Supplementary information

New bis-pyrazolate zinc(II) complexes as a potential anticancer drugs: from structure to anticancer activity

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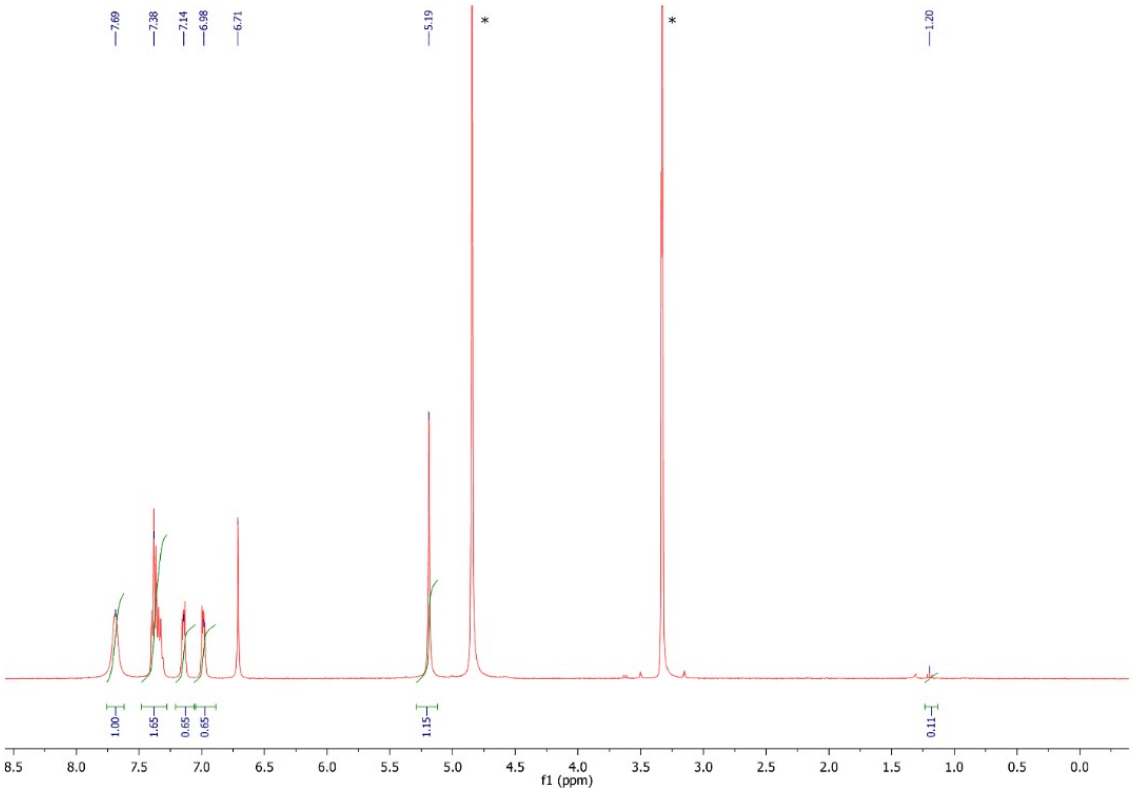
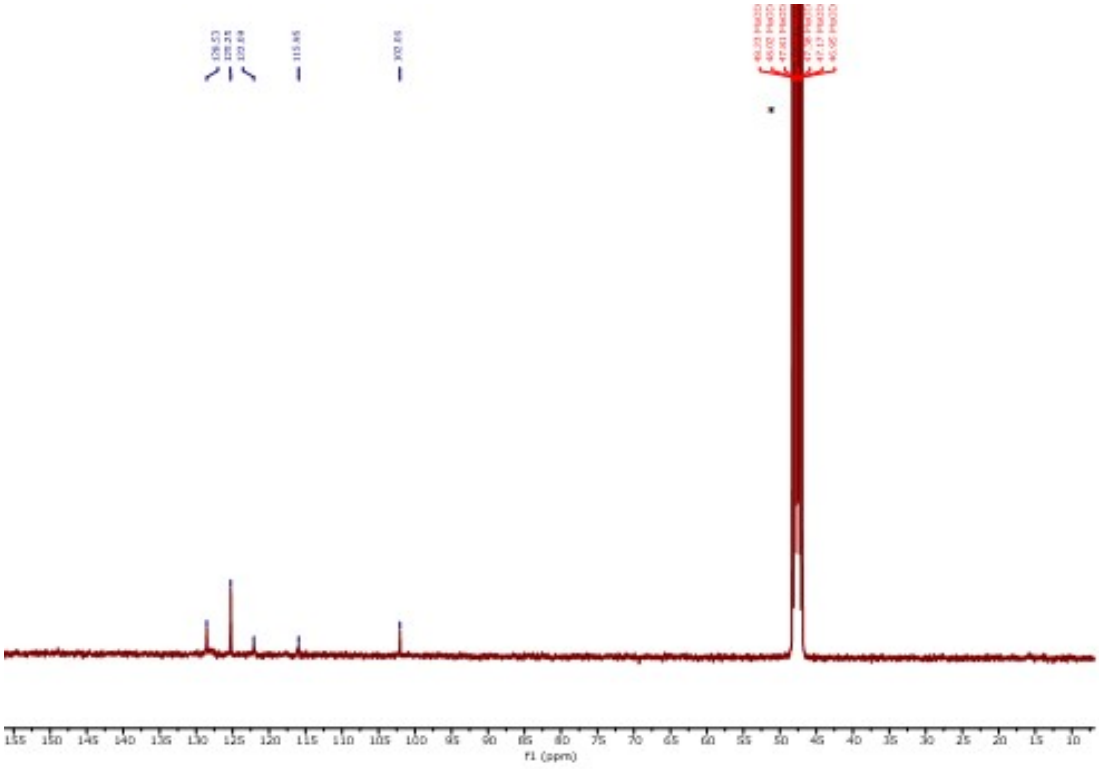
[$ZnCl_2(H_2L^{tBu})$]

