

Supporting Information

Synthesis, Structural, Magnetic & Computational Studies of a One-Dimensional Ferromagnetic Cu(II) Chain Assembled From a New Schiff-Base Ligand

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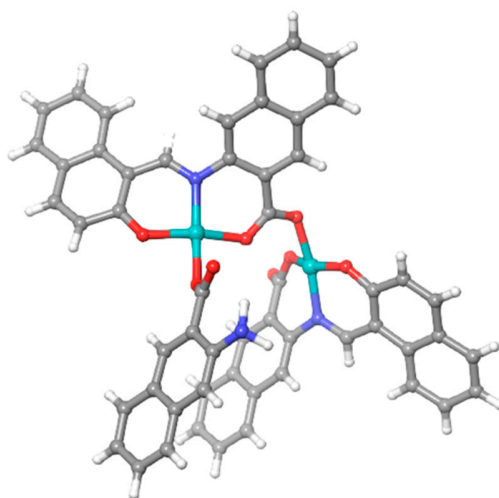


Figure S1. Structural model of **1** employed for the DFT calculations to elucidate the theoretical value of the magnetic exchange parameter J . Colour scheme: Cu^{II}, cyan; N, blue; O, red; C, grey; H, white.

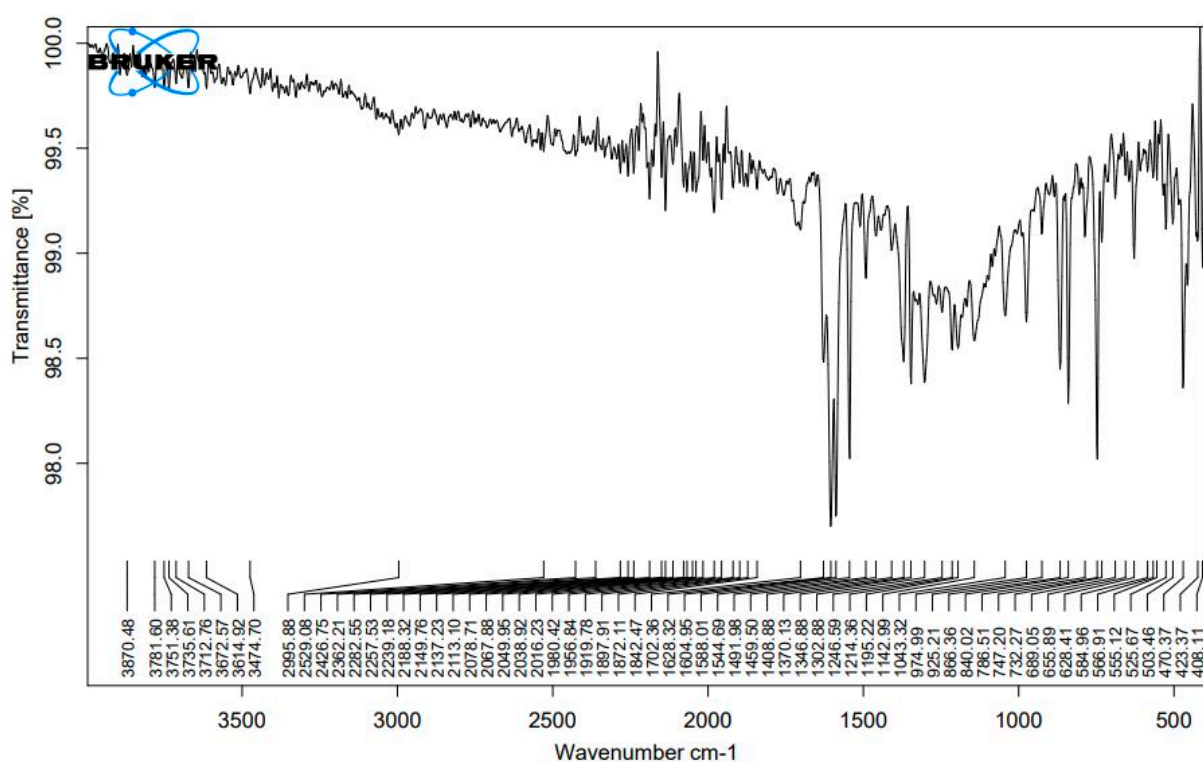


Figure S2. IR spectra for the (nancH₂) ligand.

