

New main group ferrocenyldithiocarbamates and conversion to ferrocene oxazolidine-2-thione and -2-one

Reena Yadav,^a Suryabhan Singh,^b Manoj Trivedi,^c Gabriele Kociok-Köhn,^d Nigam P. Rath,^e Randolph D. Köhn,^{f*} Mohd. Muddassir,^g and Abhinav Kumar^{a*}

-
- ^{a.} *Department of Chemistry, University of Lucknow, Lucknow 226 007, India.
Email: abhinavmarshal@gmail.com*
- ^{b.} *Department of Chemistry, Guru Ghasidas Vishwadiyalaya, Bilaspur India*
- ^{c.} *Department of Chemistry, University of Delhi, Delhi 110 007, India.*
- ^{d.} *Material and Chemical Characterisation Facility (MC²), University of Bath, Bath BA2 7AY, UK*
- ^{e.} *Department of Chemistry & Biochemistry and Centre for Nanoscience, University of Missouri-St. Louis, One University Boulevard, St. Louis, MO 63121-4499, USA*
- ^{f.} *Department of Chemistry, University of Bath, Bath BA2 7AY, UK Email: chsrdk@bath.ac.uk*

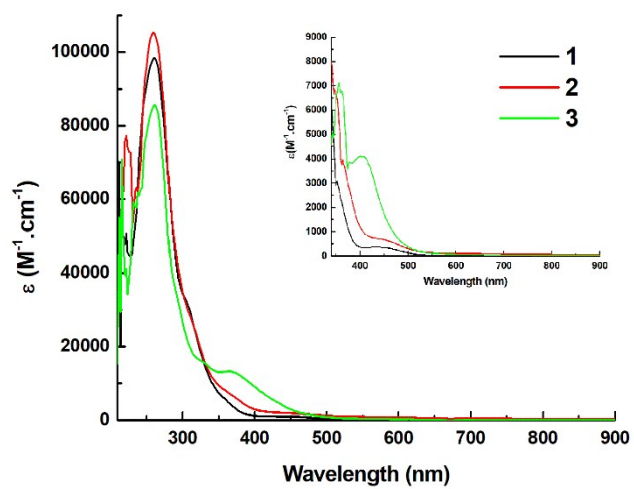


Fig. S1 Electronic absorption spectra for the complexes recorded in 10^{-5} M dichloromethane solution (inset: spectra recorded in 10^{-3} M solution).

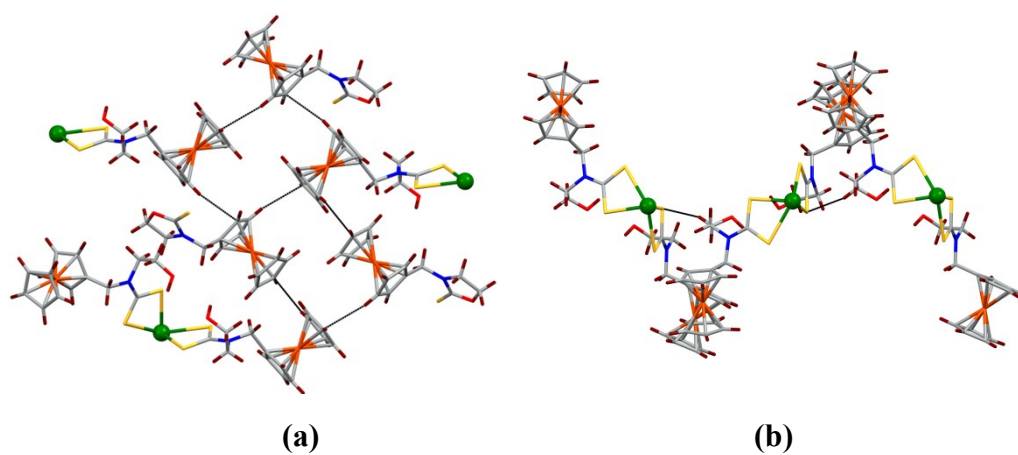


Fig. S2 (a) 2D sheet along b-axis due to $CH \cdots \pi$ and (b) 1D chain due to $CH_2 \cdots S$ interactions in **1**.