^{1}H NMR



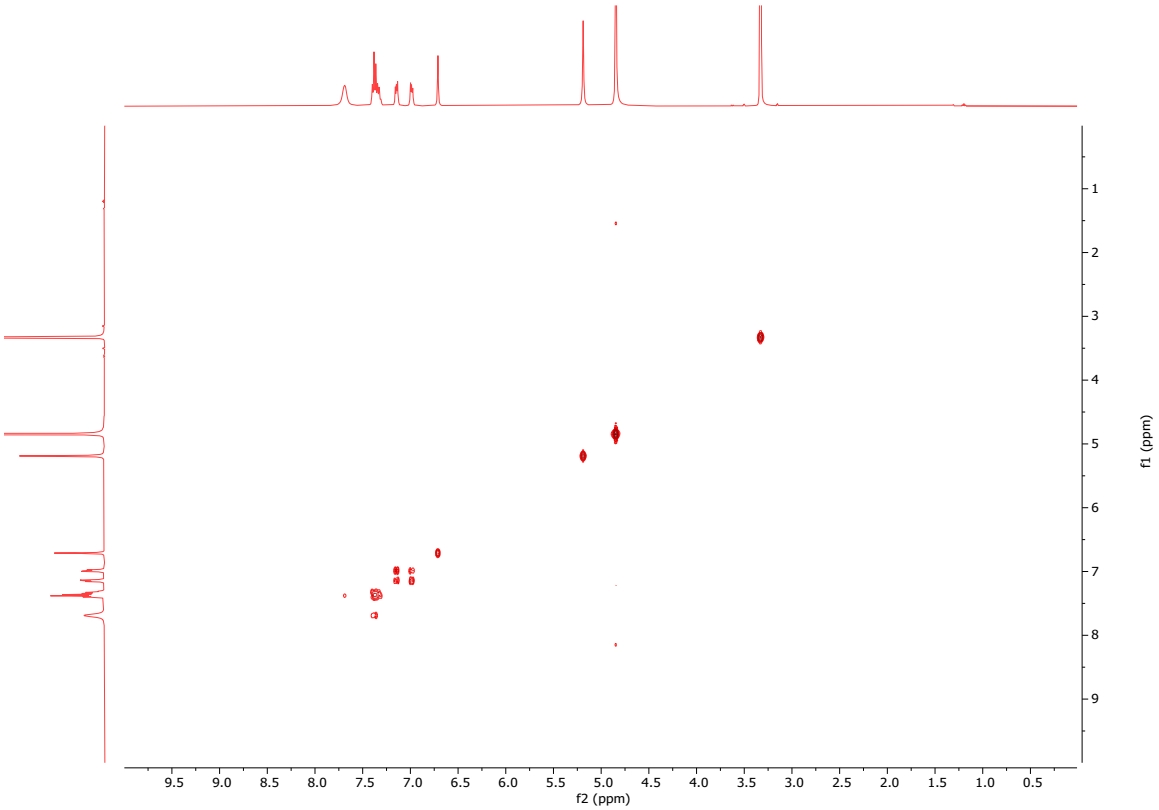
*Peaks from the solvent MeOD

^{13}C NMR

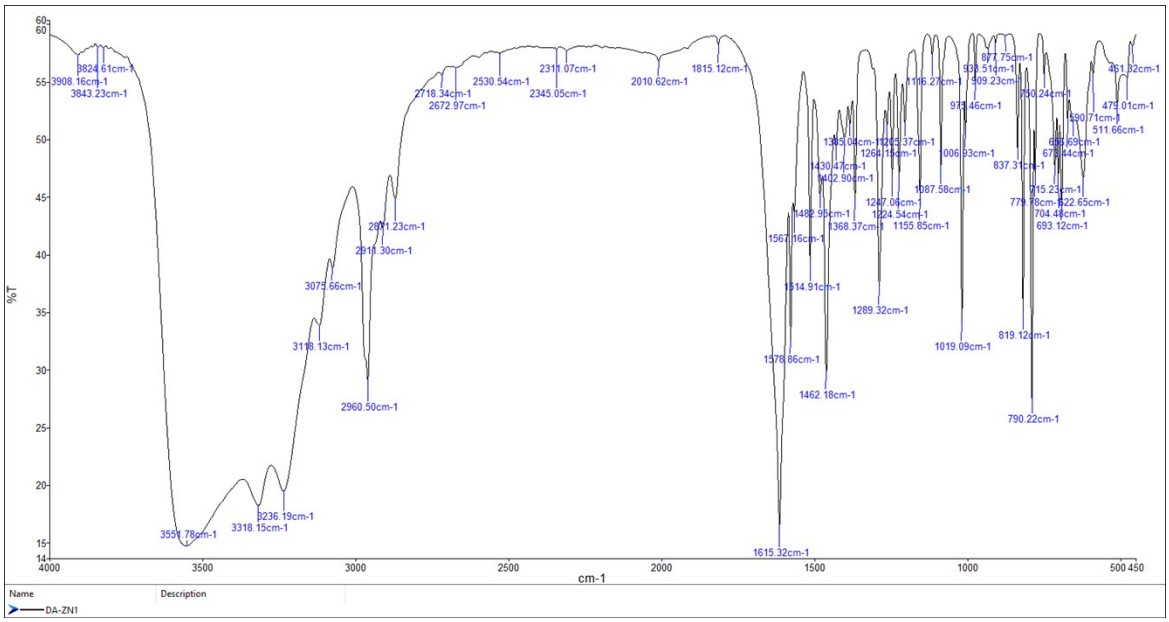


*Peak from the solvent MeOD

$^{1}H–^{1}H$ COSY



FT-IR



UV-Vis

