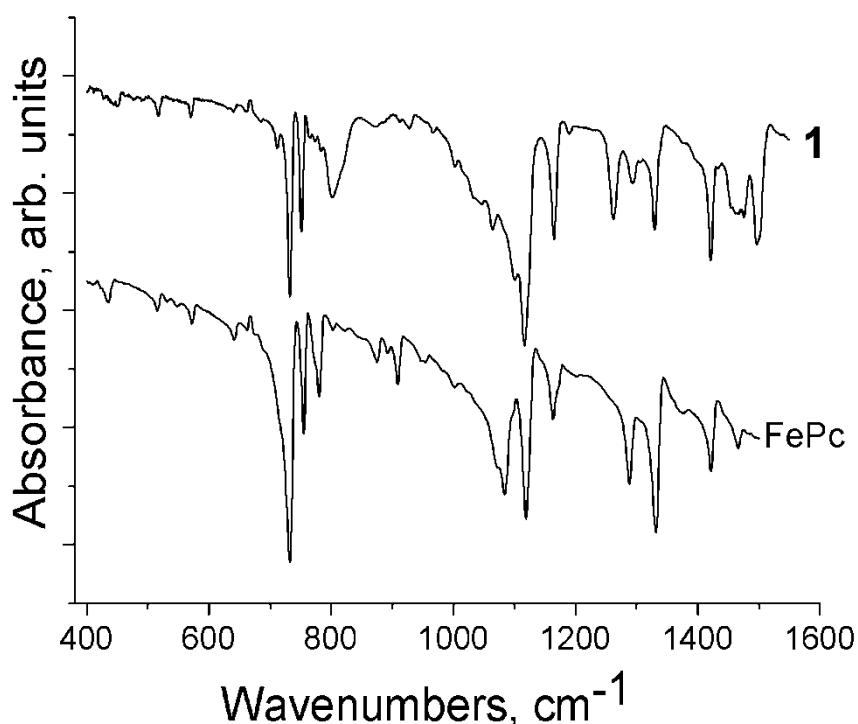


**Table S1.** IR spectra of parent components and salts **1** and **2**.

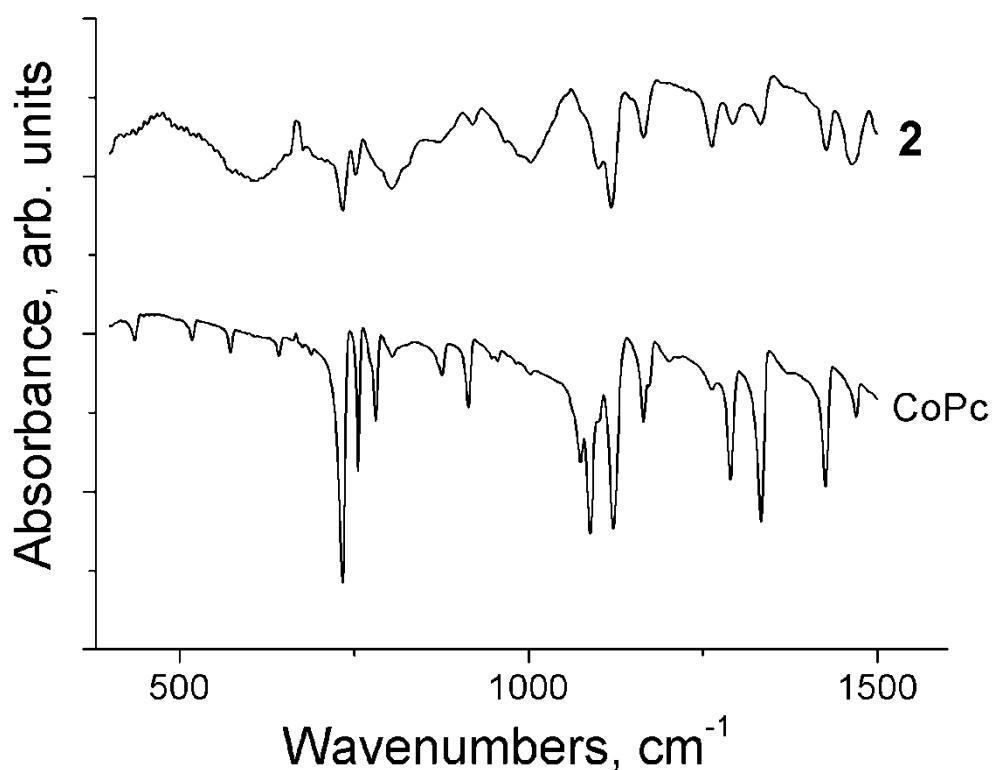
	Components			(Fe <sup>I</sup> Pc <sup>-</sup> )(TMP <sup>+</sup> )· 0.5C <sub>6</sub> H <sub>14</sub> ( <b>1</b> )	(Co <sup>I</sup> Pc <sup>-</sup> )(TMP <sup>+</sup> ) ( <b>2</b> )
<b>Fe<sup>II</sup>Pc</b>	434w 515w 571w 642w 731s 754m 779m - 874w 981w 1001w - 1084s 1119s 1163w - 1288m 1329s 1422m 1467w -			441w 517w 568w 640w 731s 751s 782w* 801m 875w - 1003w 1072m 1083s* 1116s 1164m 1264s 1293m 1329s 1421s 1466w 1497s	
<b>Co<sup>II</sup>Pc</b>		435w 518w 573w 642w 735s 756m 781w - 876w 913w 985w 1002w 1090s 1121s 1165m 1262w 1289s 1333s 1426m 1470w			735s 754m - 804m 872w - 985w 1004m 1092s* 1120s* 1165m 1262m 1293w 1333w 1426m 1464m*