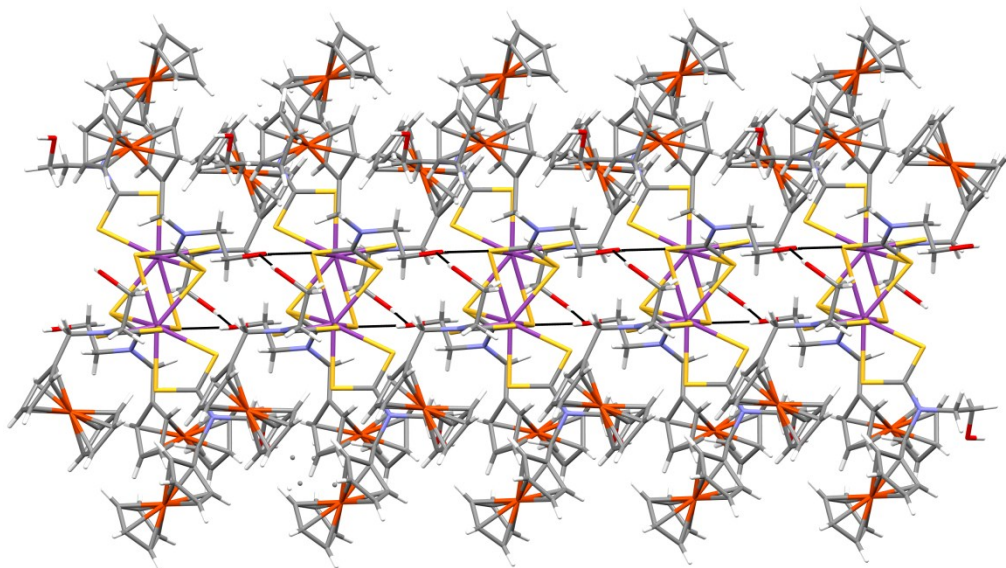


Figure S3. One dimensional chain formed due to intermolecular O-H \cdots S interactions in **3**.

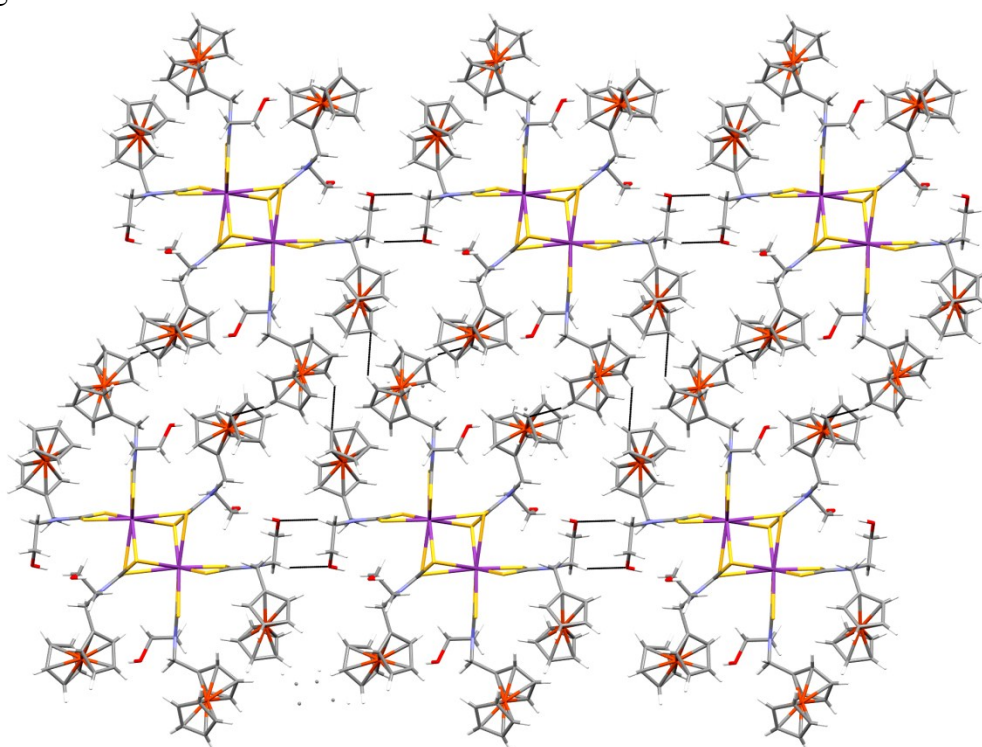


Figure S4 A 2D sheet formed due to CH \cdots π and CH₂ \cdots O (OH group, 2.496 Å) interactions in **3**.

