Supporting Information

Bimetallic Iron Cobalt Oxide Nanoclusters Embedded on Three-Dimensional Flower-like Iron Cobalt Oxide Nanosheets for Improved Oxygen Evolution Reaction

Ayyavu Shankar, and Govindhan Maduraiveeran*

Materials Electrochemistry Laboratory, Department of Chemistry, SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu-603 203, India *Corresponding Author E-mail: *maduraig@srmist.edu.in*



Fig. S1. SEM (a) and EDX (b) spectrum of the FeCoO NC@3D-FeCoO NS|NF electrode.



Fig. S2. HR-TEM (a) and EDX (b) spectrum of the FeCoO NC@3D-FeCoO NS.



Fig. S3. Contact angle measurement of the bare NF (a) and FeCoO NC@3D-FeCoO NS (b) electrodes.



Fig. S4. CV curves of the 3D-FeO NS|NF (black), FeCoO NC@3D-FeCoO NS|NF (green), 3D-CoO NS|NF (blue) electrodes recorded in 1.0 M KOH at the scan rate of 20 mV s⁻¹.



Fig. S5. CV curves of the FeCoO NC@3D-FeCoO NS|NF electrode recorded in 1.0 M KOH with the different scan rates, starting from 10.0 to 125.0 mV s⁻¹ (**a**). The corresponding plot of anodic and cathodic peak current densities against the square root of the scan rates (**b**).



Fig. S6. CV curves of the FeCoO NC@3D-FeCoO NS|NF electrode recorded in 1.0 M KOH at different scan rates from 10 to 125 mV s⁻¹ (**a**). The plot of capacitance current against the scan rates (**b**).



Fig. S7. Long-term stability of FeCoO NC@3D-FeCoO NS|NF electrode at a current densities of $\sim 10 \text{ mA cm}^{-2}$ for 100 hr.