

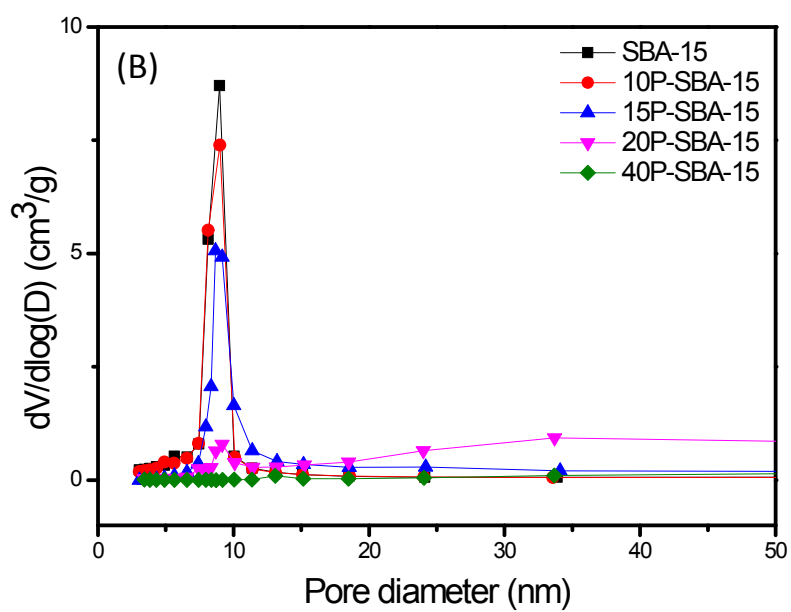
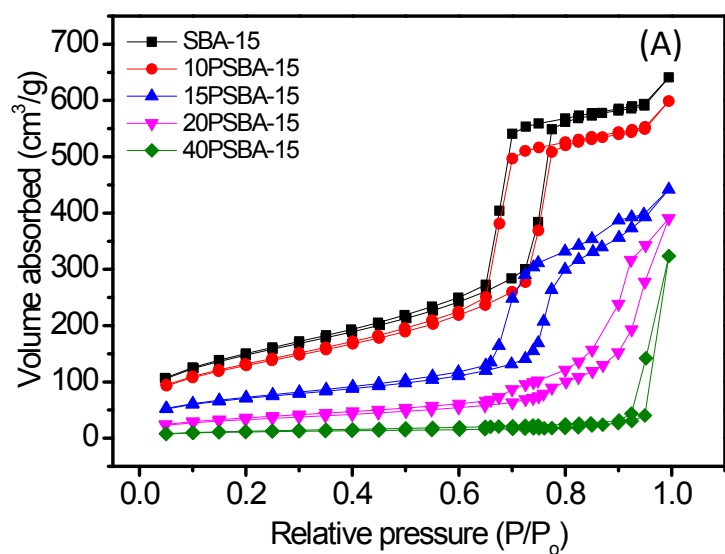
## **Electronic Supplementary Information**

### **Facile synthesis of hierarchically porous carbonaceous materials derived from olefin/aldehyde precursors using silica as templates**