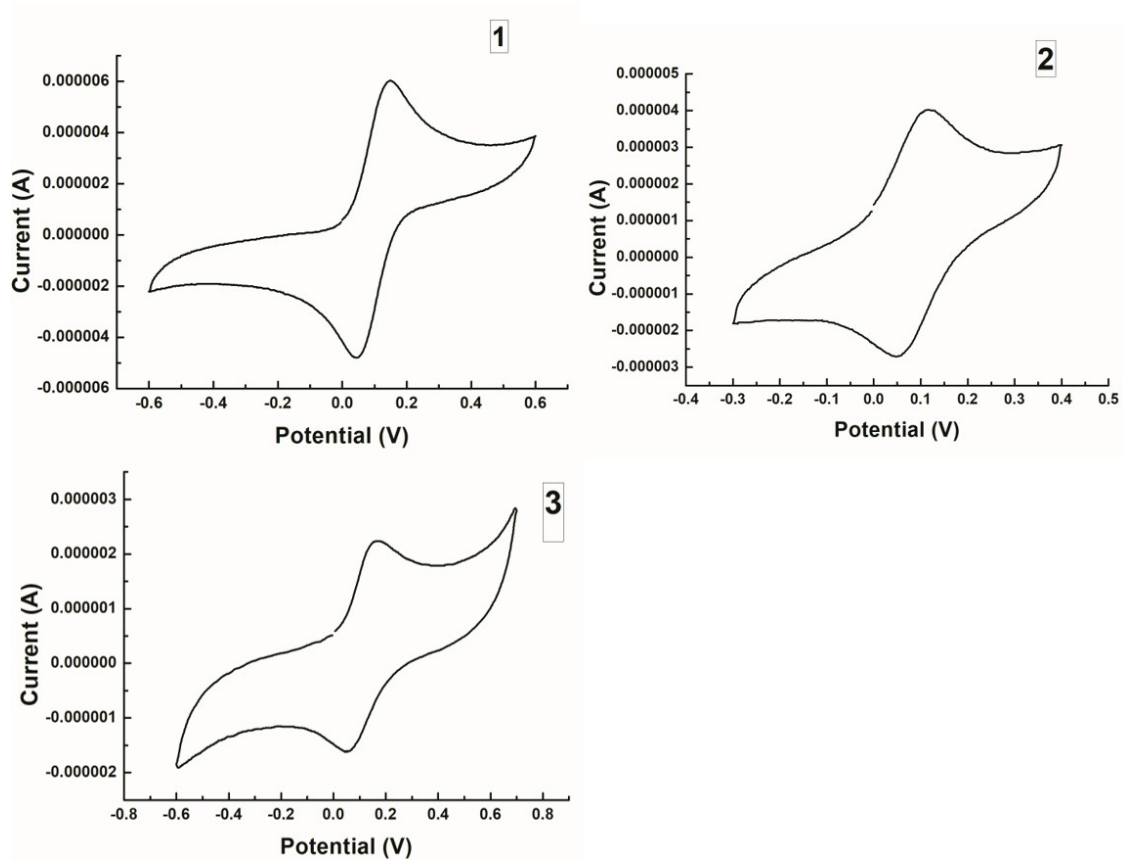


Fig. S5 The cyclic voltammograms for the complexes **1-3**.

