

Supplementary Information

For 1D ^1H and ^{13}C -NMR spectra of ligand L, see Figs S1–S10:

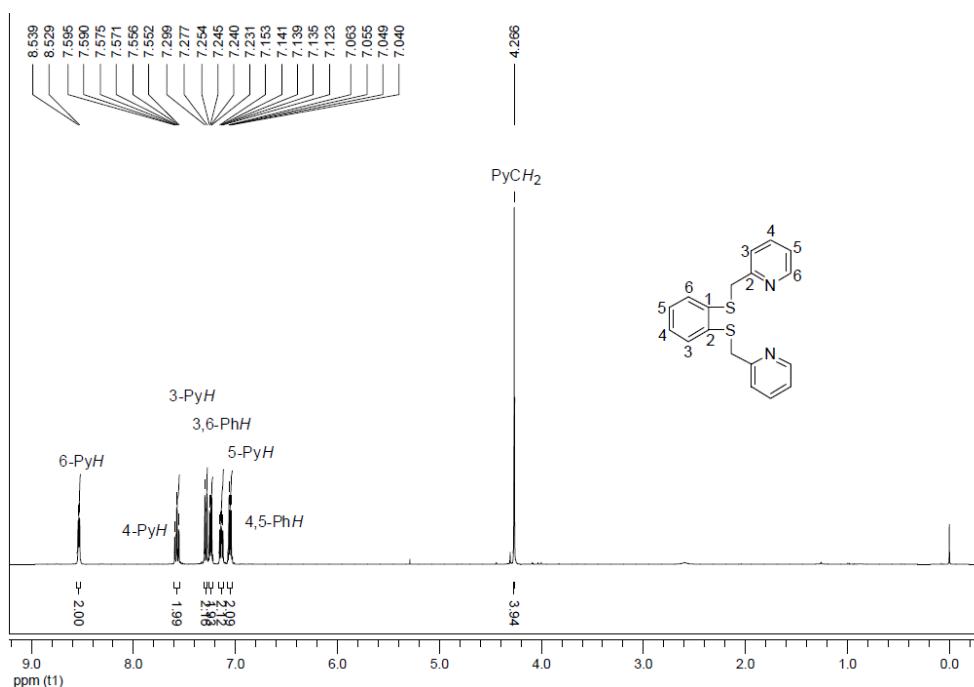


Figure S1 ^1H -NMR(CDCl_3) spectrum of ligand **L**

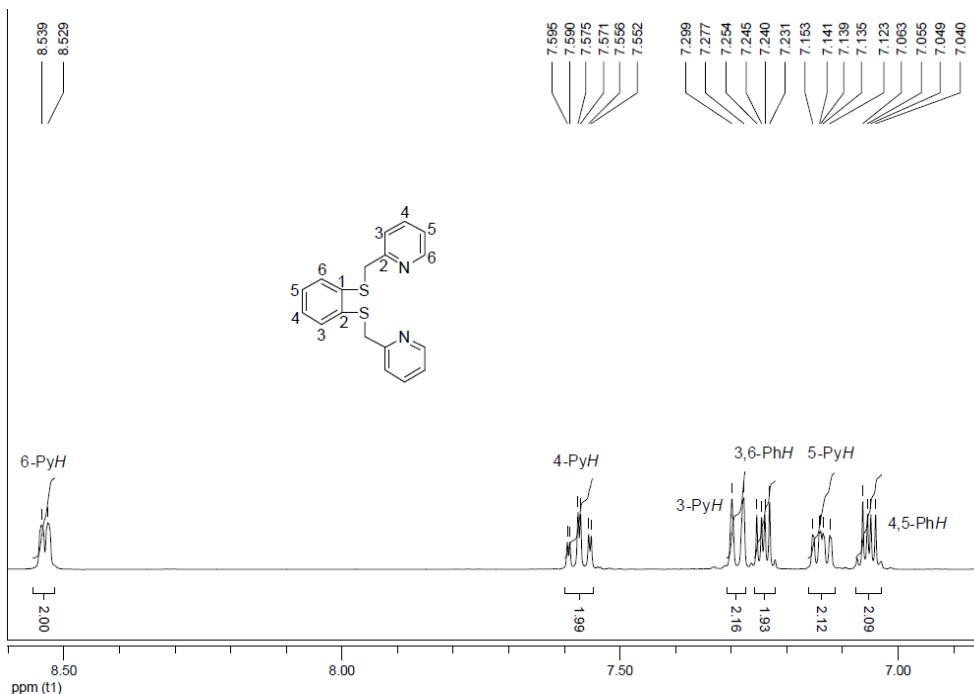


Figure S2 The expansion of ^1H -NMR(CDCl_3) spectrum of ligand **L**

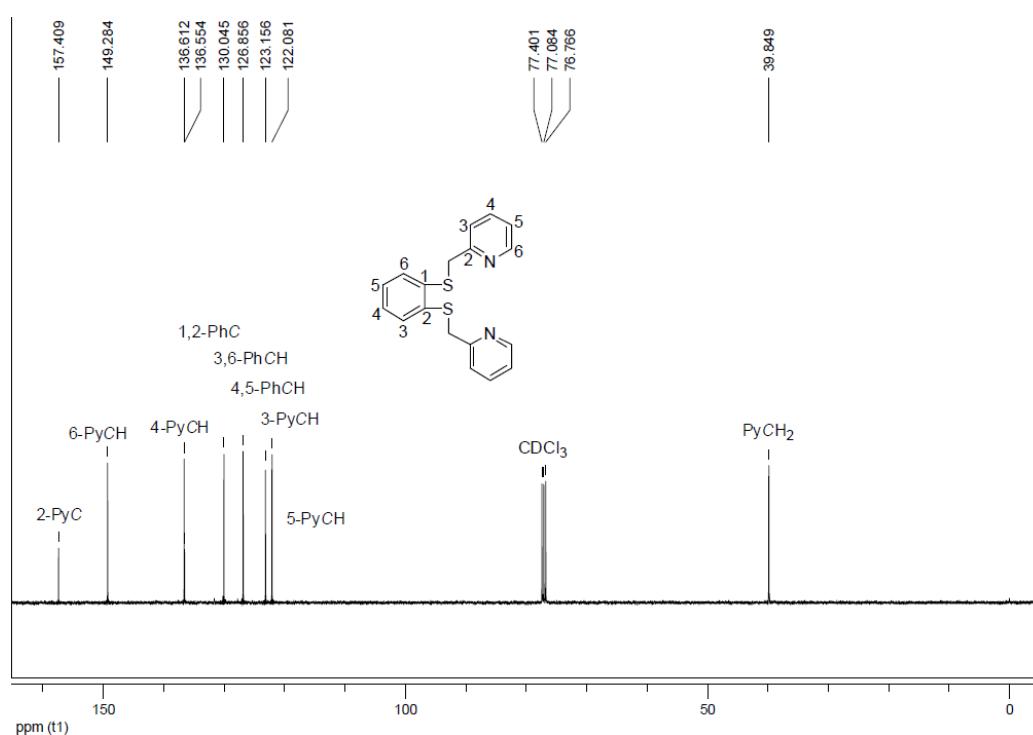


Figure S3 ^{13}C -NMR(CDCl_3) spectrum of ligand **L**

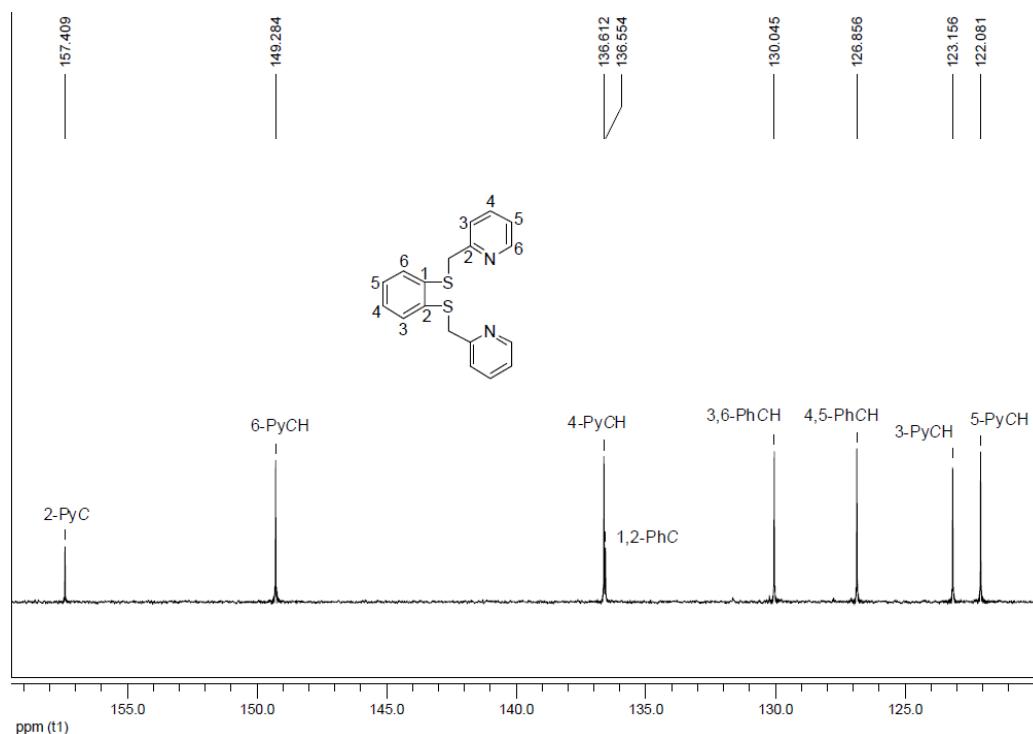


Figure S4 The expansion of ^{13}C -NMR(CDCl_3) spectrum of ligand **L**

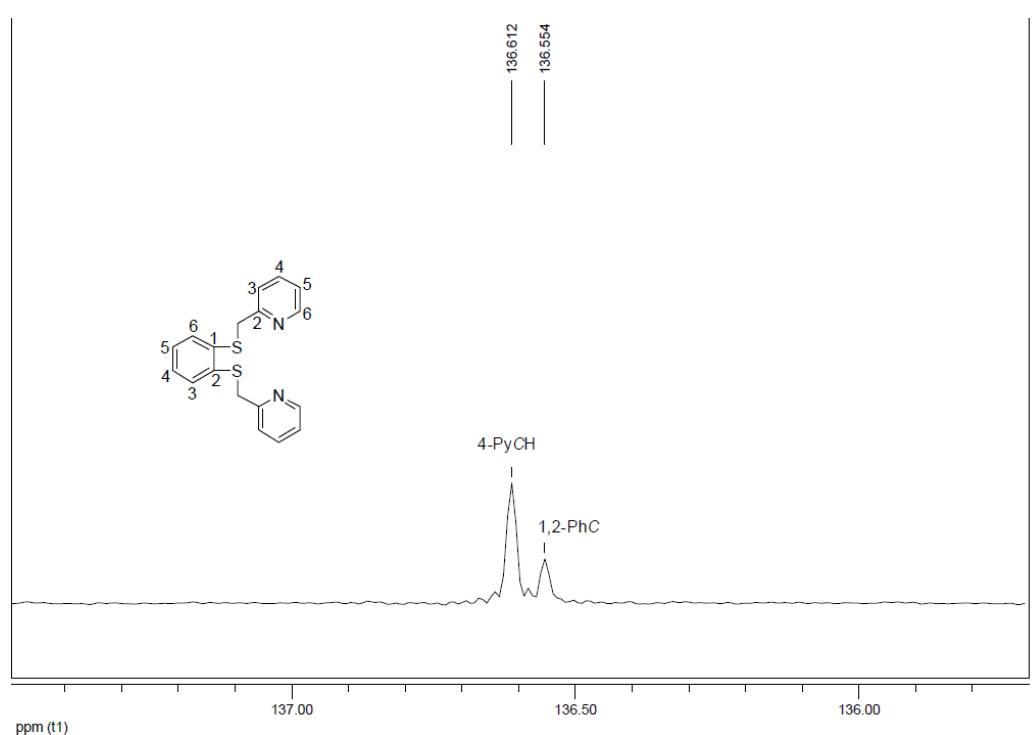


Figure S5 The expansion of ^{13}C -NMR(CDCl_3) spectrum of ligand **L**

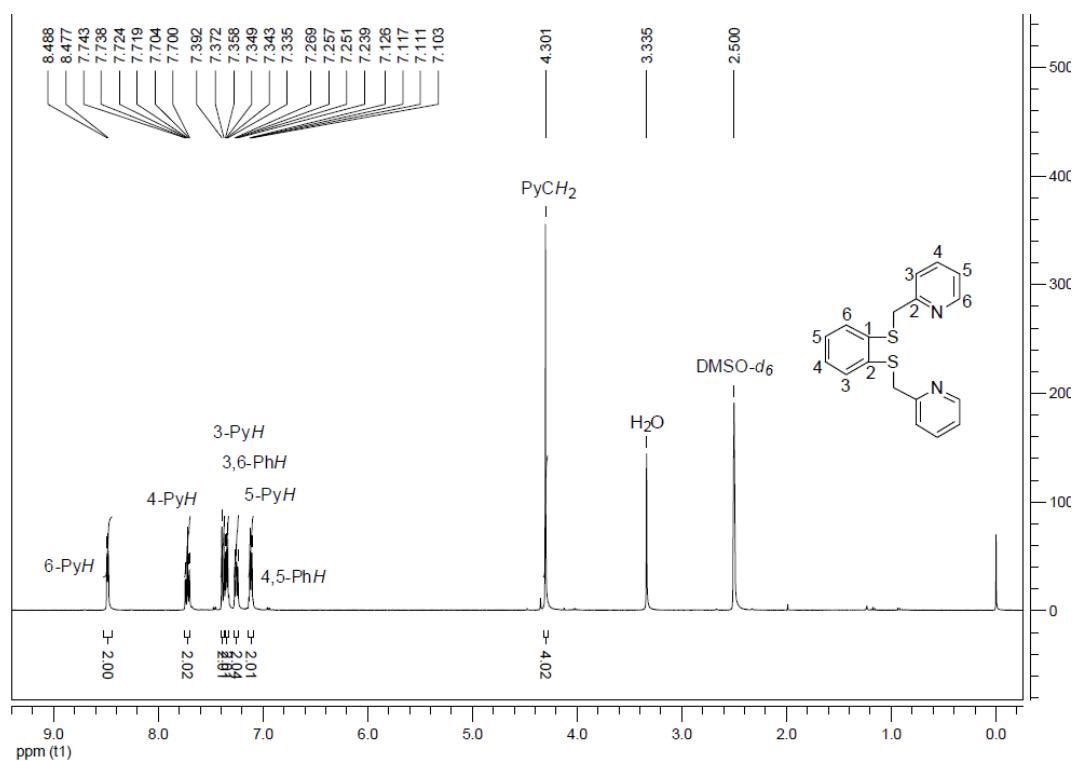


Figure S6 ^1H -NMR($\text{DMSO}-d_6$) spectrum of ligand **L**

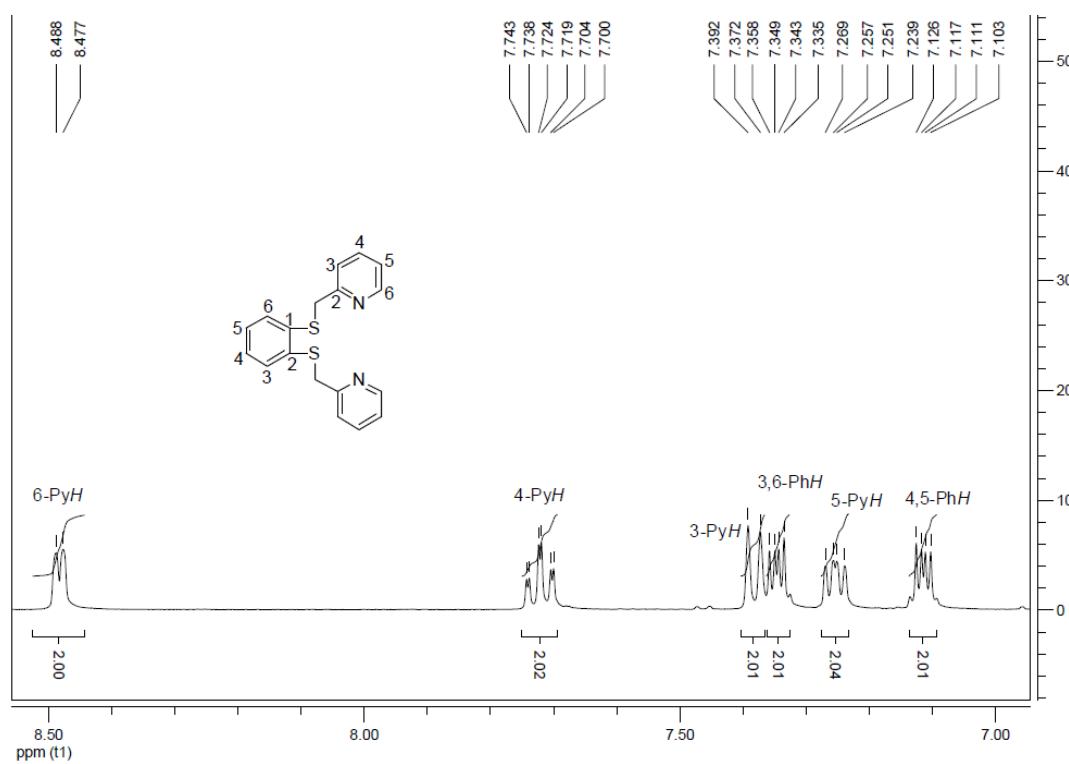


Figure S7 The expansion of ¹H-NMR(DMSO-*d*₆) spectrum of ligand **L**

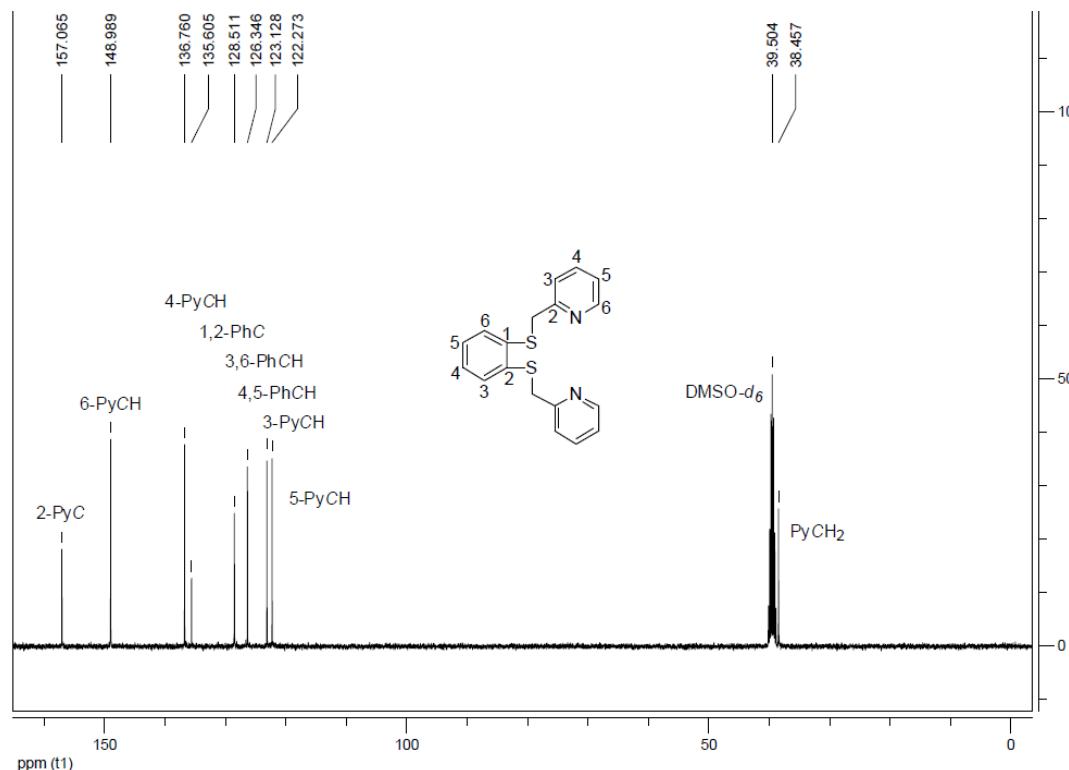


Figure S8 ¹³C-NMR(DMSO-*d*₆) spectrum of ligand **L**

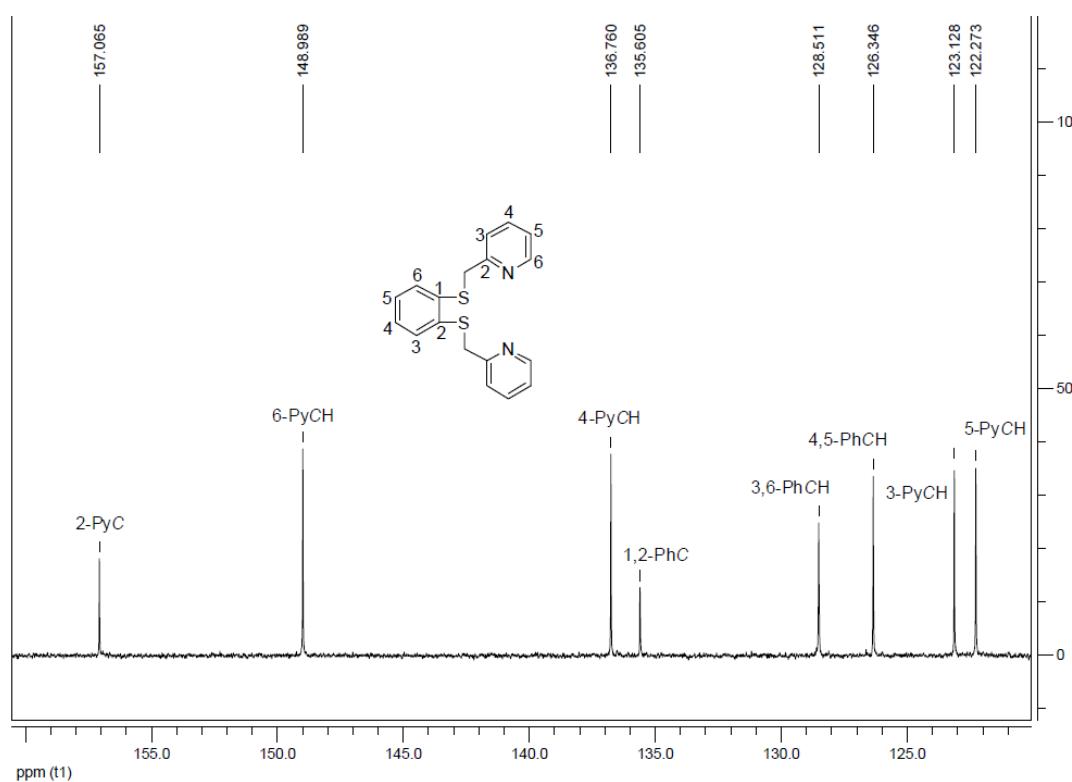


Figure S9 The expansion of ^{13}C -NMR(DMSO- d_6) spectrum of ligand **L**

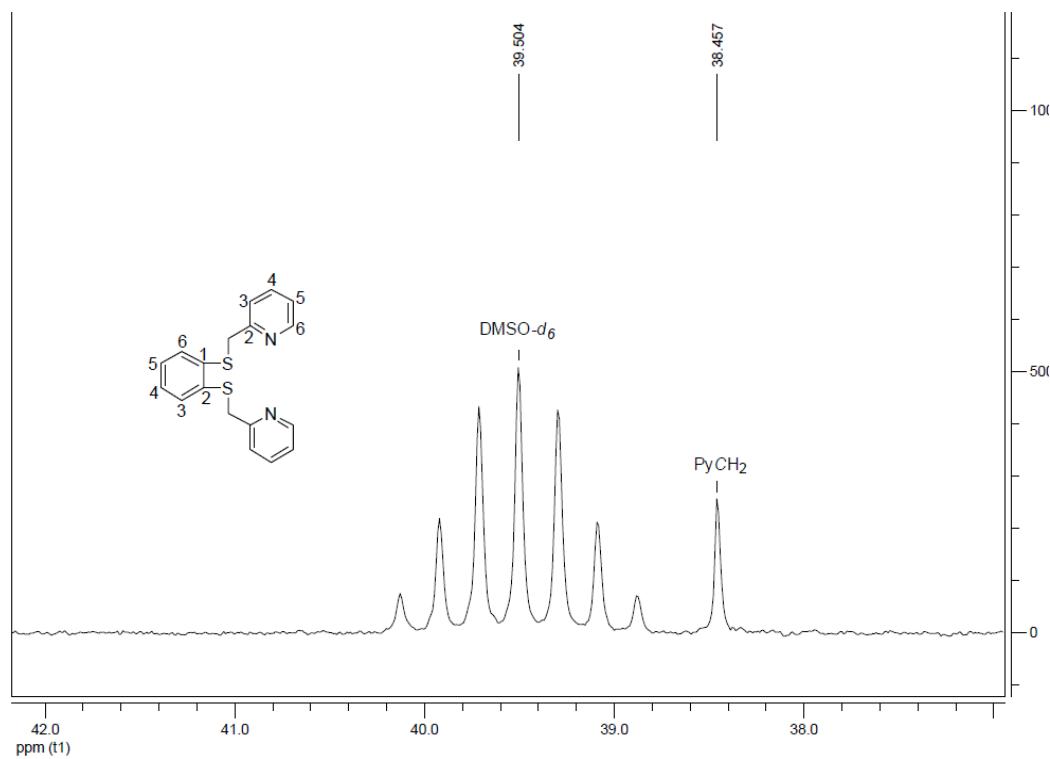


Figure S10 The expansion of ^{13}C -NMR(DMSO- d_6) spectrum of ligand **L**

For 1D ^1H -NMR spectra of compound 1, see Figs S11–S12:

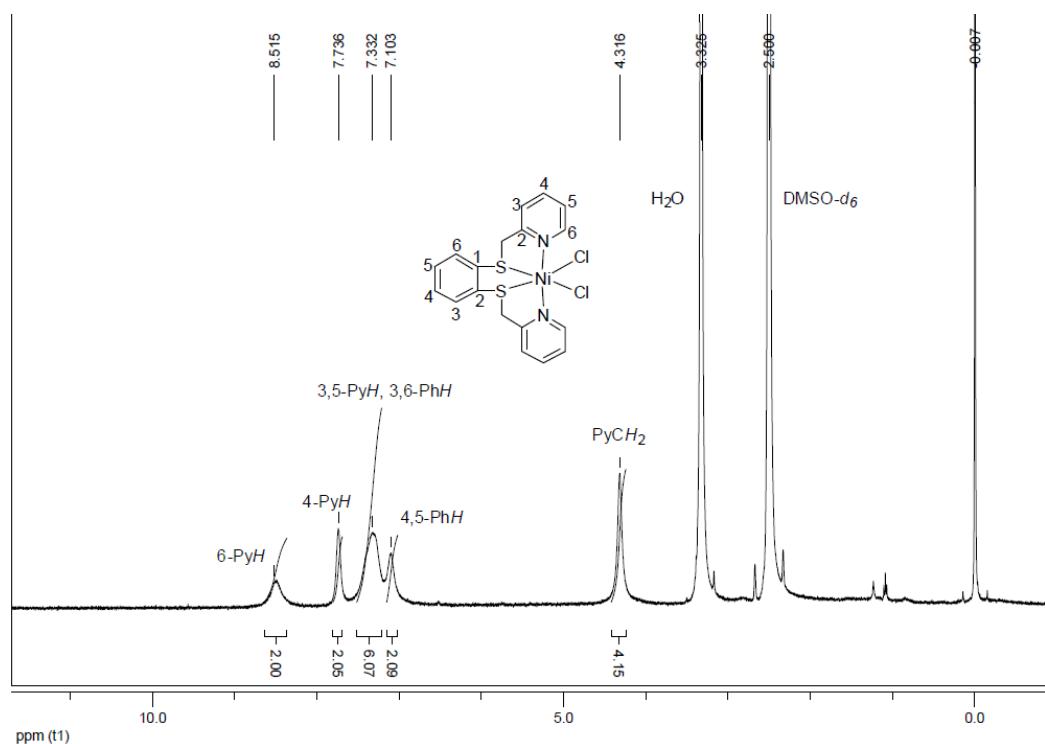


Figure S11 ^1H -NMR($\text{DMSO}-d_6$) spectrum of compound 1

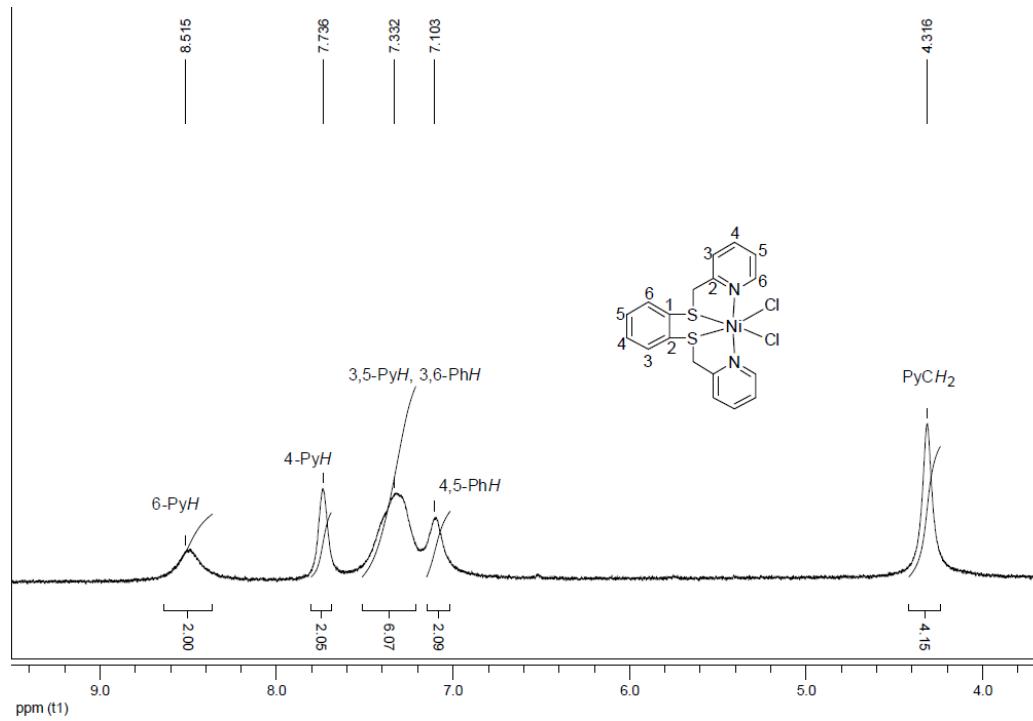


Figure S12 The expansion of ^1H -NMR($\text{DMSO}-d_6$) spectrum of compound 1

For 1D ^1H and ^{13}C -NMR spectra of compound 2, see Figs S13–S17:

