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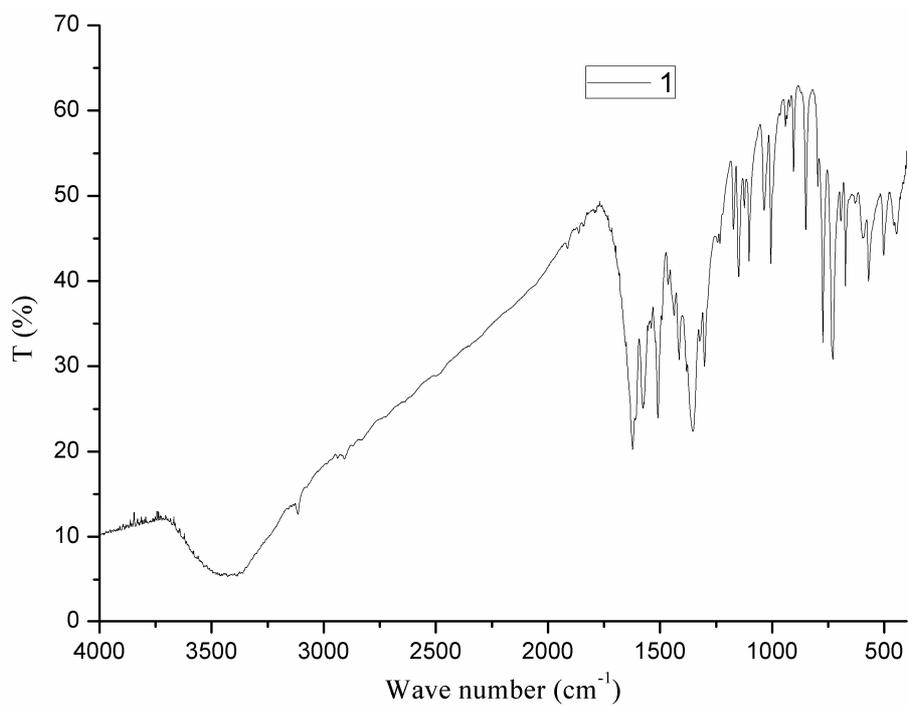
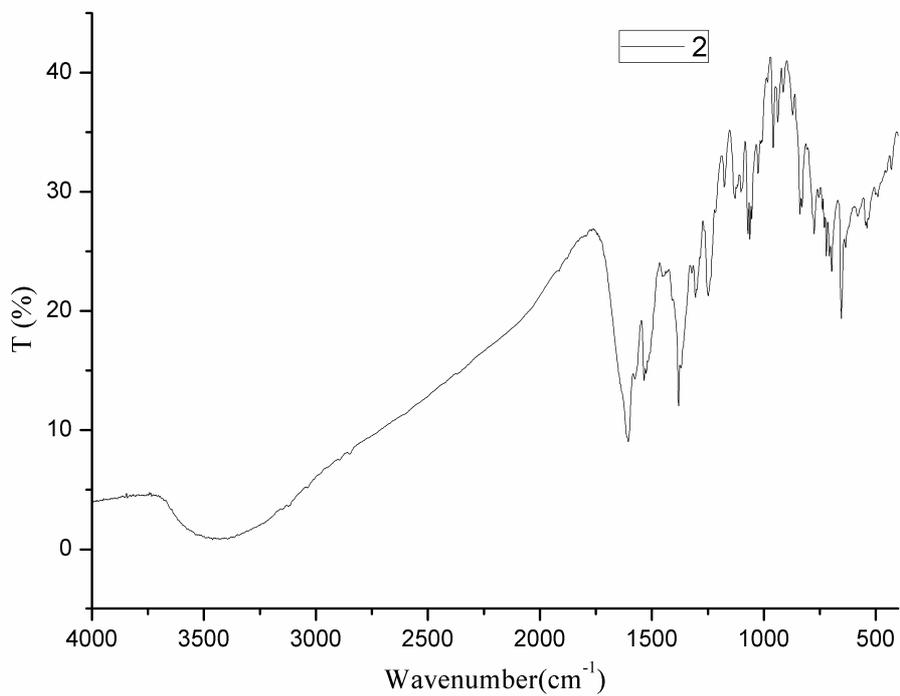
3D semiconducting Co–MOFs based on 5-(hydroxymethyl)isophthalic acid and imidazole derivatives: syntheses and crystal structures

Zhong-Xuan Xu, Chun-Yan Ou and Chun-Xue Zhang

Table S1. Some selected bond lengths (Å) and bond angles (°) in **1** and **2**

| 1 | | | | | |
|--------------------------------------|------------|--------------------------------------|------------|-------------------------|------------|
| Co1-O1 ^a | 1.9512(18) | Co1-O1 | 1.9513(18) | Co1-N1 ^a | 2.0389(13) |
| Co1-N1 | 1.971(2) | | | | |
| O1 ^a -Co1-O1 | 125.28(9) | O1 ^a -Co1-N1 ^a | 115.52(6) | O1-Co1-N1 ^a | 98.92(6) |
| O1 ^a -Co1-N1 | 98.92(6) | O1-Co1-N1 | 115.52(6) | N1a-Co1-N1 | 100.80(8) |
| 2 | | | | | |
| Co1-O4 ^a | 2.069(2) | Co1-O5 ^b | 2.199(2) | Co1-O1 | 2.030(3) |
| Co1-N3 | 2.156(3) | Co1-N1 | 2.115(3) | Co1-N5 | 2.113(3) |
| O4 ^a -Co1-N5 ^b | 89.64(10) | O4 ^a -Co1-N3 | 86.17(11) | O4 ^a -Co1-N1 | 90.76(12) |
| O4 ^a -Co1-N5 | 88.40(12) | O1-Co1-N4 ^a | 176.69(11) | O1-Co1-N5 ^b | 92.40(11) |
| O1-Co1-N3 | 92.07(13) | O1-Co1-N1 | 86.49(12) | O1-Co1-N5 | 94.35(12) |
| N3-Co1-N5 ^b | 172.60(12) | N1-Co1-O5 ^b | 94.45(12) | N1-Co1-N3 | 91.70(12) |
| N5-Co1-O5 ^b | 85.75(12) | N5-Co1-N3 | 88.03(13) | N5-Co1-N1 | 179.13(12) |

Symmetry codes: (a) $x, 1-y, 1/2-z$ for **1**; (a) $1+x, 3/2-y, 1/2+z$; (b) $1+x, y, z$ for **2**

Figure S1. The IR spectra of **1**Figure S2. The IR spectra of **2**