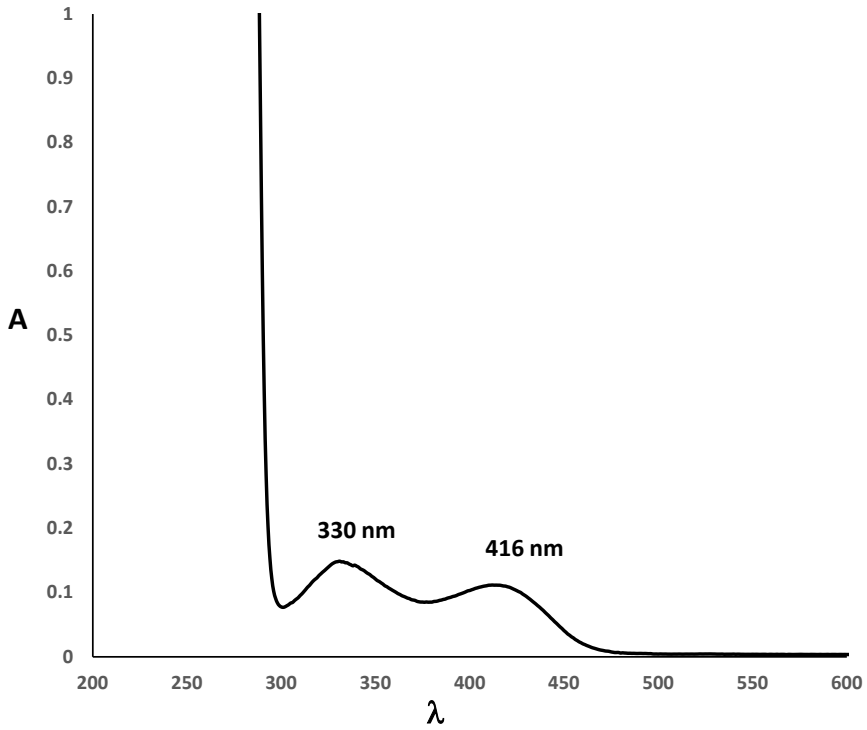
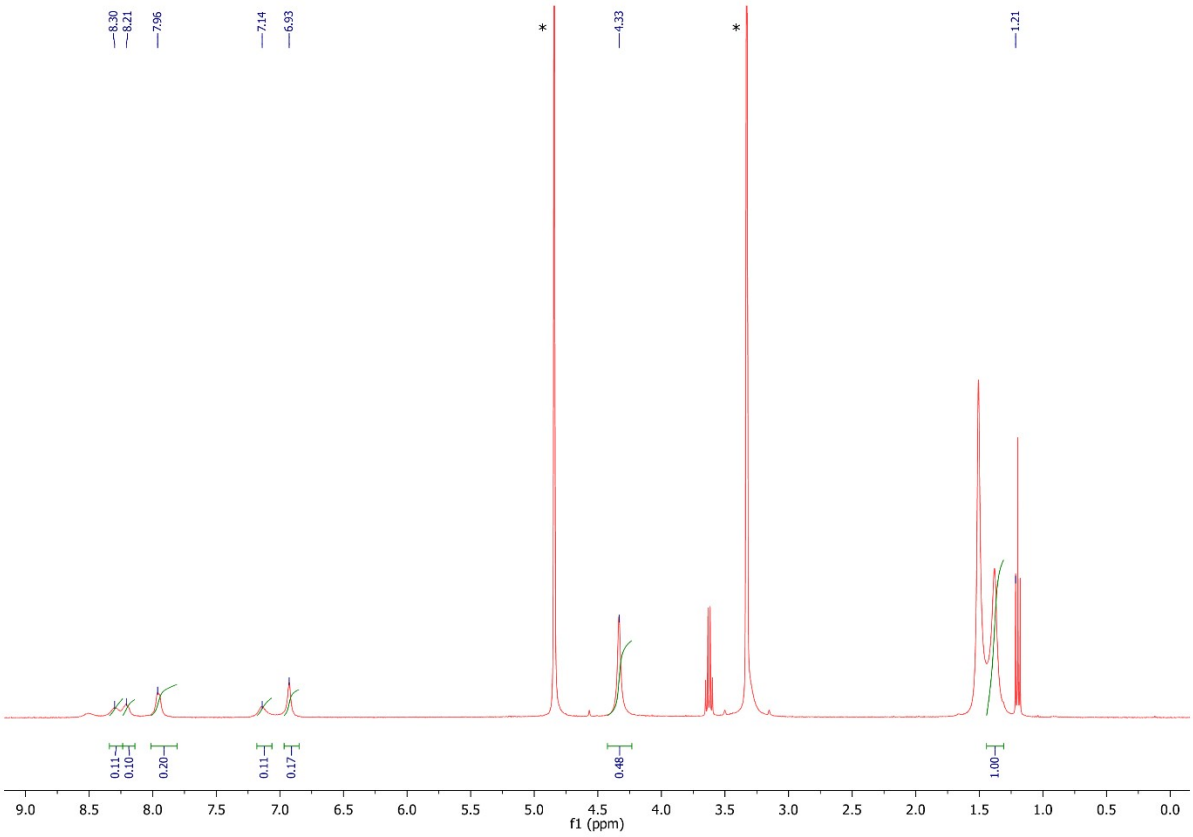


Fig. S1 Characterization spectra of $[ZnCl_2(H_2L^{tBu})]$ complex.

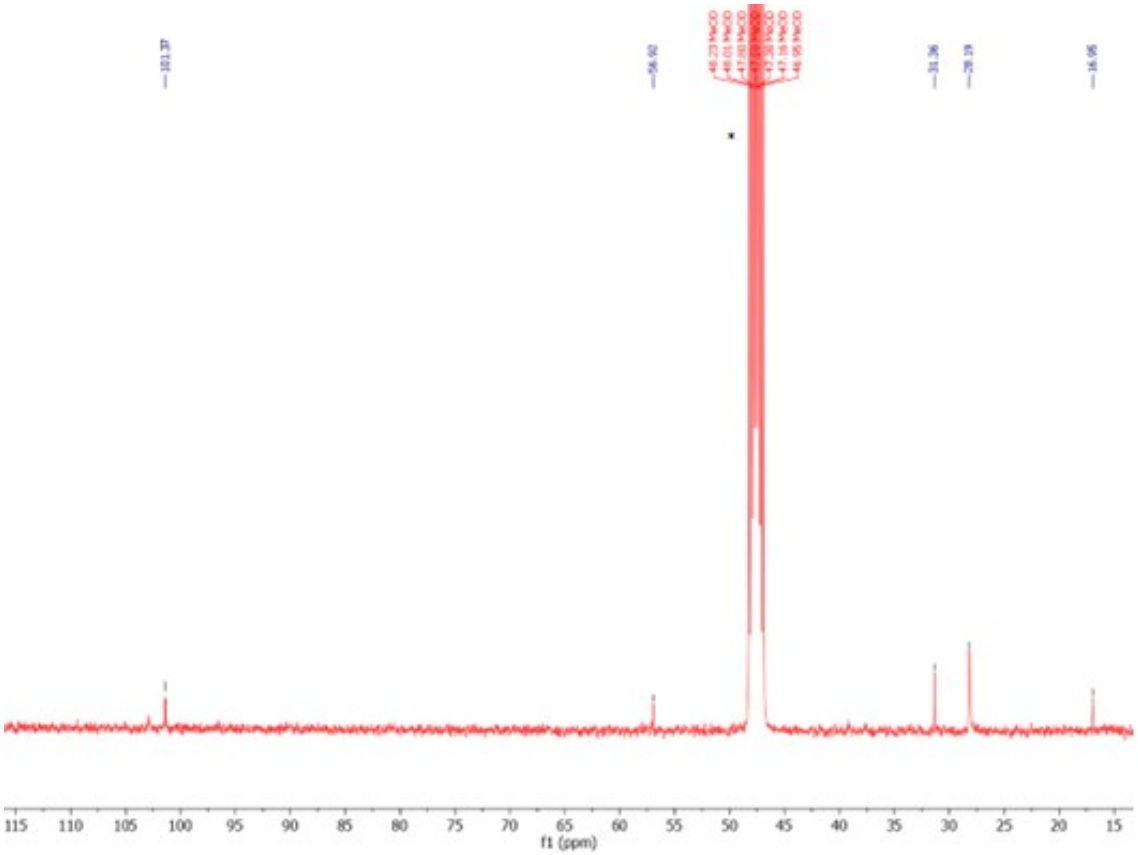
[$ZnCl_2(Me_2L^{tBu})$]

