Electronic Supplementary Material (ESI) for Dalton Transactions

Supporting Information

Bis-diimidazolylidine complexes of nickel: Investigations into nickel catalyzed coupling reactions

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Contents: ^{1}H and ^{13}C NMR specta for compounds **3a**, **3b**, **4a**, **4b**, **5a** and **5b**.

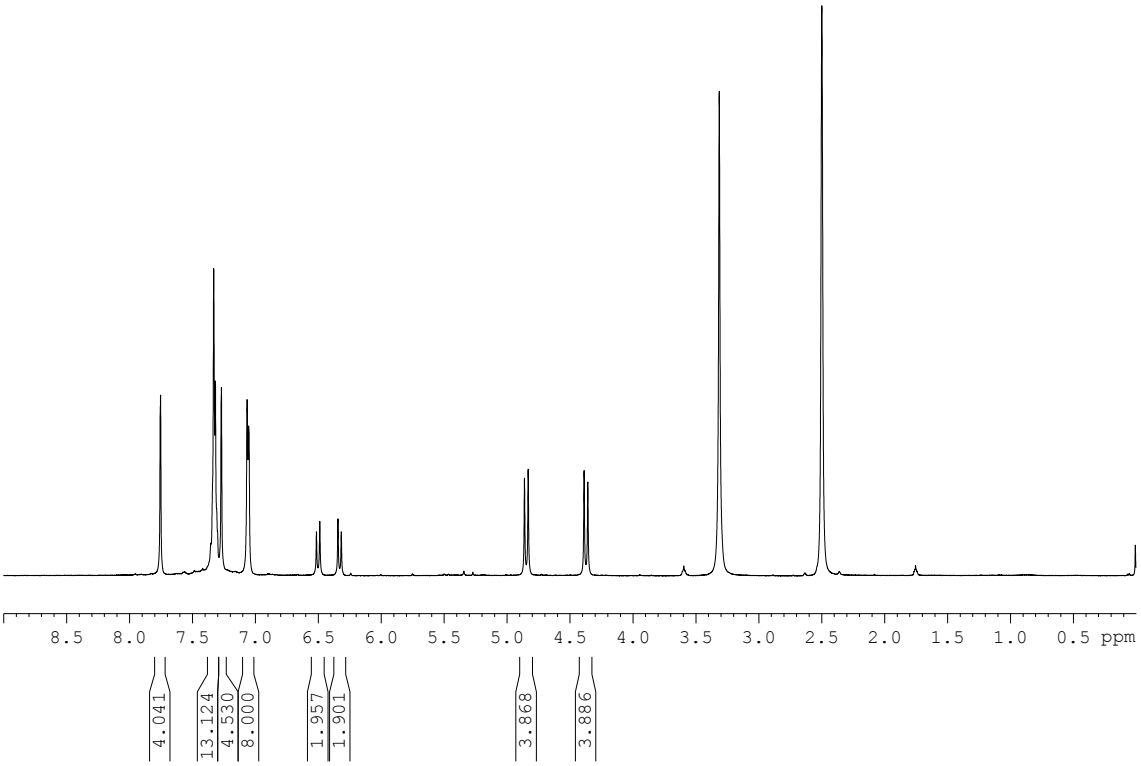

Figure S1. ^{1}H NMR spectrum of **3a** in DMSO-d_6. Additional resonances are observed for DMSO (δ 2.50); H_2O (δ 3.33) and tetrahydrofuran (δ 1.76 and 3.60).