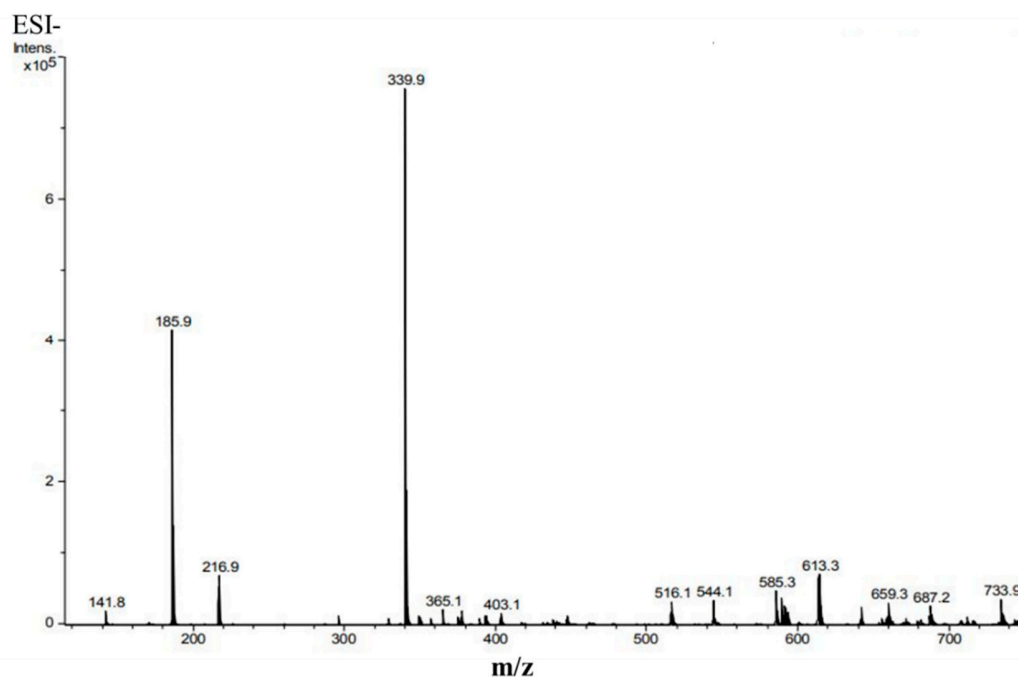


Figure S3. ESI mass spectrum of the (**nanch₂**) ligand, in a 1:1 (DCM/MeOH) solvent mixture.