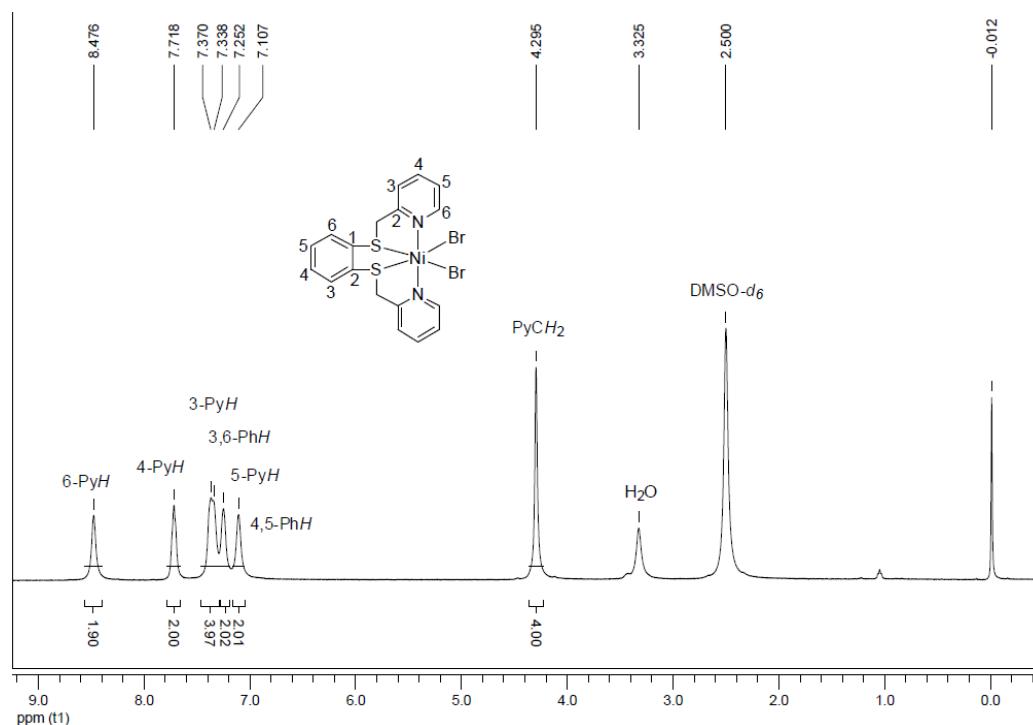


Figure S13 ^1H -NMR(DMSO- d_6) spectrum of compound 2

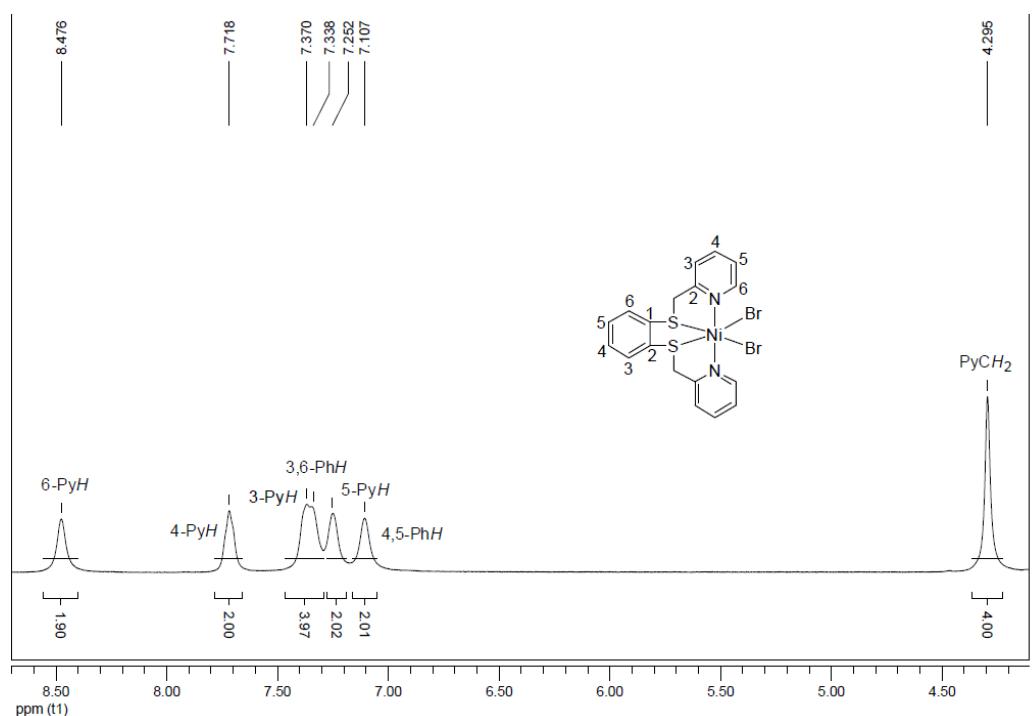


Figure S14 The expansion of ^1H -NMR(DMSO- d_6) spectrum of compound 2

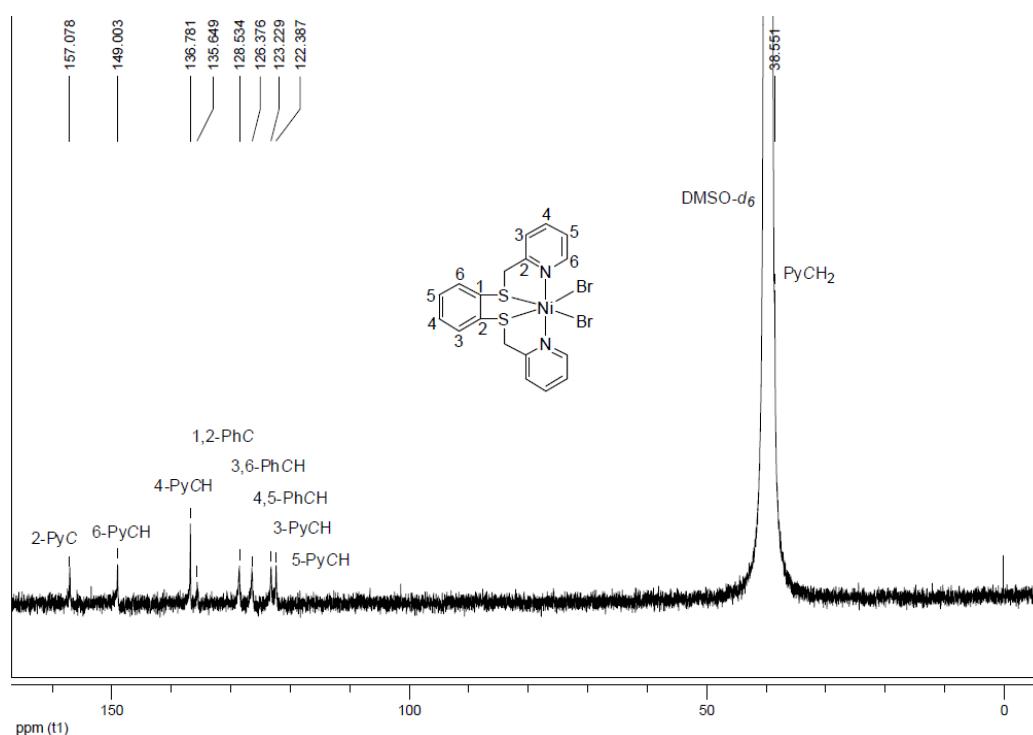


Figure S15 ^{13}C -NMR(DMSO- d_6) spectrum of compound 2

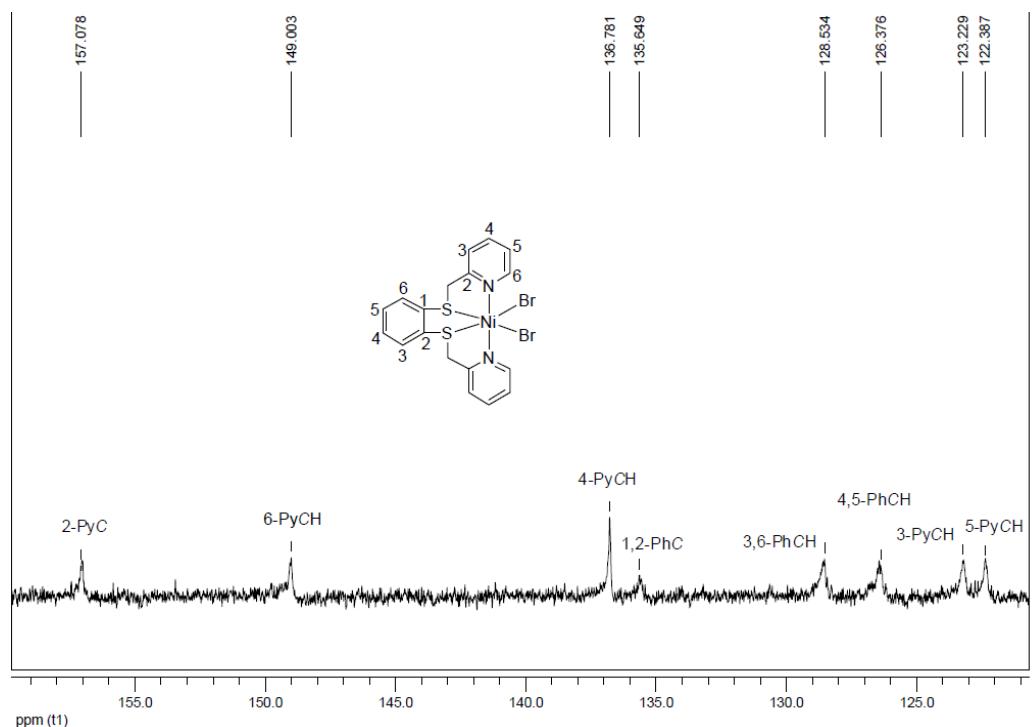


Figure S16 The expansion of ^{13}C -NMR(DMSO- d_6) spectrum of compound 2

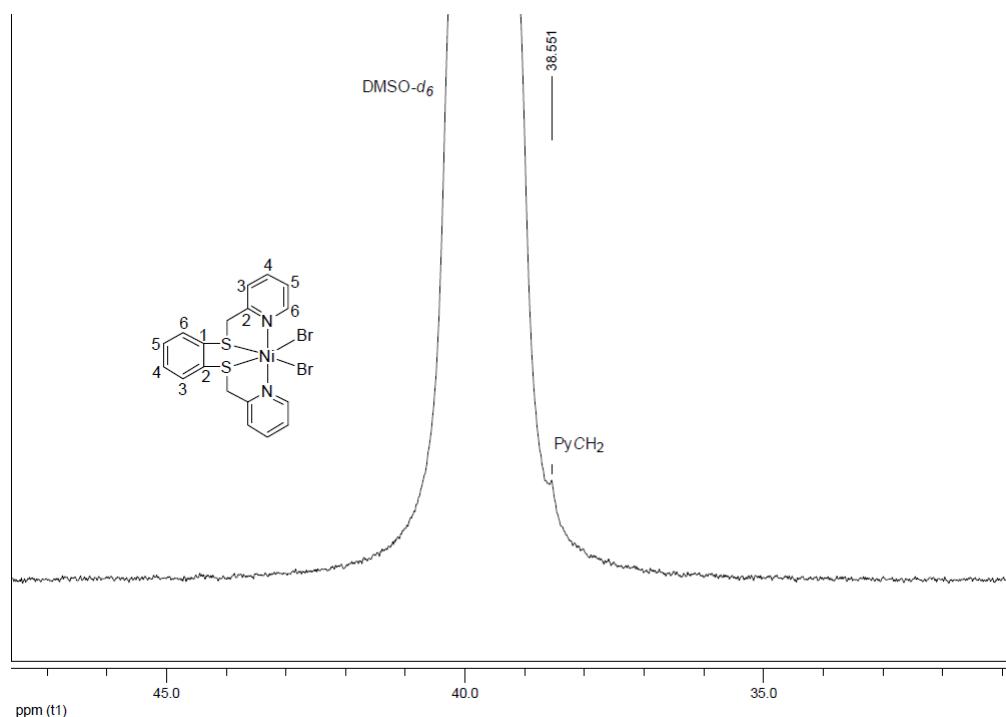


Figure S17 The expansion of ^{13}C -NMR($\text{DMSO}-d_6$) spectrum of compound **2**

For 1D ^1H and ^{13}C -NMR spectra of compound **2**^{*}, see Figs S18-S22:

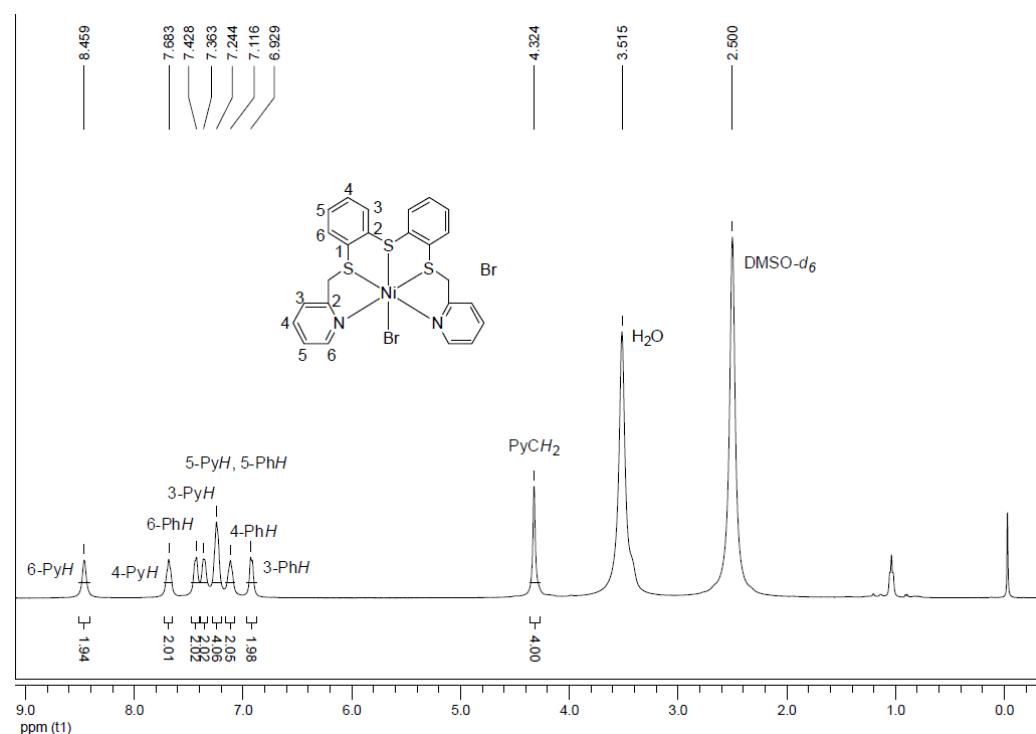


Figure S18 ^1H -NMR($\text{DMSO}-d_6$) spectrum of compound **2**^{*}

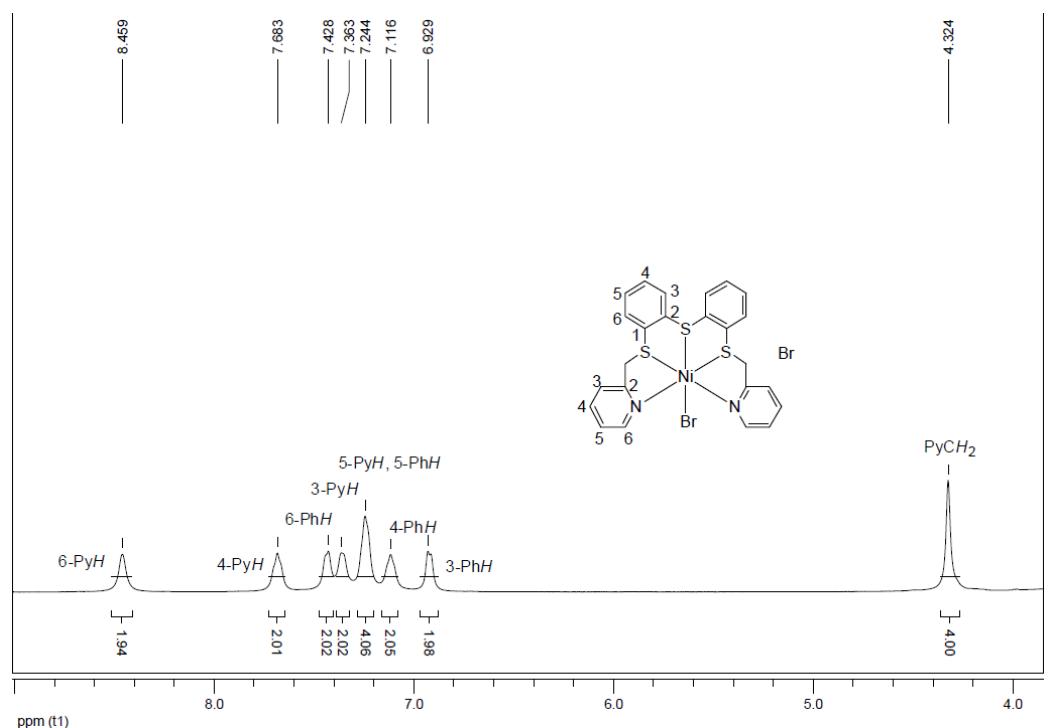


Figure S19 The expansion of ^1H -NMR(DMSO- d_6) spectrum of compound 2^*

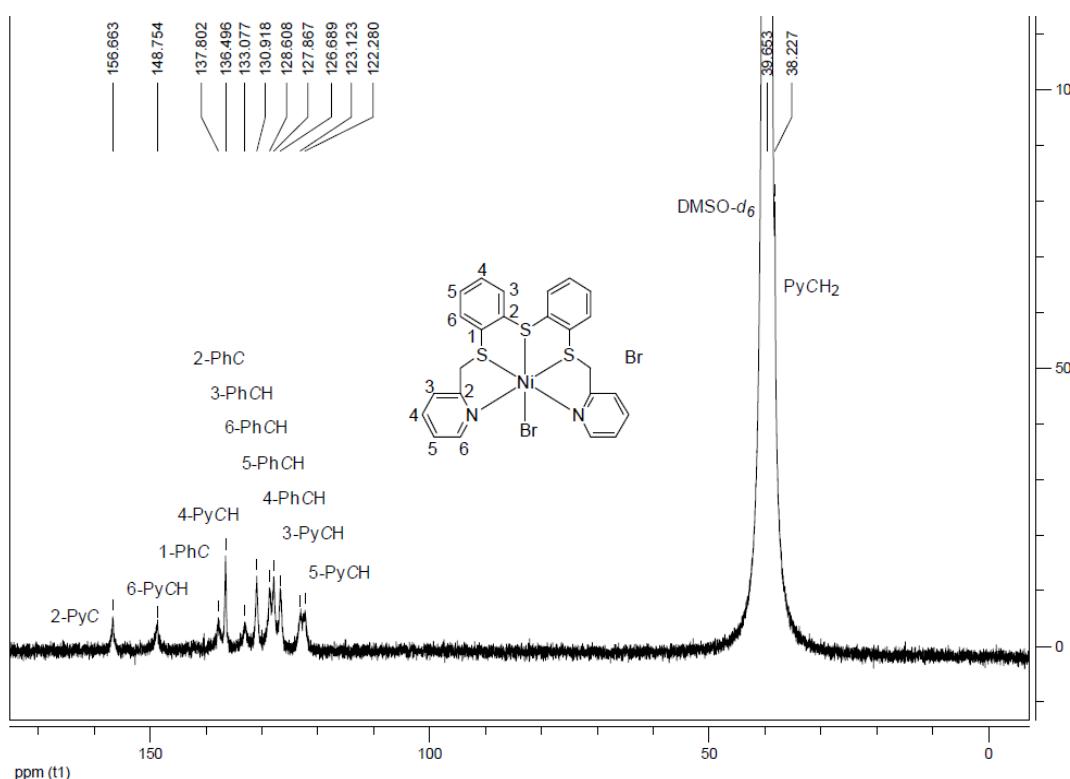


Figure S20 ^{13}C -NMR(DMSO- d_6) spectrum of compound 2^*

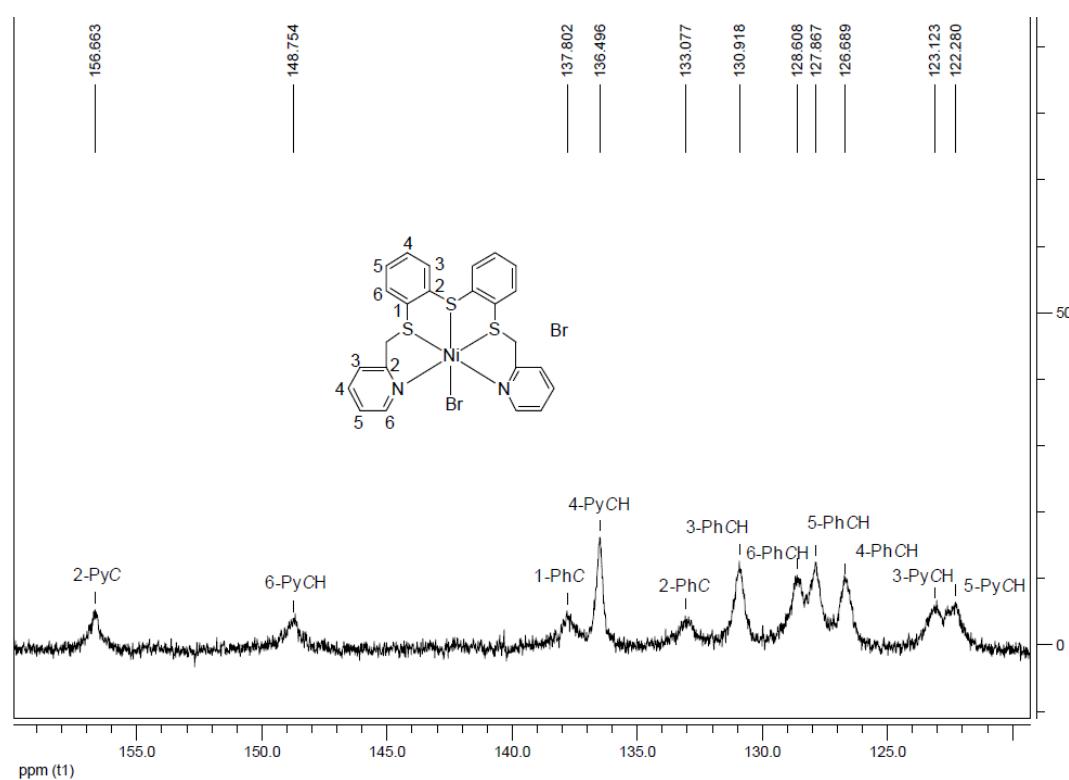


Figure S21 The expansion of ^{13}C -NMR($\text{DMSO}-d_6$) spectrum of compound 2^*

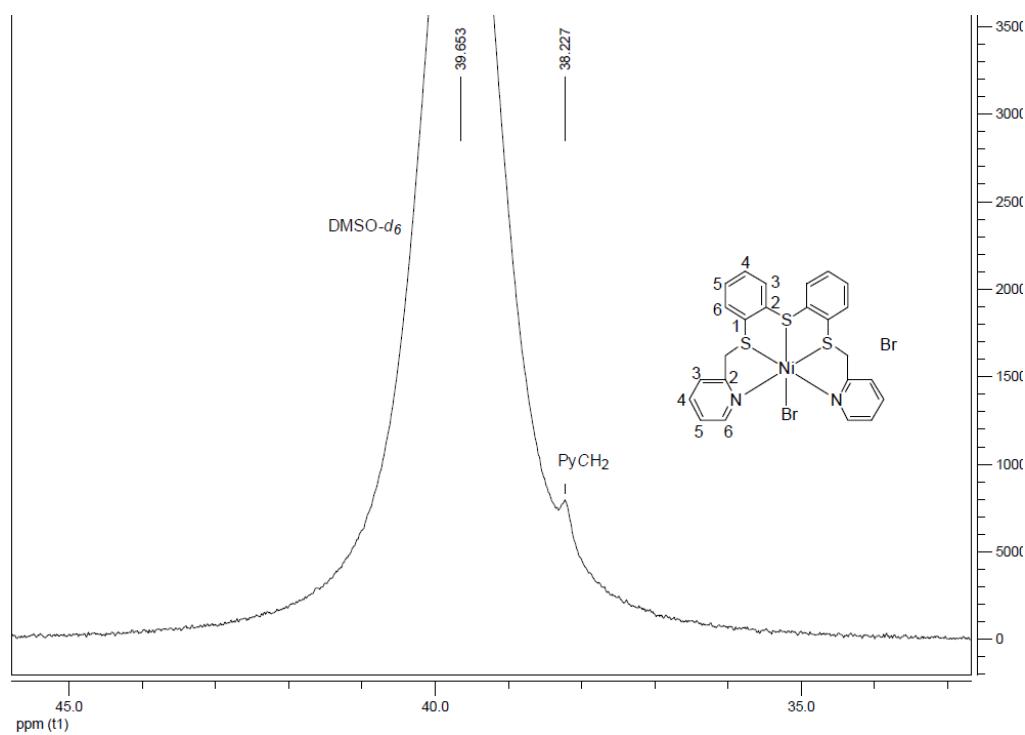


Figure S22 The expansion of ^{13}C -NMR($\text{DMSO}-d_6$) spectrum of compound 2^*