^{1}H NMR



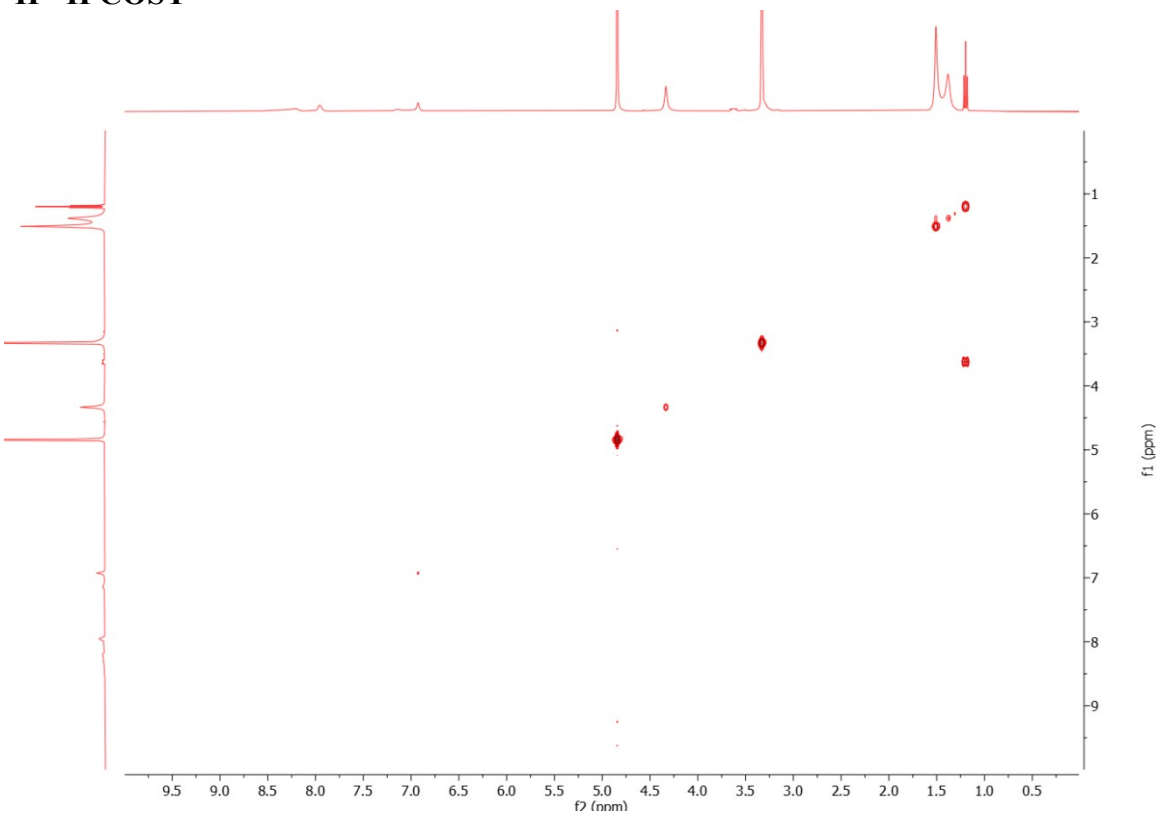
*Peaks from the solvent MeOD

^{13}C NMR

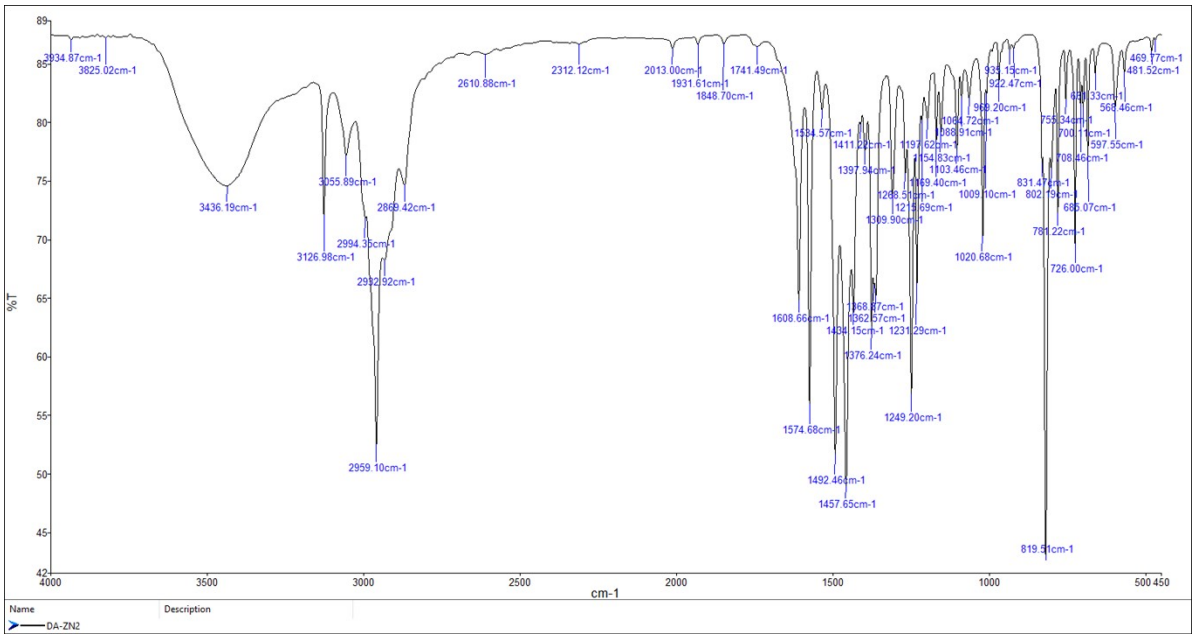


*Peak from the solvent MeOD

$^{1}H–^{1}H$ COSY