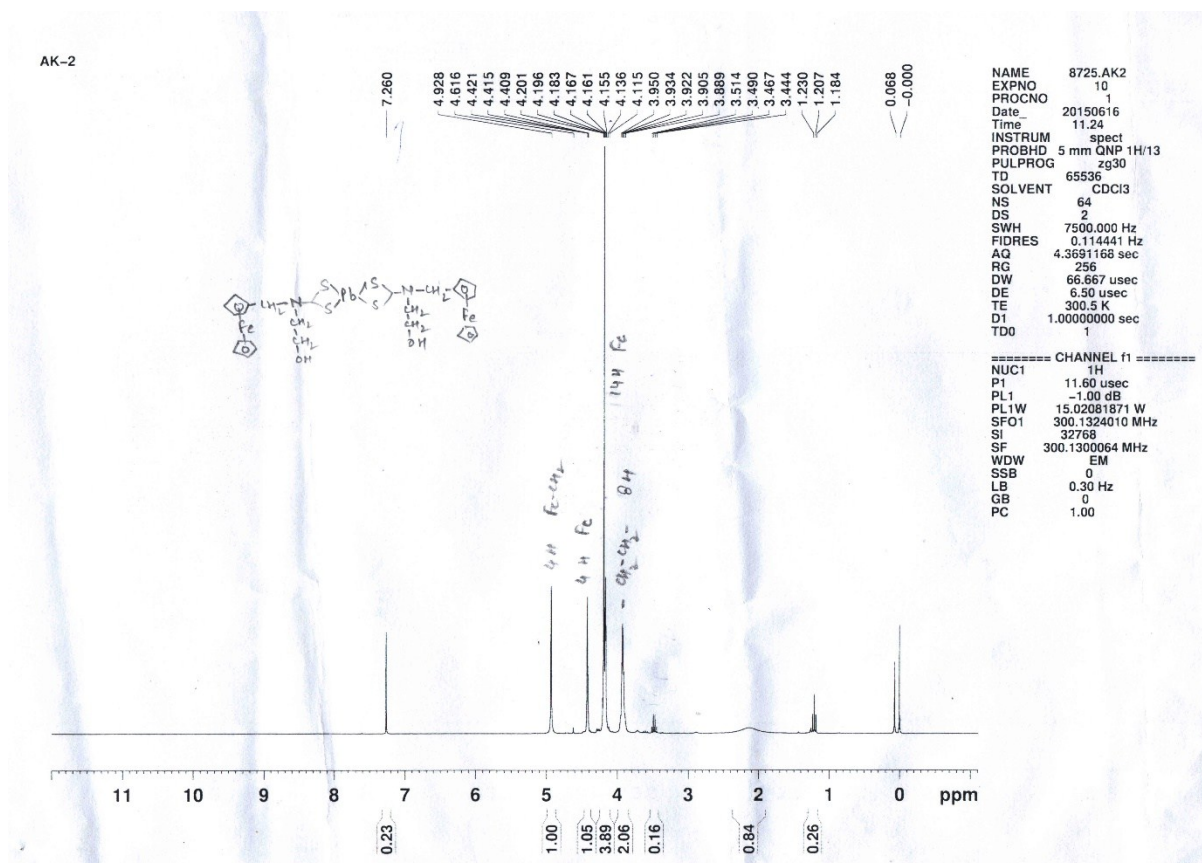


Fig. S6 ¹H NMR spectra for 1.

p-Ph

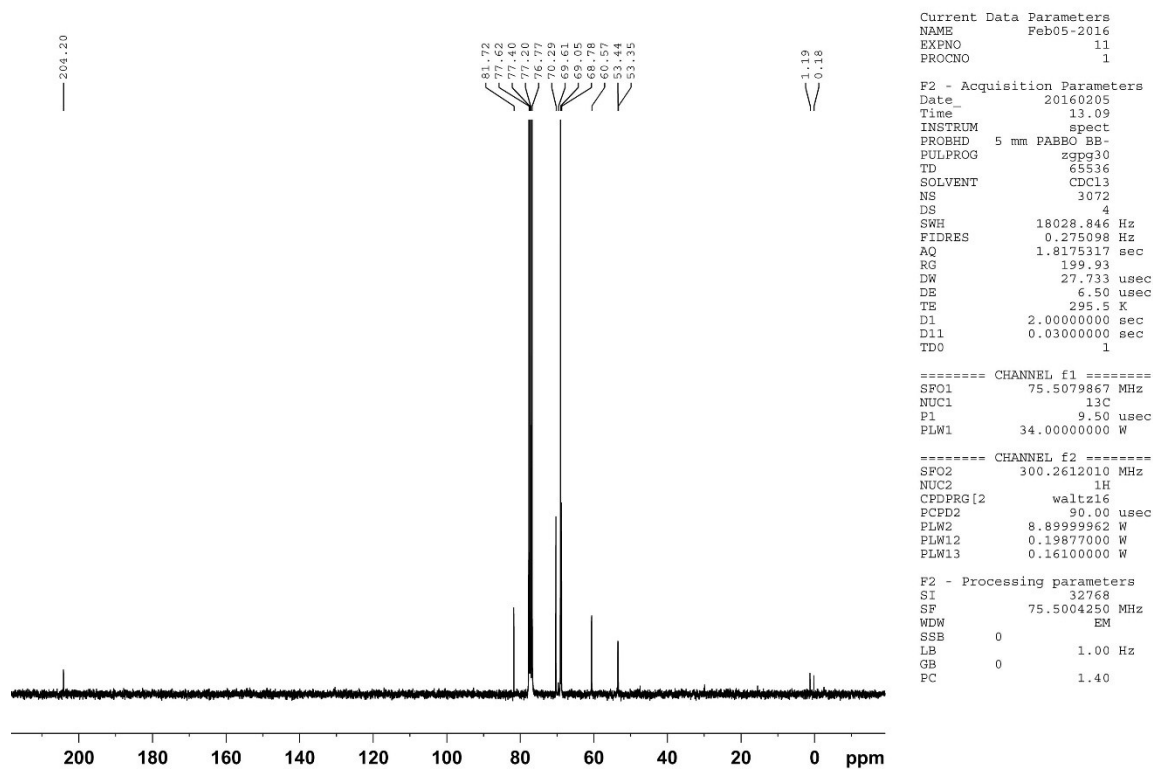


Fig. S7 ¹³C NMR spectra for 1.

