

## Supporting info

**Table S1.** Crystallographic data for **UV-012**.

Compound	UV-012
Chemical formula	C <sub>31</sub> H <sub>30</sub> Co <sub>2</sub> N <sub>4</sub> O <sub>12</sub>
Formula weight	768.45
Space group	orthorhombic
Crystal system	Pbn <sub>b</sub>
Crystal size (mm <sup>3</sup> )	0.15 x 0.125 x 0.025
Crystal color and shape	Violet plate
a(Å)	7.6879(1)
b(Å)	16.0216(4)
c(Å)	25.5781(6)
α(°)	90
β(°)	90
γ(°)	90
Volume (Å <sup>3</sup> )	3150.5(12)
Formula units per cell, Z	4
δ <sub>calc</sub> (g cm <sup>-3</sup> )	1.584
μ (mm <sup>-1</sup> )	1.112
R (int)	0.0831
F(000)	1524
Temperature of measurement (K)	293(2)
θ Limits (°)	1.59–27.49
No. of reflections collected	29608
No. of independent reflections	3609
No. of observed reflections	2456
R [F <sup>2</sup> > 2σ(F <sup>2</sup> )]	0.0687
wR (F <sup>2</sup> )	0.2266
Goodness of fit, S	1.092
No. of parameters	227
Δρ <sub>min</sub> (e Å <sup>-3</sup> )	-0.544
Δρ <sub>max</sub> (e Å <sup>-3</sup> )	2.199

**Table S2.** Selected bond distances ( $\text{\AA}$ ) and bond angles ( $^\circ$ ) for UV-012.

Compound 2	
<i>Bond lengths (<math>\text{\AA}</math>)</i>	
Co1 – N1	2.084 (9)
Co1 – N2	2.156 (10)
Co1 – O2	2.459 (16)
Co1 – O1	2.032 (8)
Co1 – O5	2.339 (12)
Co1 – O3	1.964 (8)
<i>Bond angles (<math>^\circ</math>)</i>	
N1-Co1-N2	99.31 (4)
N1-Co1-O1	143.01 (4)
N1-Co1-O5	88.25 (4)
N1-Co1-O3	105.82 (4)
N2-Co1-O1	95.62 (4)
N2-Co1-O5	172.41 (4)
N2-Co1-O3	99.34 (4)
O2-Co1-O5	78.52 (4)
O3-Co1-O5	77.76 (4)
O3-Co1-O1	104.9 (3)

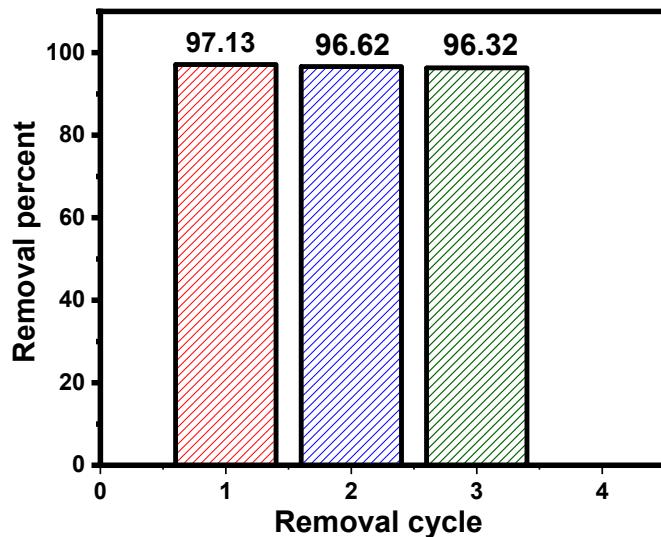


Figure S1) UV-012 reutilization cycles for MO adsorption.

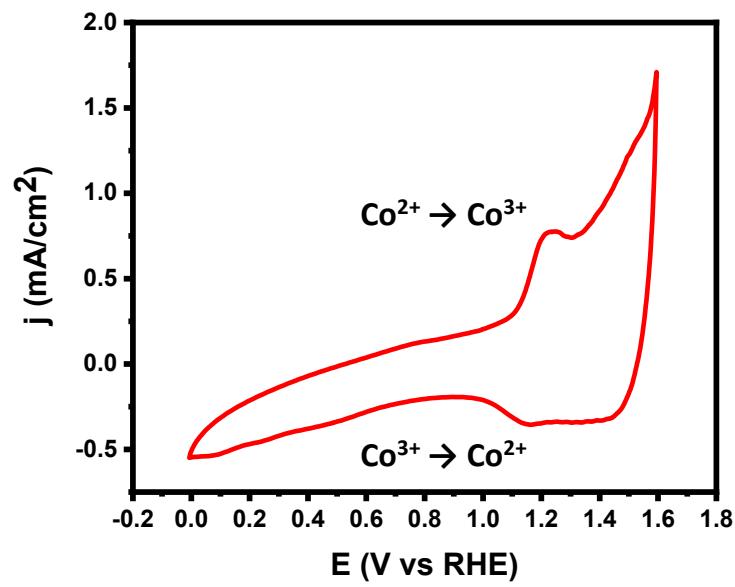


Figure S2) UV-012 cyclic voltammetry experiments