For 1D ^1H and ^{13}C -NMR spectra of compound 3, see Figs S23–S27:

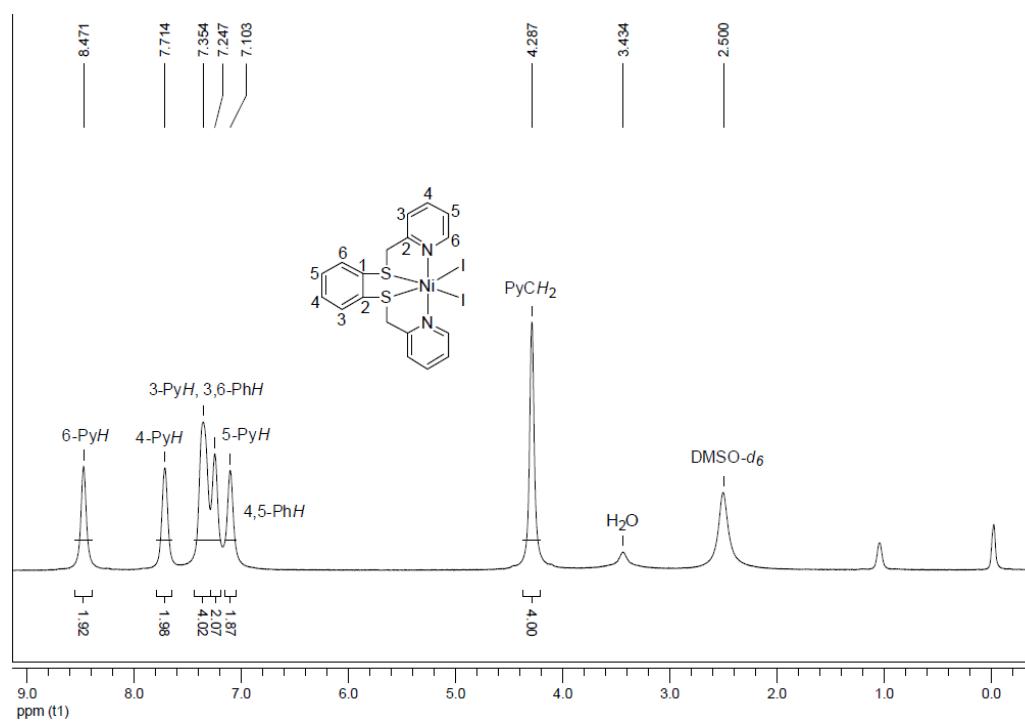


Figure S23 ^1H -NMR(DMSO- d_6) spectrum of compound 3

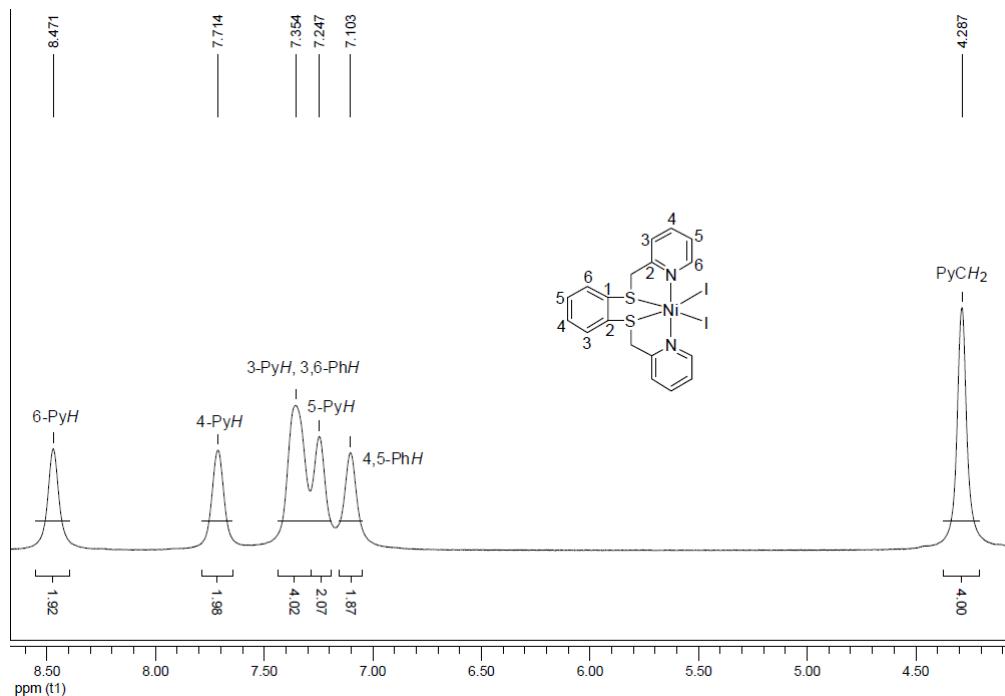


Figure S24 The expansion of ^1H -NMR(DMSO- d_6) spectrum of compound 3

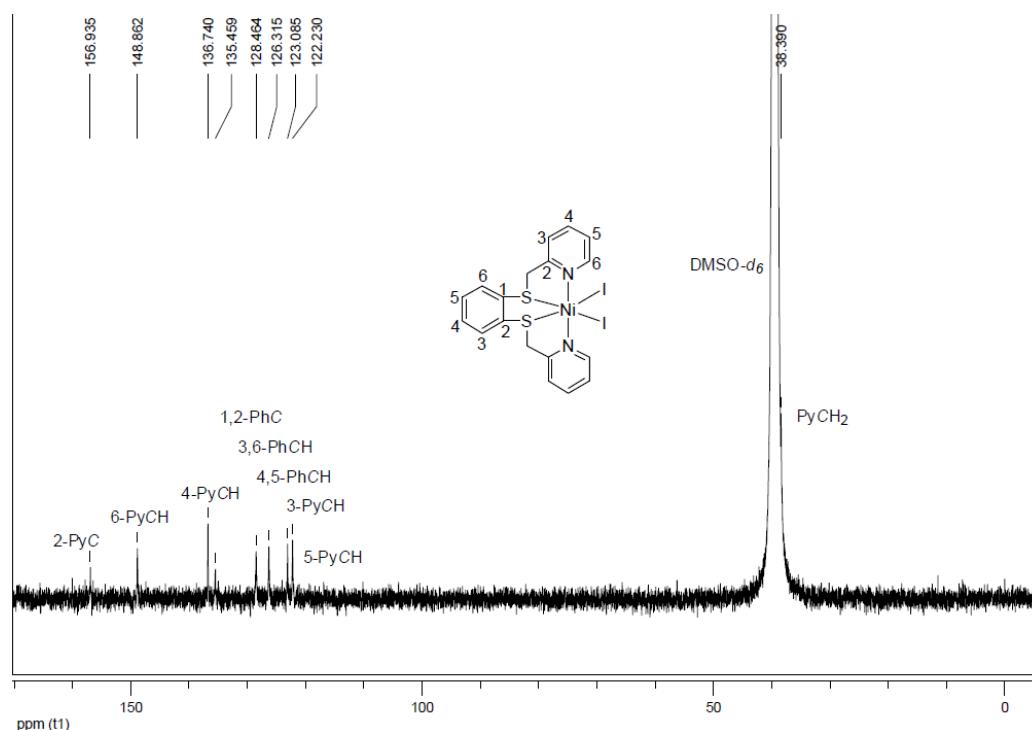


Figure S25 ^{13}C -NMR($\text{DMSO}-d_6$) spectrum of compound 3

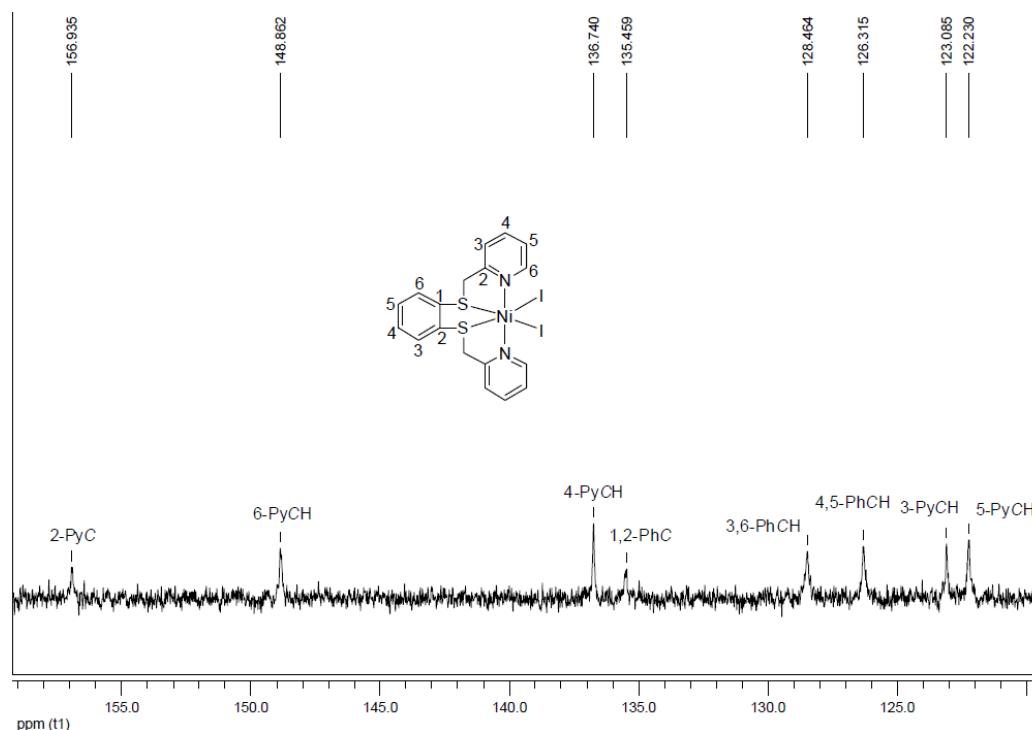


Figure S26 The expansion of ^{13}C -NMR($\text{DMSO}-d_6$) spectrum of compound 3

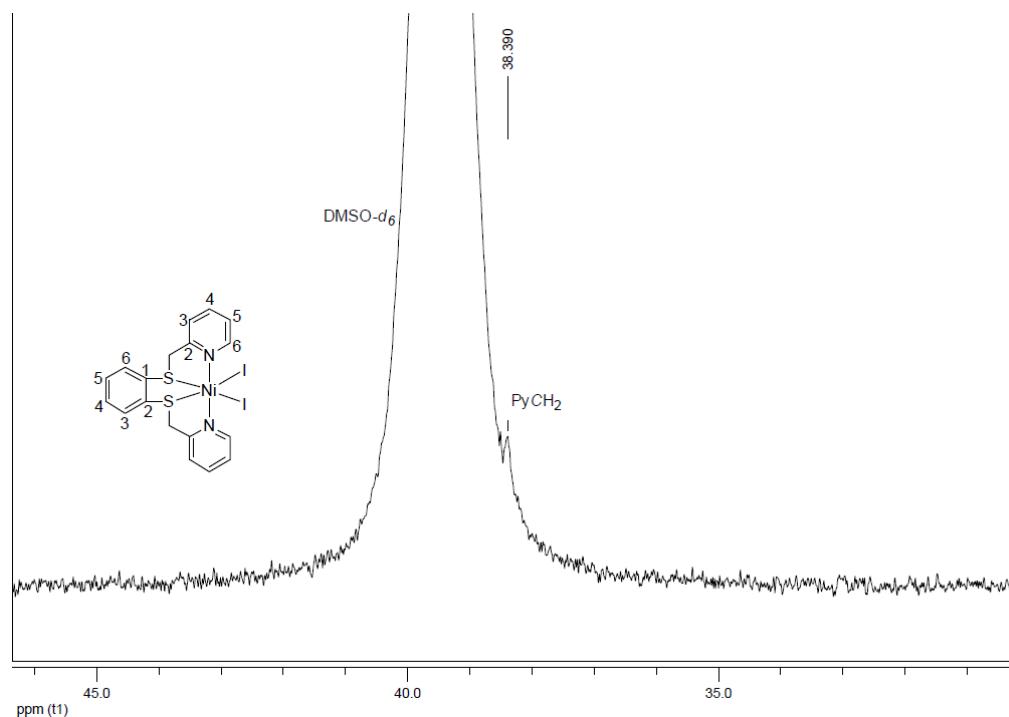


Figure S27 The expansion of ^{13}C -NMR(DMSO- d_6) spectrum of compound 3

For 1D ^1H and ^{13}C -NMR spectras of compound 4, see Figs S28-S32:

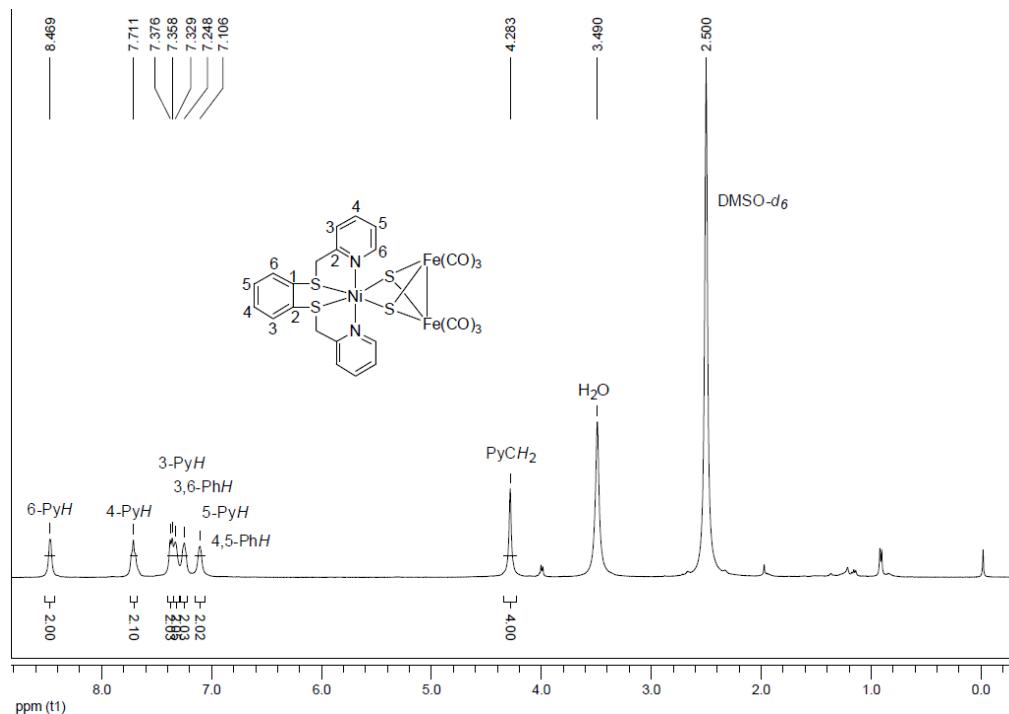


Figure S28 ^1H -NMR(DMSO- d_6) spectrum of compound 4

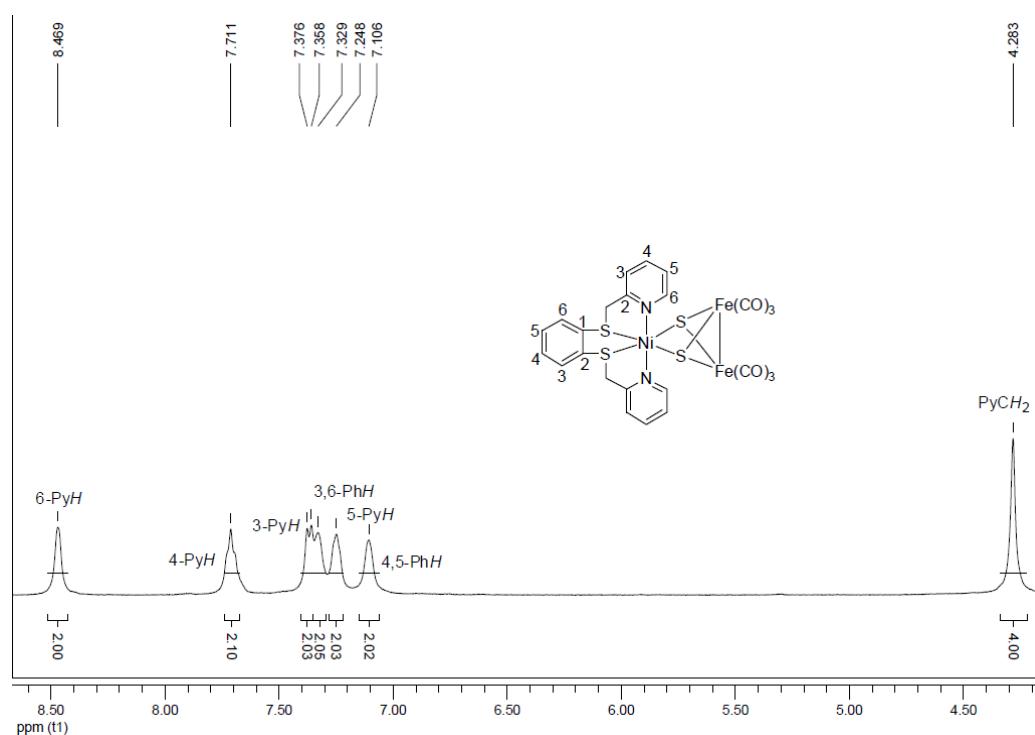


Figure S29 The expansion of ¹H-NMR(DMSO-*d*₆) spectrum of compound 4

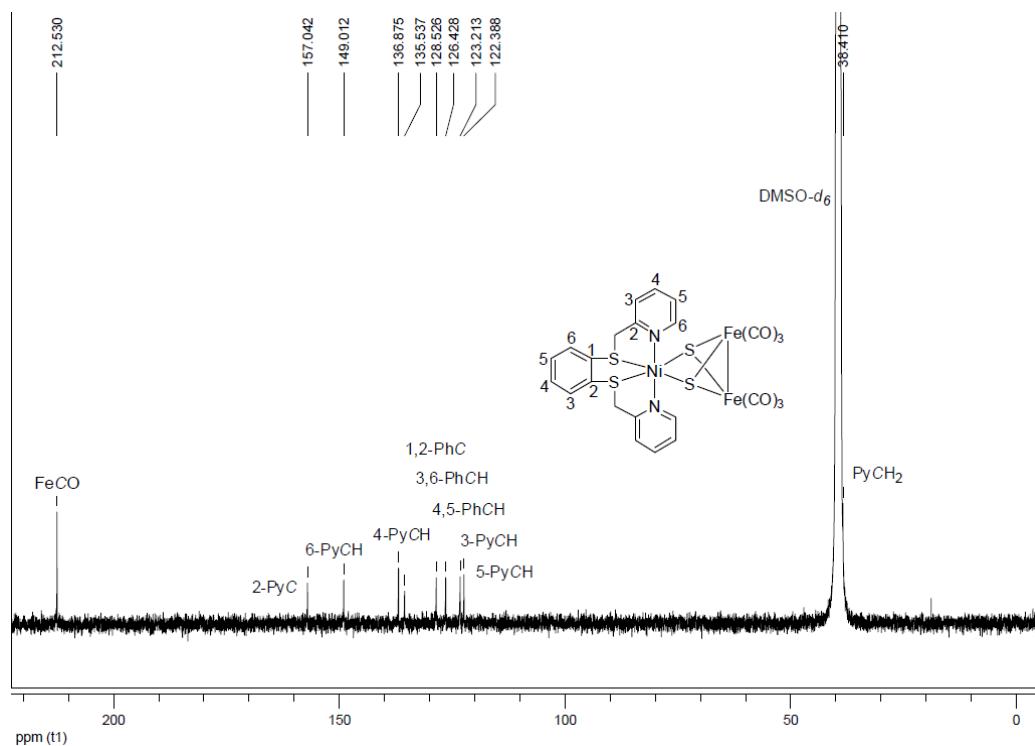


Figure S30 ¹³C-NMR(DMSO-*d*₆) spectrum of compound 4

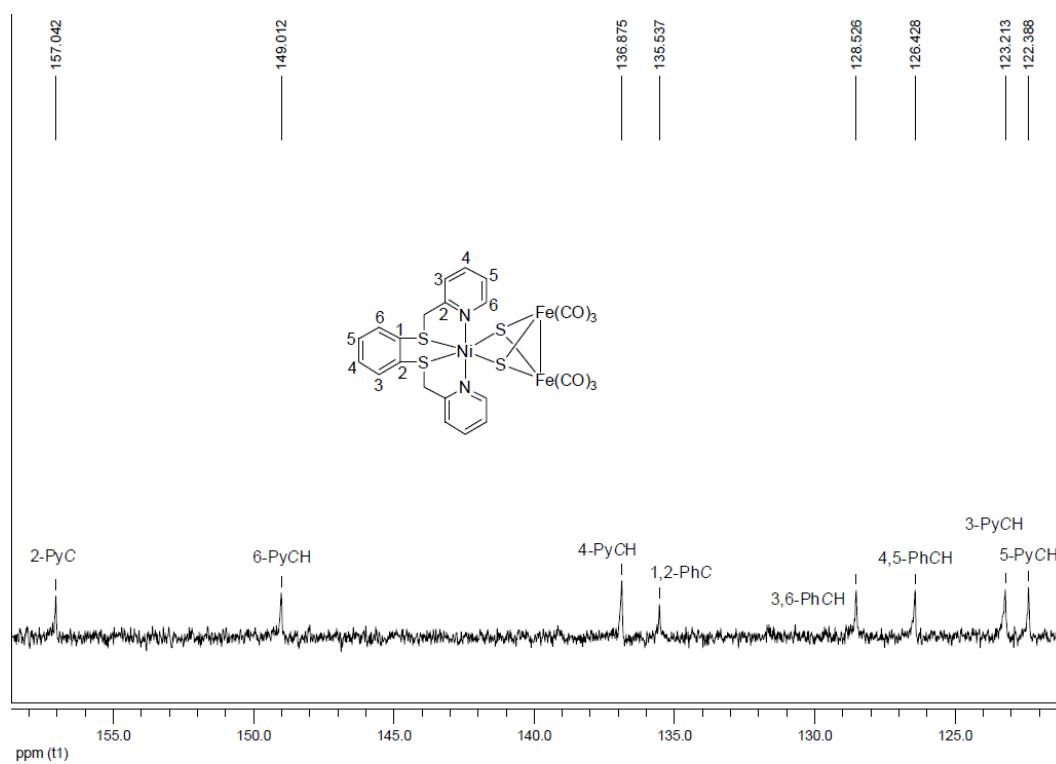


Figure S31 The expansion of ^{13}C -NMR(DMSO- d_6) spectrum of compound 4

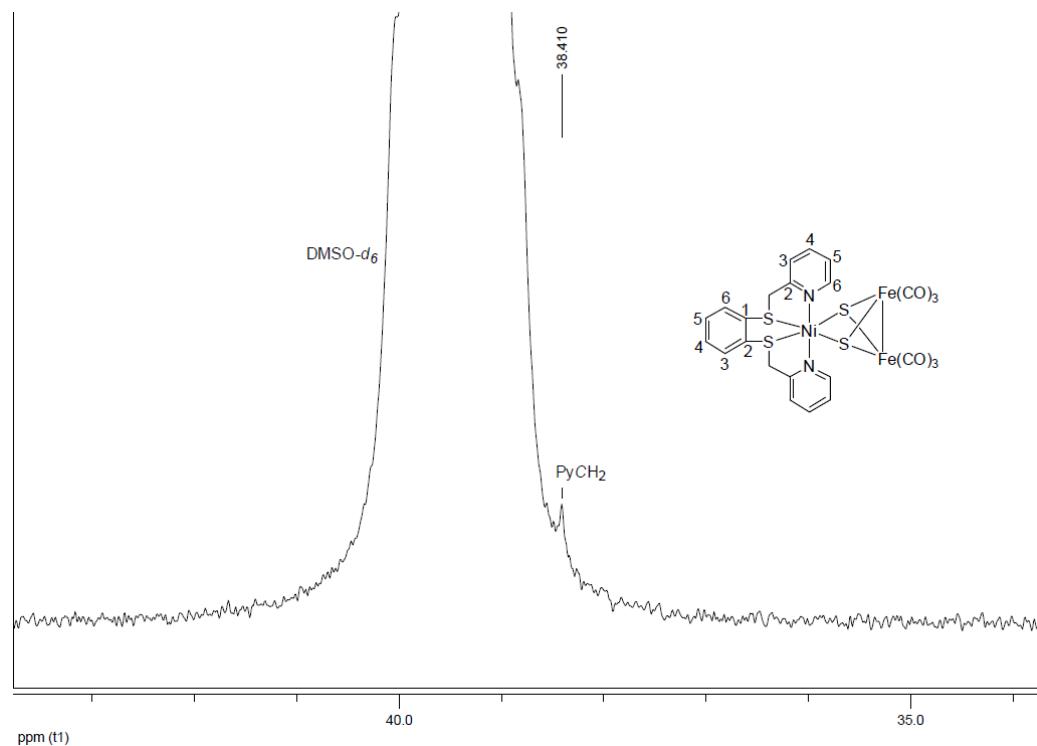


Figure S32 The expansion of ^{13}C -NMR(DMSO- d_6) spectrum of compound 4

For 2D-NMR spectra of ligand L, see Figs S33-S40:

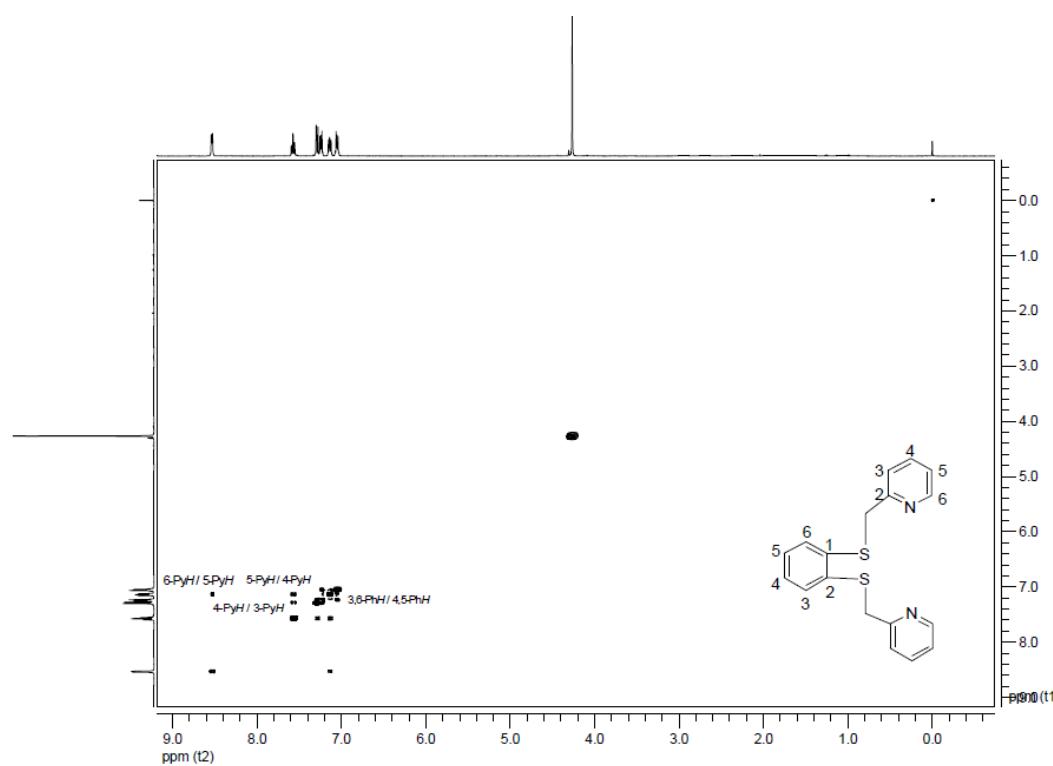


Figure S33 ¹H-¹H COSY spectrum of ligand L

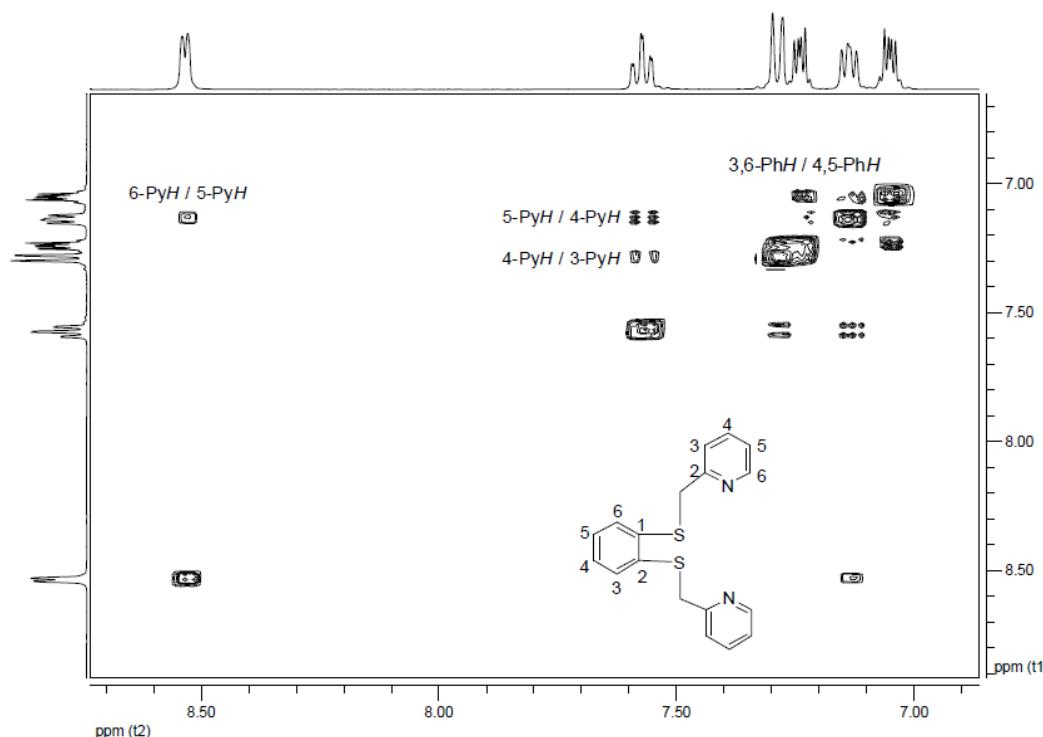


Figure S34 The expansion of ¹H-¹H COSY spectrum of ligand L

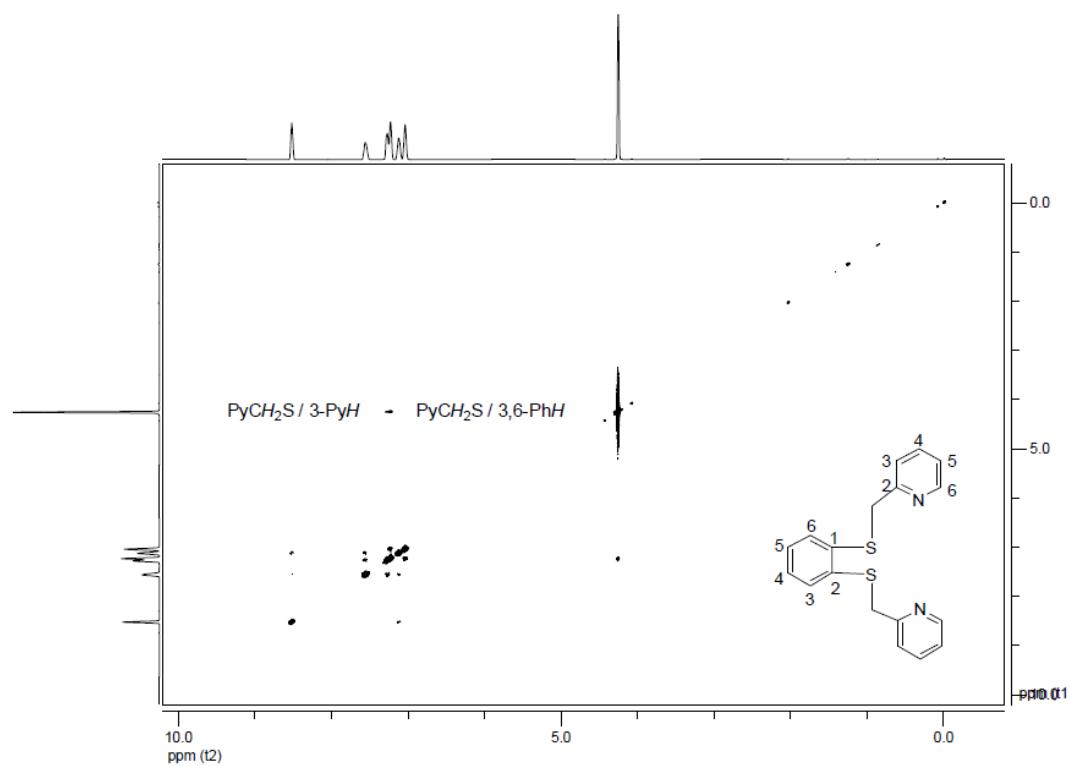


Figure S35 ^1H - ^1H NOESY spectrum of ligand **L**

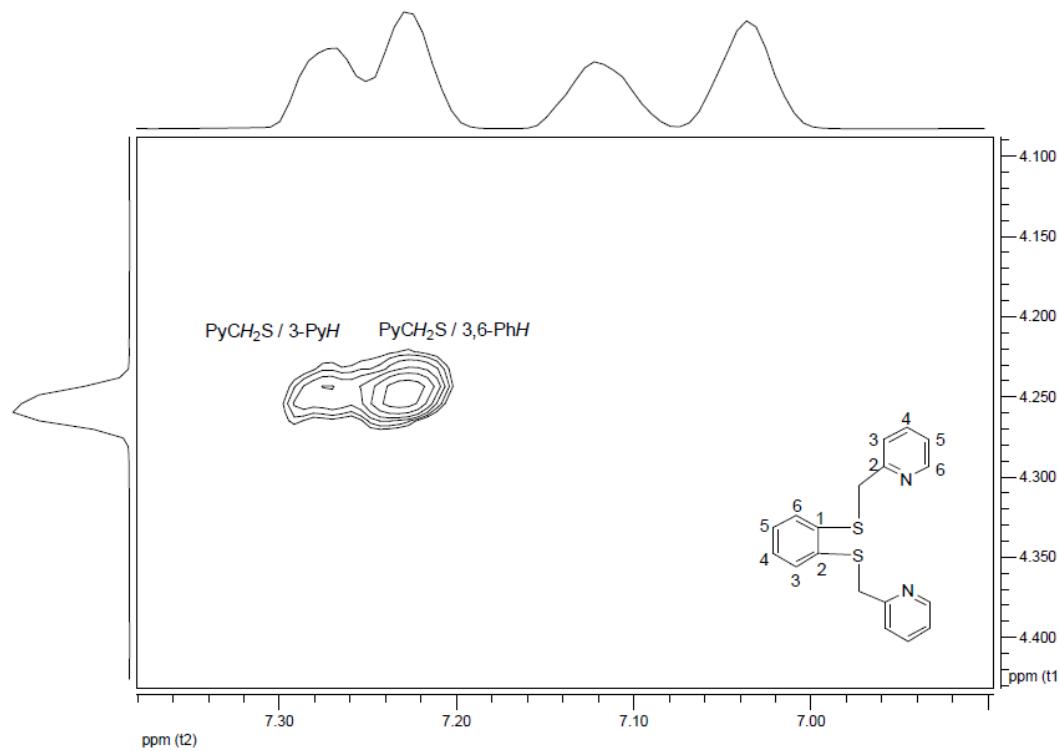


Figure S36 The expansion of ^1H - ^1H NOESY spectrum of ligand **L**

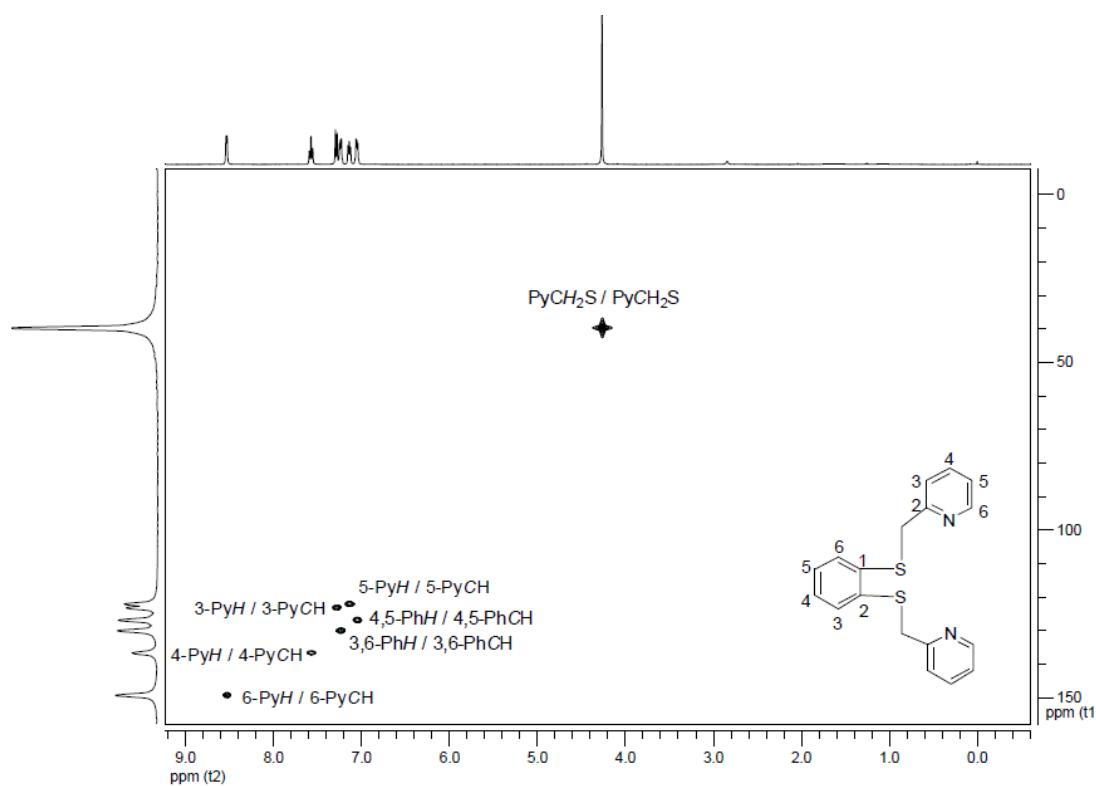


Figure S37 HMQC spectrum of ligand **L**

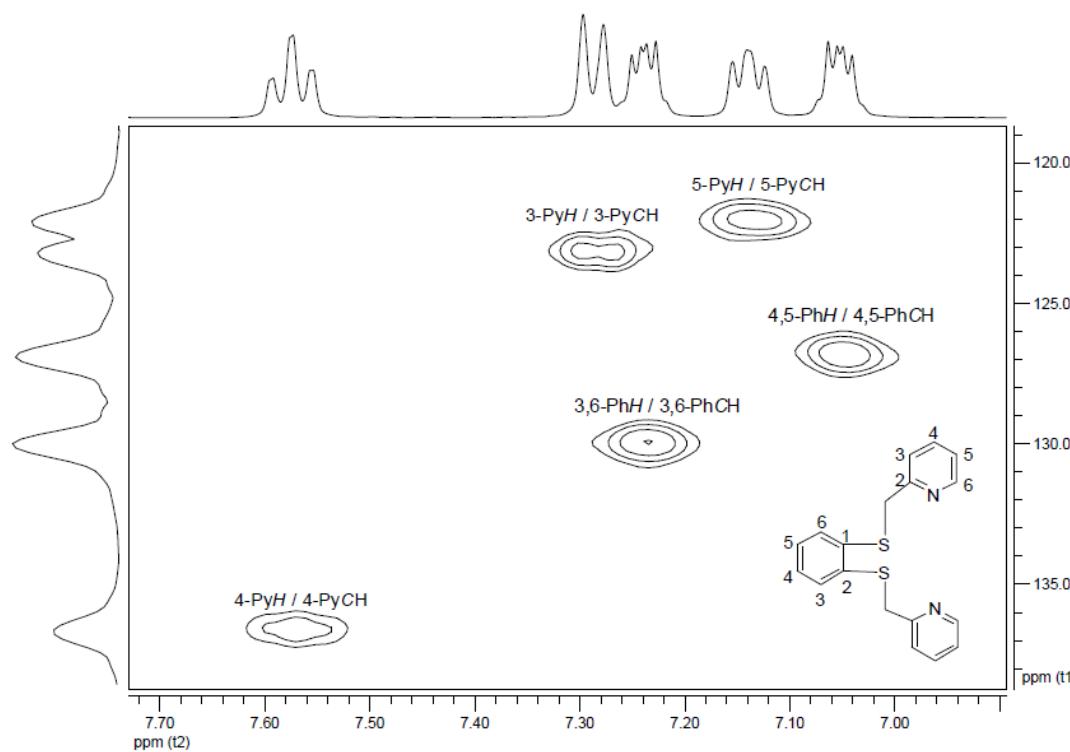


Figure S38 The expansion of HMQC spectrum of ligand **L**

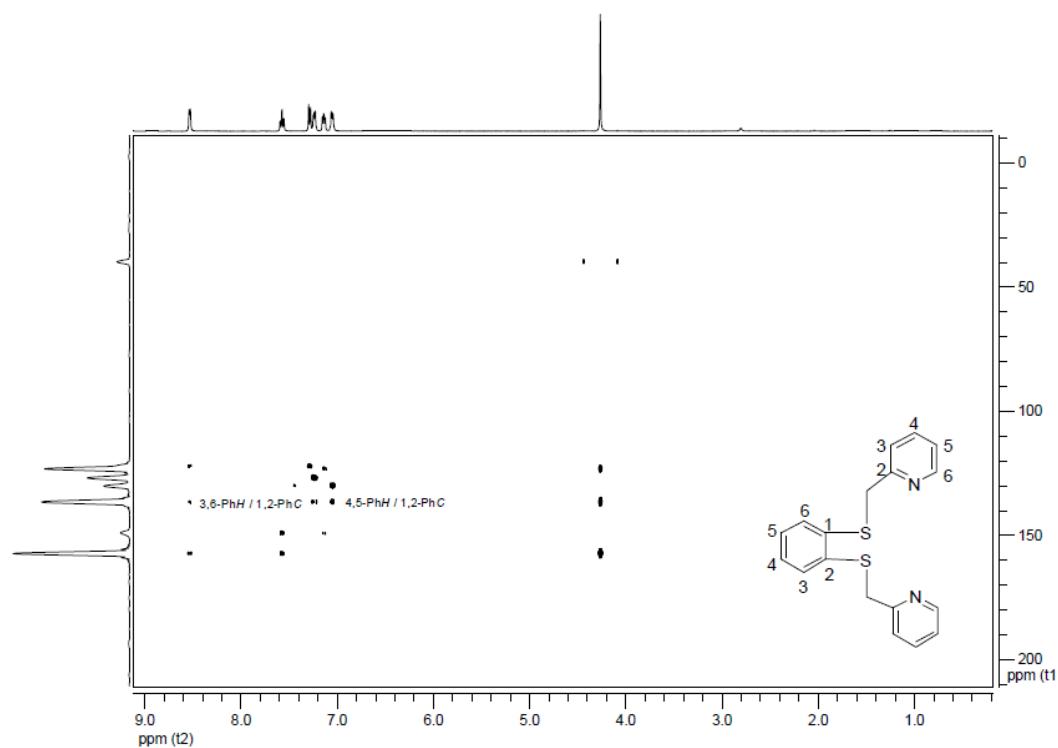


