

Electronic supplementary information (ESI)

Ni(II) based one dimensional coordination polymers for environmental remediation: Design, topology, magnetism and selective adsorption of cationic dyes

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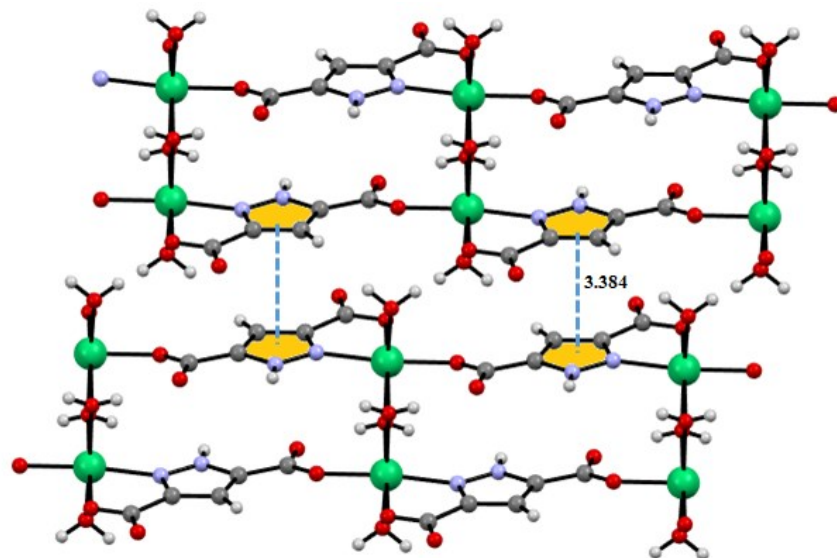


Fig. S1. Supramolecular non-covalent interactions between neighbouring moieties in CP-1.

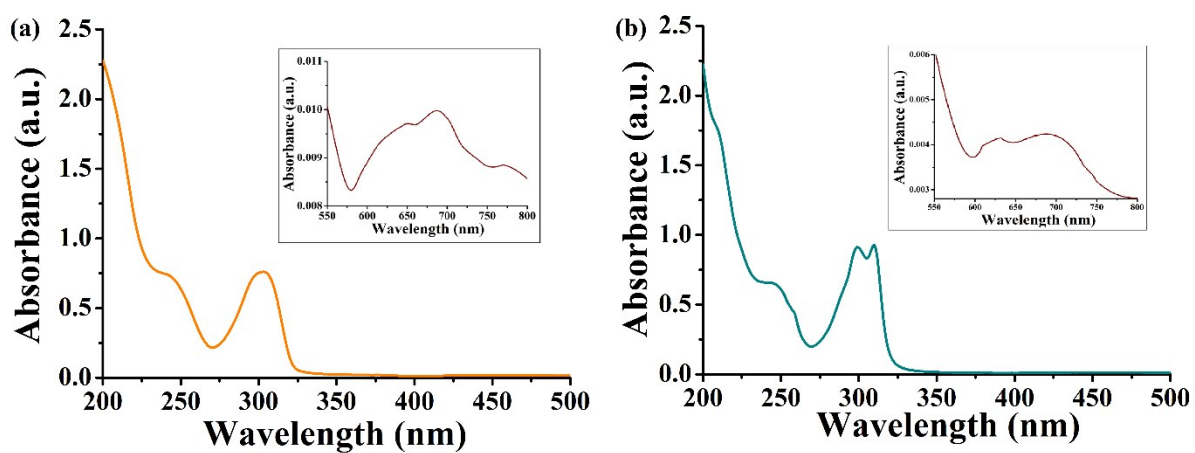


Fig. S2. UV-visible spectra of (10^{-3} M methanolic solution) CP-1 (a) and CP-2 (b).

