

Support information

Preparation of biochar-lignosulfonate composite material and its adsorption performance for Cu²⁺

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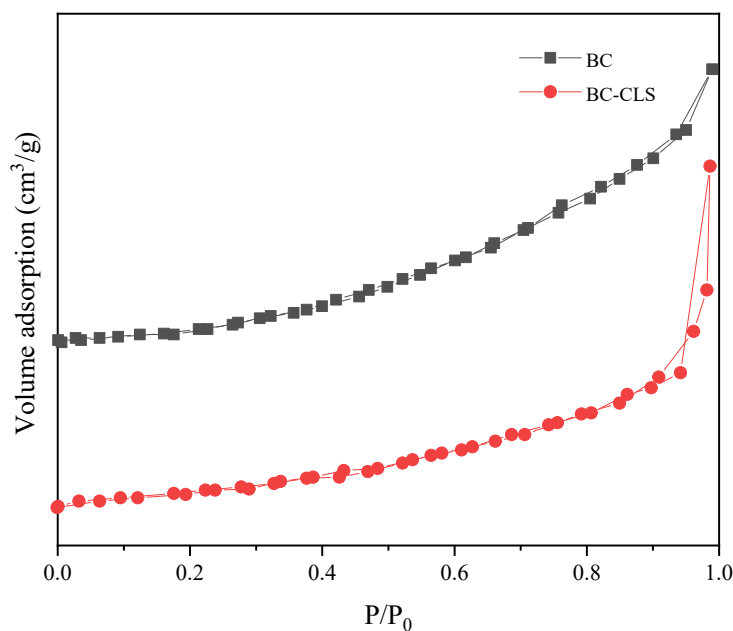


Figure S1 Nitrogen adsorption and desorption curves of BC and BC-CLS

Figure S1 shows the nitrogen adsorption/desorption isotherms and pore size distributions of BC and BC-CLS. The isotherms can be classified as type III isotherms, which indicate that there is a weak interaction force between the samples and N₂. In addition, the specific surface area, total pore volume and porosity of BC and BC-CLS are listed in Table S1. From Table S1, it can be seen that the specific surface area, total pore volume and porosity of BC-CLS are slightly larger than those of BC.

Table S1 Mesoscale properties of adsorbents

Material	Specific surface area (m ² /g)	Total pore volume (cm ³ /g)	Porosity (%)
BC	6.245	0.065	4.6
BC-CLS	7.658	0.824	7.8