

## Supplementary Information for:

### A Series of Novel Ion-pair Complexes Based on TCNQ: Syntheses, Crystal Structures and Properties

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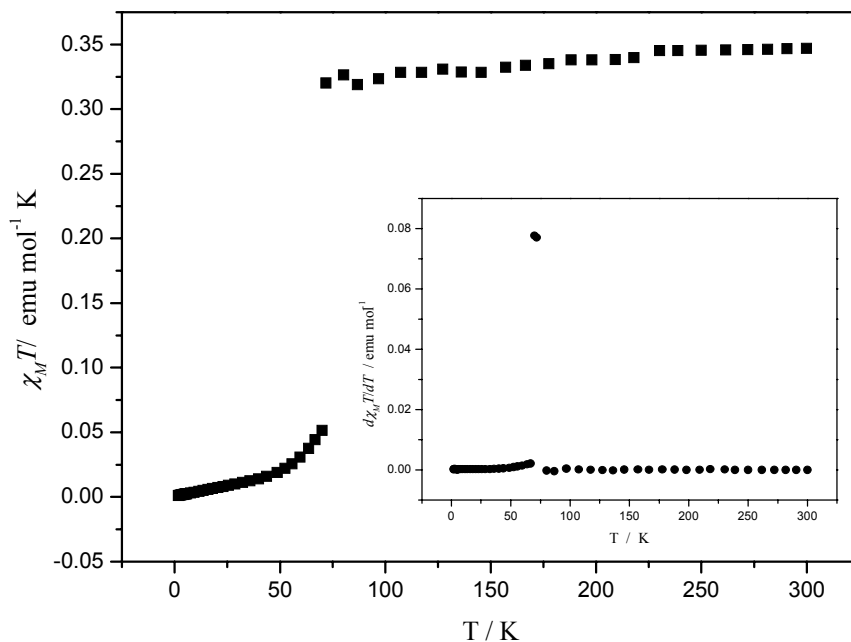
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**Table 1S.** Distance [ $\text{\AA}$ ] and angles [ $^\circ$ ] of hydrogen bonding for complexes **1** – **4**

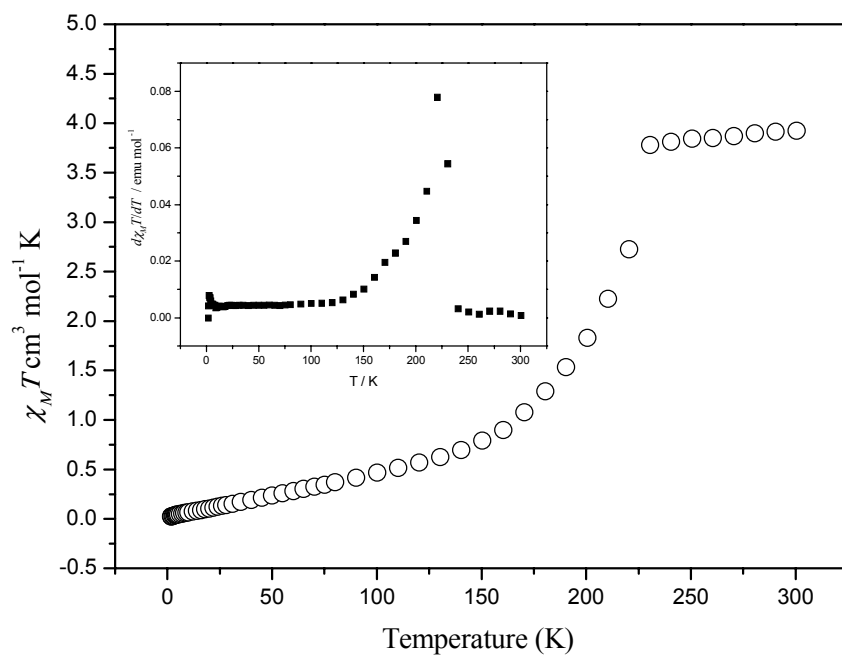
D-H...A	$d(\text{D-H})$	$d(\text{H...A})$	$d(\text{D...A})$	$\angle(\text{DHA})$
<b>(AP)(TCNQ) (1)</b>				
N2-H2A...N3#1	0.86	2.42	2.991(3)	125
N2-H2B...N5#2	0.86	2.23	3.025(3)	154
C9-H9...N6#3	0.93	2.58	3.215(3)	126
<b>(CP)<sub>2</sub>(TCNQ)<sub>3</sub> (2)</b>				
C12-H12...N6#4	0.93	2.47	3.157(3)	131