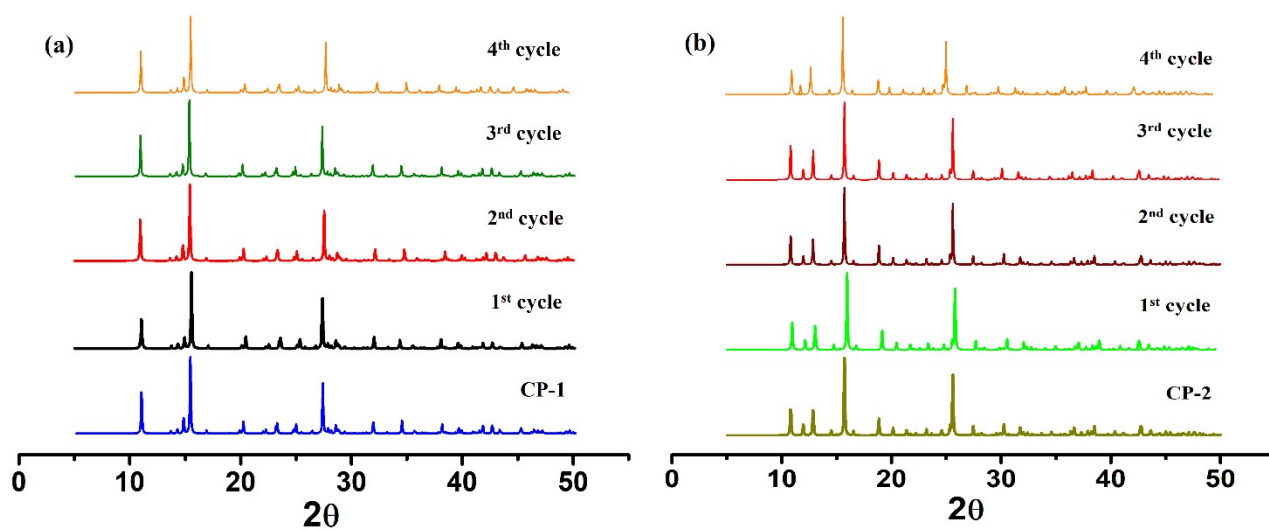


Fig. S3. PXRD patterns of CP-1 and CP-2 before and after adsorption of MB dye.

