

Supplementary Information

An Eco-Friendly Adsorbent Based on Bacterial Cellulose and Vermiculite Composite for Efficient Removal of Methylene Blue and Sulfanilamide

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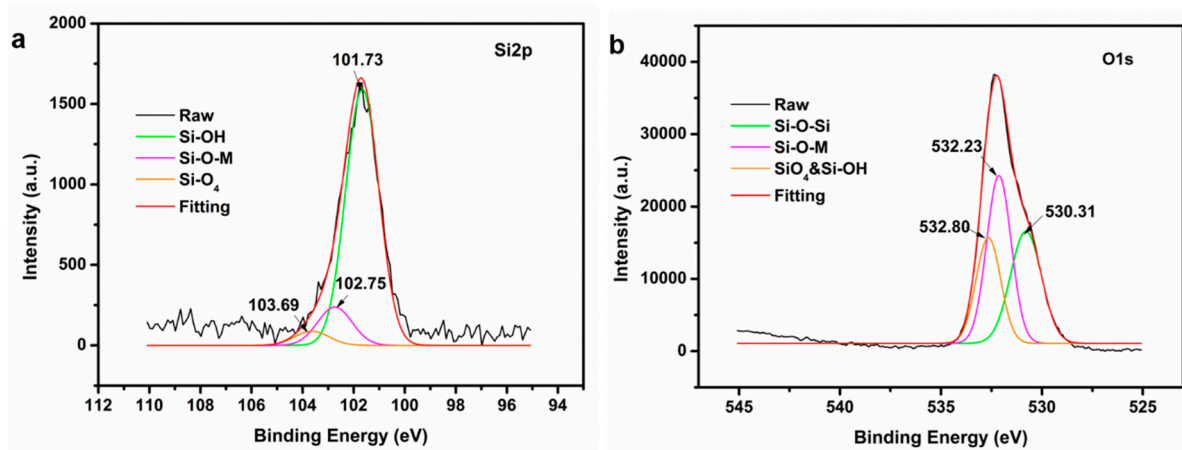


Figure S1. The high-resolution XPS spectra of Si2p (a) and O1s (b).

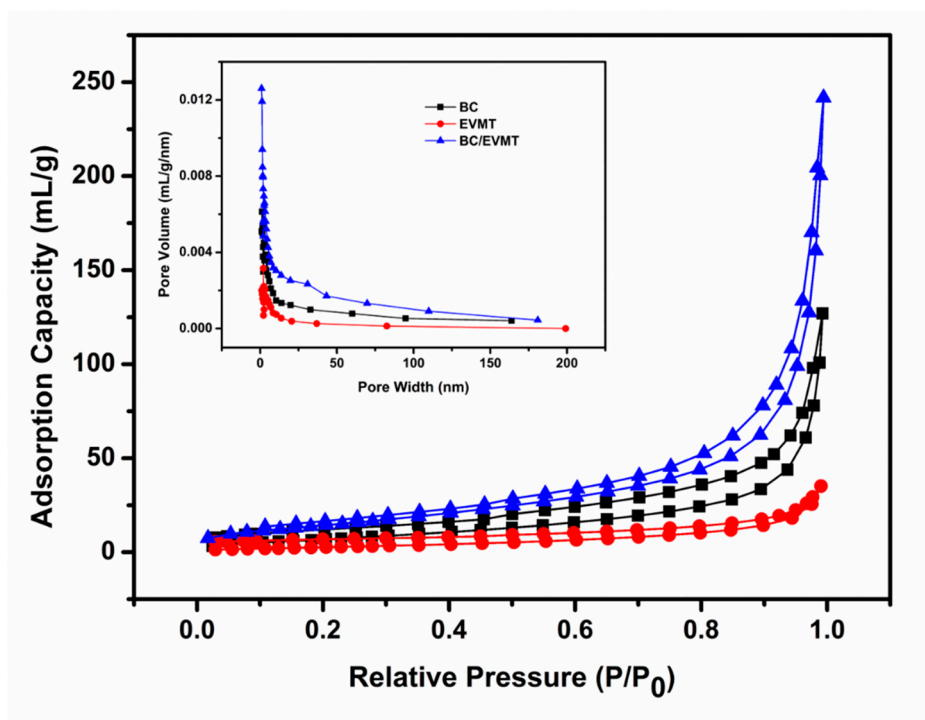


Figure S2. The nitrogen adsorption-desorption isotherms of EVMT, BC, and BC/EVMT by Brunauer-Emmett-Teller (BET) method.

Table S1. BET data of EVMT, BC, and BC/EVMT.