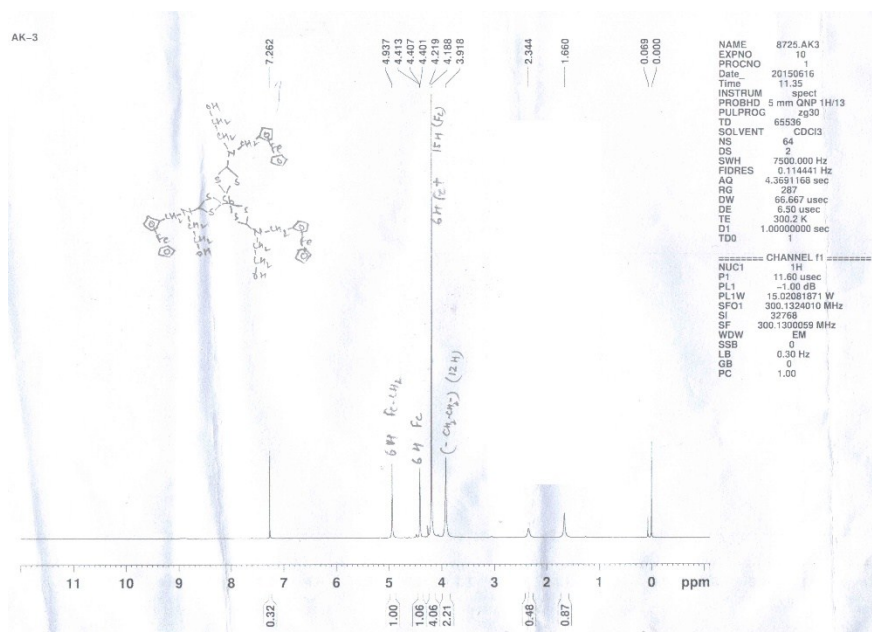


Fig. S8 ¹H NMR spectra for **2**.

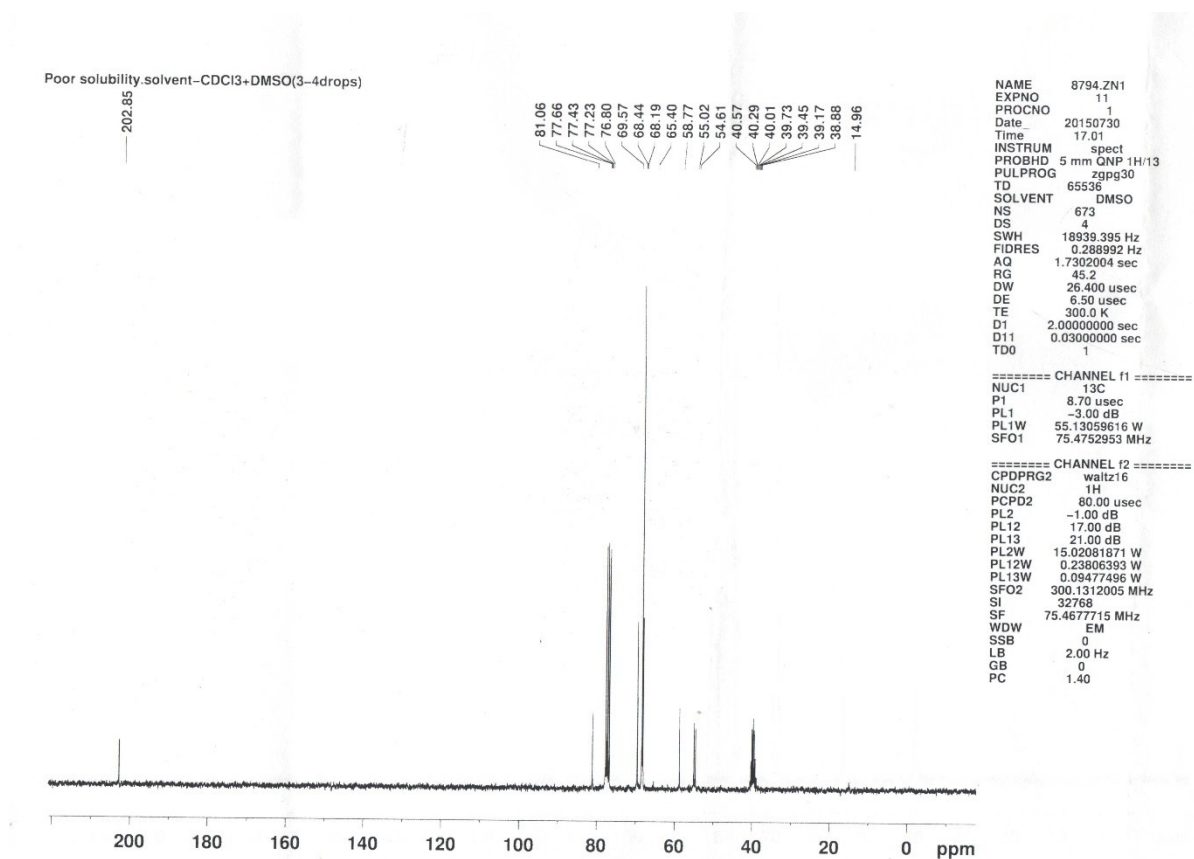


Fig. S9 ¹³C NMR spectra for **2**.

