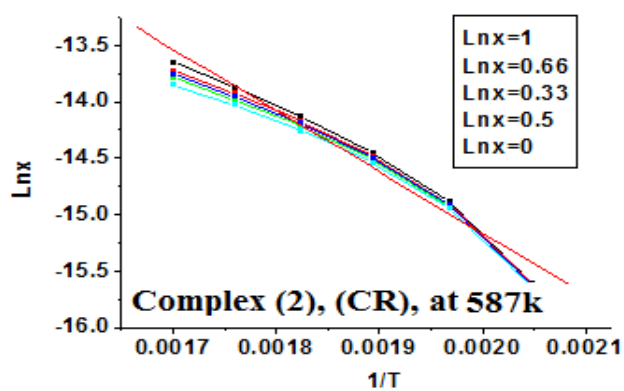
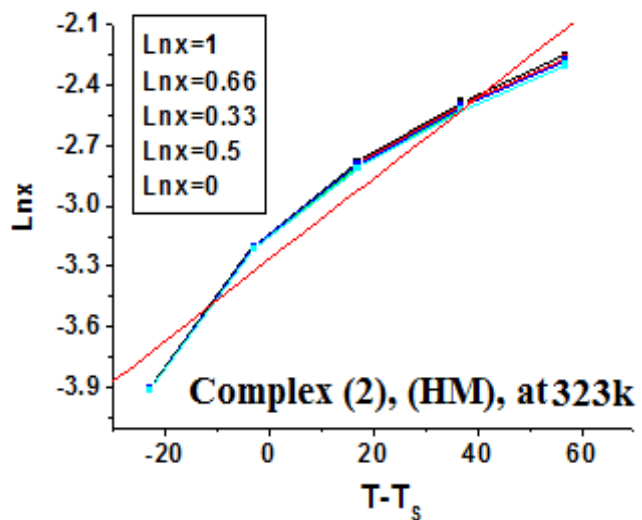
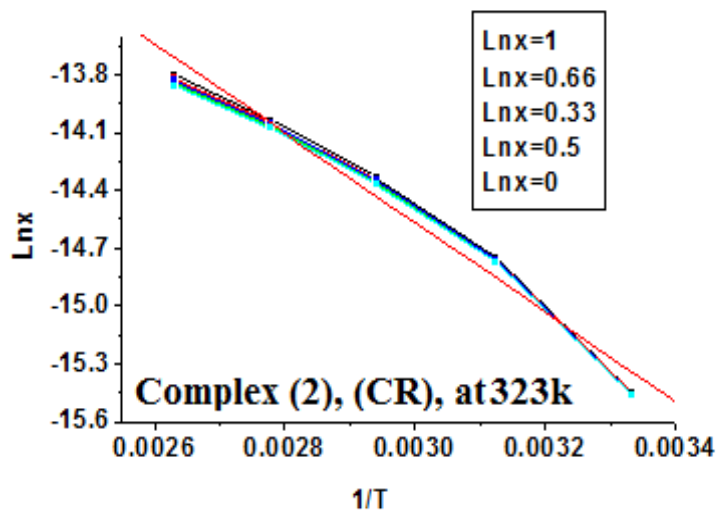


Figure S5 TG and DTG diagrams for H₂L and its metal complexes.