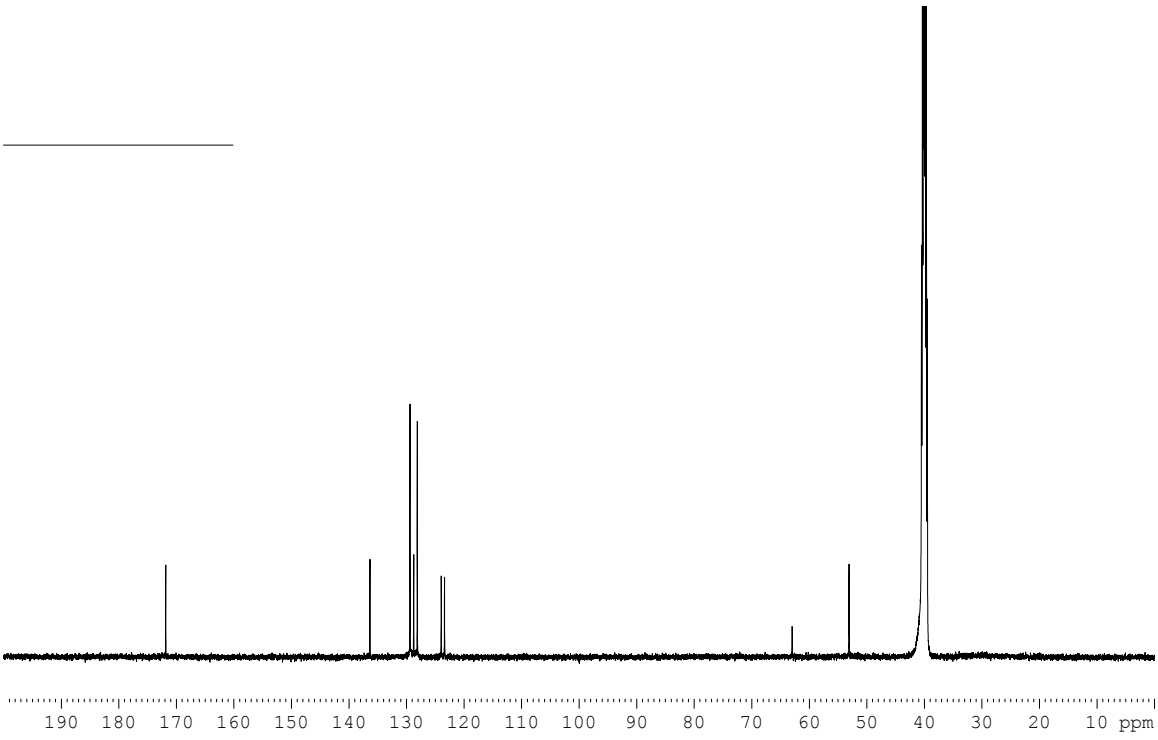

Figure S2. ^{13}C NMR spectrum of **3a** in DMSO-d_6.

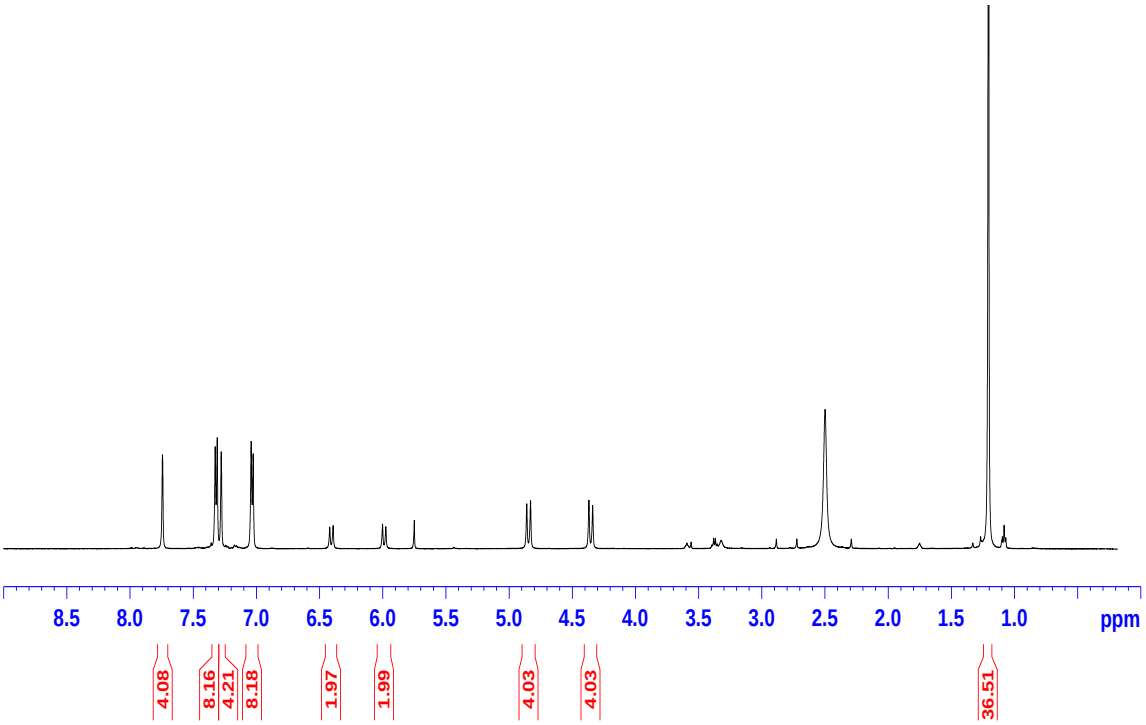

Figure S3. ^{1}H NMR spectrum of **3b** in DMSO-d_6. Additional resonances are observed for DMSO (δ 2.50); H_2O (δ 3.33); tetrahydrofuran (δ 1.76 and 3.60) and dichloromethane (δ 5.75).