FT-IR



UV-Vis

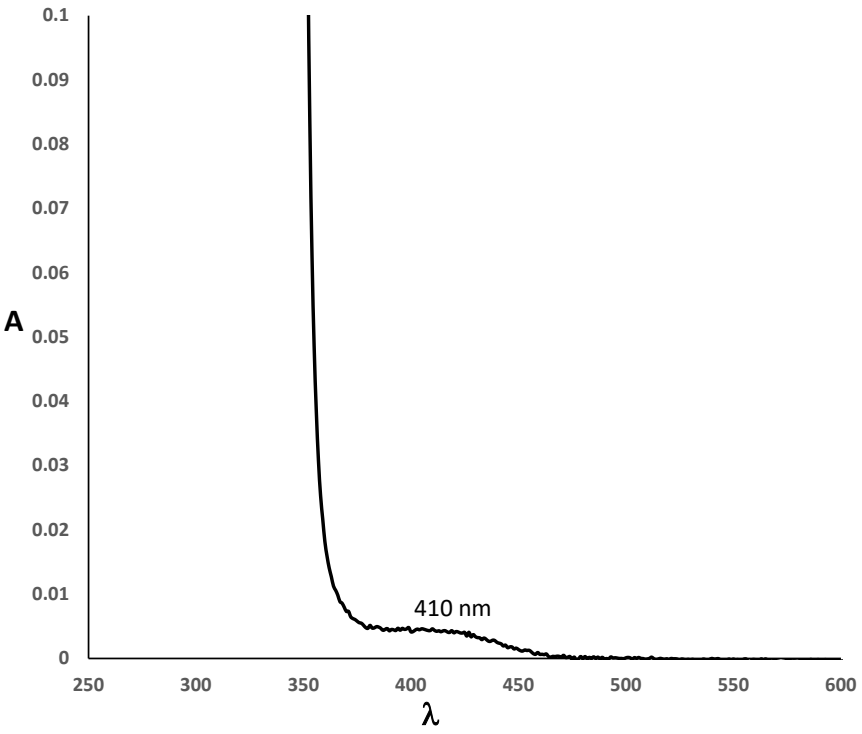
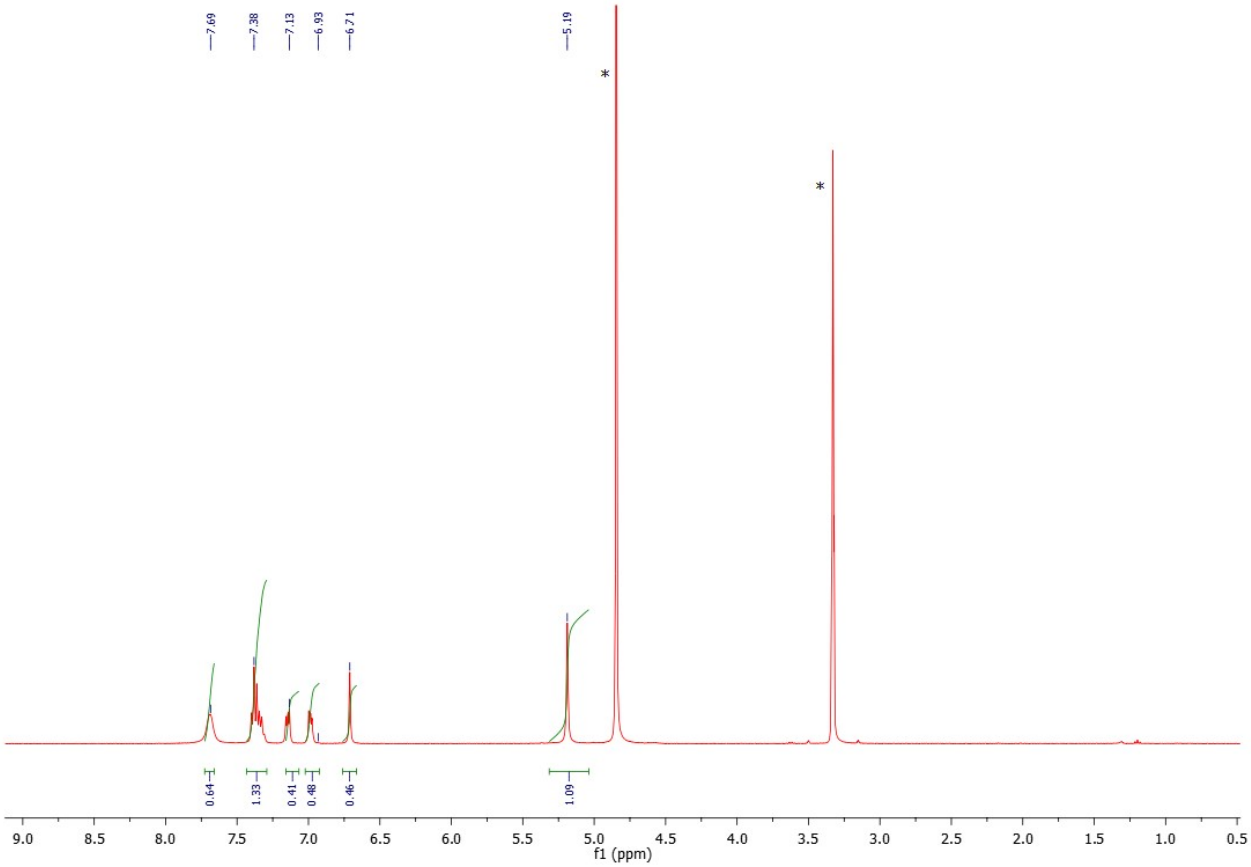


Fig. S2 Characterization spectra of $[ZnCl_2(Me_2L^{tBu})]$ complex.

