

Supporting information

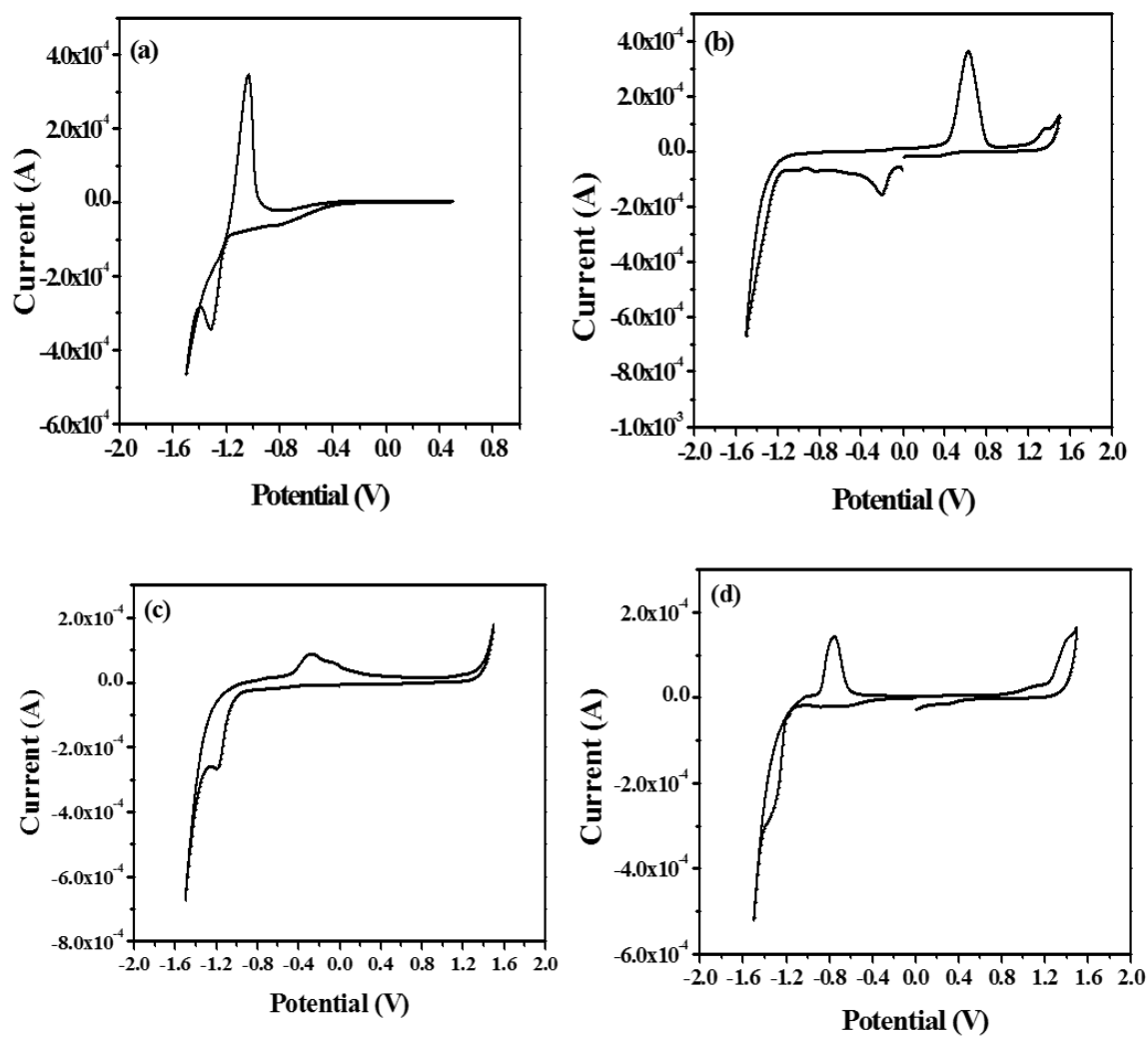


Figure S1: Cyclic voltammogram of individual metal ions in 1M KOH (a) 2 mM CoSO_4 (b) 2 mM CuSO_4 (c) 4 mM FeSO_4 (d) 2 mM ZnSO_4 .

