

Table S1 Crystal data collections and structure refinements for ADD

| compound 1 | | | |
|-----------------------------------------------------|-----------------------------|-------------------------|-----------------------------|
| Formula | C16H16N4CuO4 | Crystal system | Orthorhombic |
| Fw | 391.87 | V /nm ³ | 1.621(2) |
| Space group | P212121 | Temperature (K) | 296(2) |
| a/nm | 0.533(4) | α /° | 90.00 |
| b/nm | 1.228(10) | β /° | 90.00 |
| c/nm | 2.474(19) | γ /° | 90.00 |
| Z | 4 | Dc/Mg m ⁻³ | 1.606 |
| F(000) | 804 | μ /mm ⁻¹ | 1.378 |
| θ range (°) | 1.65–28.46 | Reflections collected | 10123 |
| Independent reflections (Rint) | 4016(0.0199) | GOF | 1.035 |
| Final R _{a,b} indices [$I > 2\sigma(I)$] | R1 = 0.0259 wR2 = 0.0639 | R indices (all data) | R1 = 0.0321 wR2 = 0.0666 |

$$a \text{ R1} = \frac{\sum ||F_o| - |F_c||}{\sum |F|}, \text{ b wR2} = \frac{|\sum w(|F_o|^2 - |F_c|^2)|}{\sum w(F)^2} |1/2$$

Table S2 Bond lengths (nm) and angles (°) of ADD

| compound 1 | | | | | |
|------------|-----------|-----------|-----------|-----------|-----------|
| Bond | Dist.(nm) | Bond | Dist.(nm) | Bond | Dist.(nm) |
| Cu1-O2 | 0.193(13) | Cu1-N2 | 0.200(15) | Cu1-N1 | 0.198(14) |
| Cu1-O4 | 0.195(12) | N3-N4 | 0.123(3) | | |
| Angle | (°) | Angle | (°) | Angle | (°) |
| O2-Cu1-O4 | 91.85(6) | O2-Cu1-N2 | 171.41(7) | N1-Cu1-N2 | 84.19(7) |
| O2-Cu1-N1 | 92.55(6) | O4-Cu1-N2 | 91.39(6) | O4-Cu1-N1 | 175.58(6) |

Table S3 Hydrogen bond distances (nm) and angles (°) in ADD

| D-H | d(D-H) | d(H...A) | \angle DHA | d(D-A) | A |
|--------------|--------|----------|--------------|----------|-------|
| N(1)-H(1B) | 0.090 | 0.223 | 135 | 0.294(3) | O(1)B |
| N(2)-H(2A) | 0.090 | 0.200 | 168 | 0.289(2) | O(3)B |
| C(15)-H(15A) | 0.097 | 0.253 | 139 | 0.332(2) | O(4)C |

symmetry code: B, 1+x, y, z; C, 1-x, 0.5+y, 0.5-z

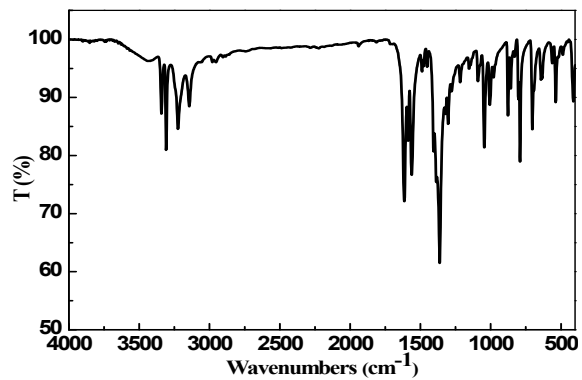


Fig.S1. IR curve of ADD

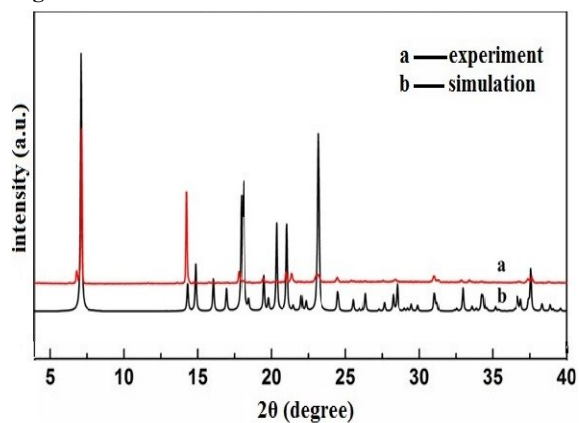


Fig.S2. The experimental (a) and simulative (b) powder X-ray diffraction patterns for ADD

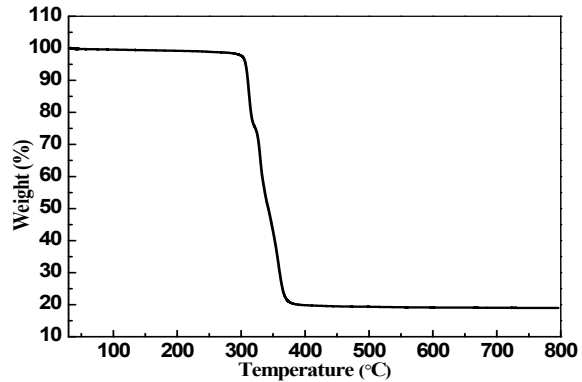


Fig.S3. TGA curve of ADD

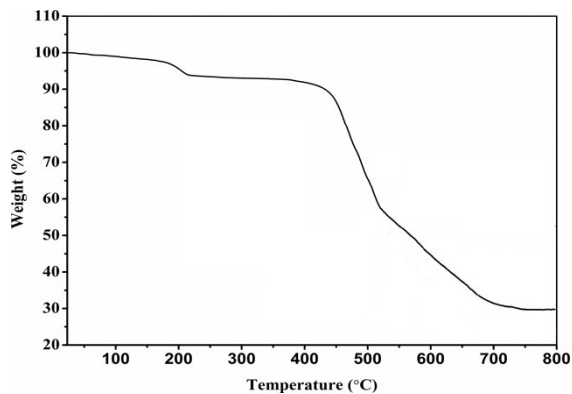


Fig.S4. TGA curve of DDB