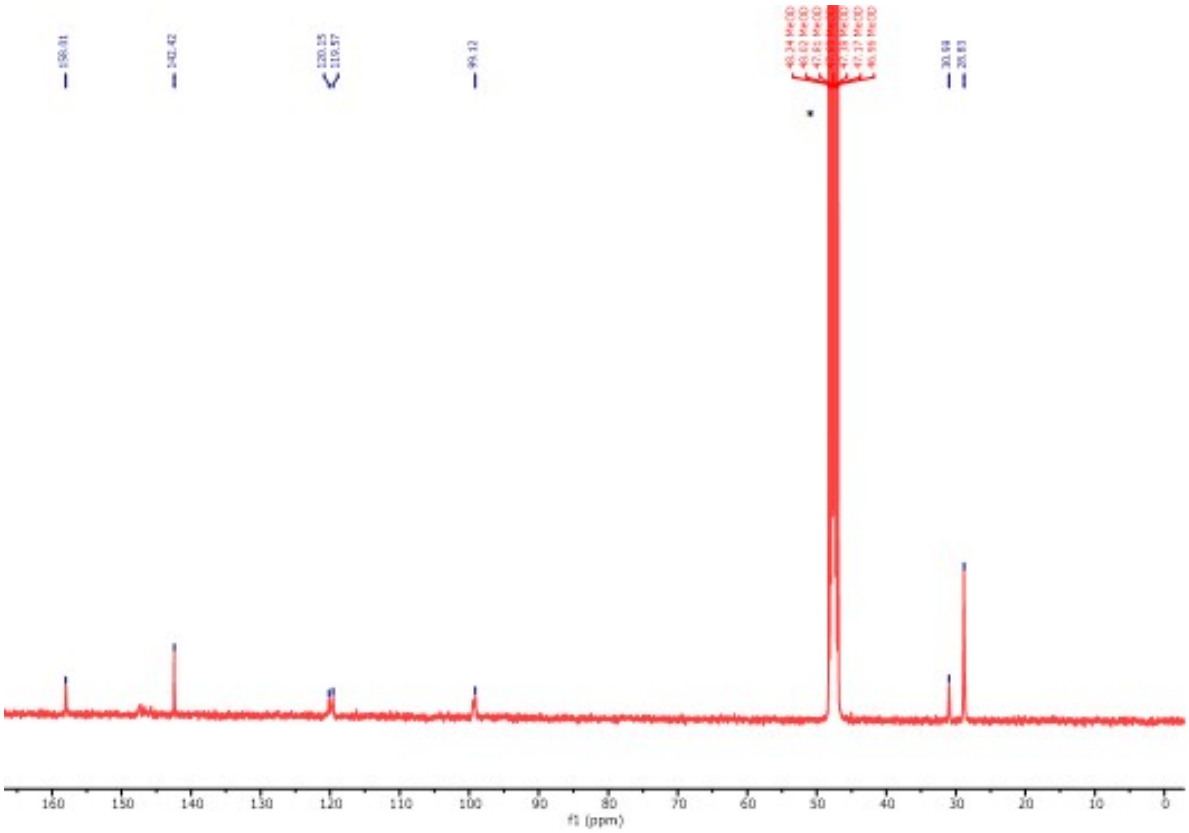
[$ZnCl_2(H_2L^{CatBiPyPh})$]

