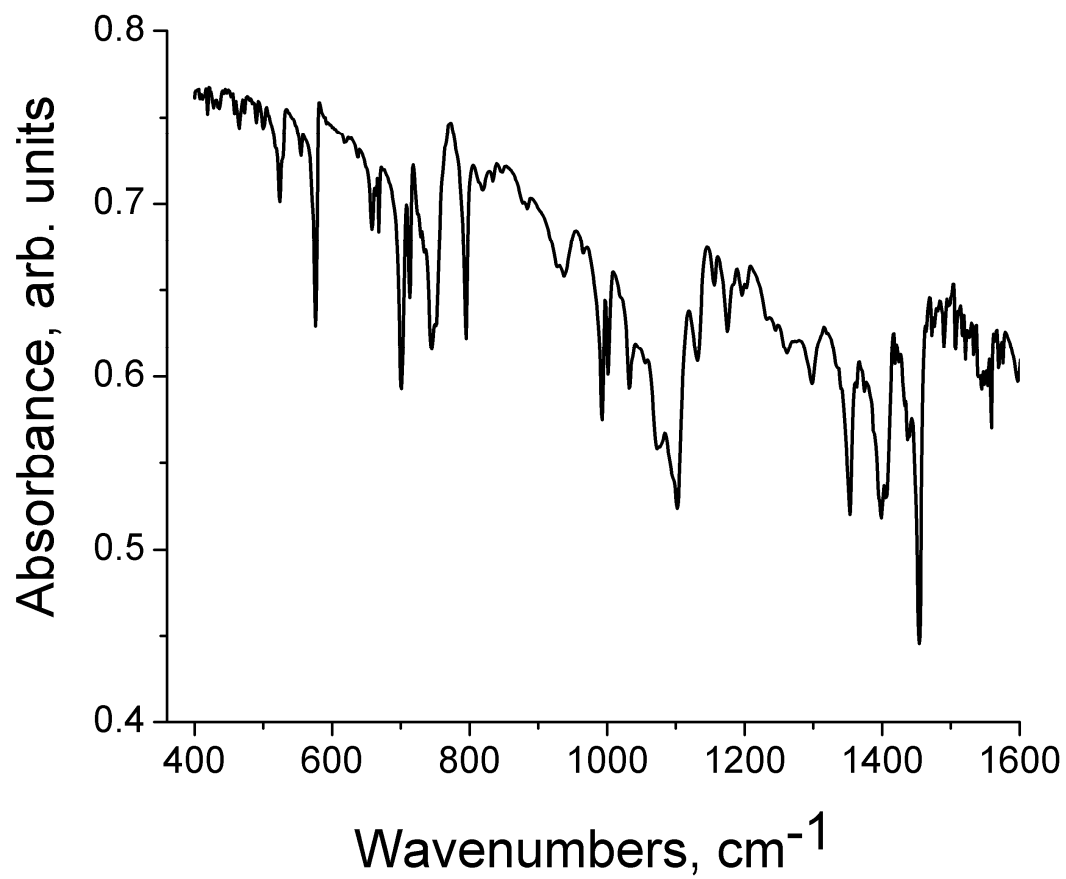


**Supporting information.**

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

| Components                   | Co <sup>II</sup> TPP | Cryptand[2,2,2] | C <sub>60</sub> | C <sub>6</sub> H <sub>4</sub> Cl <sub>2</sub> | <b>1</b> |
|------------------------------|----------------------|-----------------|-----------------|---|----------|
| Co <sup>II</sup> TPP         | 657w                 |                 |                 |   | 658w*    |
|                              | 701s                 |                 |                 |   | 701s     |
|                              | 718m                 |                 |                 |   | 713w     |
|                              | 754m                 |                 |                 |   | 751m*    |
|                              | 794s                 |                 |                 |   | 796m     |
|                              | 992s                 |                 |                 |   | 994m     |
|                              | 1000s                |                 |                 |   | 1001m    |
|                              | 1008s                |                 |                 |   | -        |
|                              | 1072m                |                 |                 |   | 1072m*   |
|                              | 1113w                |                 |                 |   | -        |
|                              | 1177w                |                 |                 |   | 1175w    |
|                              | 1199w                |                 |                 |   | 1196w    |
|                              | 1332m                |                 |                 |   | -        |
|                              | 1437w                |                 |                 |   | 1438w    |
|                              | 1473m                |                 |                 |   | -        |
|                              | 1559w                |                 |                 |   | -        |
|                              | 1594w                |                 |                 |   | -        |
|                              | 2965w                |                 |                 |   | 2966w*   |
|                              | 3016w                |                 |                 |   | 3016w    |
|                              | 3045w                |                 |                 |   | 3054w    |
|                              | Cryptand[2,2,2]      |                 | 525w            |   |          |
|                              |                      | 580w            |                 |   | -        |
|                              |                      | 733m            |                 |   | -        |
|                              |                      | 832m            |                 |   | 818w     |
|                              |                      | 851m            |                 |   | 884w     |
|                              |                      | 921m            |                 |   | -        |
|                              |                      | 951m            |                 |   | -        |
|                              |                      | 982s            |                 |   | 937w     |
|                              |                      | 1072m           |                 |   | 1072m*   |
|                              |                      | 1103s           |                 |   | 1101s    |
|                              |                      | 1129s           |                 |   | 1131m    |
|                              |                      | 1274w           |                 |   | 1262w    |
|                              |                      | 1294m           |                 |   | 1298w    |
|                              |                      | 1328w           |                 |   | -        |
|                              |                      | 1361m           |                 |   | 1353s    |
|                              |                      | 1393w           |                 |   | -        |
|                              |                      | 1447w           |                 |   | 1454s*   |
|                              |                      | 1462w           |                 |   | -        |
|                              |                      | 1489 w          |                 |   | -        |
|                              |                      | 2716w           |                 |   | -        |
|                              | 2875w                |                 |                 | 2859w   |          |
|                              | 2942w                |                 |                 | 2966w*  |          |
| C <sub>60</sub> <sup>-</sup> |                      |                 | 526s            |   | 524w     |
|                              |                      |                 | 576m            |   | 576s     |
|                              |                      |                 | 1182m           |   | 1399s    |
|                              |                      |                 | 1429s           |   | 1405m    |
|                              |                      |                 |                 |   |          |
|                              |                      |                 |                 | 657w  | 658w*    |
|                              |                      |                 |                 | 748s  | 751m*    |
|                              |                      |                 |                 | 1030m   | 1032w    |
|                              |                      |                 |                 | 1122m   | -        |
|                              |                      |                 |                 | 1453m   | 1454s*   |

\* - the bands are coincided.



**Fig. 1S.** IR spectrum of **1** in KBr pellet.