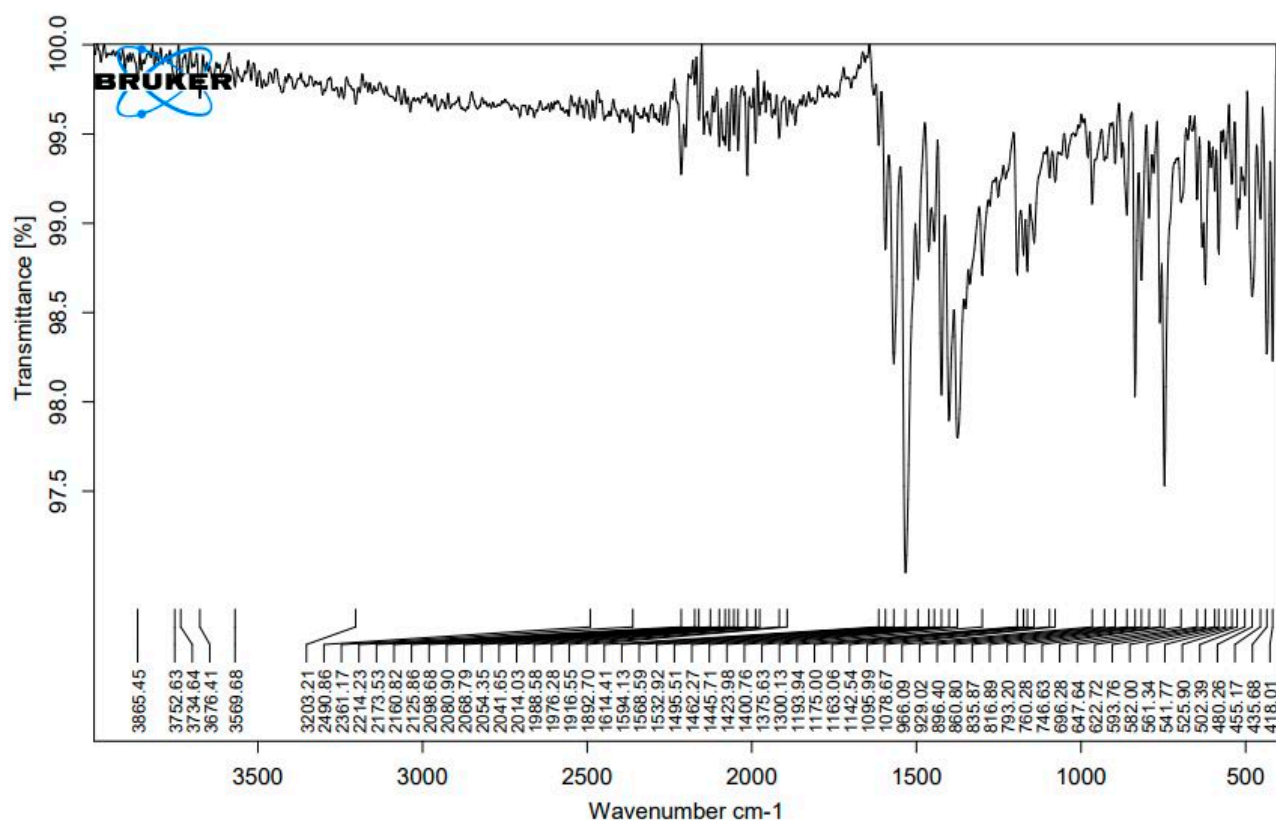


Figure S4. IR spectrum of complex **1**.

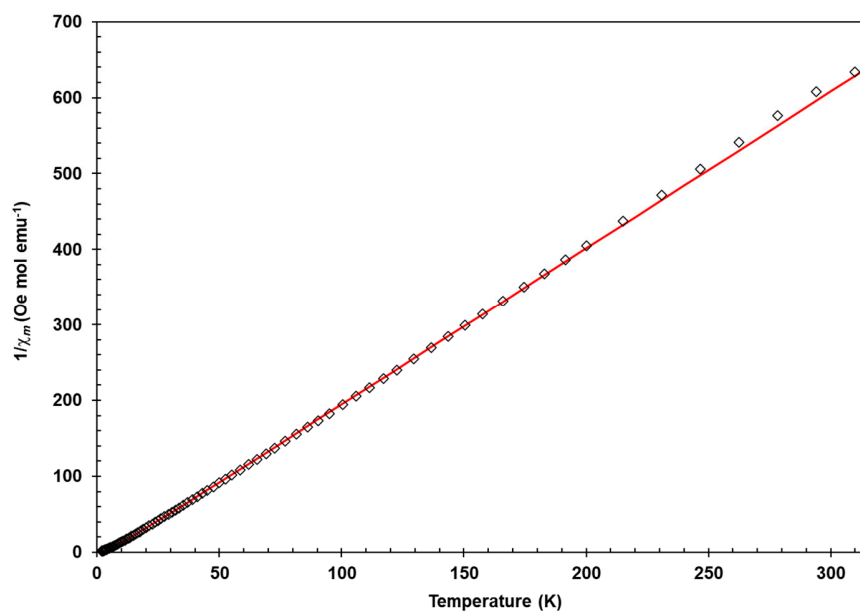


Figure S5. Temperature dependence of $1/\chi_m$ for **1**. The red solid line represents the best fit to the uniform Heisenberg 1-D-ferromagnetic chain model.