Figure S39 HMBC spectrum of ligand **L**

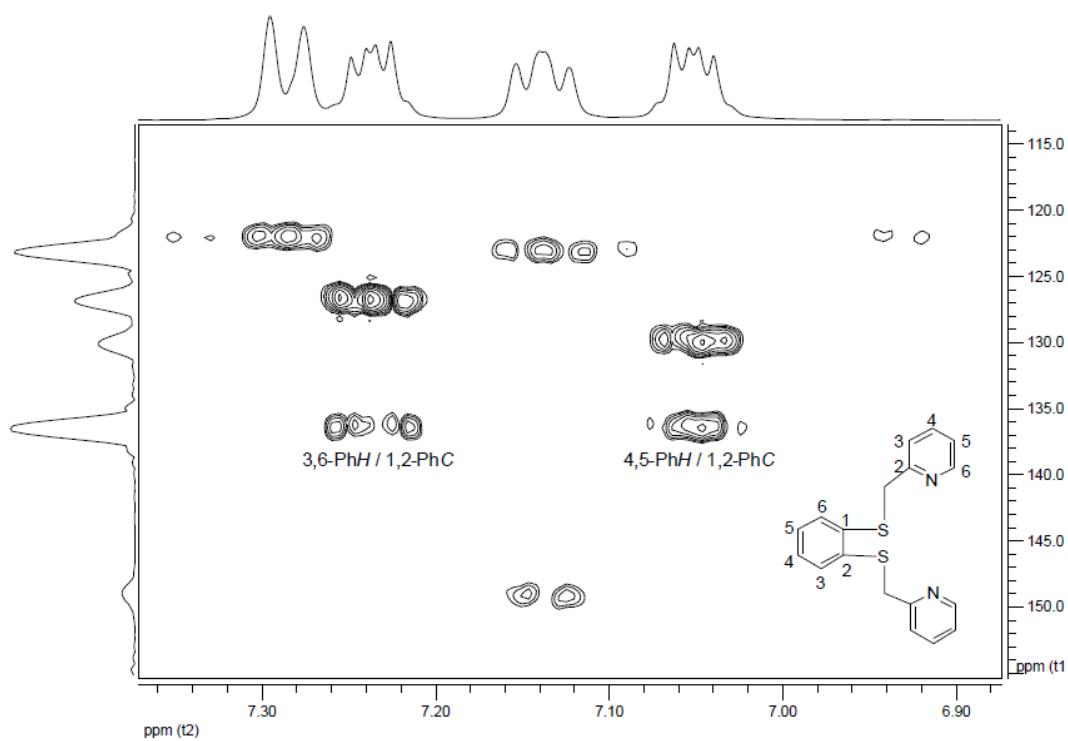


Figure S40 The expansion of HMBC spectrum of ligand **L**

For 2D-NMR spectra of compound 2, see Figs S41–S44:

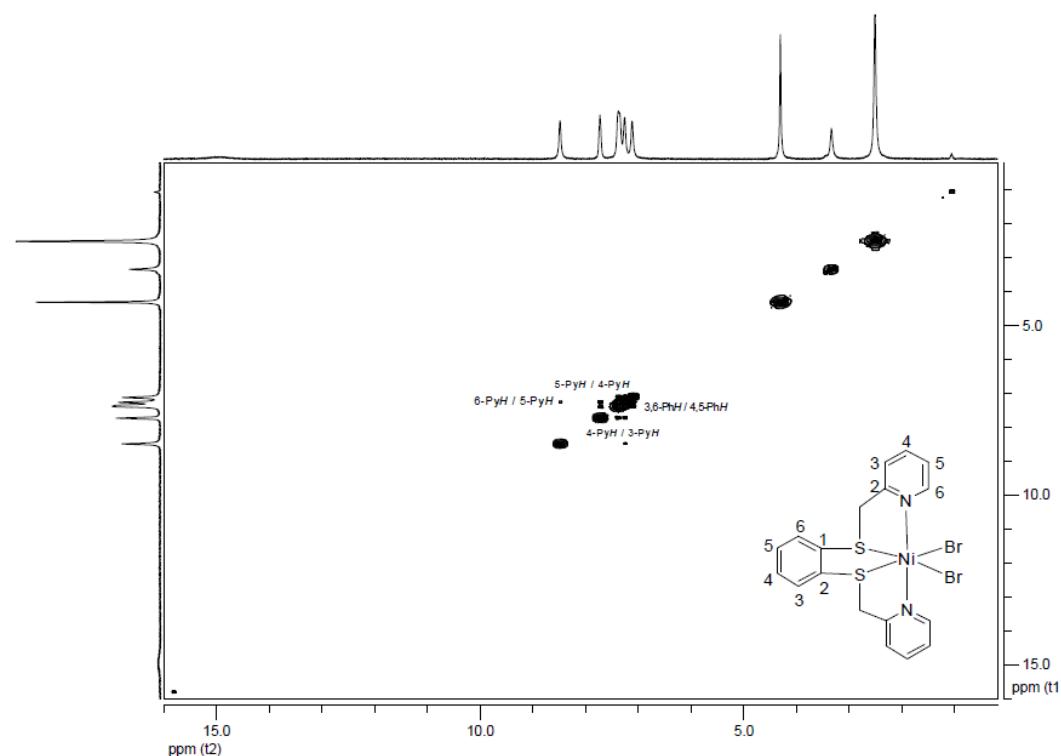


Figure S41 ^1H - ^1H COSY spectrum of compound 2

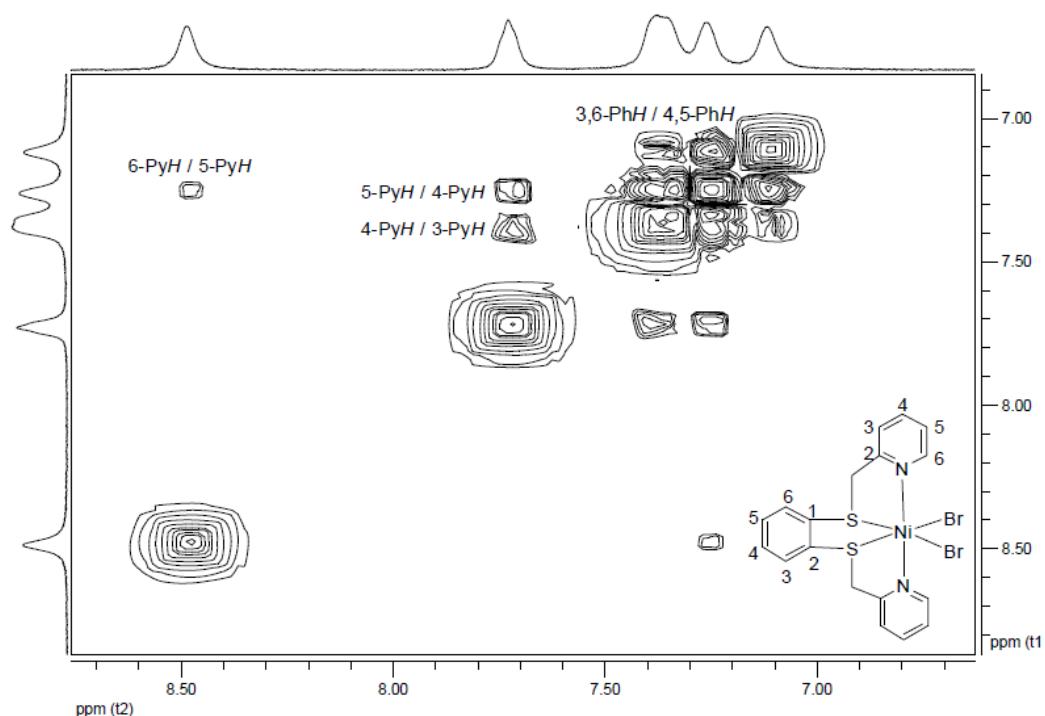


Figure S42 The expansion of ^1H - ^1H COSY spectrum of compound 2

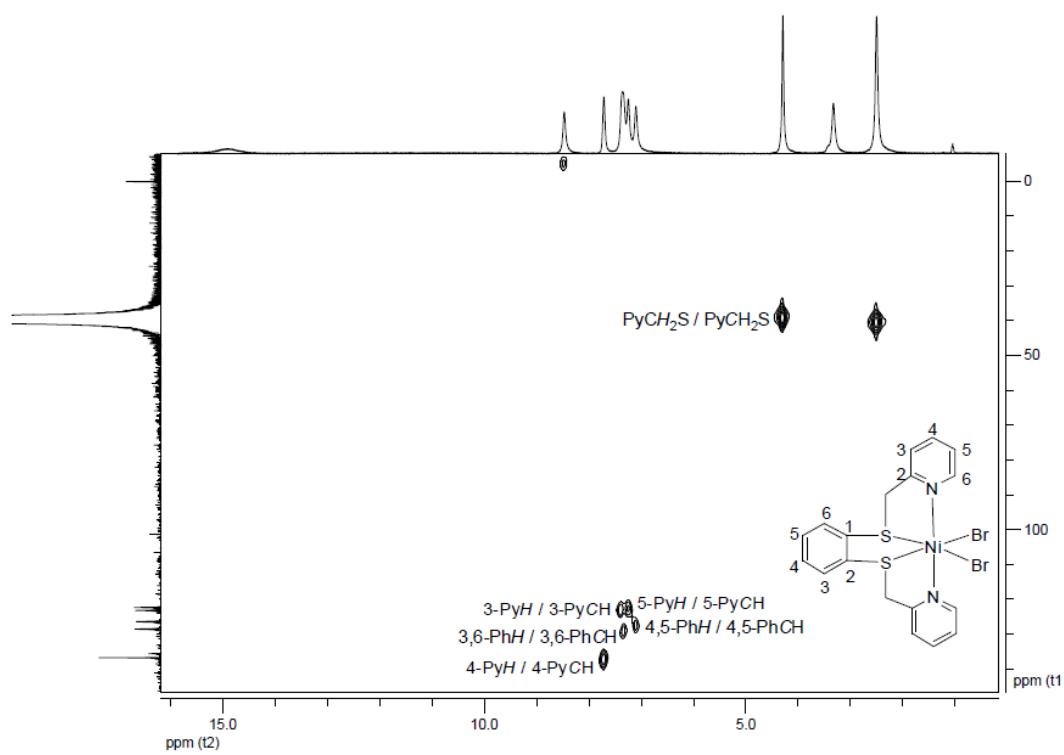


Figure S43 HMQC spectrum of compound 2

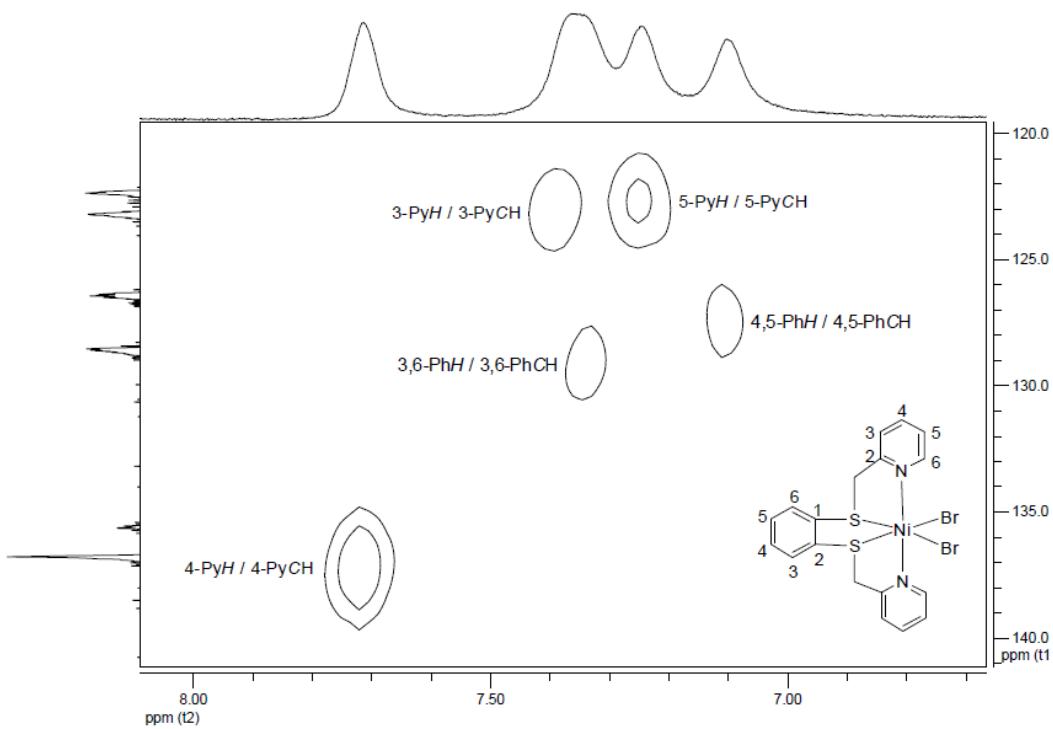


Figure S44 The expansion of HMQC spectrum of compound 2

For 2D-NMR spectra of compound 2^* , see Figs S45–S46:

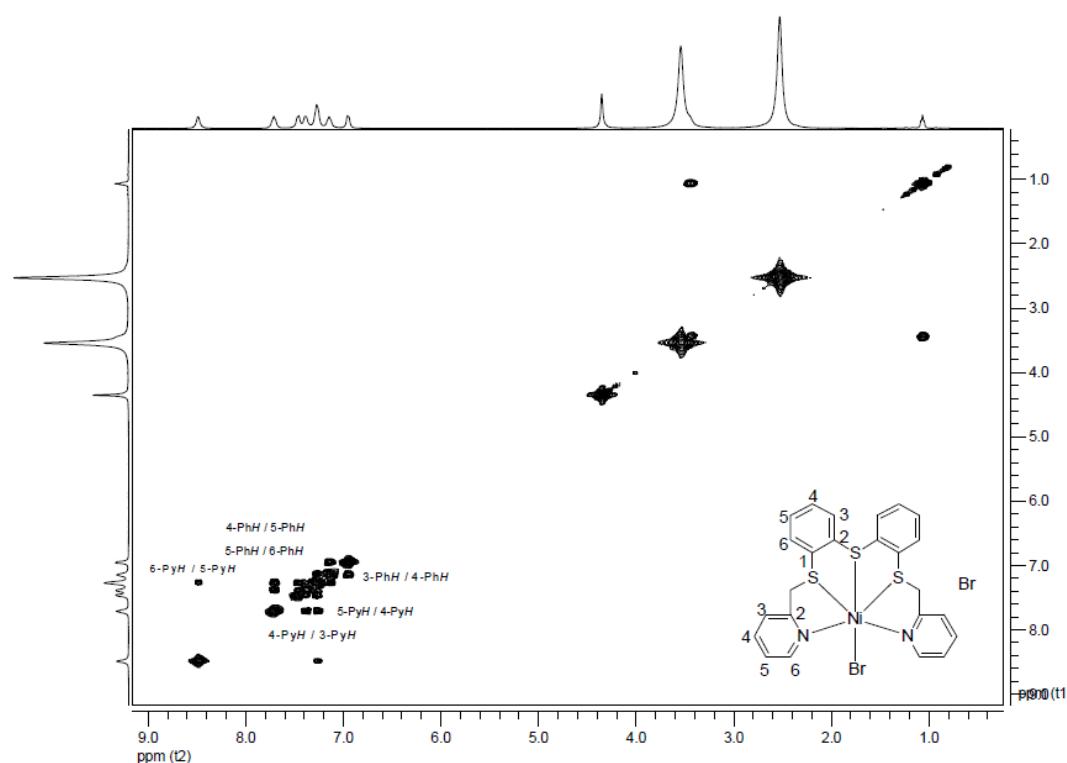


Figure S45 ^1H - ^1H COSY spectrum of compound 2^*

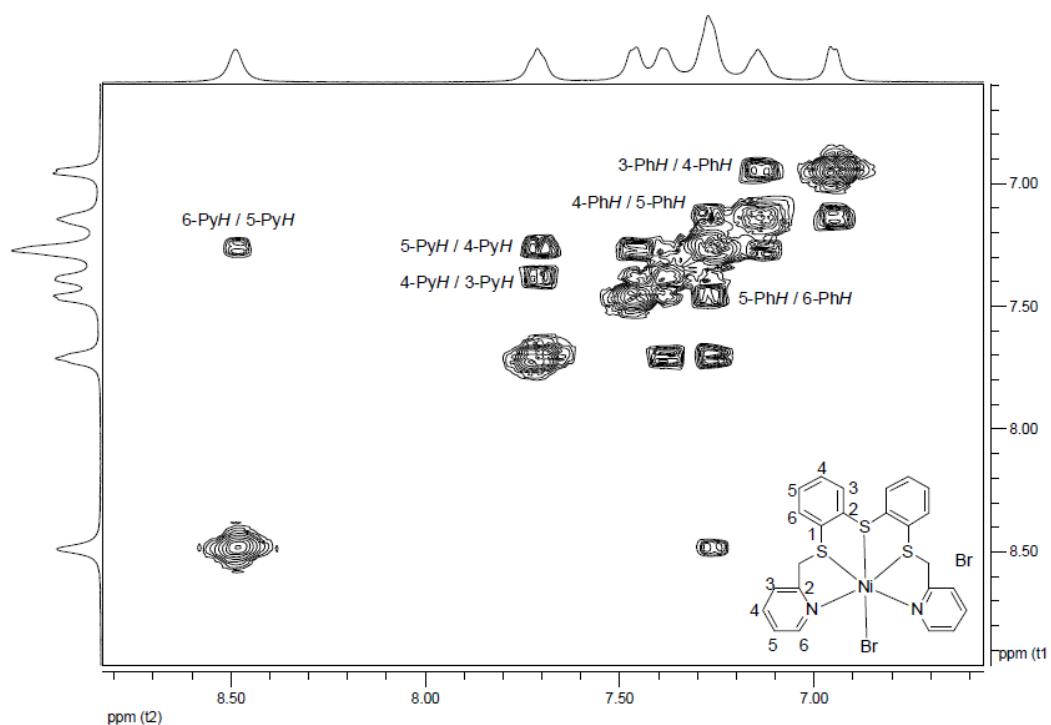


Figure S46 The expansion of ^1H - ^1H COSY spectrum of compound 2^*

For 2D-NMR spectra of compound 3, see Figs S47–S50:

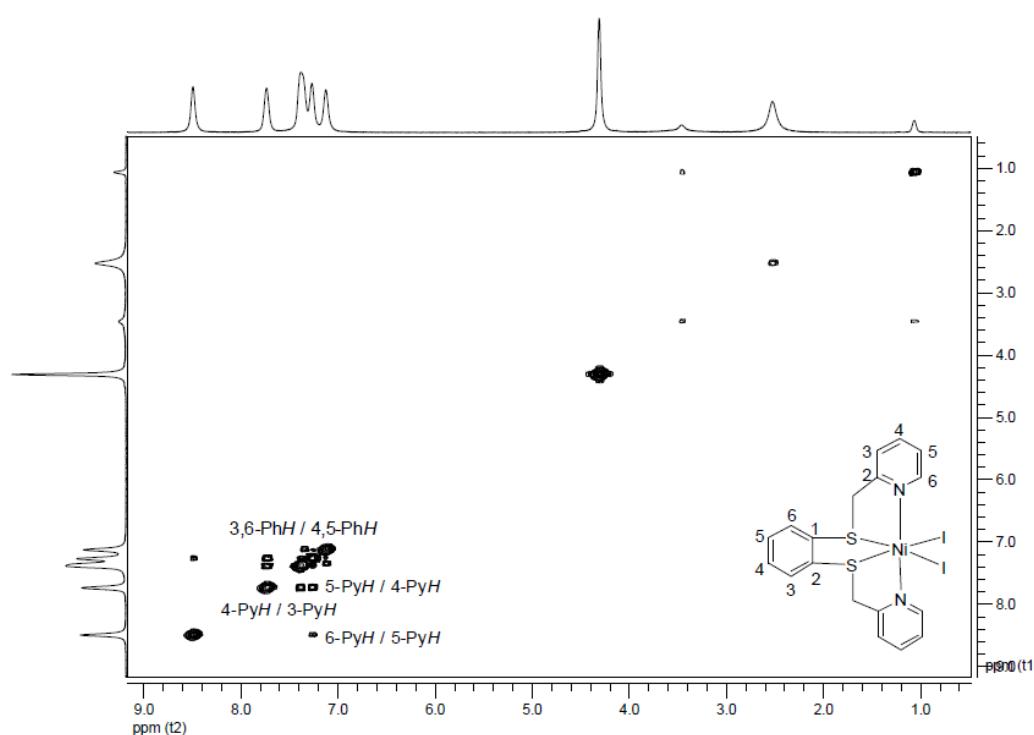


Figure S47 ^1H - ^1H COSY spectrum of compound 3

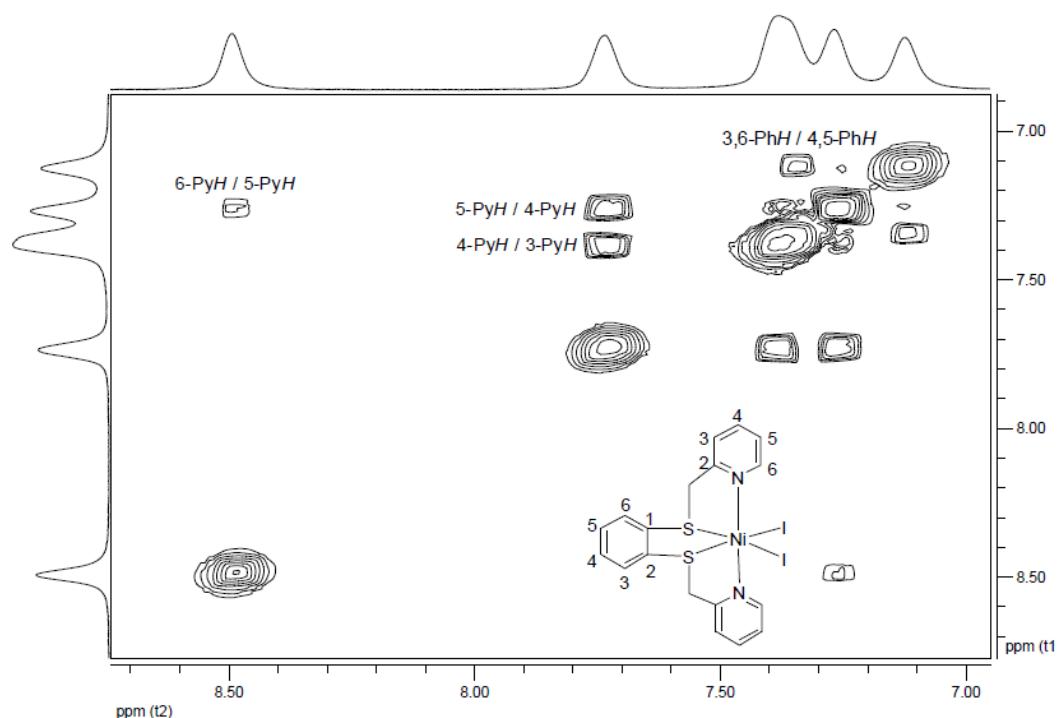


Figure S48 The expansion of ^1H - ^1H COSY spectrum of compound 3

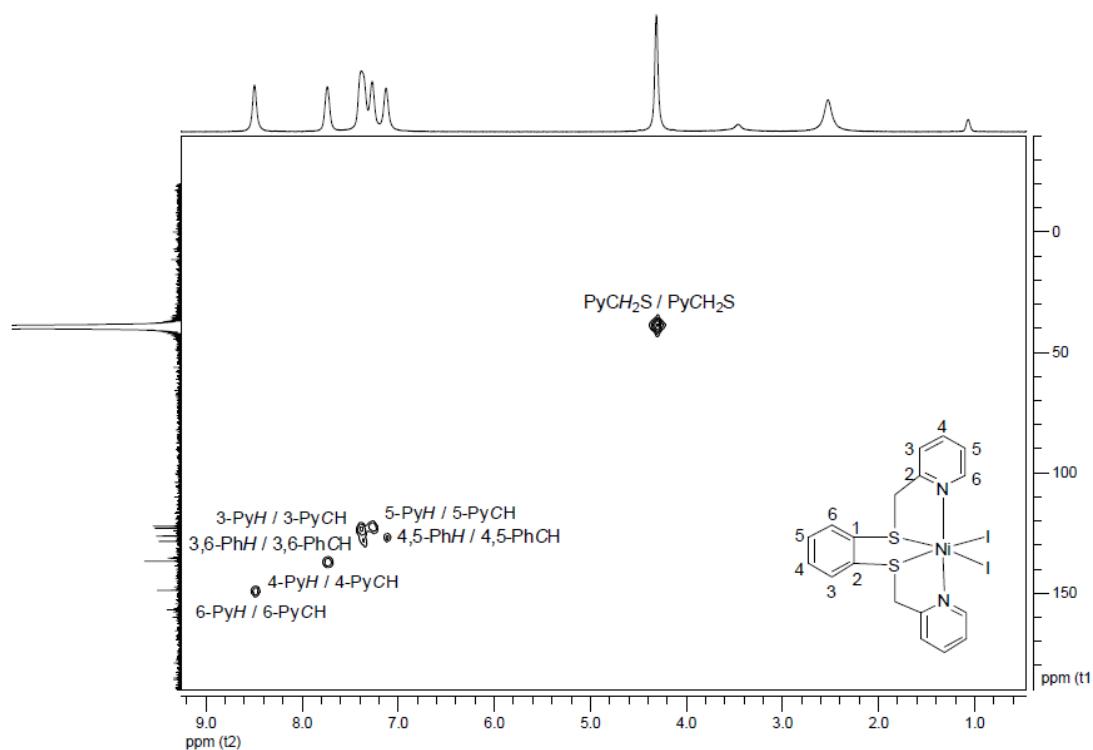


Figure S49 HMQC spectrum of compound **3**

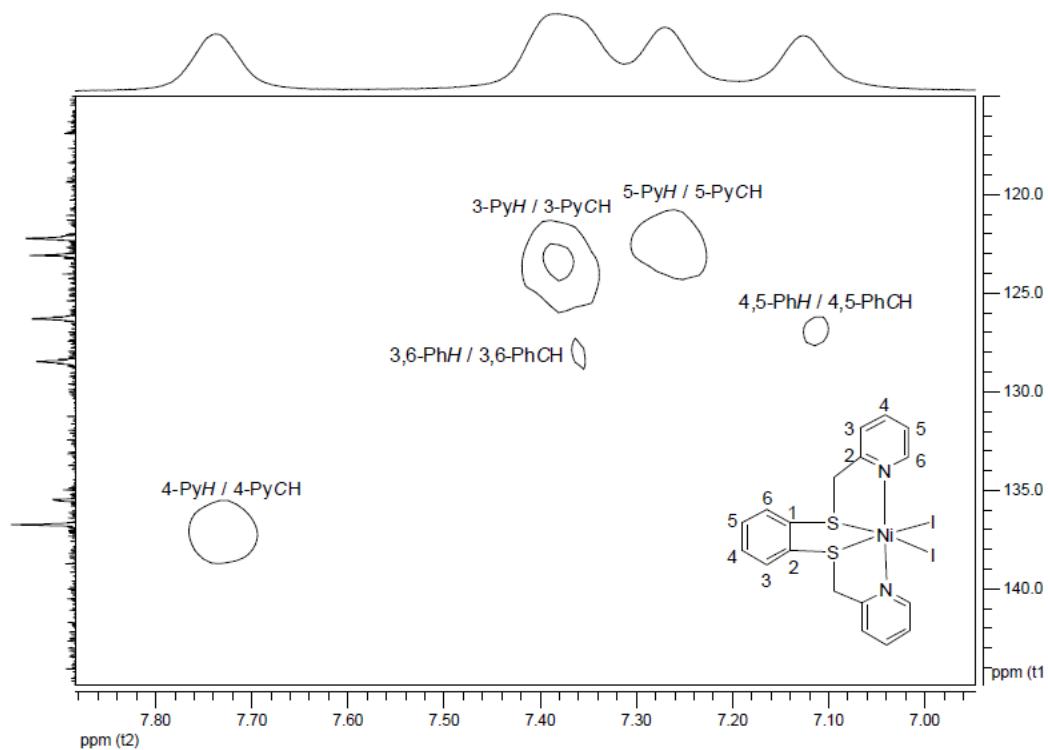


Figure S50 The expansion of HMQC spectrum of compound **3**

For 2D-NMR spectra of compound 4, see Figs S51–S56:

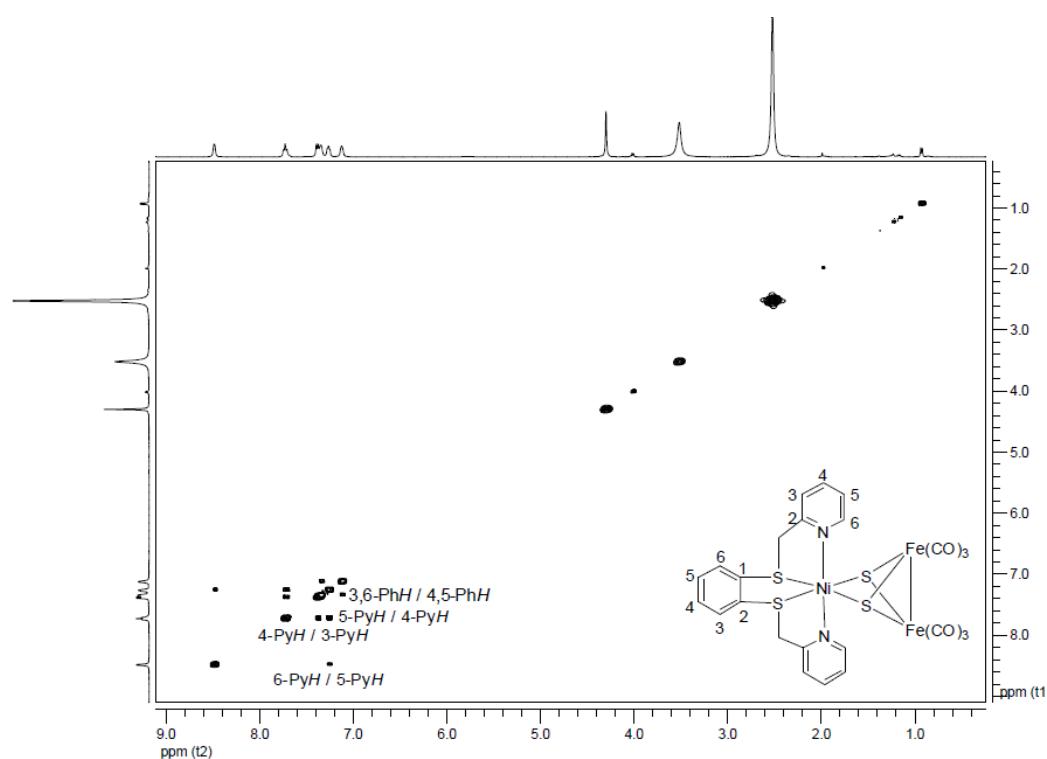


Figure S51 ^1H - ^1H COSY spectrum of compound 4

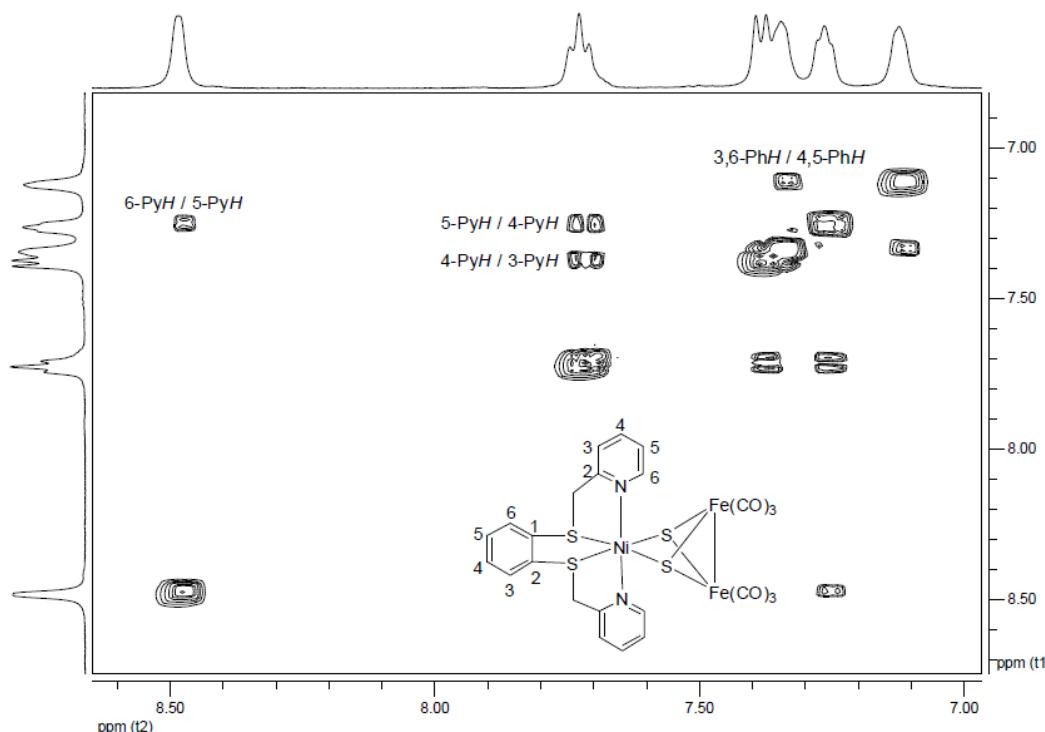


Figure S52 The expansion of ^1H - ^1H COSY spectrum of compound 4

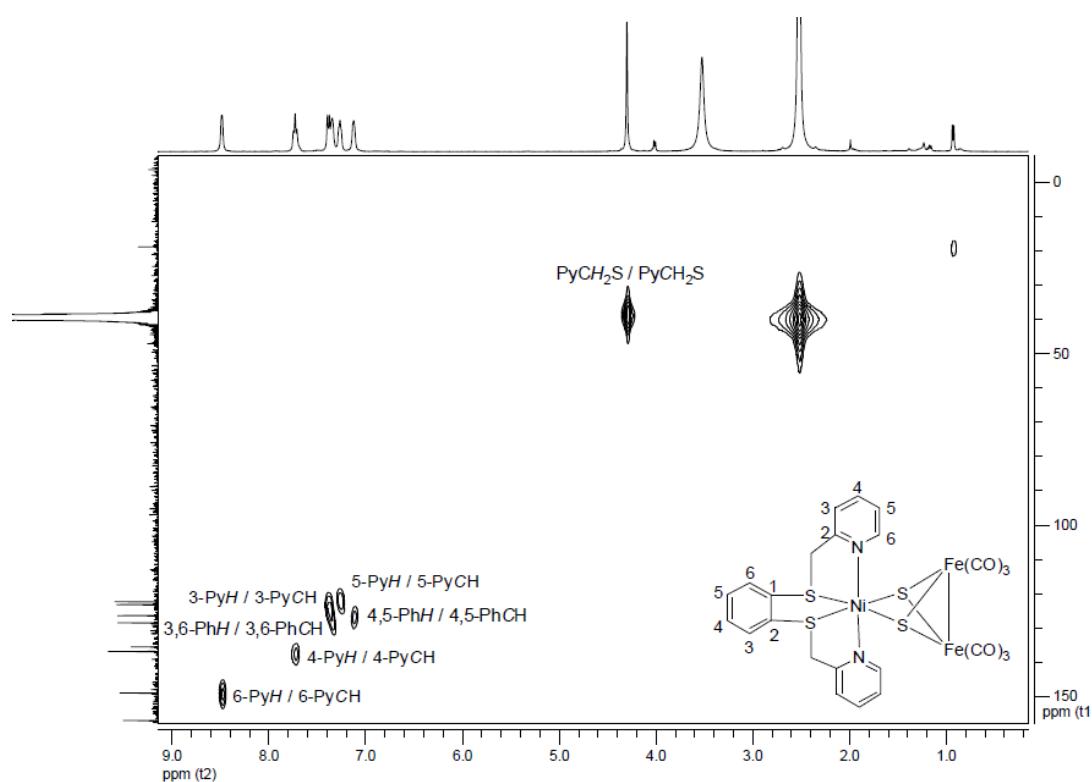


Figure S53 HMQC spectrum of compound 4

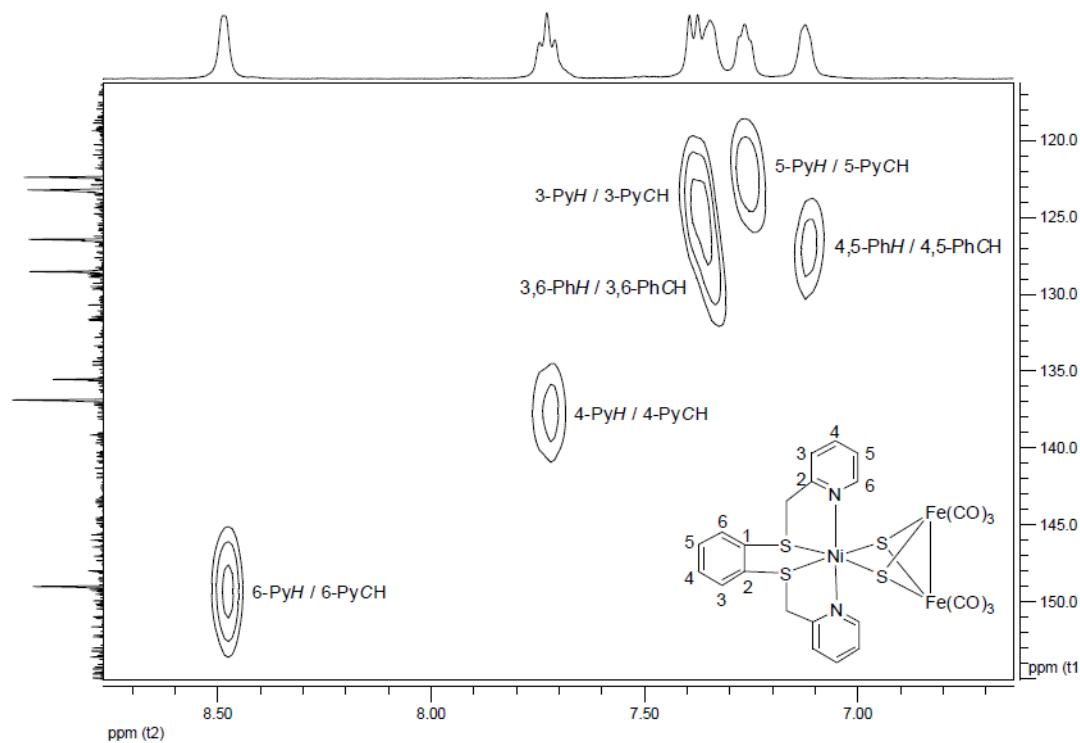


Figure S54 The expansion of HMQC spectrum of compound 4

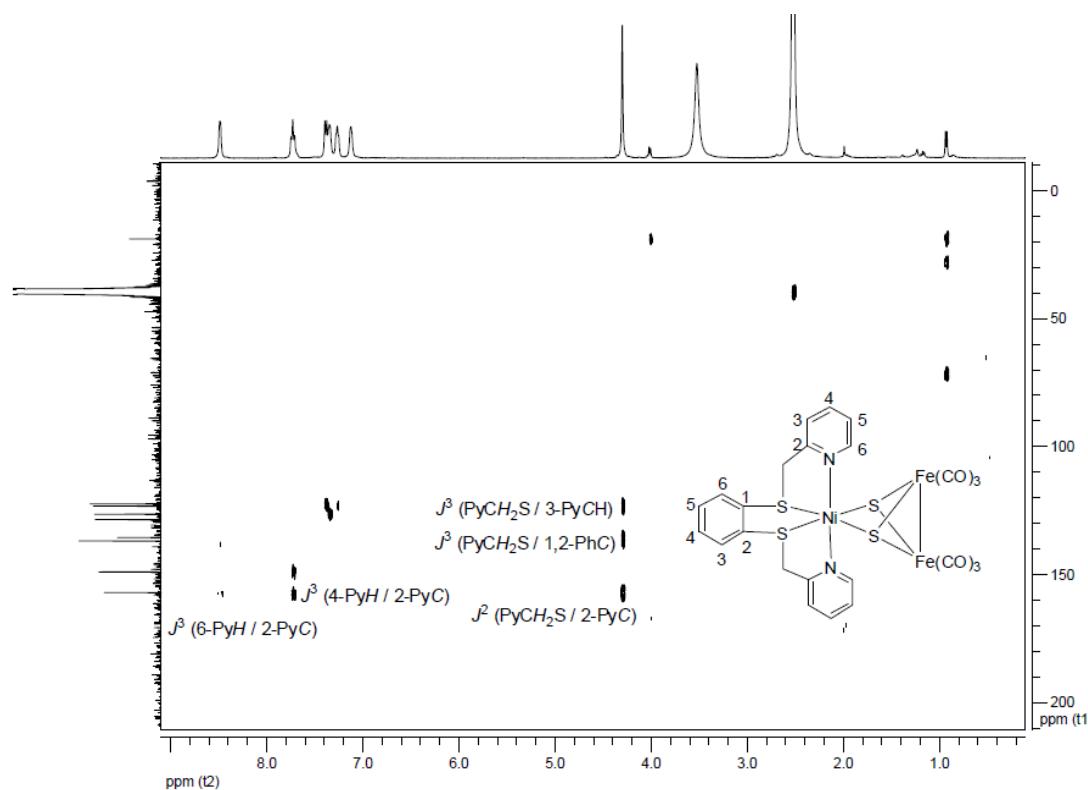


Figure S55 HMBC spectrum of compound 4

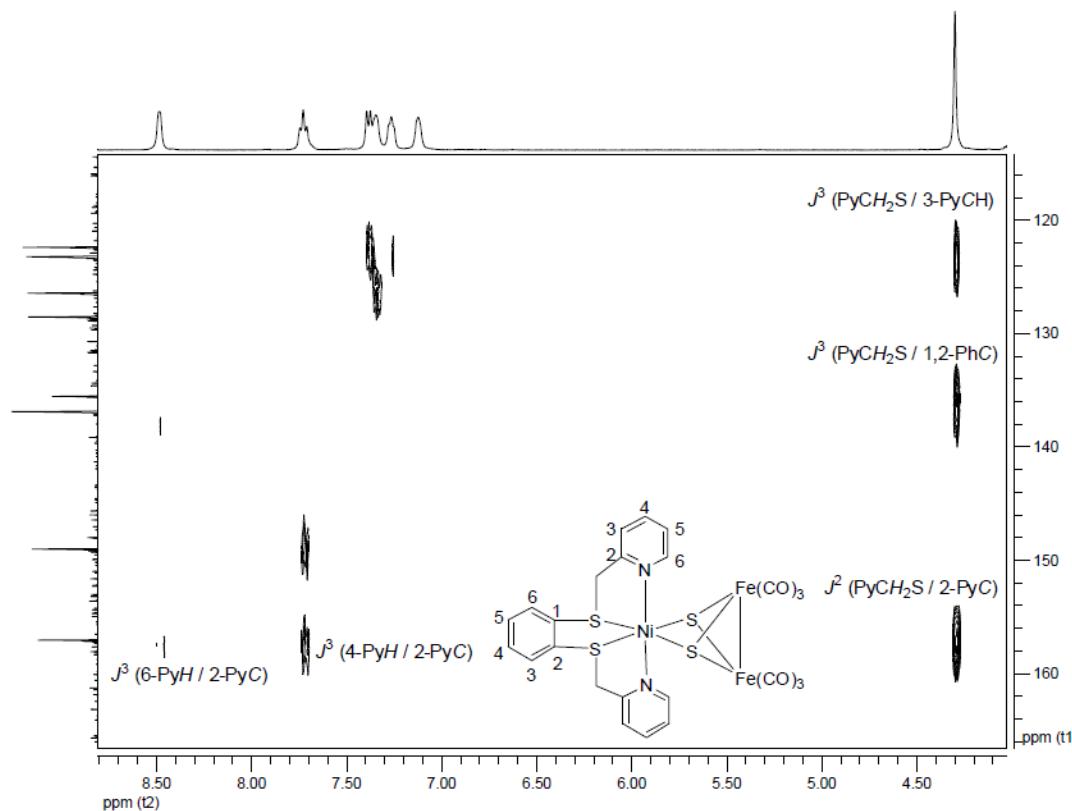


Figure S56 The expansion of HMBC spectrum of compound 4

For EPR Spectra of complexes **1**, **2***, **3** and **4**, see Figs S57–S60:

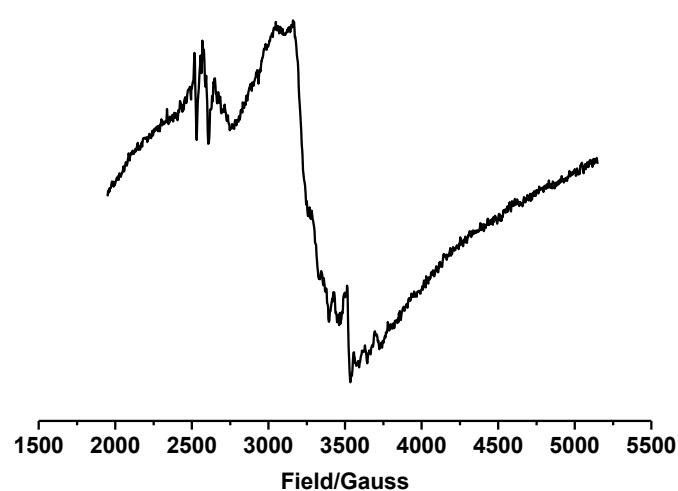


Figure S57 X-band EPR spectrum of complex **1** with $g = 2.161$ at room temperature.

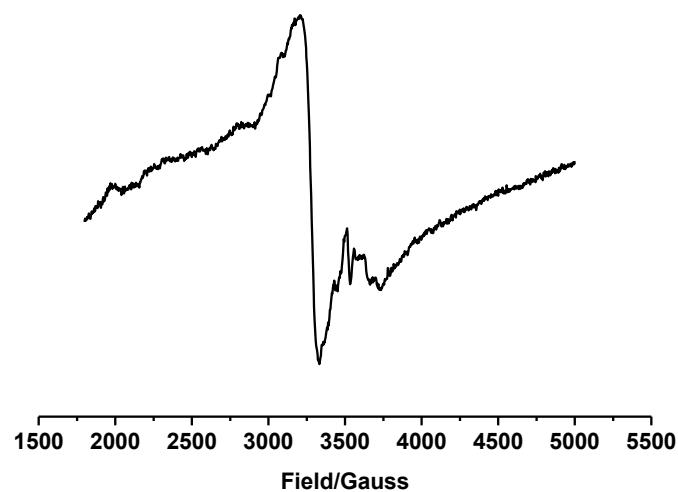


Figure S58 X-band EPR spectrum of complex **2*** with $g = 2.141$ at room temperature.

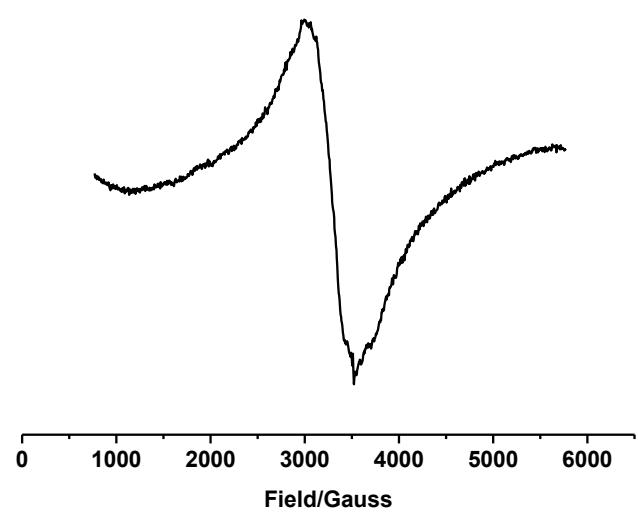


Figure S59 X-band EPR spectrum of complex **3** with $g = 2.134$ at room temperature.

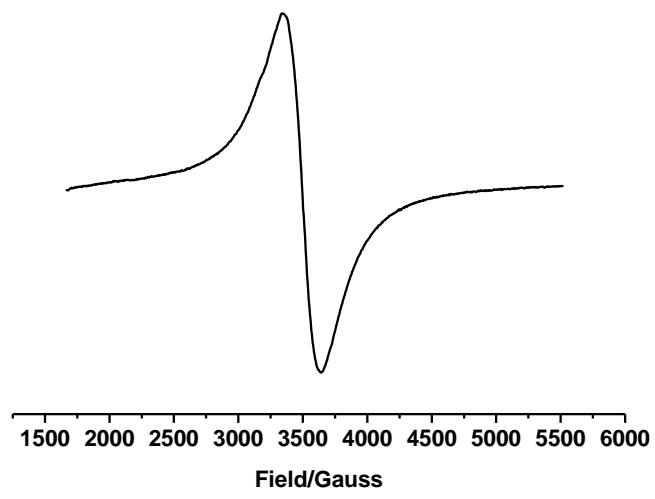


Figure S60 X-band EPR spectrum of complex **4** with $g = 2.003$ at room temperature.