^{1}H NMR



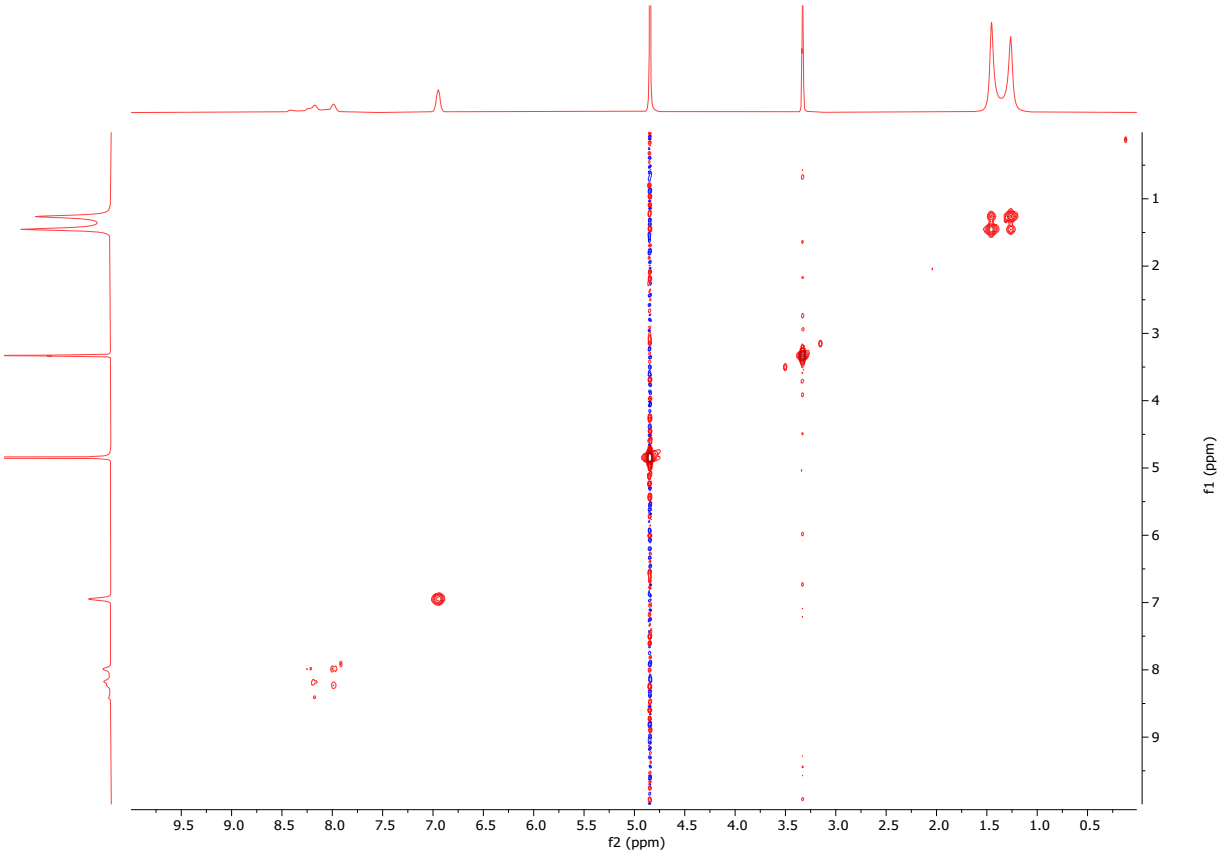
*Peaks from the solvent MeOD

^{13}C NMR

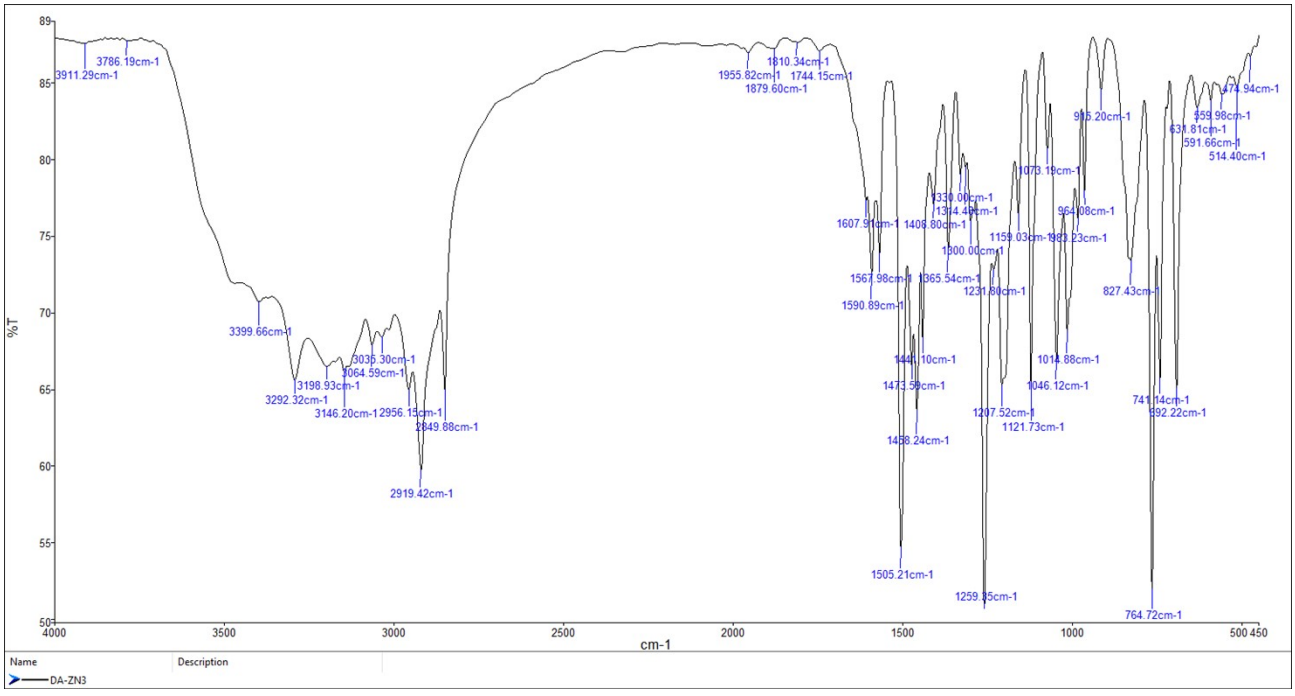


*Peak from the solvent MeOD

$^{1}H–^{1}H$ COSY



FT-IR



UV-Vis

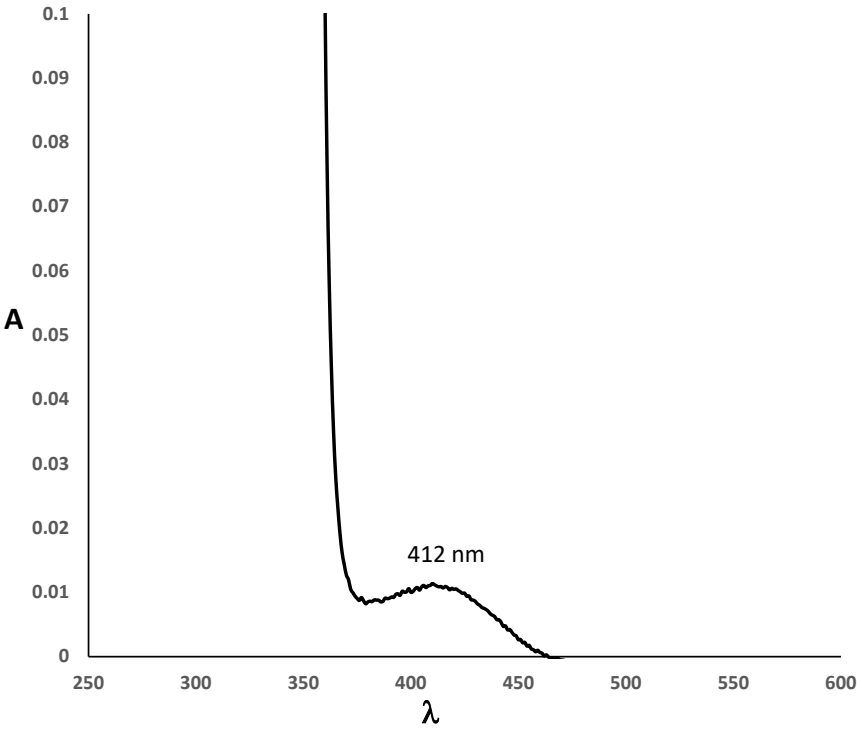


Fig. S3 Characterization spectra of $[ZnCl_2(H_2L^{CatBiPyPh})]$ complex.