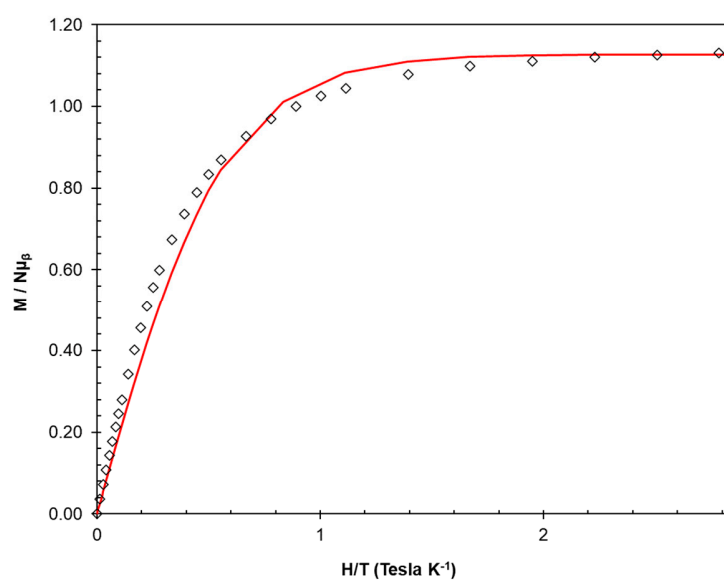


Figure S6. Field/Temperature dependence of M for **1**. The red solid line represents the best fit to the Brillouin function.