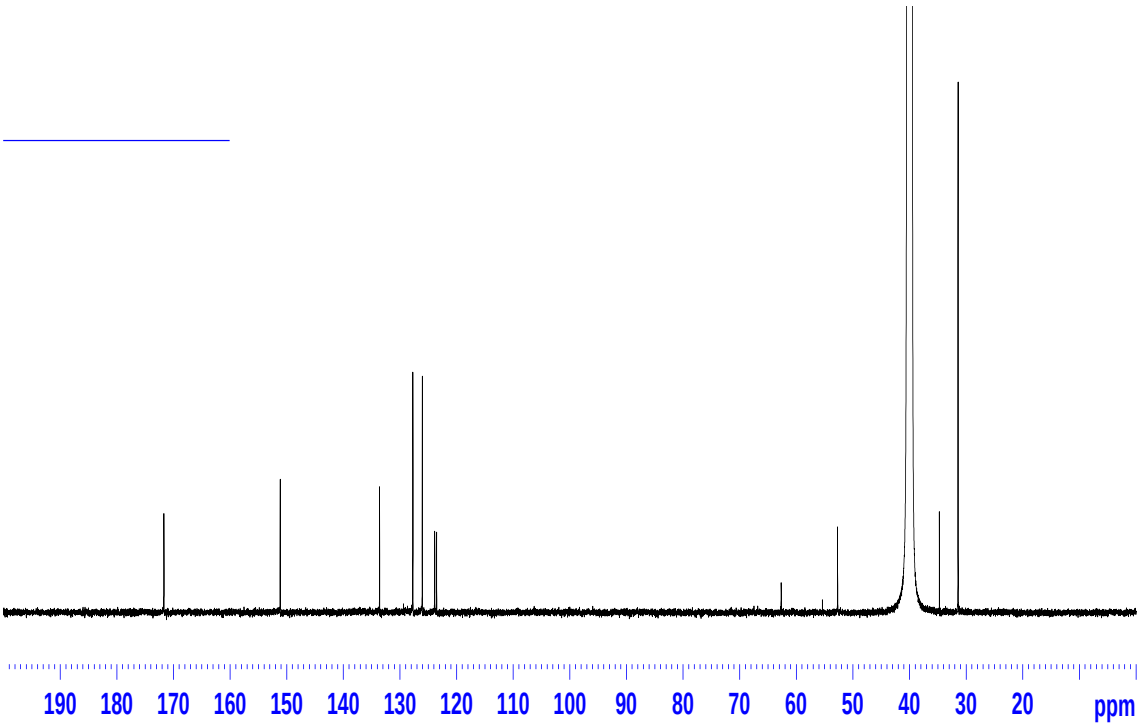

Figure S4. ^{13}C NMR spectrum of **3b** in DMSO-d_6. Additional resonances are observed for DMSO (δ 39.51) and dichloromethane (δ 55.08).