Samples	BET surface	BJH Adsorption	Adsorption
	area	cumulative volume of	average
	(m ² g ⁻¹)	pores (mL g ⁻¹)	pore width (nm)
BC	28.67	0.1964	12.47
EVMT	11.50	0.0543	10.43

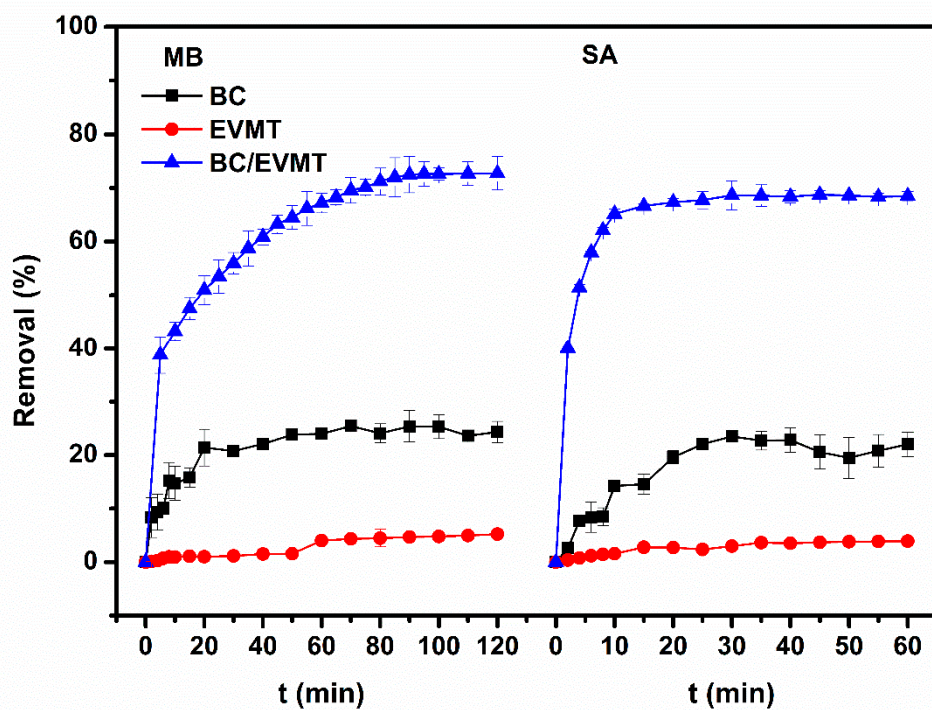


Figure S3. Removal efficiency of BC, EVMT, and BC/EVMT for MB and SA (temperature: 30 °C, pH_{MB} : 8, pH_{SA} : 2, adsorbent

dosage: 20 mg, $[\text{MB}]_0$: 60 mg/L, $[\text{SA}]_0$: 60 mg/L).

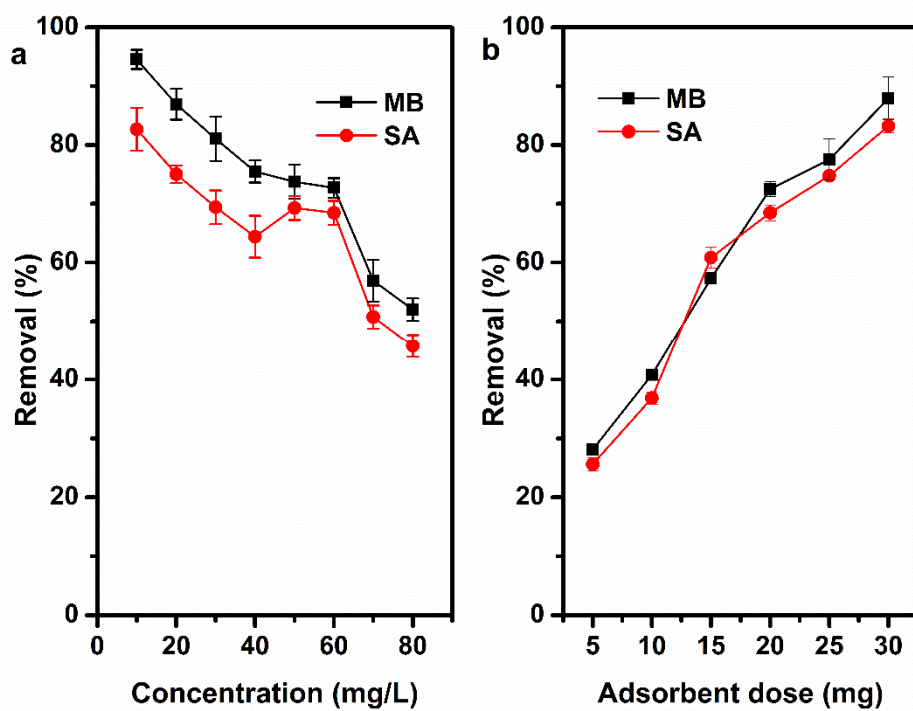


Figure S4. Effect of various experimental parameters on the adsorption of MB and SA by BC/EVMT: (a) MB and SA concentration and (b) adsorbent dosage. (temperature: 30 °C, pH_{MB} : 8, pH_{SA} : 2, adsorbent dosage: 20 mg, $[\text{MB}]_0$: 60 mg/L, $[\text{SA}]_0$: 60 mg/L, t : 120 min).