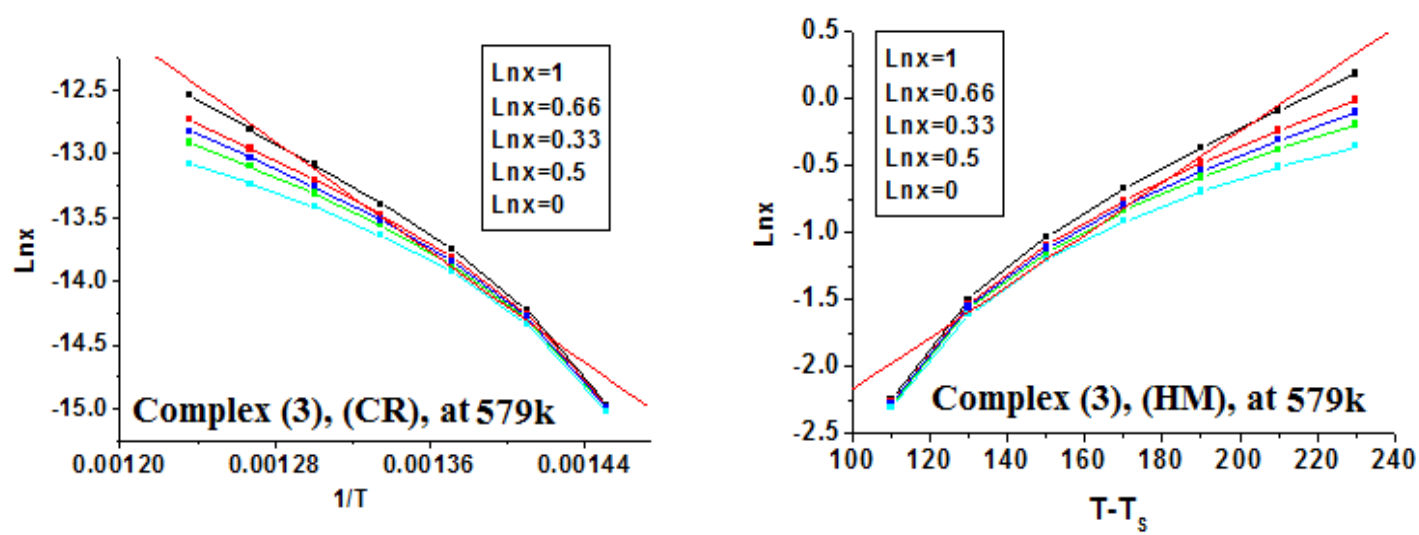


Figure S6 The diagrams of kinetic parameters of H_2L and its metal complexes.