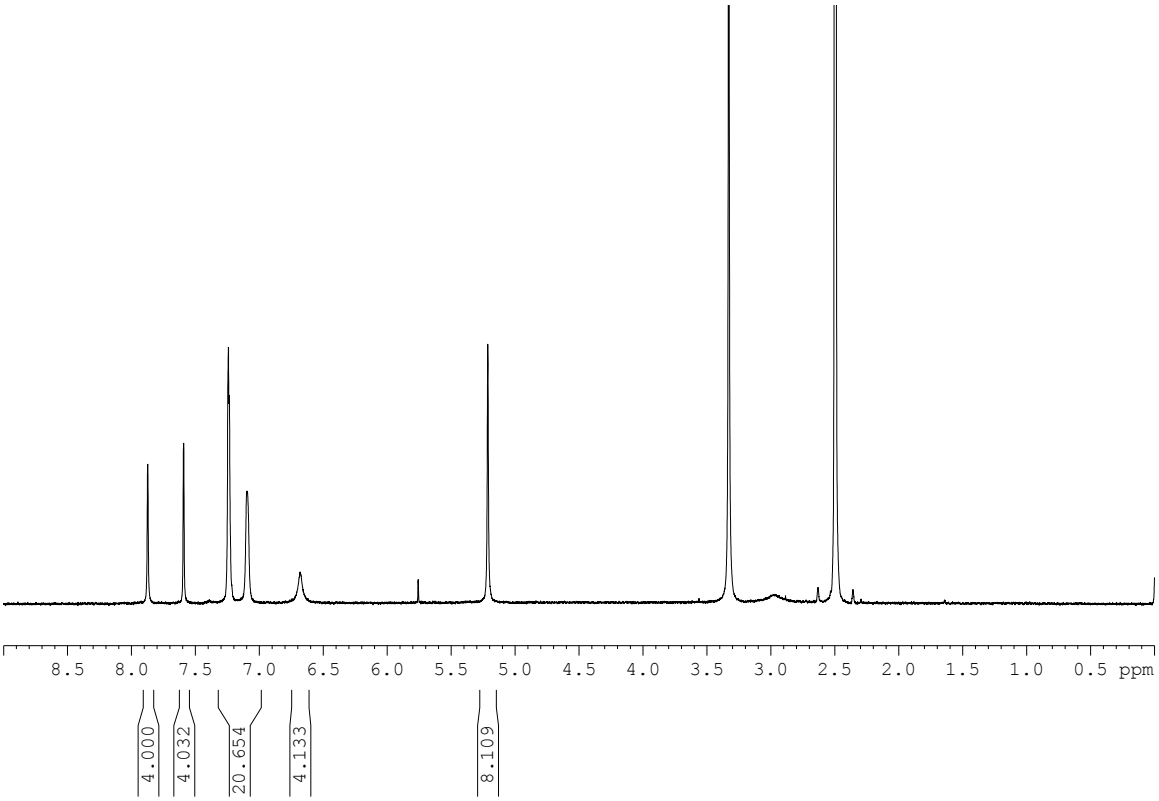

Figure S5. ^{1}H NMR spectrum of **4a** in DMSO-d_6. Additional resonances are observed for DMSO (δ 2.50); H_2O (δ 3.33) and dichloromethane (δ 5.75).

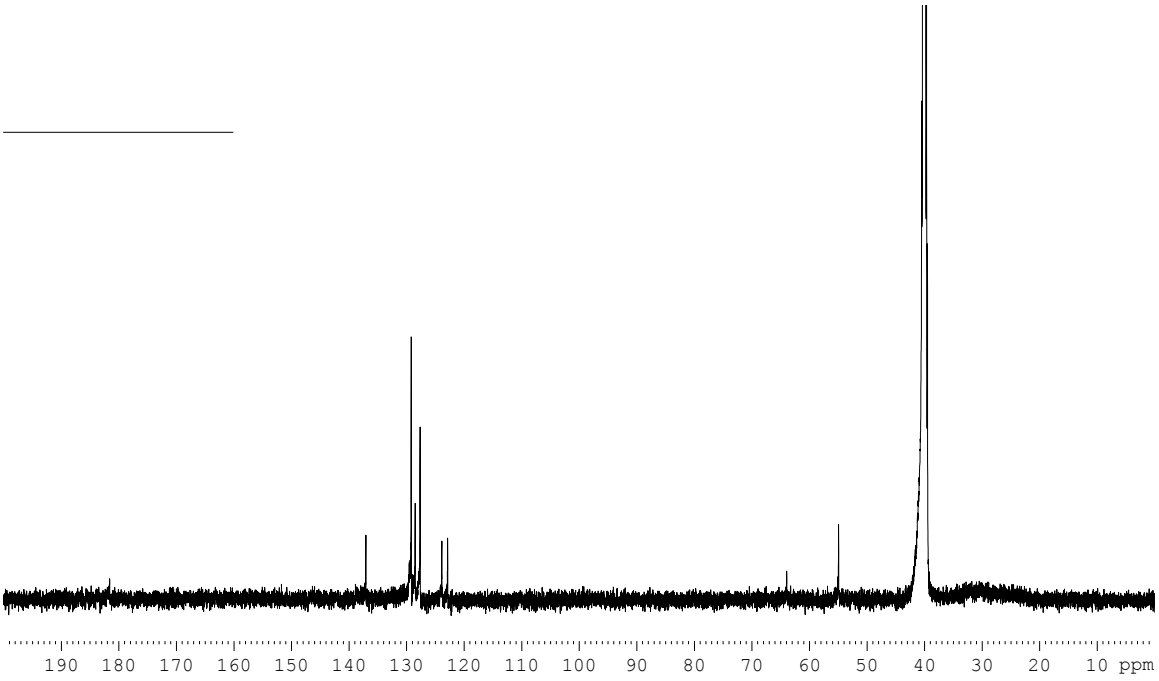

Figure S6. ^{13}C NMR spectrum of **4a** in DMSO-d_6.