C21-H21···N6#5	0.93	2.59	3.367(3)	141
<b>(CMP)(TCNQ) (3)</b>				
C9-H9···N4#6	0.93	2.57	3.331(3)	139
C12-H12···N2	0.93	2.47	3.338(3)	155
C13-H13B···N5#7	0.96	2.59	3.452(4)	150
<b>(BQ)<sub>2</sub>(TCNQ)<sub>2</sub>·CH<sub>3</sub>CN (4)</b>				
C7-H7A···N3#8	0.93	2.57	3.331(3)	139
C8-H8···N3#8	0.93	2.47	3.338(3)	155
C8-H8···N5	0.96	2.59	3.452(4)	150

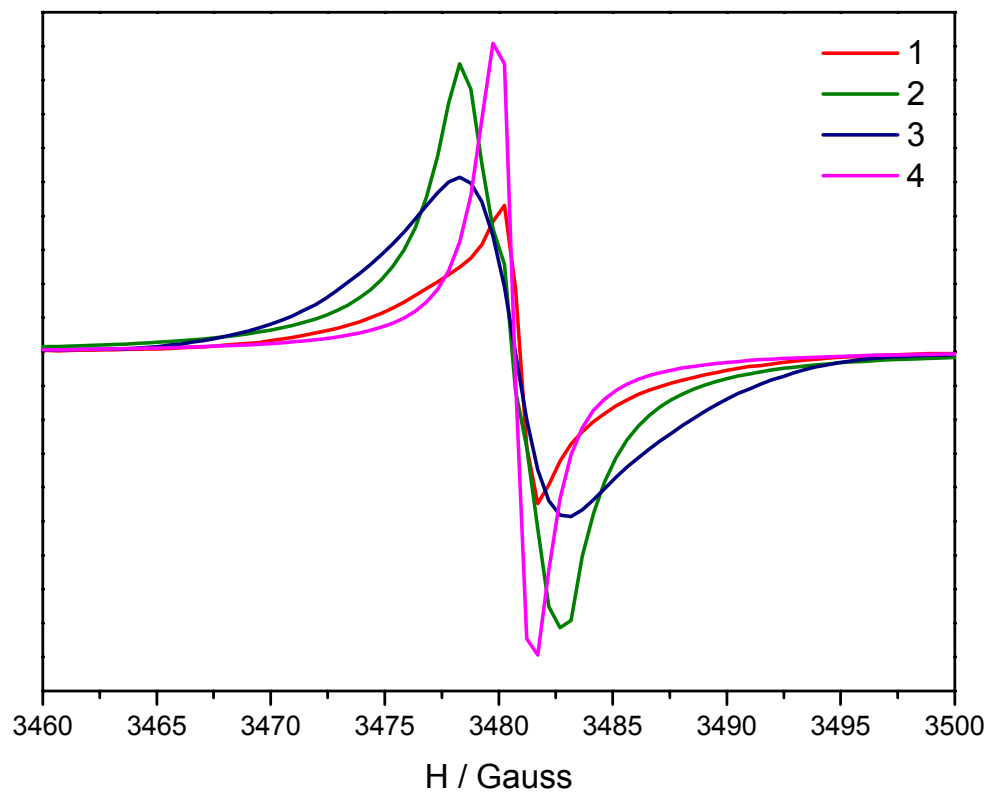
Symmetry codes: #1 x, -1+y, z; #2 -x, 1-y, 2-z; #3 -x, -1/2+y, 3/2-z; #4 2-x, 1-y, 1-z;  
#5 -1+x, y, z; #6 -x, -1/2+y, 1/2-z; #7 1-x, -1/2+y, 1/2-z; #8 x, -1+y, z.



**Figure S1.** The plot of  $\chi_M T$  versus  $T$  for complex **3** (inset:  $d(\chi_M T)/dT$  versus  $T$ ).



**Figure S2.** The plot of  $\chi_M T$  versus  $T$  for complex **4** (inset:  $d(\chi_M T)/dT$  versus  $T$ ).



**Figure S3.** EPR spectra of **1** - **4** at room temperature.