

Supporting information.

Table S1. IR spectra of the starting compounds and complexes **1** and **2**.

Components of the complex	Co ^{II} (dppe)Br ₂	C ₆₀	C ₇₀	{Co(dppe) ₂ Cl}(C ₆₀) (1)	{Co(dppe) ₂ Cl}(C ₇₀)· 0.5C ₆ H ₄ Cl ₂ (2)
Co(dppe)₂Cl	418w			428w	427w
	-			467m	-
	476m			485s	479m
	512m			507m	509m
	530s			529s*	531s*
	663w			669w	659w*
	691s sp			691s	690s
	697s sp			-	697s
	719m			-	712w
	736m			740s	740s
	-			751m	-
	852w			851w	843w
	877w			879m	883w
	998w			999w	999w
	1026w			1026w	1027w
	1090m sp			1091m	1094m
	1100m sp			-	-
	1159w			1159w	1156w
	1181w			1181w*	1176w
	1275w			-	1260w
	1308w			-	1308w
	1334w			-	1323w
	1433s			1432s*	1432s*
	1483m			1482w	1483w
	-			1633w	1632w
	2852w	\		2851w	2852w
	2924w			2923w	2923w
	2956w			2962w	2960w
	3050m			3051w	3051w
	3073w			3072w	-
Fullerene		526s	457w	529s*	446w
		576m	534s	576s	531s*
		1182m	564m	1181w*	-
		1429s	576s	1393s	577w
			642m	1432s*	-
			673m		659w
			794m		801m
			1132w		1121w
			-		1393m
			1413w		1412m
			1429s		1432s*

sp - splitted band

w – weak, m-middle, s – strong intensity.

* - the bands are coincided.

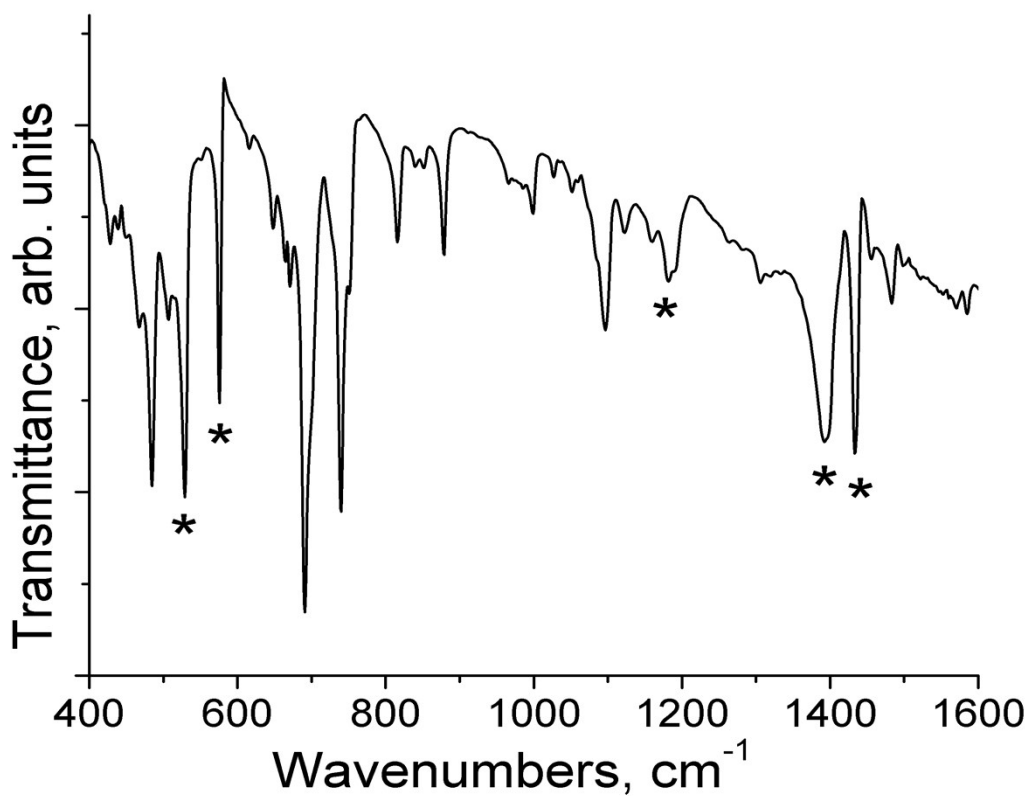


Fig. S1. IR spectrum of **1** in KBr pellet prepared in anaerobic conditions. Absorption bands of C₆₀ are marked by asterisks.

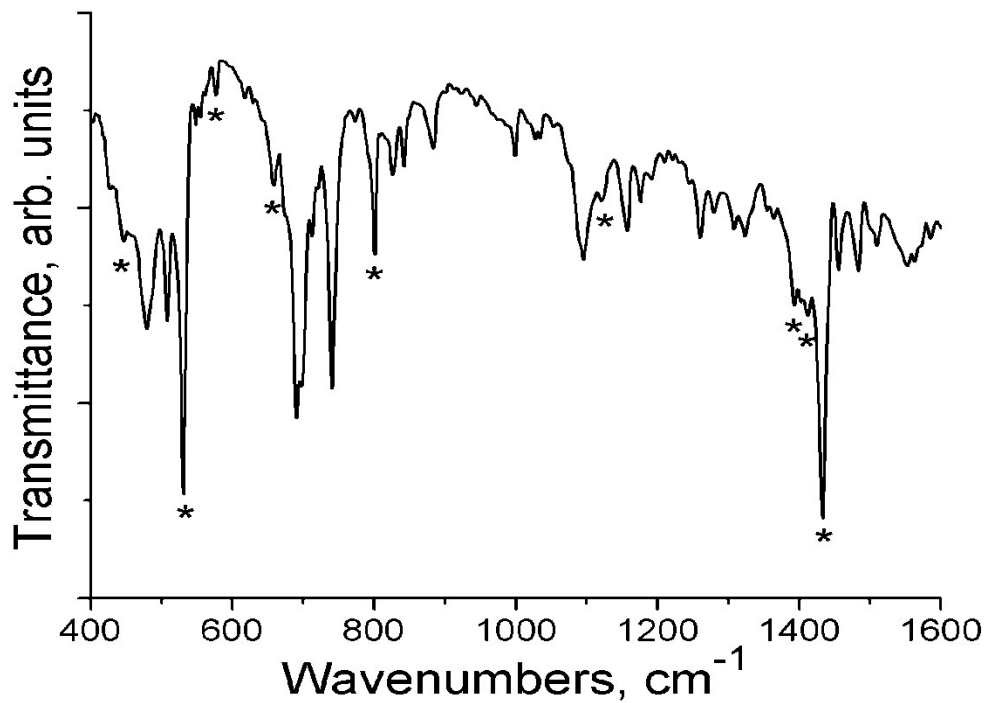


Fig. S2. IR spectrum of **2** in KBr pellet prepared in anaerobic conditions. Absorption bands of C₇₀ are marked by asterisks.