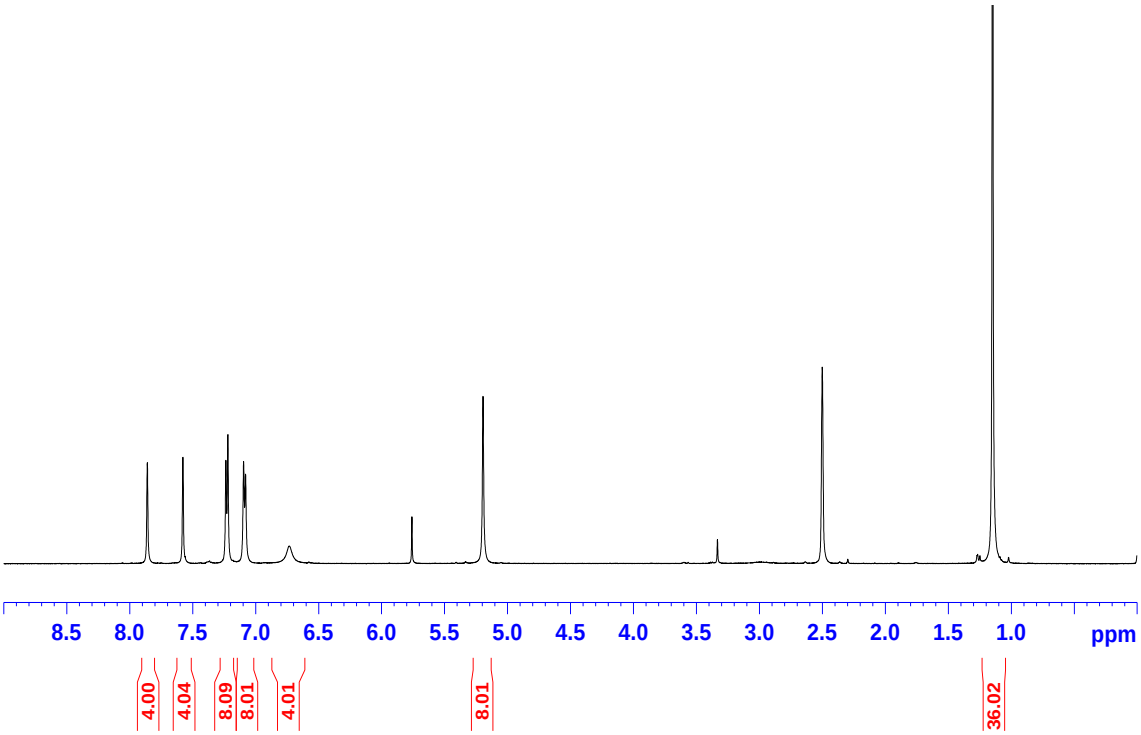

Figure S7. ^{1}H NMR spectrum of **4b** in DMSO-d_6. Additional resonances are observed for DMSO (δ 2.50); H_2O (δ 3.33) and dichloromethane (δ 5.75)