<b>TMP<sup>+</sup></b>		(TMP <sup>+</sup> )(I <sup>-</sup> ) 782m 895s 923s 967s 1008m 1042m 1086m 1123m 1200m 1478s		782w* - 916w 966w - 1045w 1083s* - - 1475w	- - 920w 966w - - 1092s* 1120s* - 1464m*
<b>C<sub>6</sub>H<sub>14</sub></b>			722s 758w 882m 1065m 1342m 1373s 1460s	712w - - - - - 1461w	

w- weak, m- middle, s- strong intensity, sp. – split band, \*- the bands coincide.

IR-spectra

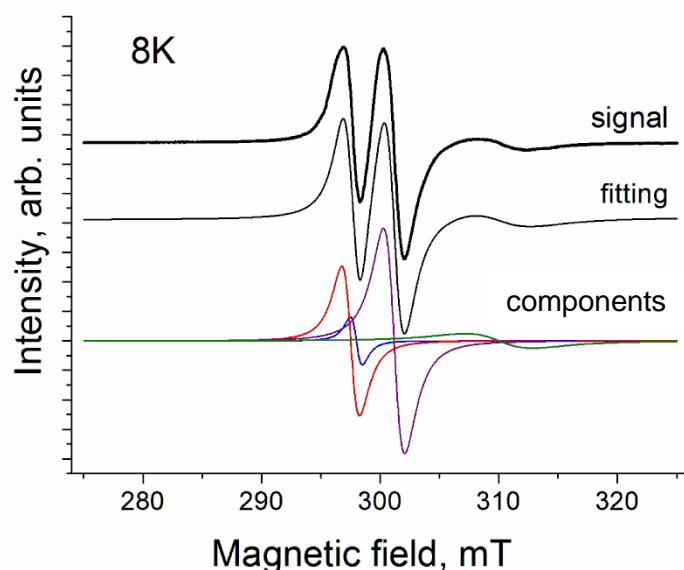


**Figure 1S.** IR-spectra of starting  $\text{Fe}^{\text{II}}\text{Pc}$  (bottom spectrum) and  $(\text{Fe}^{\text{II}}\text{Pc}^-)(\text{TMP}^+)\cdot 0.5\text{C}_6\text{H}_{14}$  (**1**) (upper spectrum) in the  $400\text{-}1500\text{ cm}^{-1}$  range in KBr pellet. Spectrum of **1** was measured in anaerobic conditions.