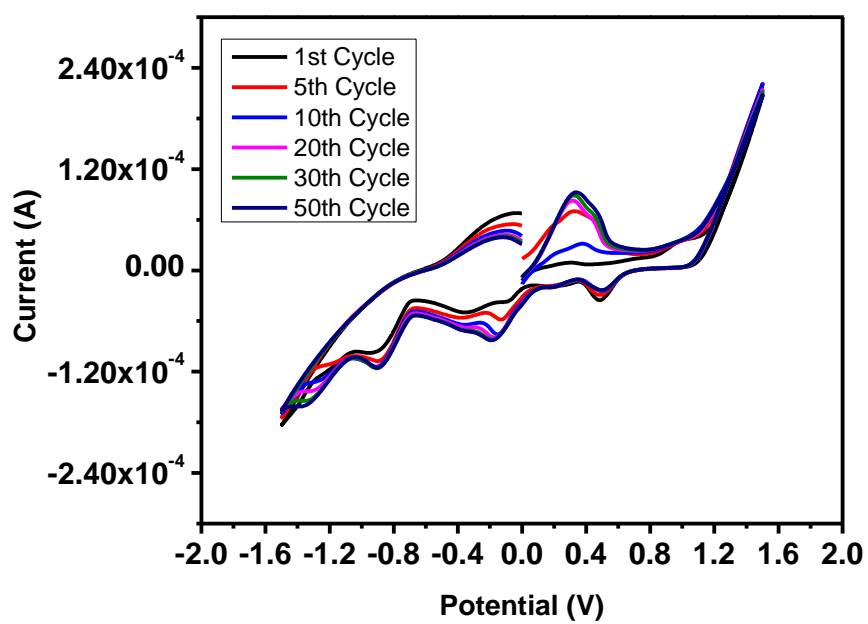


Figure S2: Effect of scan cycles on the oxidation/reduction peaks of Co, Cu, Fe & Zn in 1M KOH at a scan rate of 100 mVs^{-1} .