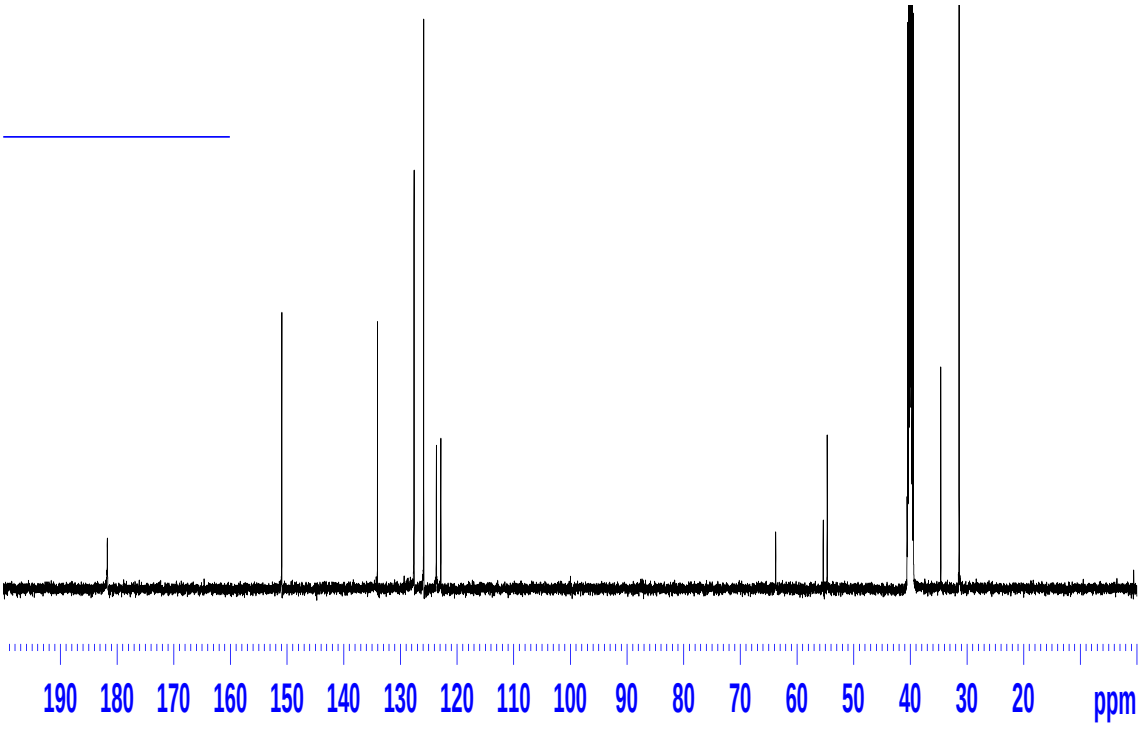

Figure S8. ^{13}C NMR spectrum of **4b** in DMSO-d_6. Additional resonances are observed for DMSO (δ 39.51) and dichloromethane (δ 54.92).

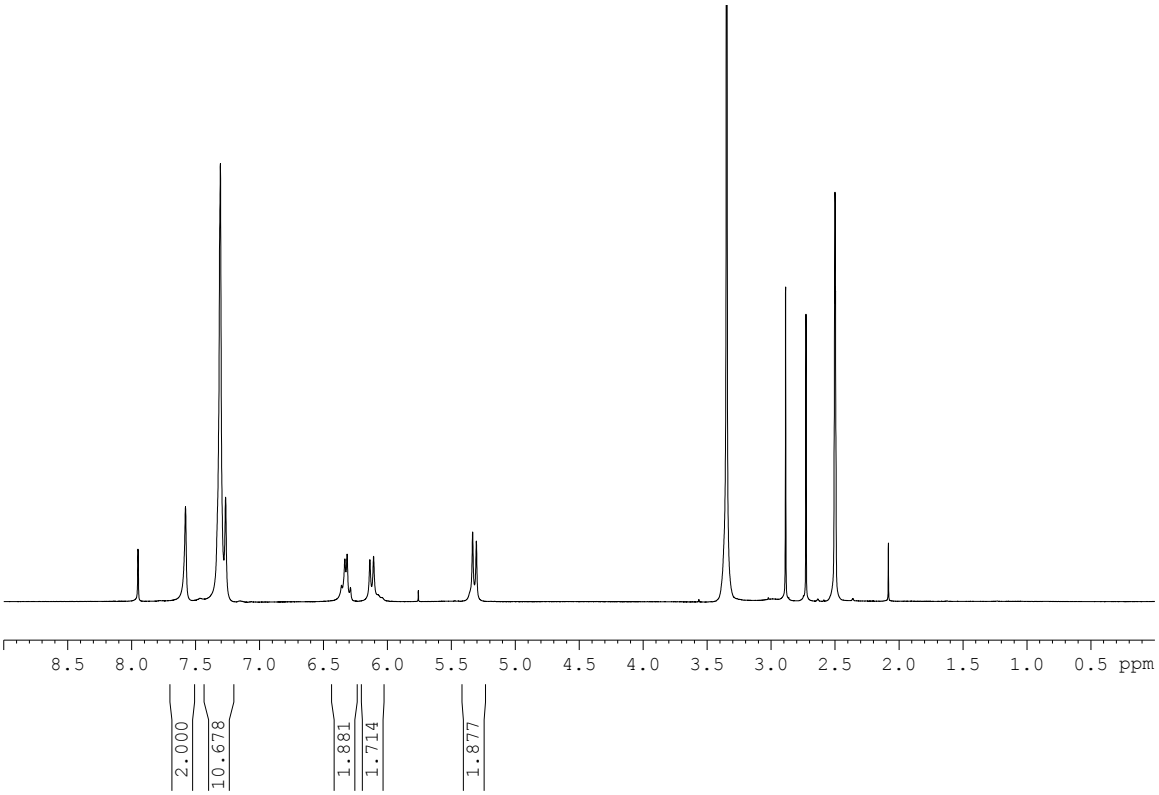

Figure S9. ^{1}H NMR spectrum of **5a** in DMSO-d_6. Additional resonances are observed for DMSO (δ 2.50); H_2O (δ 3.33); dimethylformamide (δ 2.73, 2.88 and 7.95); acetone (δ 2.09) and dichloromethane (δ 5.75)