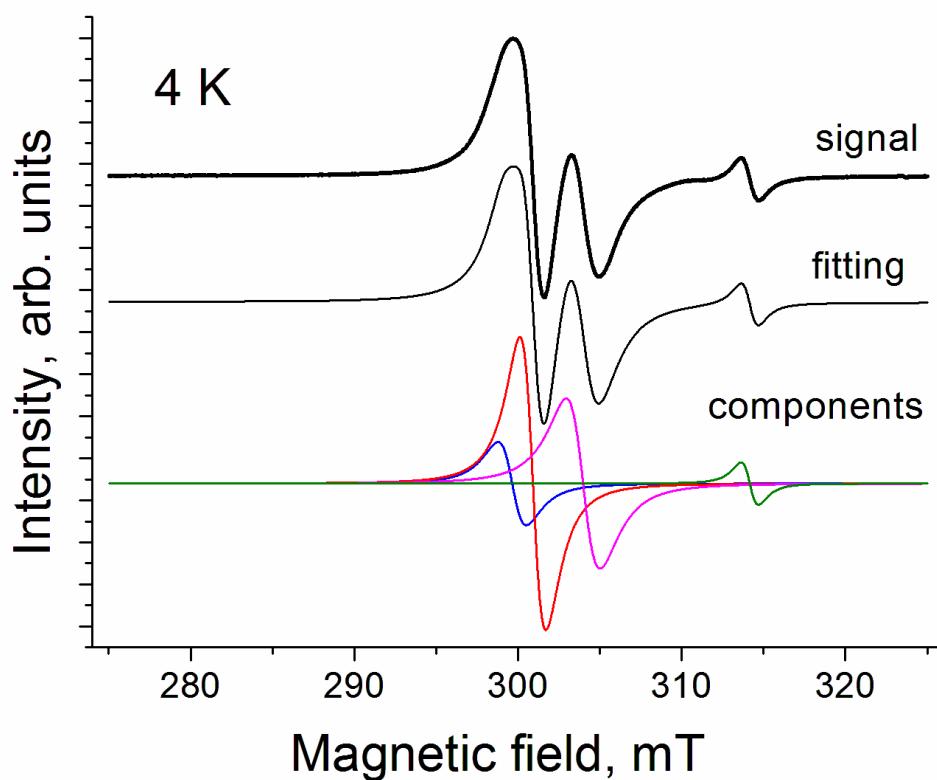


**Figure 2S.** IR-spectra of  $\text{Co}^{\text{II}}\text{Pc}$  (bottom spectrum) and  $(\text{Co}^{\text{II}}\text{Pc}^-)(\text{TMP}^+)$  (**2**) (upper spectrum) in the  $400\text{-}1500\text{ cm}^{-1}$  range in KBr pellet. Spectrum of **2** was measured in anaerobic conditions. 2

### EPR spectra



**Figure S3.** EPR spectrum of quenched sample of **1** at 8 K. Below is shown the fitting of the signal by four Lorentzian lines:  $g_1 = 2.1713$  and the linewidth ( $\Delta H$ ) of 1.47 mT,  $g_2 = 2.1676$  ( $\Delta H = 1.00$  mT),  $g_3 = 2.1450$  ( $\Delta H = 1.76$  mT), and  $g_4 = 2.0837$  ( $\Delta H = 5.60$  mT).



**Figure S4.** EPR spectrum of slowly cooled phase of **1** at 4 K. The fitting of the signal by four Lorentzian lines is shown below:  $g_1 = 2.1559$  and the linewidth ( $\Delta H$ ) of 1.73 mT,  $g_2 = 2.1469$  ( $\Delta H = 1.58$  mT),  $g_3 = 2.1252$  ( $\Delta H = 2.07$  mT), and  $g_4 = 2.0563$  ( $\Delta H = 1.05$  mT).