Supplementary material

A. Electron UV-VIS and infra-red spectra for 1 = $[\{Fe^{II}(CN)_6\}\{Fe^{III}(salpet)\}_6]Cl_2$.

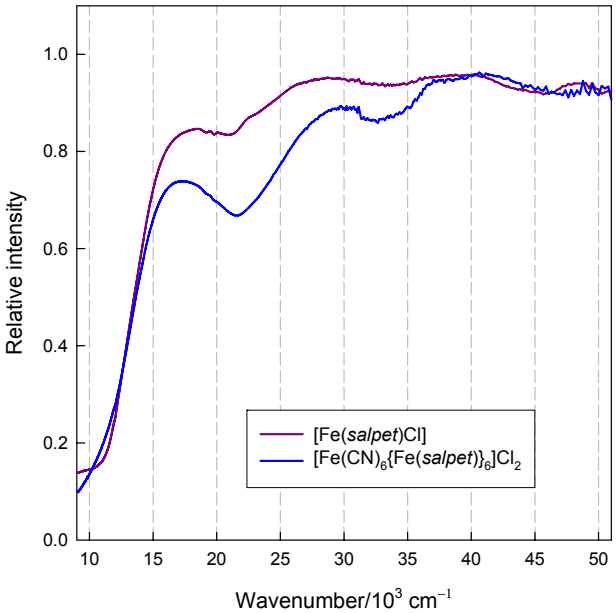


Fig. S1. Electron spectra of *salpet*-containing complexes [Nujol mull (Analytical Jena, Specord 200), 10000 – 50000 cm^{-1}]

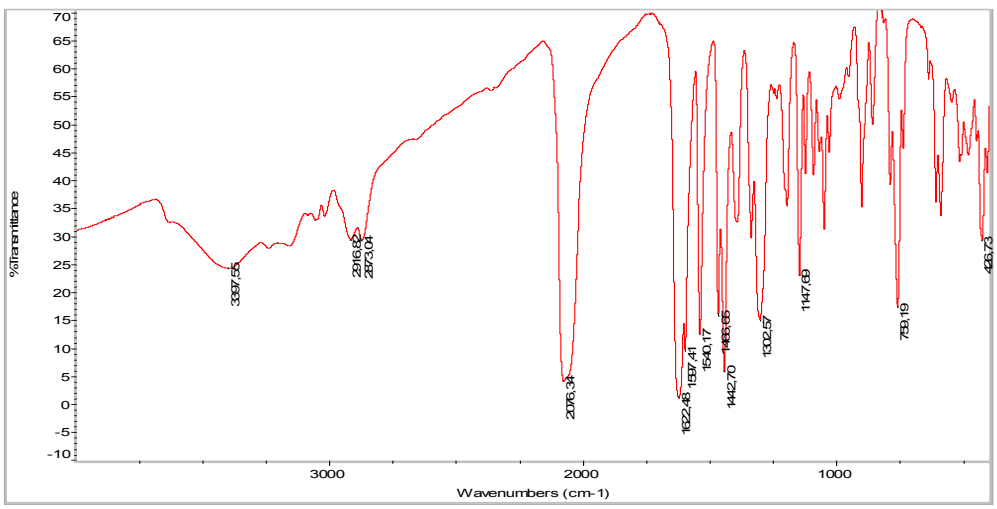


Fig. S2. MID-IR spectrum of **1** [KBr pellets (Nicolet, Magna FTIR 750), 4000 – 400 cm^{-1}]

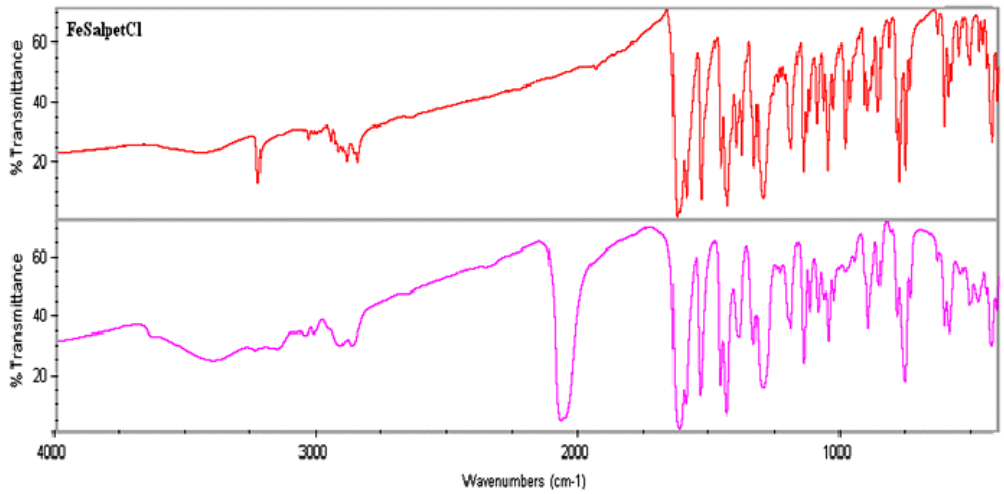


Fig. S3. MID-IR spectrum of **1** and its comparison with the mononuclear precursor [Fe(Salpet)Cl]

