## Supplimetary data file

## Fabrication of MoS<sub>2</sub>/rGO hybrids as electrocatalyst for water splitting applications

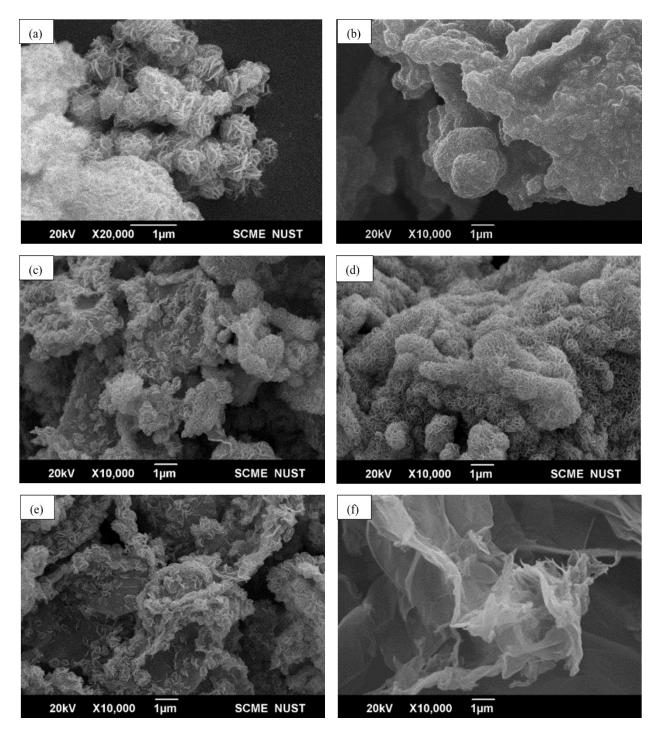


Figure S1: SEM images of (a) Pure  $MoS_2$  (b) 1 wt %  $MoS_2/rGO$  (c) 3 wt %  $MoS_2/rGO$  (d) 5 wt %  $MoS_2/rGO$  (e) 8 wt %  $MoS_2/rGO$  (f) rGO sheets

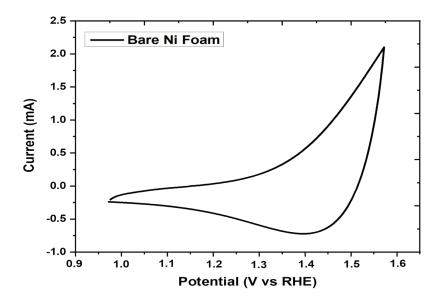


Figure S2. : Cyclic voltammetry of bare nickel foam in 1 M KOH

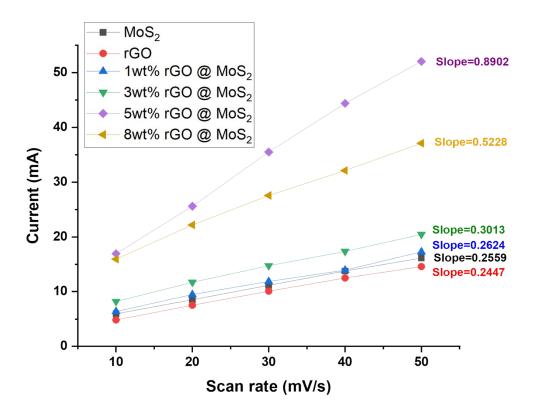


Figure S3: Electrochemical surface comparison for pure MoS<sub>2</sub>, rGO, 1, 3, 5 and 8 wt % hybrids

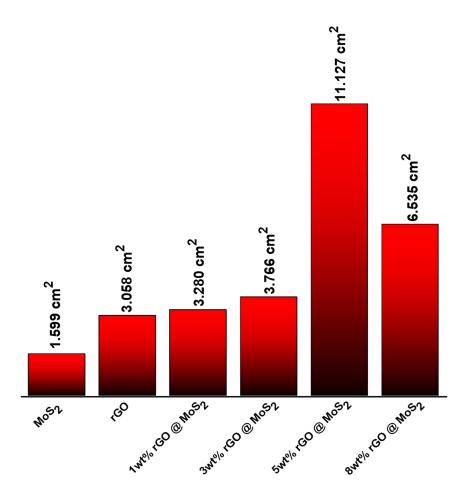


Figure S4: Electrochemical surface Area comparison for pure  $MoS_2$ , rGO, 1, 3, 5 and 8 wt % hybrids