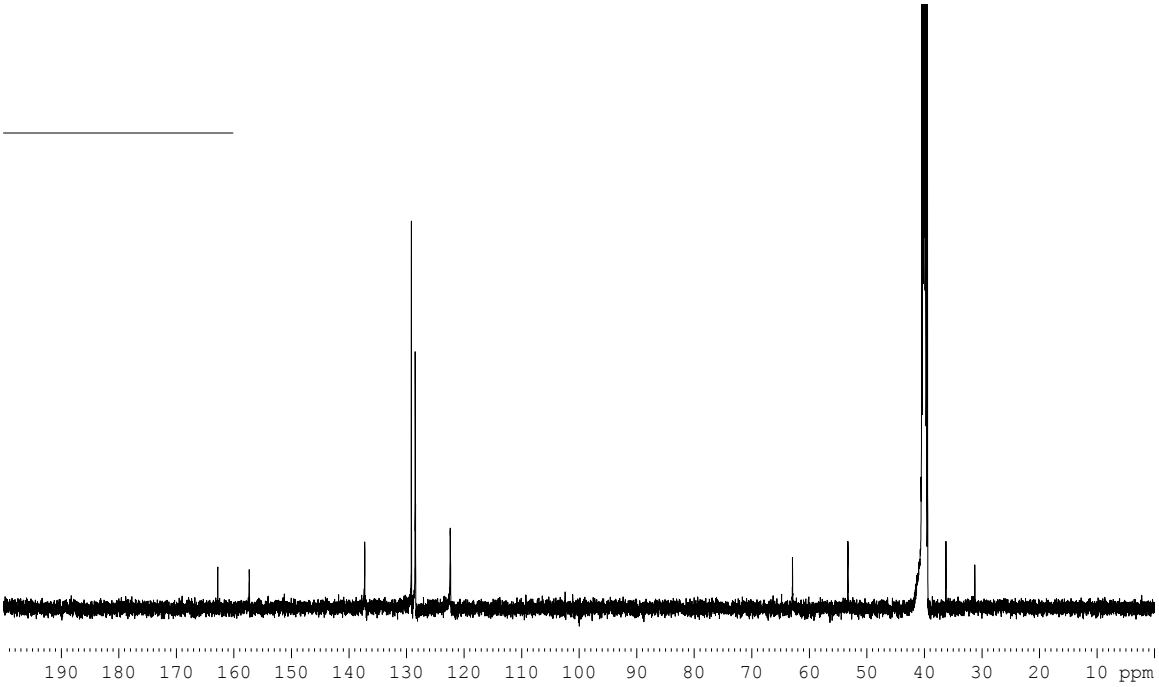

Figure S10. ^{13}C NMR spectrum of **5a** in DMSO-d_6. Additional resonances are observed for DMSO (δ 39.51) and DMF (δ 35.90 and 30.83).