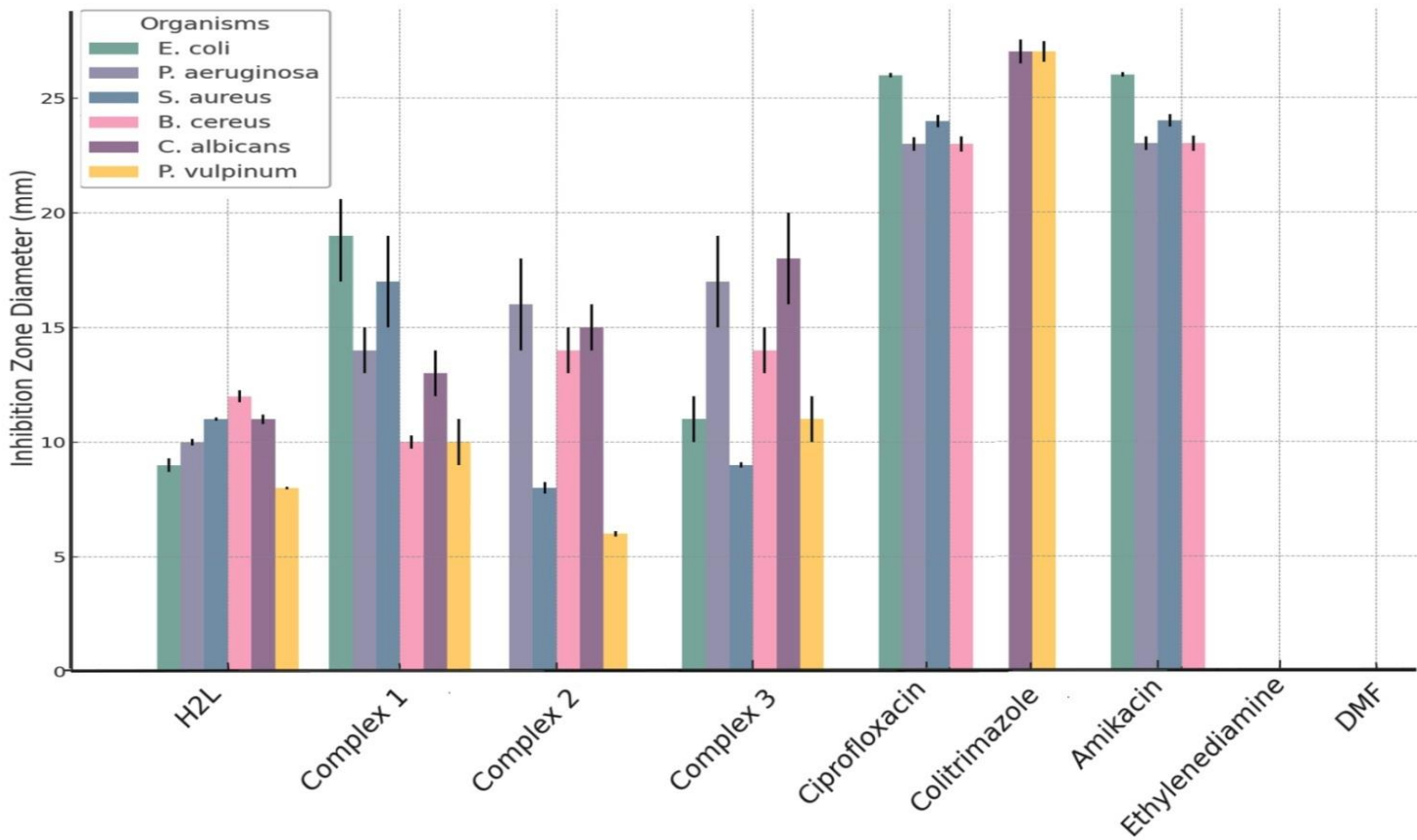


Figure S7 Illustrates the antimicrobial efficacy of **H₂L** and its metal complexes, presented as mean inhibition zones (mm). Error bars represent the standard error (SE), indicating data variability and reproducibility