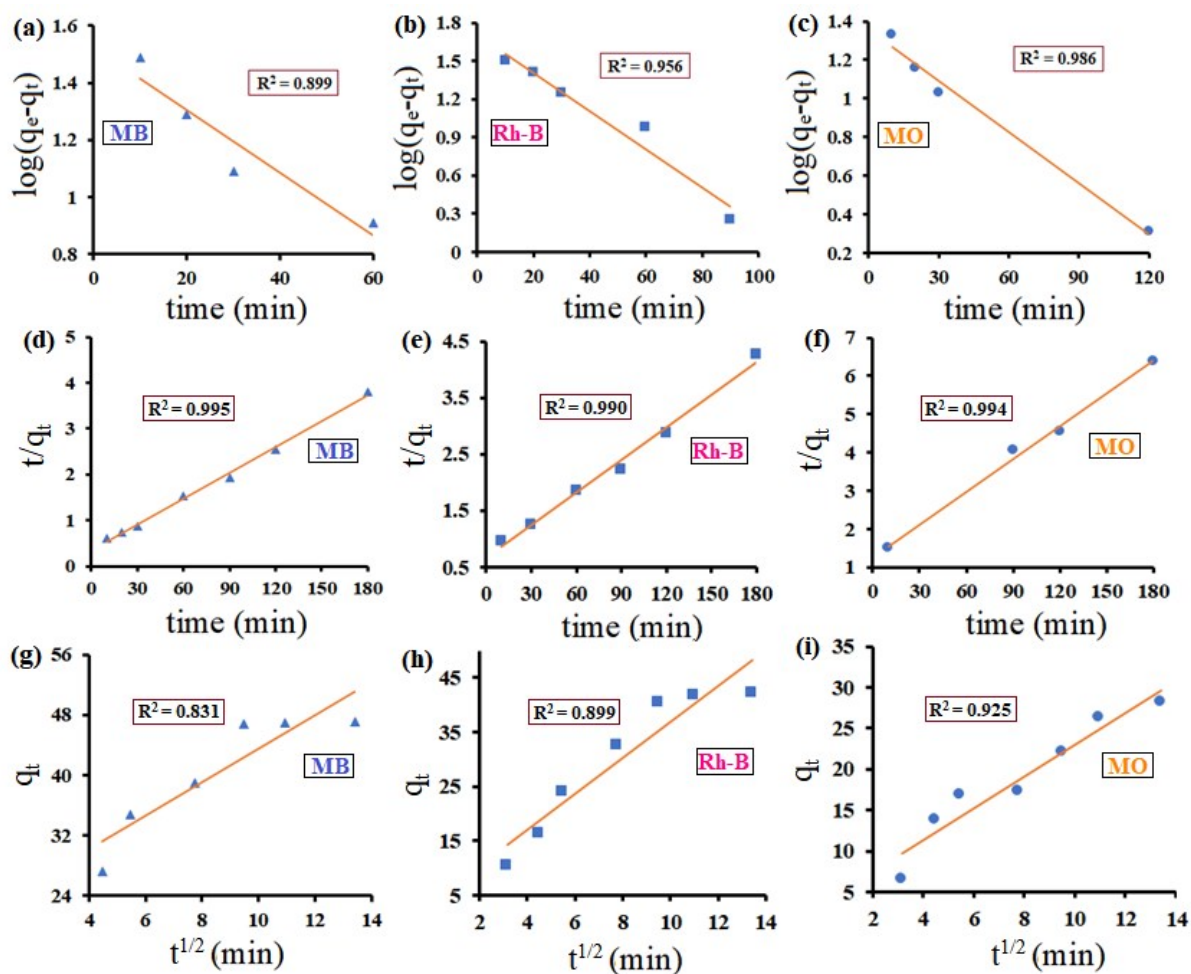


Fig. S4. Adsorption of MB, Rh-B and MO onto CP-1 using pseudo-first-order (a, b and c), pseudo-second-order (d, e and f) and intra-particle (g, h and i) kinetics models.

Table S1. Bond lengths for **CP-1** and **CP-2**.

CP-1			CP-2		
Atom	Atom	Length/Å	Atom	Atom	Length/Å
Ni1	O1	1.991(3)	Ni1	O3	2.025(3)
Ni1	O4	2.034(2)	Ni1	O2	2.024(4)
Ni1	O5	2.072(2)	Ni1	O5	2.058(3)
Ni1	O5	2.144(3)	Ni1	N4	2.109(4)
Ni1	O6	2.037(3)	Ni1	N1	2.087(4)
Ni1	N9	2.053(3)	Ni1	N3	2.083(4)
O1	C1	1.260(5)	O5	H5a	0.8500
O2	C1	1.260(4)	O3	C6	1.313(6)
O3	C5	1.242(4)	O4	C6	1.200(6)
O4	C5	1.276(5)	O1	C1	1.203(7)
O6	H6a	0.8500	N4	C9	1.343(7)
N8	C2	1.361(5)	N1	C2	1.337(7)
N9	C4	1.342(5)	N3	C7	1.326(6)
C1	C2	1.478(5)	C2	C1	1.535(7)

Table S2. Bond angles for **CP-1** and **CP-2**.

CP-1				CP-2			
Atom	Atom	Atom	Angle/°	Atom	Atom	Atom	Angle/°
O4	Ni1	O1	89.29(10)	O2	Ni1	O3	175.83(14)
O5	Ni1	O1	90.34(10)	O5	Ni1	O3	89.49(15)
O5	Ni1	O1	89.15(10)	O5	Ni1	O2	87.96(14)
O6	Ni1	O1	89.73(11)	N4	Ni1	O3	93.45(15)
O6	Ni1	O4	96.38(10)	N4	Ni1	O2	89.12(15)
O6	Ni1	O5	172.84(10)	N4	Ni1	O5	177.03(17)
N9	Ni1	O1	169.25(11)	N1	Ni1	O3	96.24(16)
N9	Ni1	O5	100.21(11)	N1	Ni1	O2	80.42(15)
C1	O1	Ni1	127.8(2)	N1	Ni1	O5	88.81(15)
C5	O4	Ni1	115.3(2)	N3	Ni1	N4	89.41(15)
C4	N9	Ni1	111.8(2)	N3	Ni1	O3	80.83(15)
N8	N9	Ni1	141.8(2)	N3	Ni1	O2	102.49(15)