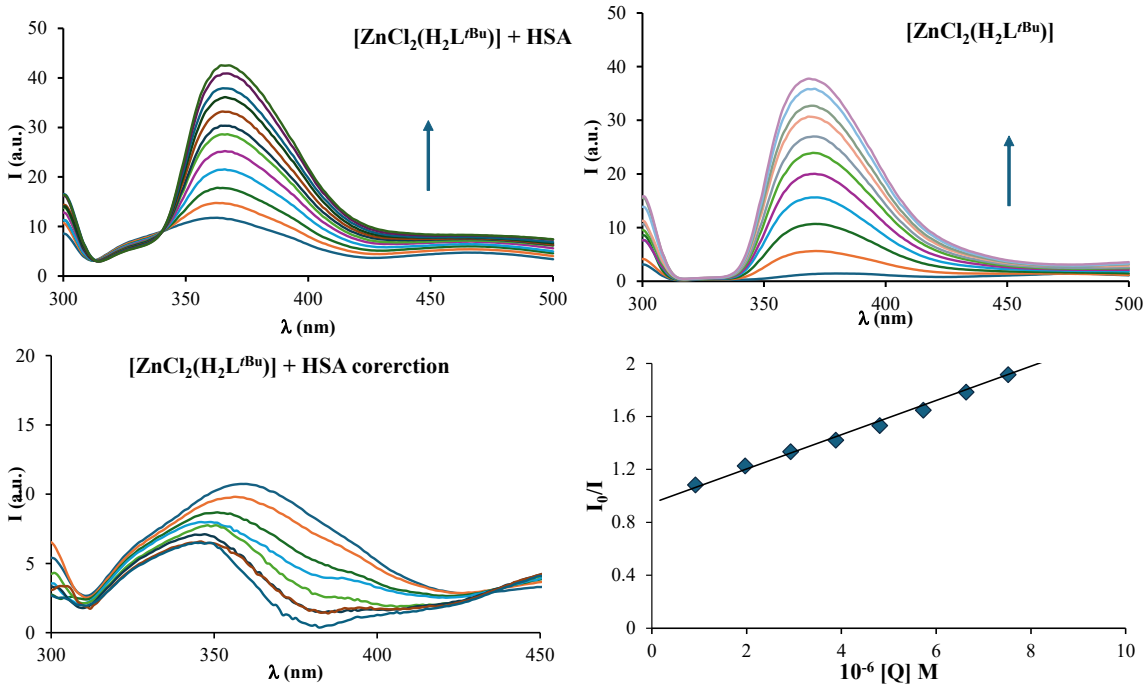


Fig. S4 Fluorescent titration spectra of HAS (2 μM) solution in absence and presence of the examined complex $[ZnCl_2(H_2L^{tBu})]$. The arrow shows changes in the spectral band with the increasing complex concentration (added up to ratio 5). Insert graph: Stern-Volmer plots for HSA fluorescence titration in presents of the examined complex $[ZnCl_2(H_2L^{tBu})]$.

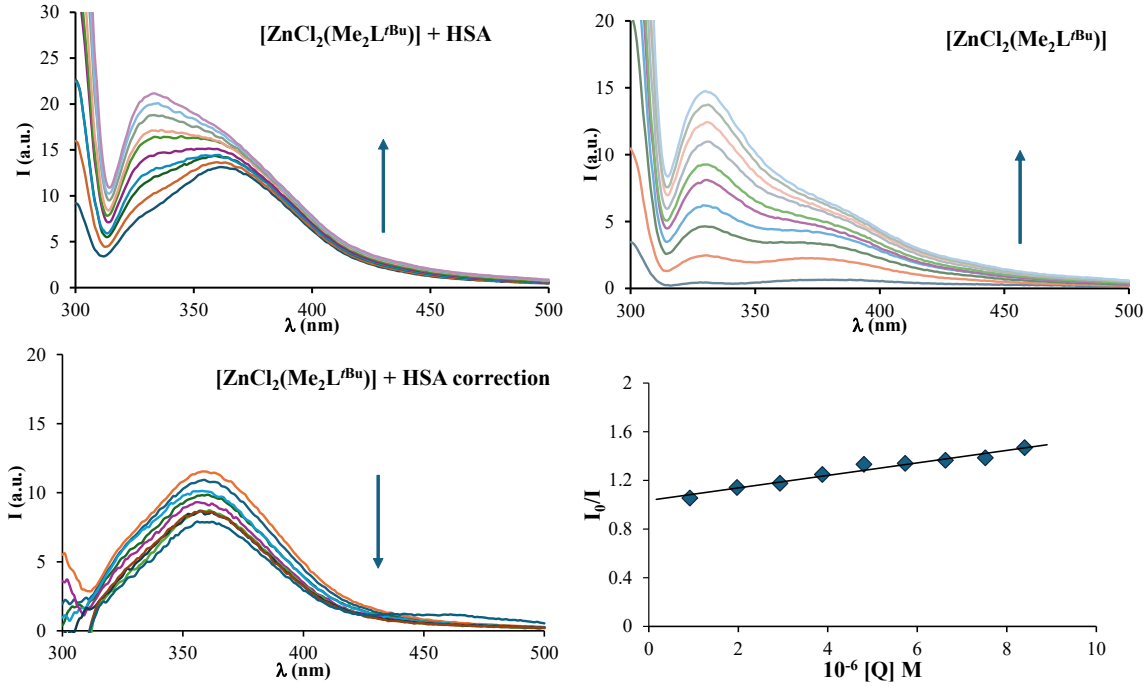


Fig. S5 Fluorescent titration spectra of HAS (2 μM) solution in absence and presence of the examined complex [$ZnCl_2(Me_2L^{tBu})$]. The arrow shows changes in the spectral band with the increasing complex concentration (added up to ratio 5). Insert graph: Stern-Volmer plots for HSA fluorescence titration in presents of the examined complex [$ZnCl_2(Me_2L^{tBu})$].