

Supporting Information

Efficient removal of chromium(VI) using a novel waste biomass chestnut shell-based carbon electrode by electrosorption

Xiaofei Zhang^{a,†}, Bo Ren^{b,†}, Xiaonan Wu^{a,*}, Xin Yan^a, Yu Sun^a, Hongcheng Gao^a, Feng Qu^a

^a Department of Chemical Engineering, Hebei Petroleum University of Technology, Chengde, 067000, PR China

^b Institute for Interdisciplinary Biomass Functional Materials Studies, Jilin Engineering Normal University, Changchun, 130052, PR China

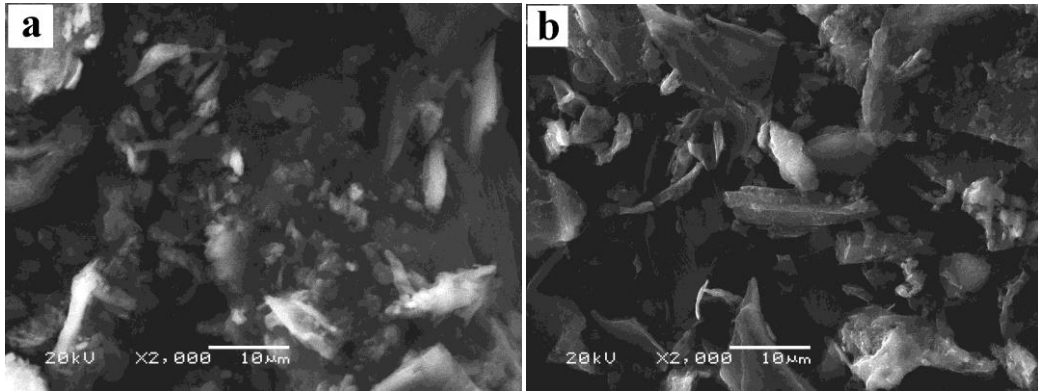


Figure S1. SEM images of the CHC (a) and DCHC (b).

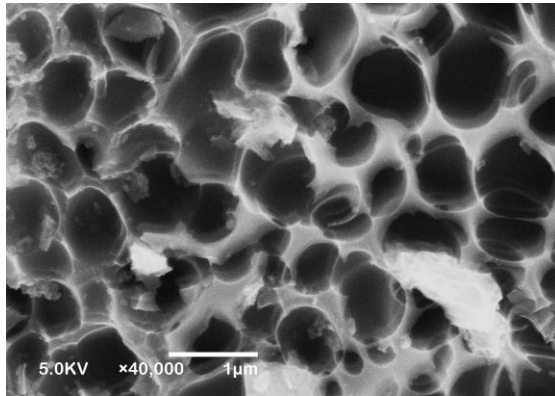


Figure S2. SEM image of the CPC.

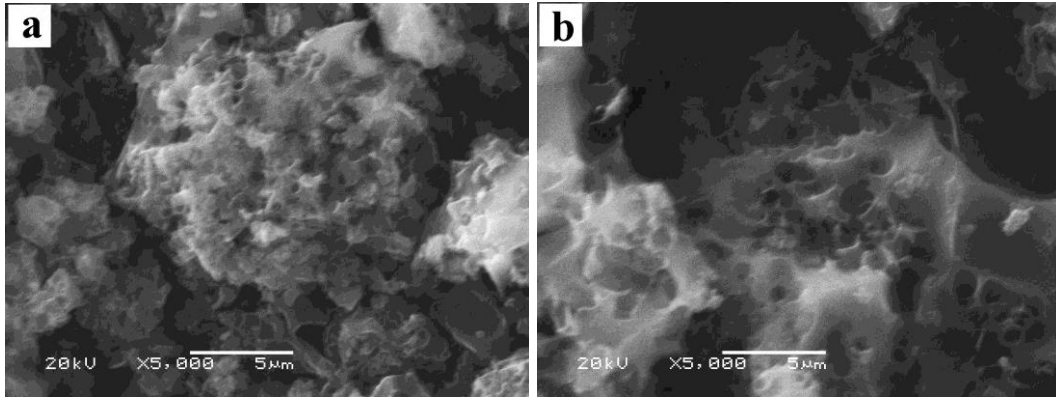


Figure S3. SEM images of the CPC-400 (a) and CPC-550 (b).

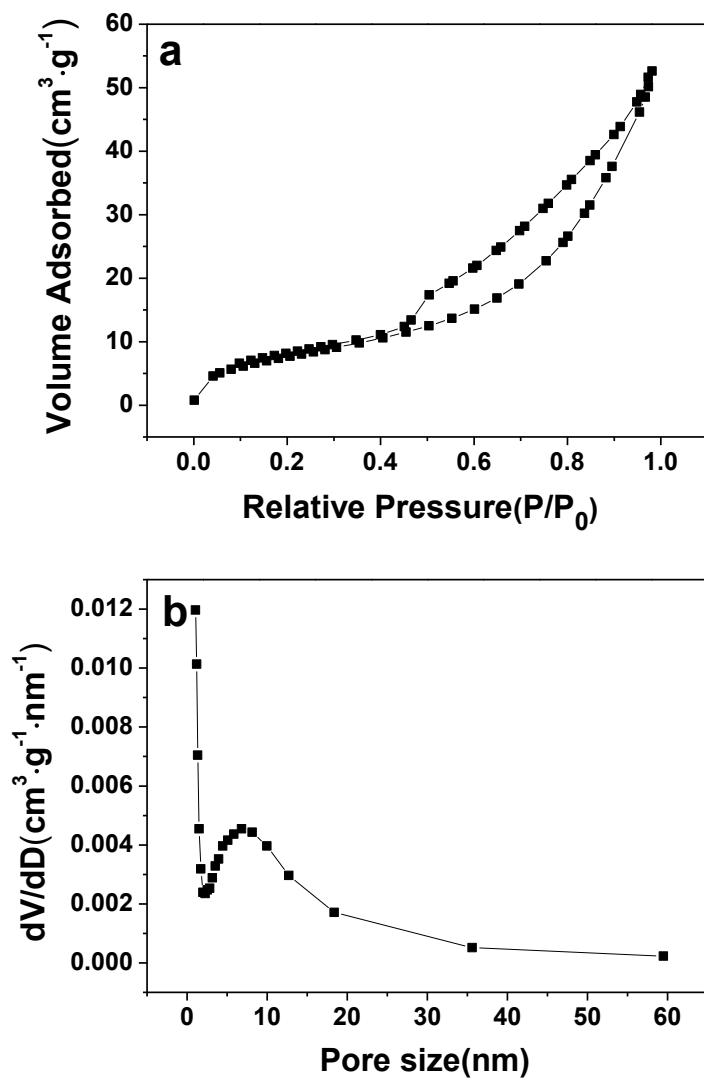


Figure S4. N_2 adsorption-desorption isotherm (a) and pore size distribution (b) of CHC.

Table S1. Removal efficiency of different adsorbents for chromium(VI).

Material	Voltage (V)	Initial concentration (mg L ⁻¹)	Removal efficiency (%)	Ref.
Acid treated rice husk waste biomass activated carbon	1.2	10	85	56
		25	82	
		50	54	
		100	32	
Stainless steel nets coated with single wall carbon nanotubes	1.0	6.39	7.8	57
	2.5	6.39	99.6	
Activated carbon (commercial)	1.2	10	97.1	55
		100	42	
CPC	1.0	30	90.5	This work