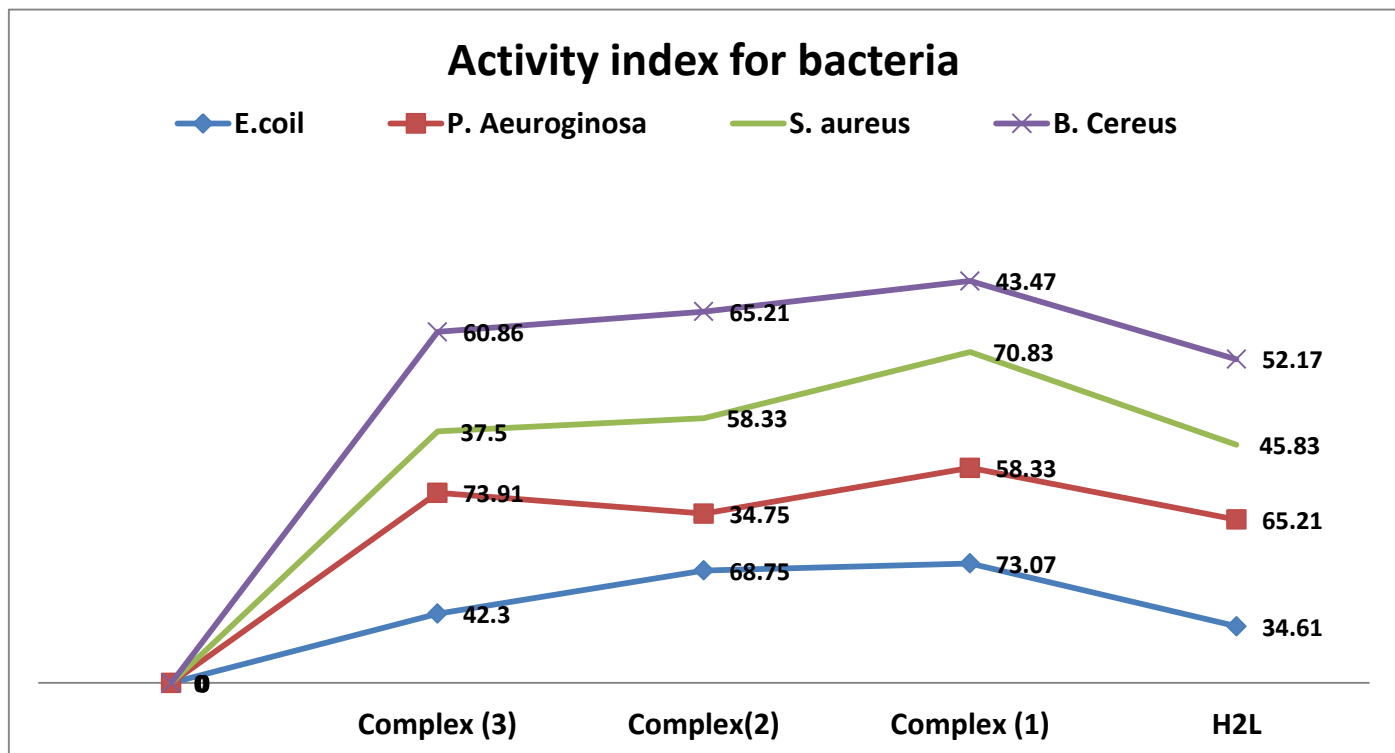


Figure S8 Activity index for bacteria strains of H₂L and its metal complexes.

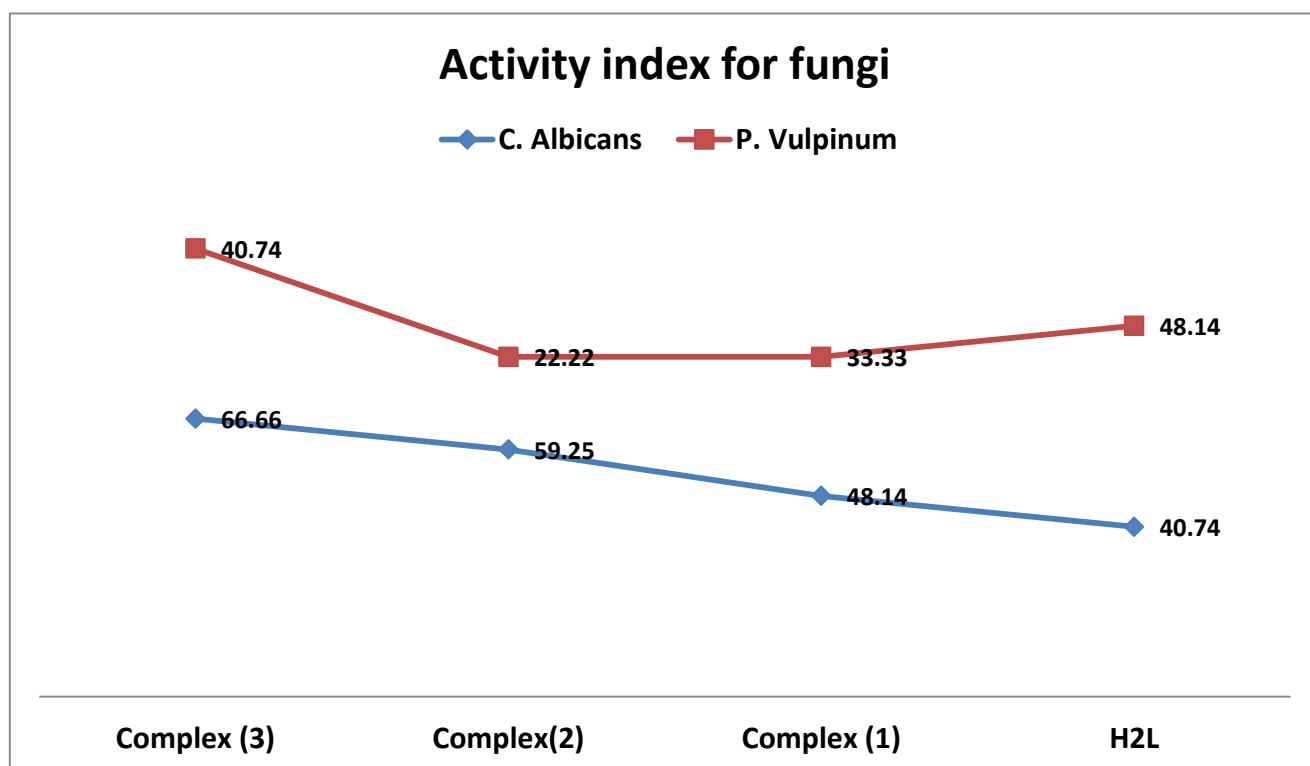


Figure S9 Activity index for fungi strains of H₂L and its metal complexes