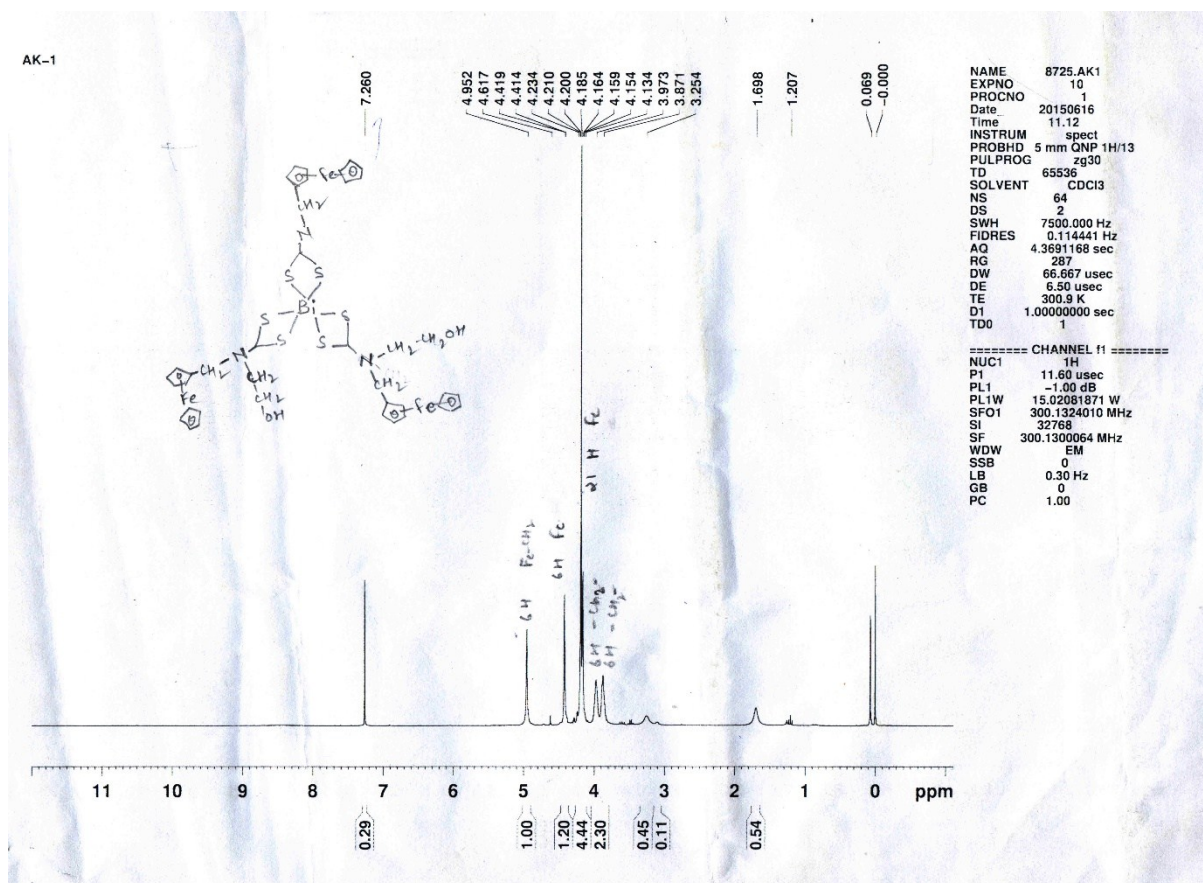


Fig. S10 ^1H NMR spectra for **3**.