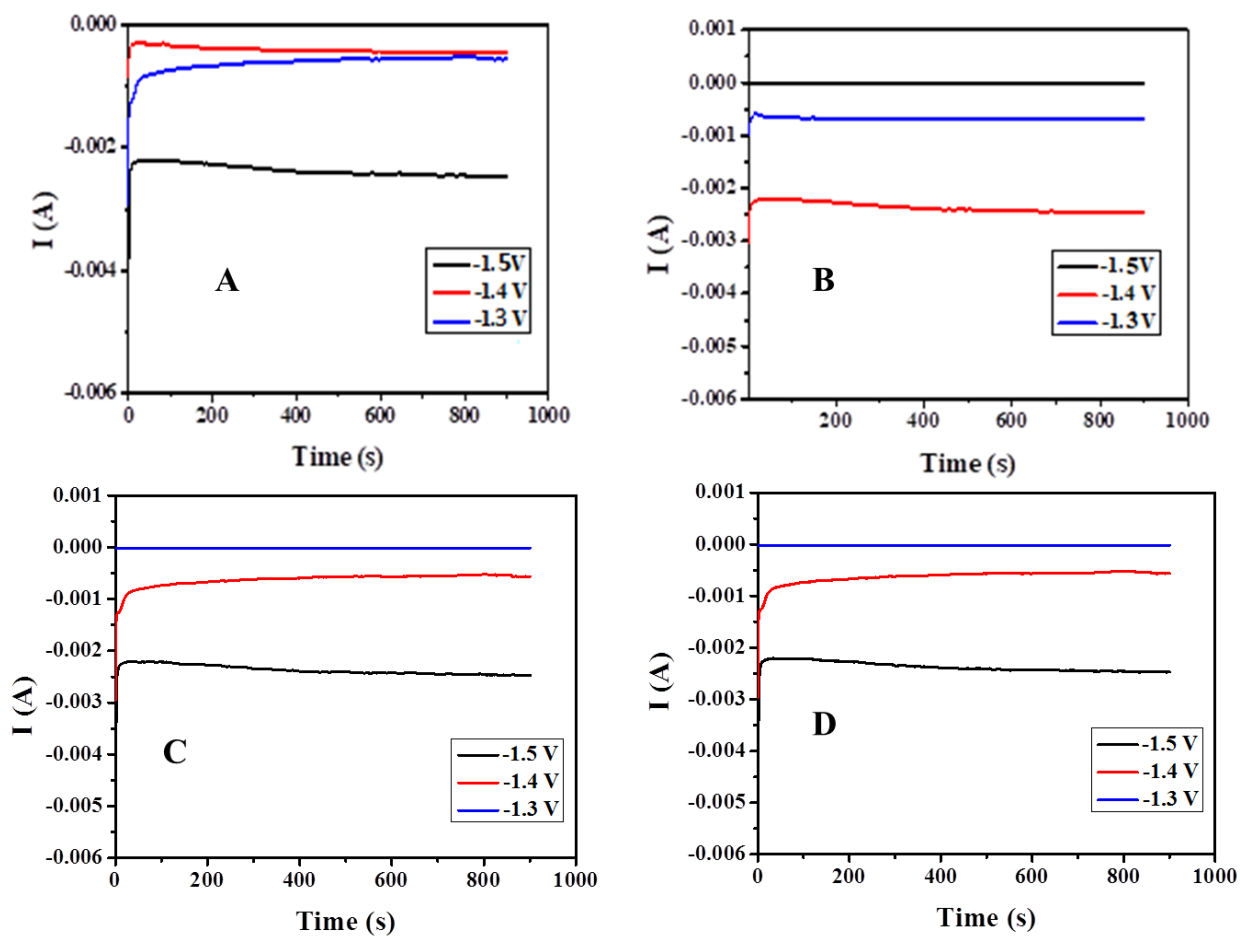


Figure S3: In-situ deposition of (a) cobalt, (b) copper, (c) iron, (d) zinc ions on FTO at different values of deposition potentials in 1 M KOH as supporting electrolyte for a deposition time of 900 sec.

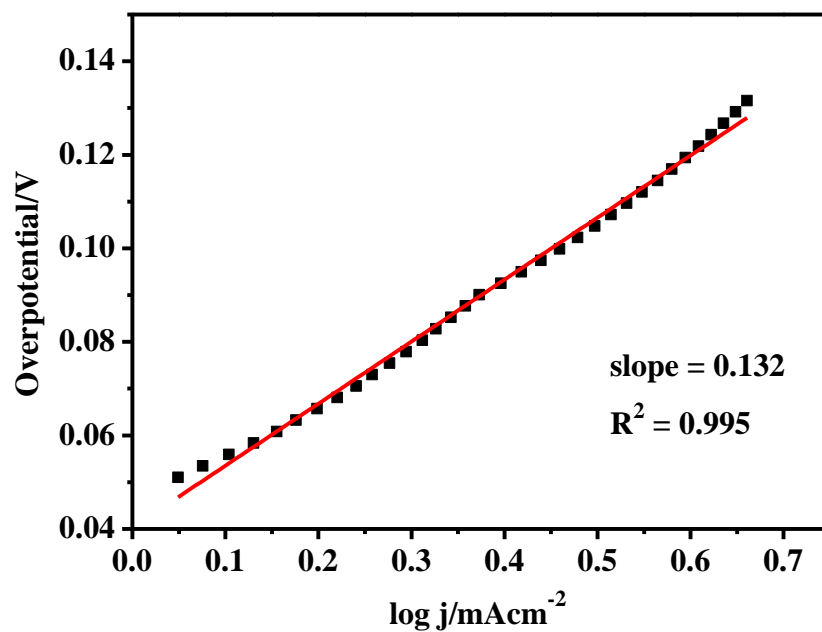


Figure S4: Tafel plot using data obtained at a scan rate of 10 mV/sec in 1 M KOH at the FTO modified with Co-Cu-Zn-Fe