Electronic Supplementary Material for CrystEngComm

Supporting Information:

Synthesis, Structure and Property of Cobalt(II) Complexes with 3,5-Di(1H-imidazol-1-yl)benzoic Acid

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Table S1 Hydrogen bonding distances/ Å and angel/ º for complex **2**

O3-H10···O1#1	2.763(4)	160(4)
O3-H11···O12#1	2.857(7)	156(4)
O4-H12···O2#2	3.222(4)	136(4)
O4-H12···O3#3	3.239(4)	151(4)
O4-H13···O24#3	3.253(12)	142(4)
C2-H1···O22#4	3.150(10)	122
C2-H1···O22#5	3.108(10)	114
C11-H4···O22#4	3.437(10)	162

C11-H4···O24#5	3.436(14)	150
C13-H6···O23#6	3.162(15)	136
C13-H6···O21 #1	3.286(11)	151
C31-H7···O11#4	3.223(8)	177
C33-H9···O21	3.416(11)	170
C33-H9···O23#7	3.285(15)	172

Symmetry transformations used to generate equivalent atoms:#1 1/2-x, 1/2+y, 1-z, #2 x, y, -1+z, #3 1/2-x, 1/2+y, -z, #4 x, 1+y, z, #5 1-x, 1+y, 1-z, #6 -1/2+x, 1/2+y, z, #7 1-x, y, 1-z.

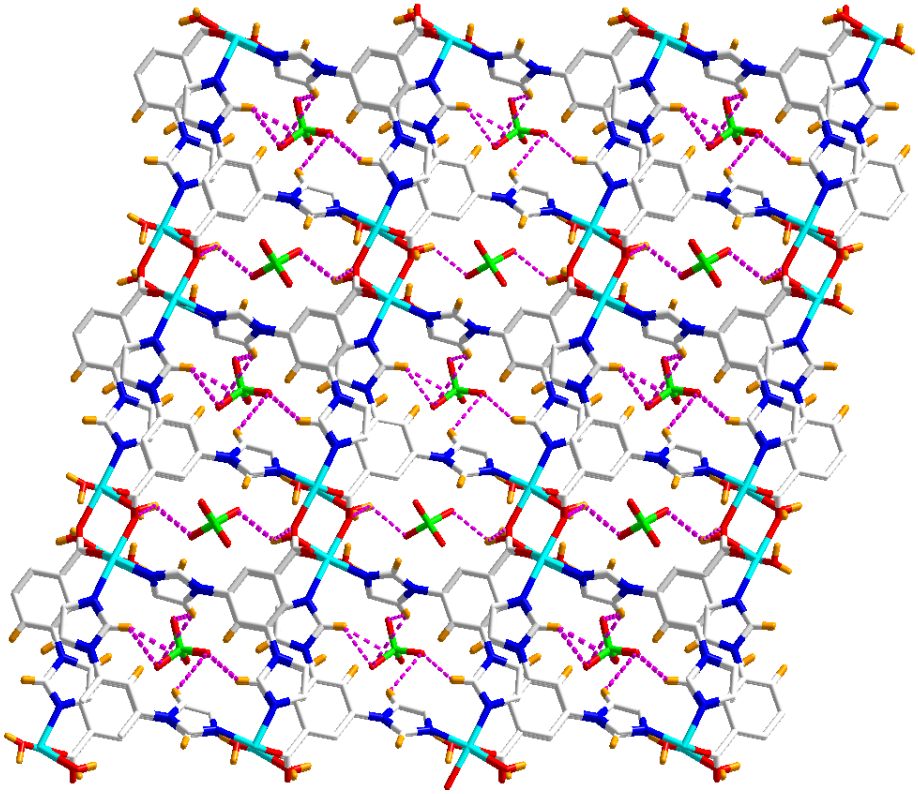

Figure S1. View of crystal packing diagram of **2** with perchlorate anions encapsulated inside the 1D tubes. The hydrogen bonds are shown in dash line.

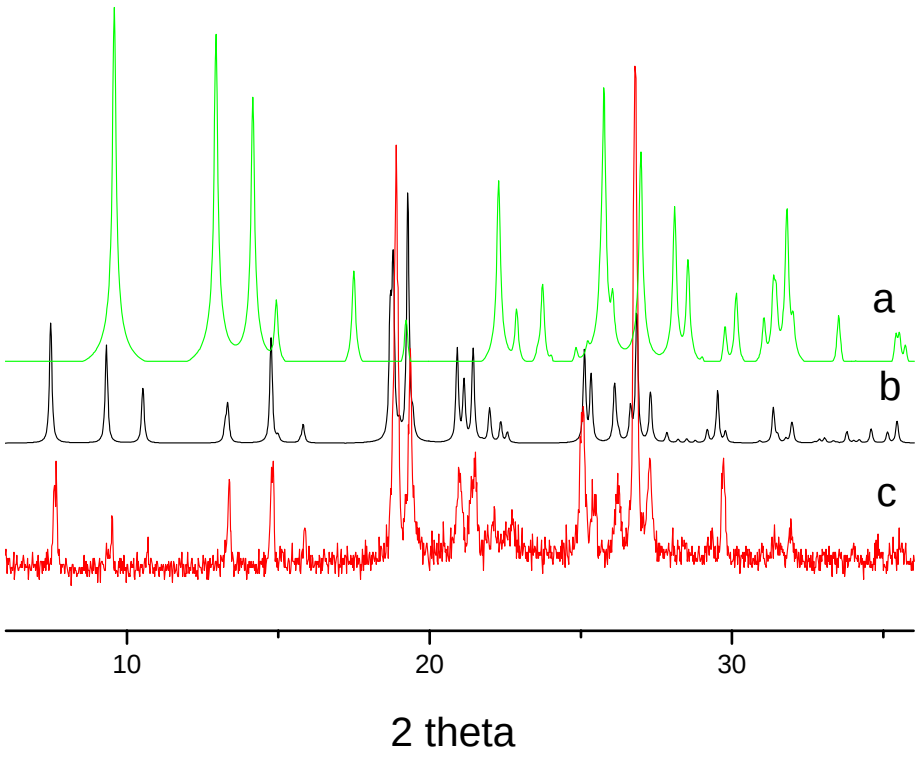

Figure S2. XRPD pattern of (a) complex **1**, (b) complex **2**, (c) complex **2** treated with aqueous solution of $NaNO_3$.