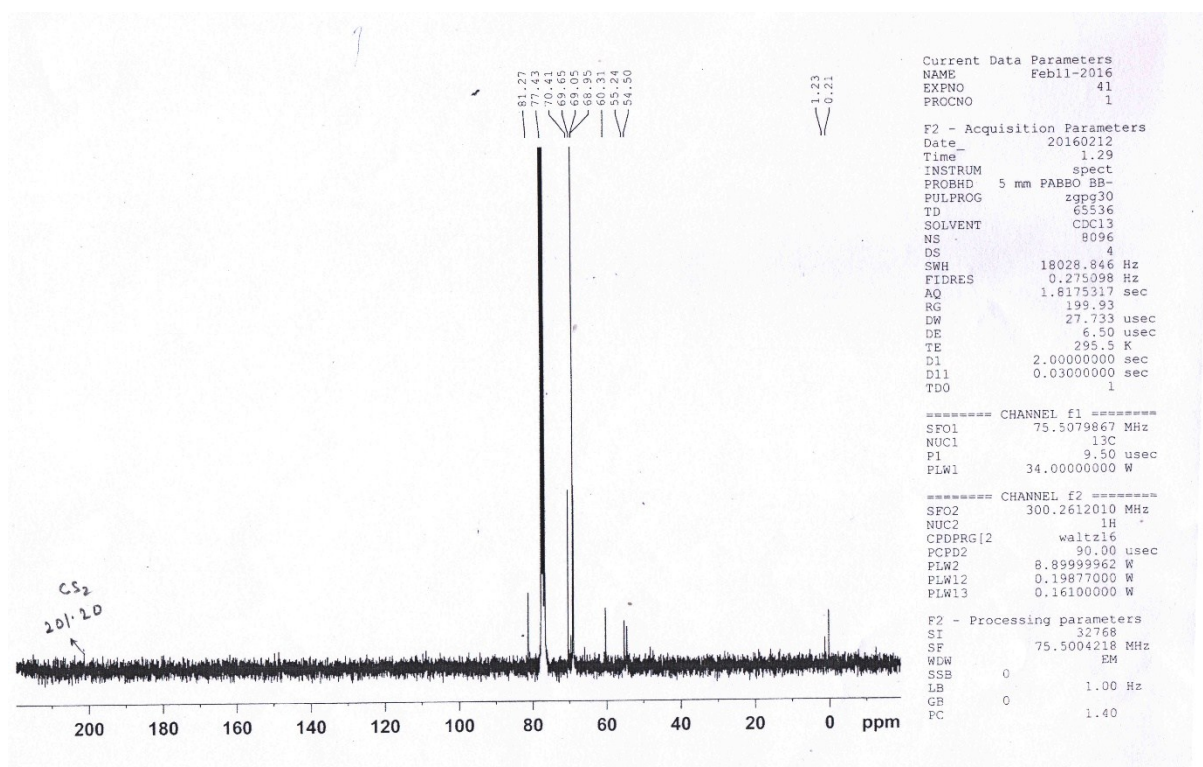


Fig. S11 ^{13}C NMR spectra for **3**.

