## **Supporting Information**

Enhancement of capacitance in CNT based supercapacitors by incorporating Mg<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>/CuSO<sub>4</sub> porous composite on their electrodes

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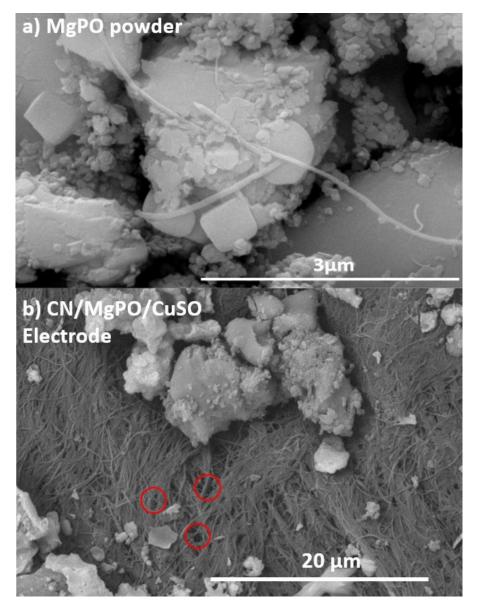
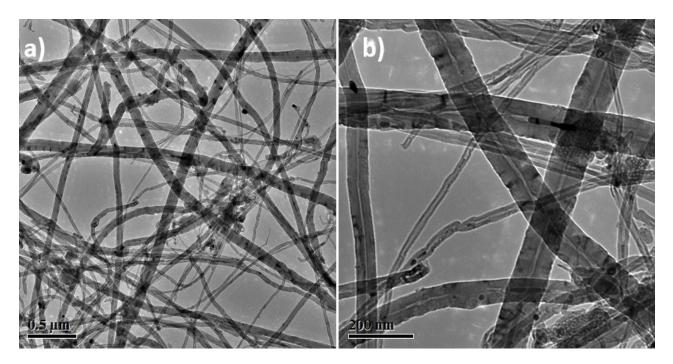
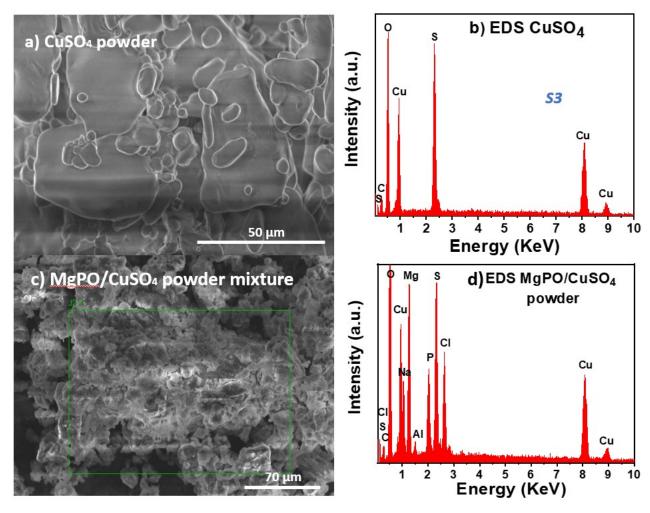


Figure S1. Zoomed view for a) MgPO powder and b) CN/MgPO/CuSO electrode.



**Figure S2.** TEM images for the CNTs utilized for the construction of the SC electrodes.



**Figure S3.** a) and b) are SEM images and EDS spectra for the CuSO<sub>4</sub> powder, respectively. b) and c) are SEM images and EDS spectra for the MgPO/CuSO<sub>4</sub> powder mixture, respectively.

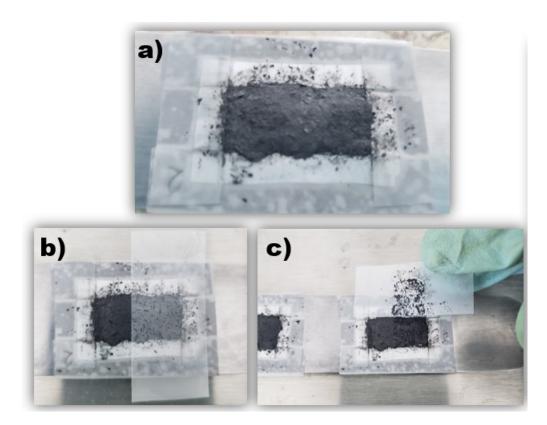
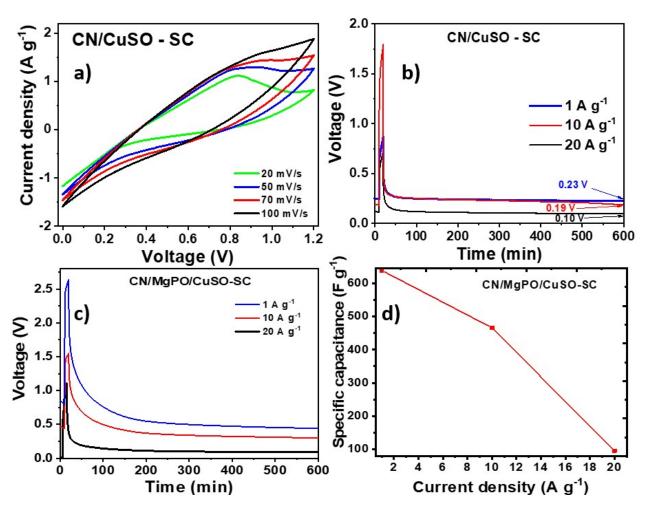
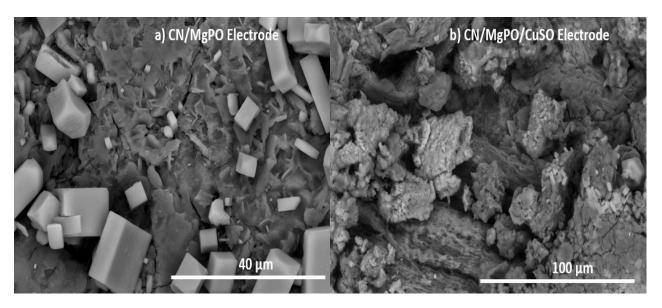


Figure S4. Test of Adherence for the SC electrodes utilized in this research.



**Figure S5.** a) and b) are the CV and GCD curves for the device only made with  $CuSO_4$  on the CN electrodes. c) shows the GCD curves for the CN/MgPO/CuSO-SC device as a function of current density. d) shows the values of capacitance for the CN/MgPO/CuSO-SC device as a function of current density.



**Figure S6.** SEM images for: a) CN/MgPO and b) CN/MgPO/CuSO electrodes used in the SCs.

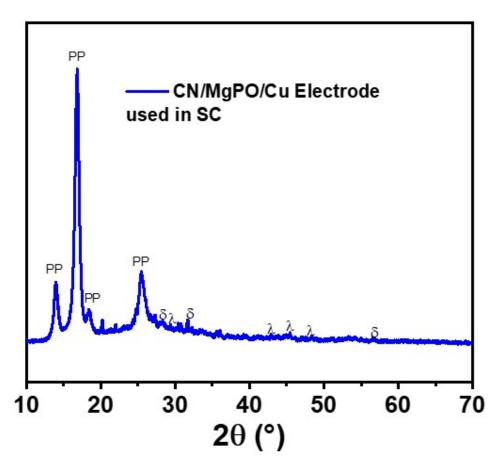


Figure S7. XRD pattern for the CN/MgPO/CuSO electrode used in the SC.