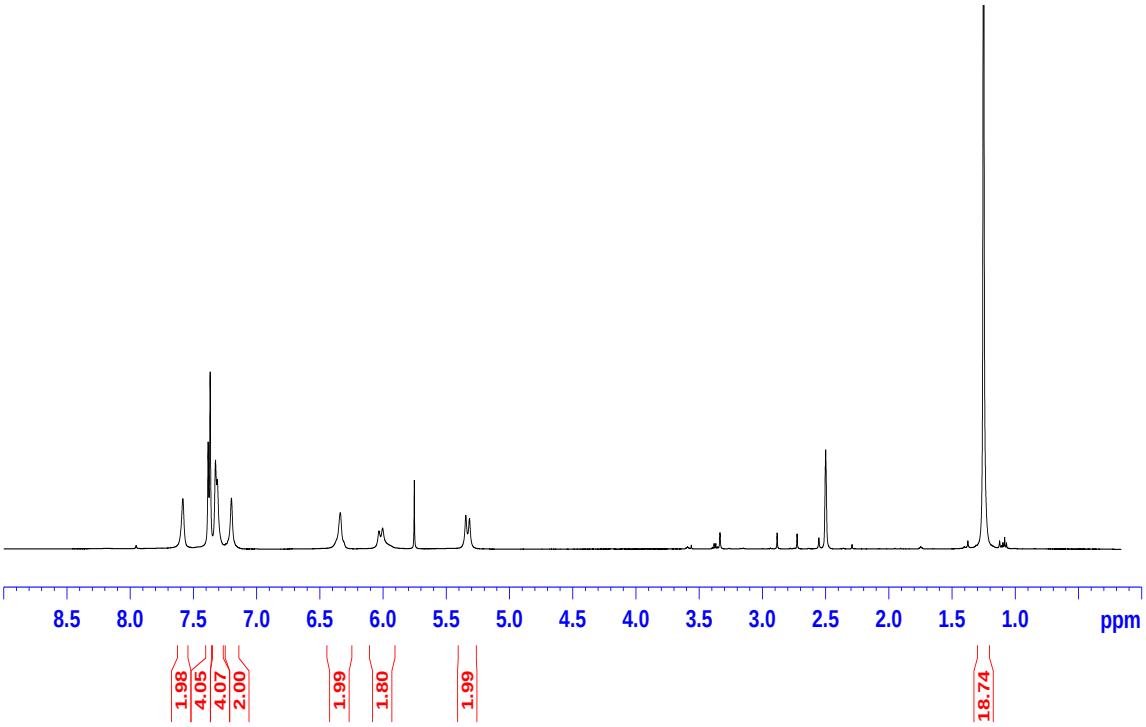

Figure S11. ^{1}H NMR spectrum of **5b** in DMSO-d_6. Additional resonances are observed for DMSO (δ 2.50); H_2O (δ 3.38); dimethylformamide (δ 2.73, 2.88 and 7.95 ppm) and dichloromethane (δ 5.75)

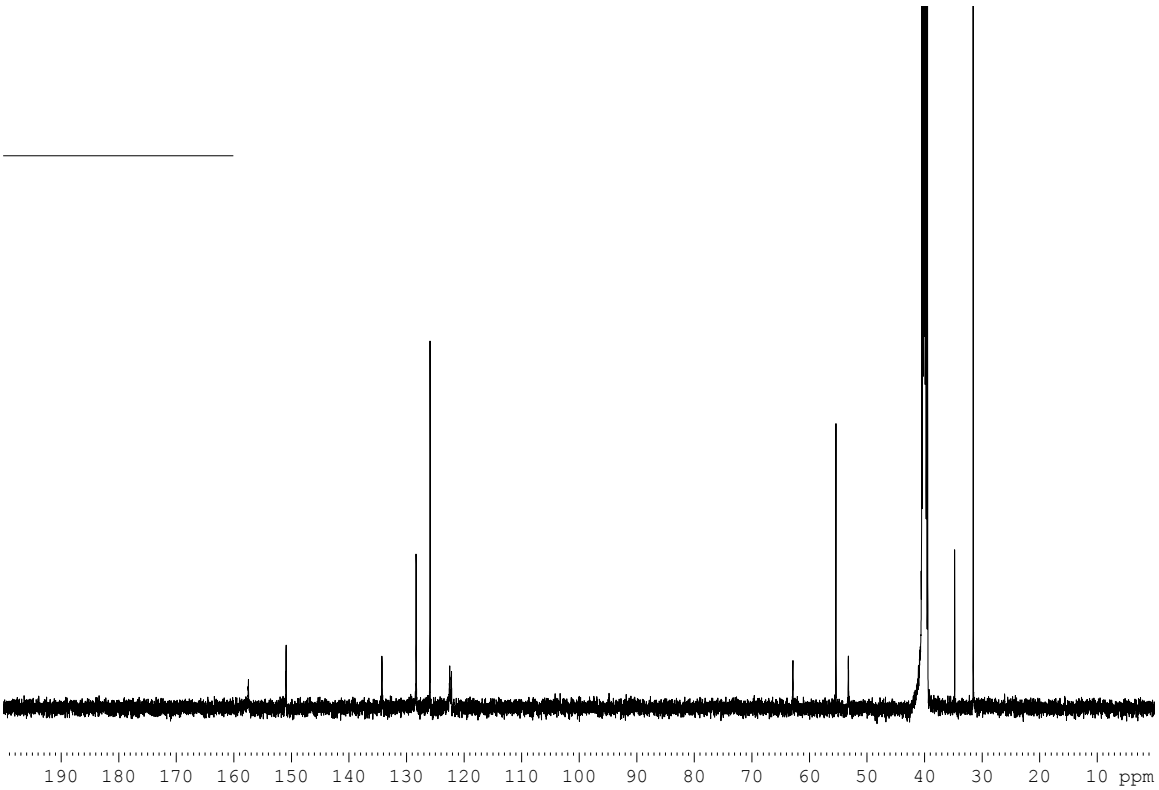

Figure S12. ^{1}H NMR spectrum of **5b** in DMSO-d_6. Additional resonances are observed for DMSO (δ 39.51) and dichloromethane (δ 54.88).