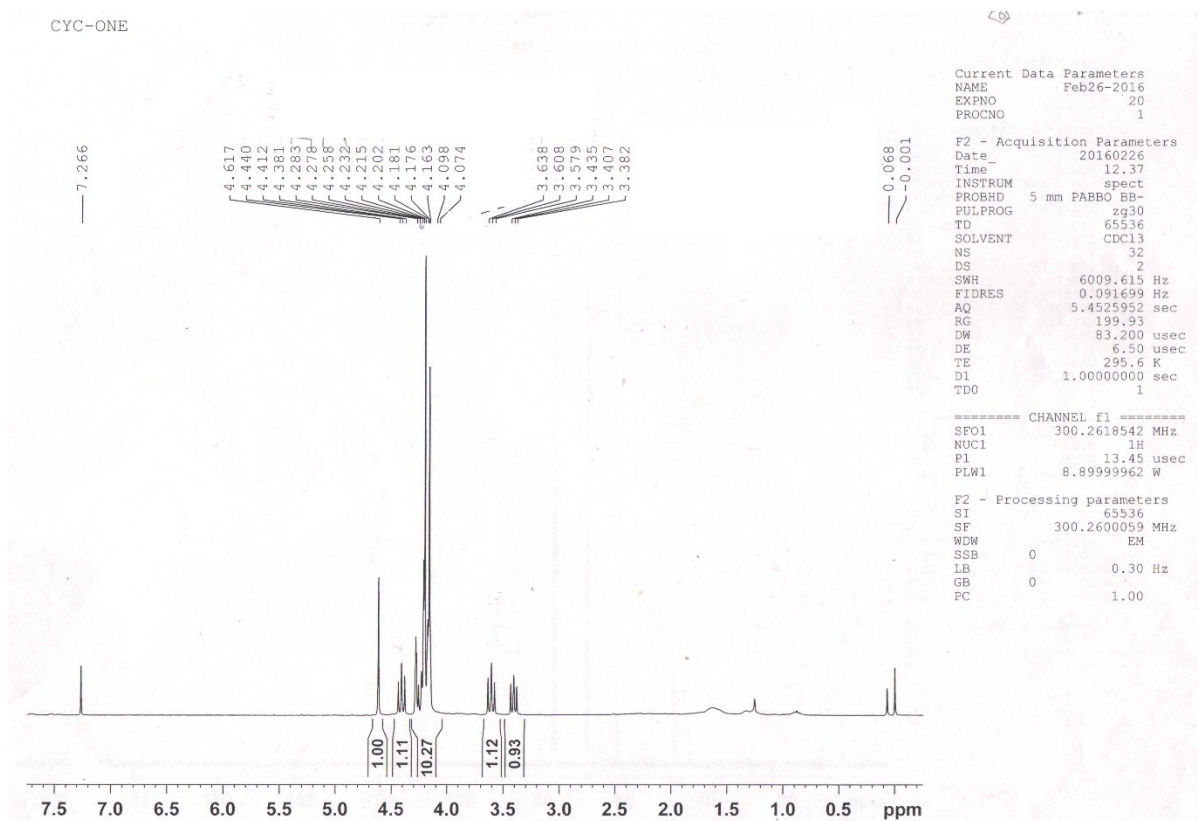


Fig. S14 ^1H NMR spectra for **5**.

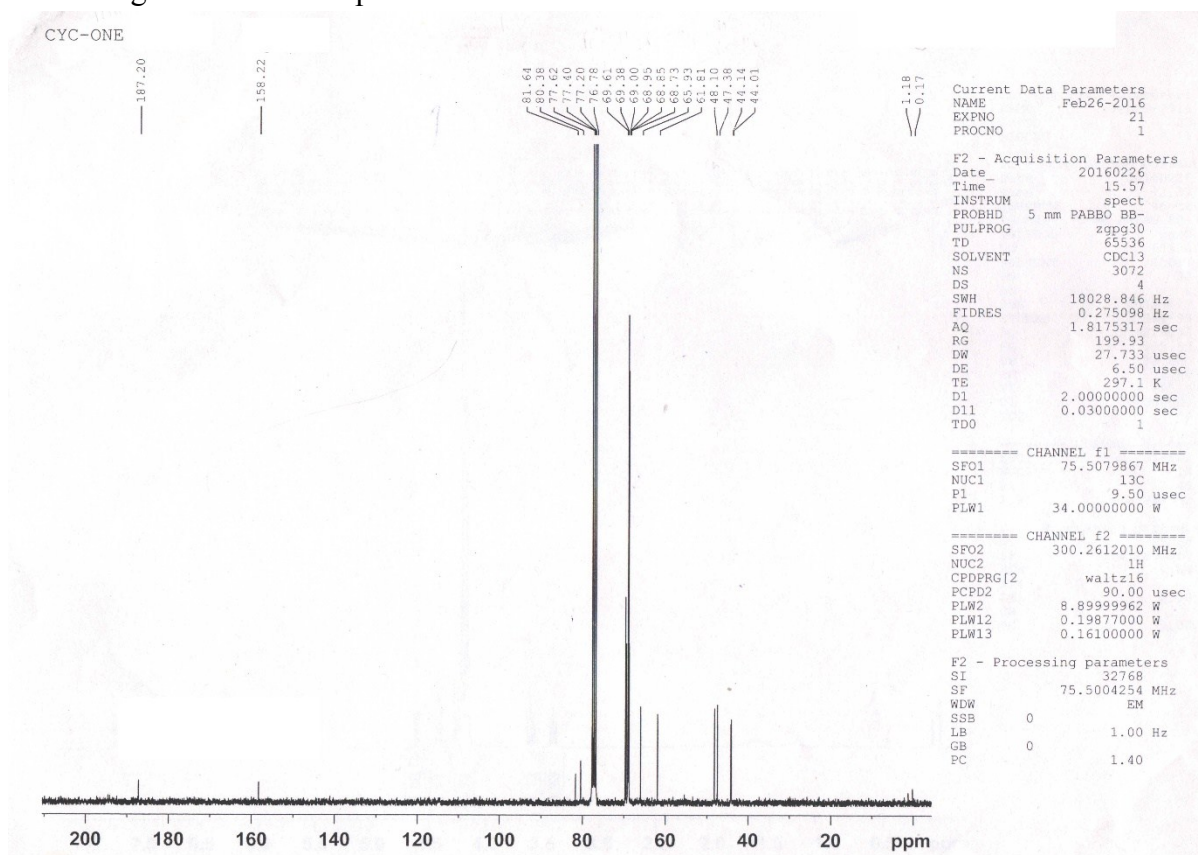


Fig. S15 ^{13}C NMR spectra for **5**.