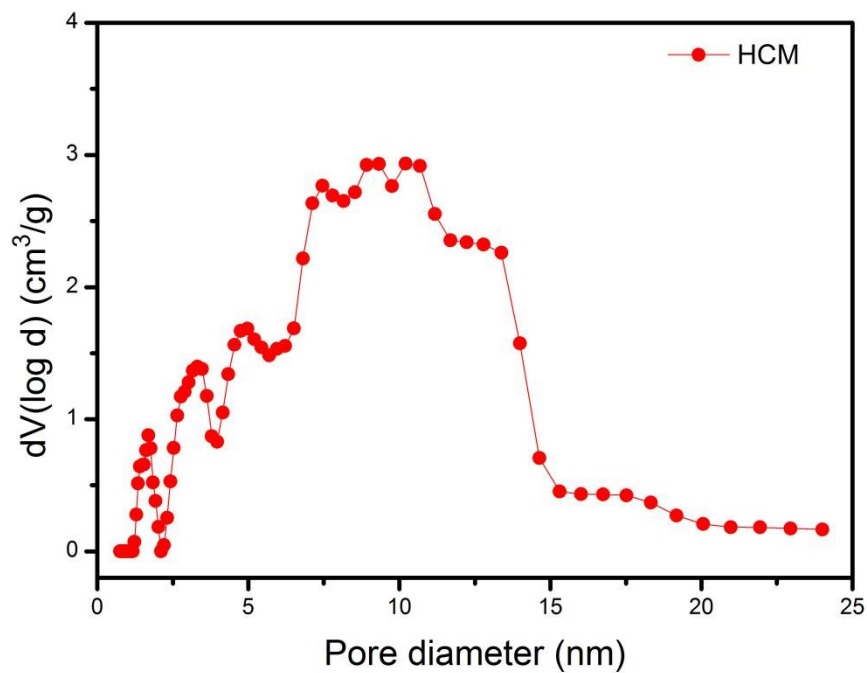
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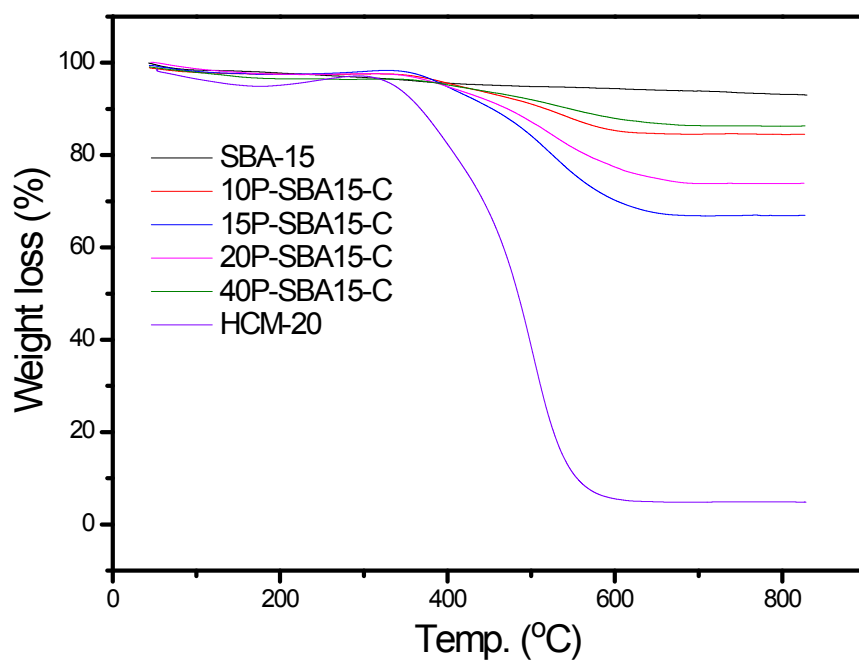
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**Fig.S1** N<sub>2</sub> adsorption-desorption of SBA-15 modified by various amounts of phosphorous (A) and corresponding pore size distribution (B).



**Fig. S2** DFT pore size distribution of hierarchical porous carbon HCM-20 sample.



**Fig. S3** TG curves of obtained carbonaceous composites with various amount of phosphorus

contents and HMC material.

**Table S1** Textural properties of SBA-15, silica/carbon composites with various amount of phosphorus contents and corresponding derived carbon materials

Sample	$S_{\text{BET}}^{\text{a}}/\text{m}^2\text{g}^{-1}$	$V_{\text{total}}/\text{cm}^3\text{g}^{-1}$	Pore size <sup>b</sup> /nm
SBA-15	532.1	1.0	8.9
10-PSBA15 <sup>c</sup>	461.6	0.93	8.9
15-PSBA15	243.9	0.69	8.7
20-PSBA15	117.8	0.61	9.1
40-PSBA15	37.6	0.50	—
HCM-10	51.3	0.06	—
HCM-20	971.0	1.91	15.2-24.2
HCM-30	854.3	1.24	8.3
HCM-40	734.8	0.60	3.8

a. Determined by multi-point BET.

b. Determined by BJH method.

c. The number represents various amount of phosphorus contents.