Supporting information

**V$_2$(PO$_4$)O/C@CNTs hollow sphere with a core-shell structure as a potential anode material for lithium-ion batteries**

Bin Xiao, Wen-hai Zhang, Hai-feng Xia, Zhi-teng Wang, Lin-bo Tang, Chang-sheng An, Zhen-jiang He, Hui Tong, Jun-chao Zheng*  

School of Metallurgy and Environment, Central South University, Changsha 410083, P.R. China  

*Corresponding author: J-c Zheng (jczheng@csu.edu.cn)

**Fig. S1** (a) XPS survey of V$_2$(PO$_4$)O/C HSs; (b) XPS survey of V$_2$(PO$_4$)O/C HSs; (c) XPS core level of V2p in V$_2$(PO$_4$)O/C HSs; (d) XPS core level of P2p in V$_2$(PO$_4$)O/C HSs; (e) XPS core level of O 1s in V$_2$(PO$_4$)O/C HSs; (f) XPS core level of C 1s in V$_2$(PO$_4$)O/C HSs.
Fig. S2 TEM of $\text{V}_2\text{(PO}_4\text{)}\text{O/C HSs}$. 

Fig. S3 SEM of $\text{V}_2\text{(PO}_4\text{)}\text{O/C HSs}$. 
Fig. S4 TEM of V$_2$(PO$_4$)O/C@CNTs HSs.