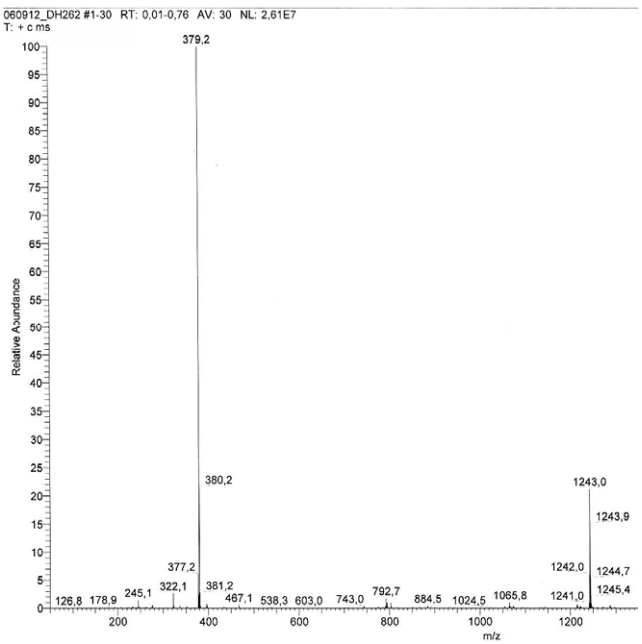
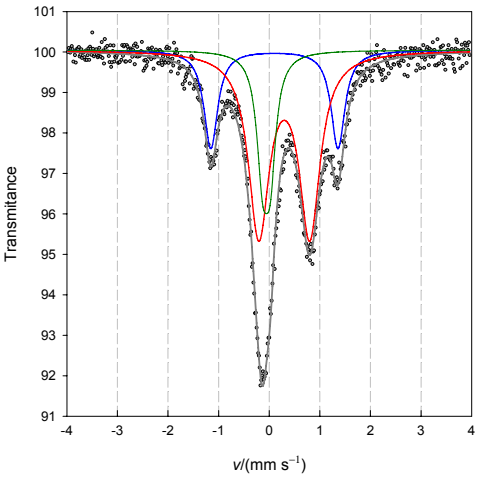
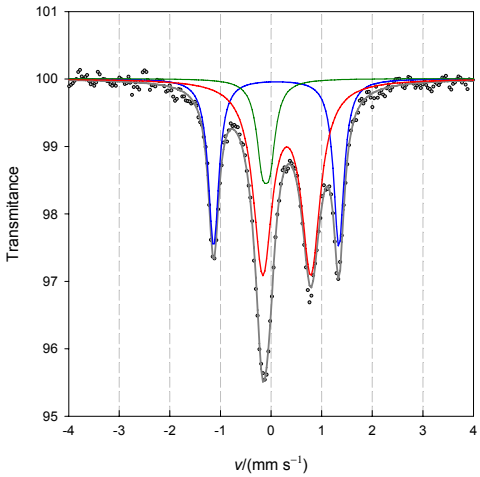


Fig. S4. ESI-mass spectra. The heptanuclear complex shows the molpeak in: *m*/*z* (=K^{2+}/2): 1244 g mol^{-1} which matches the composition $[K]Cl_2$; the molar mass of $[K^{2+}]$ is 2488 g mol^{-1}; K^{2+} is the heptanuclear molecular dication $[\{Fe^{II}(CN)_6\}\{Fe^{III}(salpet)\}_6]^{2+}$. Molpeak *m*/*z* (=$L^{+}$/1): 379.2 g mol^{-1} is exactly the L = $[Fe^{III}(salpet)]^{+}$ fragment.