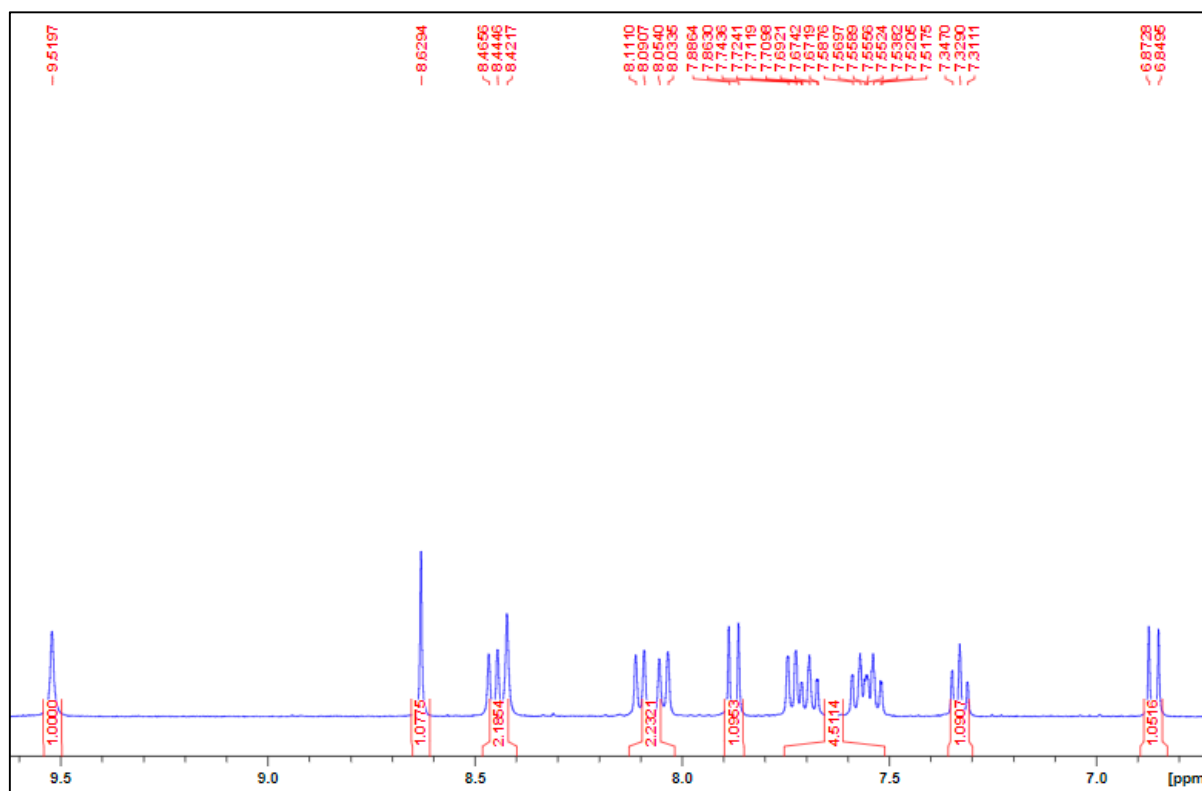


Figure S7. ^1H NMR spectrum of the (nancH₂) ligand in DMSO-d₆.

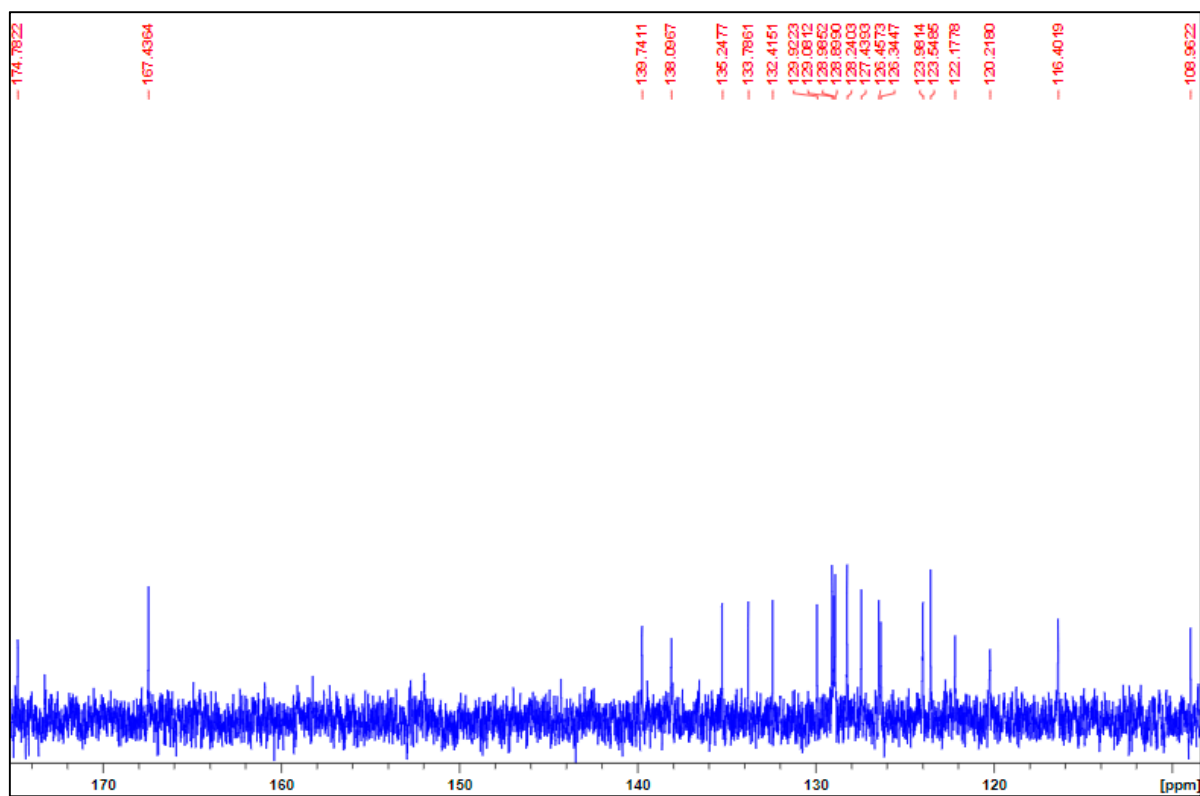


Figure S8. ^{13}C NMR spectrum of the (**nancH₂**) ligand in DMSO- d_6 .