

Supplementary information

Table S1 Selected bond distances (Å) and angles (°) for title polymer

Cu(1)-O(4) #1	1.962(3)	Cu(1)-O(2) #1	1.959(3)
Cu(1)-O(3)	1.958(3)	Cu(1)-O(1)	1.984(3)
Cu(1)-N(2) #2	2.161(3)		
C(10)-O(4)-Cu(1)	121.1(2)	O(3)-Cu(1)-O(2)	89.71(12)
O(3)-Cu(1)-O(4)	167.43(11)	O(2)#1-Cu(1)-O(4) #1	88.48(12)
O(3)-Cu(1)-O(1)	90.84(12)	O(2)#1-Cu(1)-O(1)	167.50(10)
O(4)#1-Cu(1)-O(1)	88.27(12)	O(3)-Cu(1)-N(2)#2	96.81(11)
O(2)#1-Cu(1)-N(2)#2	98.85(11)	O(4)#1-Cu(1)-N(2)#2	95.76(11)
O(1)-Cu(1)-N(2)#2	93.49(11)	O(3)-Cu(1)-Cu(1)#1	82.38(8)
O(2)#1-Cu(1)-Cu(1)#1	83.59(8)	O(4)#1-Cu(1)-Cu(1)#1	85.05(8)

Symmetry transformations used to generate equivalent atoms: #1 -x,-y+2,-z; #2 -x,-y+1,-z

Table S2. Parameters for fits of the heat capacity (in $\text{J} \cdot \text{mol}^{-1} \cdot \text{K}^{-1}$) of **1**.

Parameter	Temperature range	Coefficients
	$0 \leq T/\text{K} \leq 6.65$	
γ		7.26415E-03
B_3		2.15654E-03
B_5		-2.90347E-05
B_{asw}		1.18766E-02
Δ		7.12
	RMS% = 1.85	
	$6.65 \leq T/\text{K} \leq 48.25$	
A_0		2.91962E+00
A_1		-1.43857E+00
A_2		2.26735E-01
A_3		-7.15388E-03
A_4		1.23487E-04
A_5		-1.13151E-06
A_6		4.22975E-09
	RMS% = 0.55	
	$48.25 \leq T/\text{K} \leq 300$	

n_D	1.94
θ_D	171
n_E	0.52
θ_E	241
A_1	1.17677E+00
A_2	-6.72518E-04
$RMS\% = 0.25$	

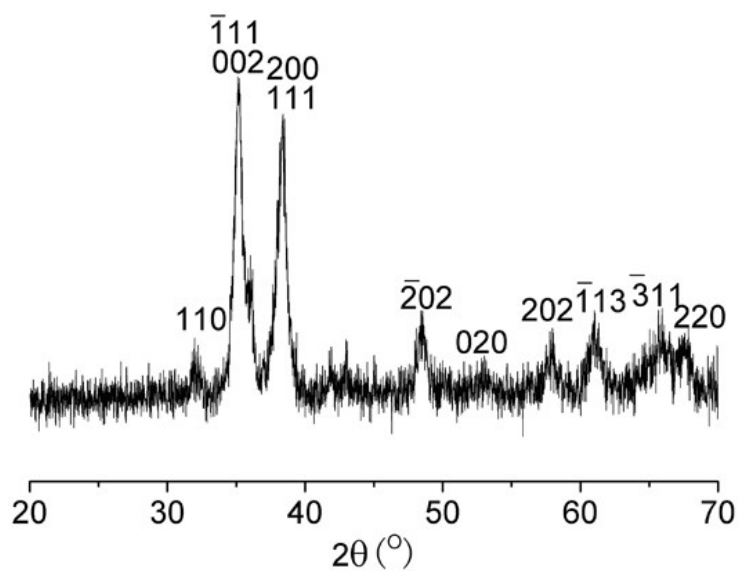


Figure S1. X-ray powder diffraction for the polymer after thermal decomposition