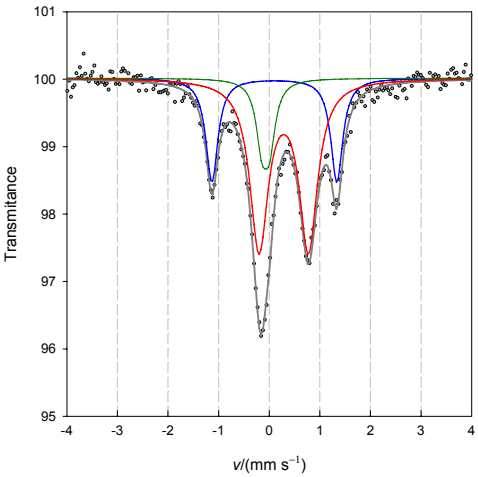
B. Deconvolution of the Mössbauer spectra for 1



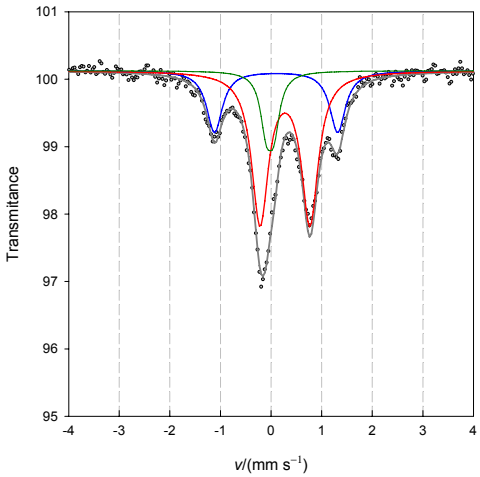
T = 20 K



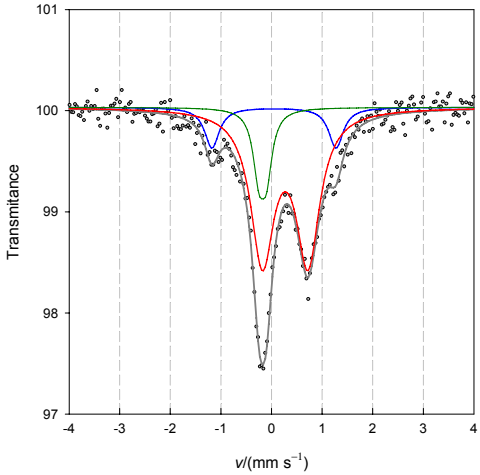
T = 78 K



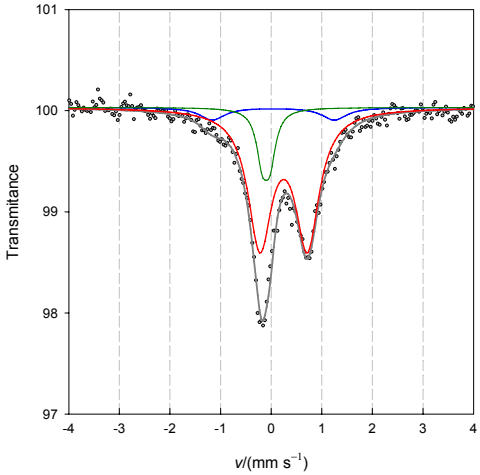
T = 120 K



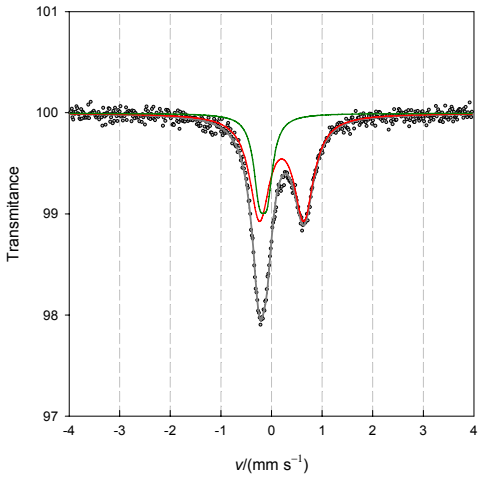
T = 150 K



T = 180 K



T = 200 K



T = 300 K

C. Selected interatomic distances

	Fe2	Fe3	Fe4
Fe^{II}–C(cyanide)	1.879(9)	1.888(8)	1.932(10)
Fe^{III}–N(cyanide)	2.058(9)	2.033(7).	2.013(10)
Fe^{III}–O(phenolate)	1.897(7)	1.960(6)	1.823(10)
	1.947(7)	1.960(5)	1.863(10)
Fe^{III}–N(amine) –NH–	2.161(9)	2.157(7)	2.020(13)
Fe^{III}–N(imine) –N=C–	2.028(12)	2.086(9)	1.832(15)
	2.034(10)	2.110(8)	1.924(15)

Formatted Table

Comment [DJM1]: tato je dobra