

Supporting Information

**pH-dependent adsorption characteristics of antibiotic on HKUST-1@CNS
nanocomposite corroborating efficiency, mechanism, and kinetics studies**

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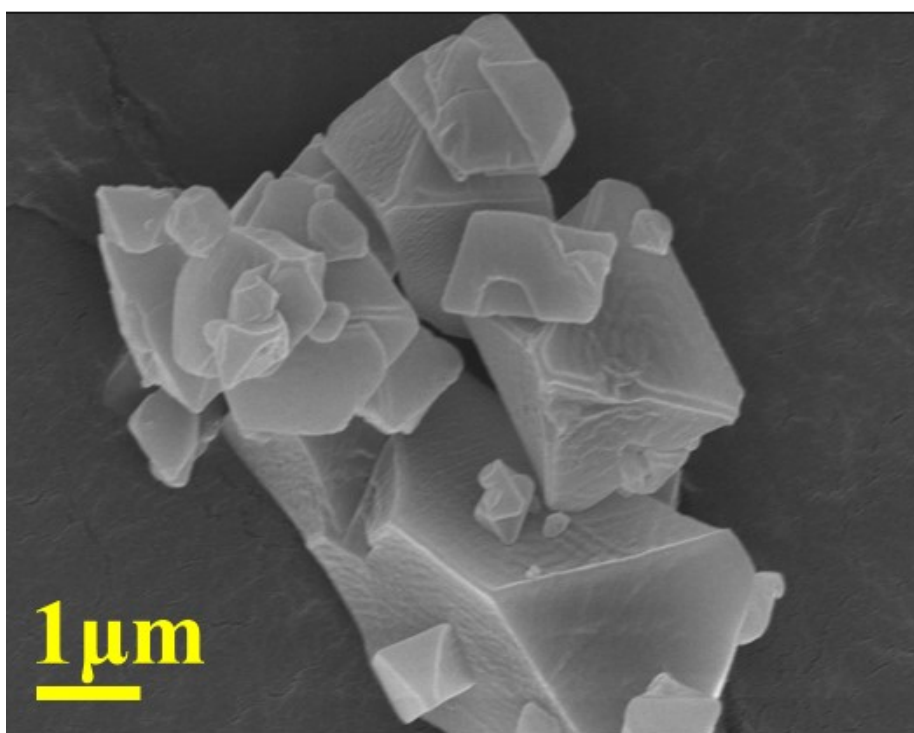


Figure S1: FESEM image of HKUST-1 (pristine)

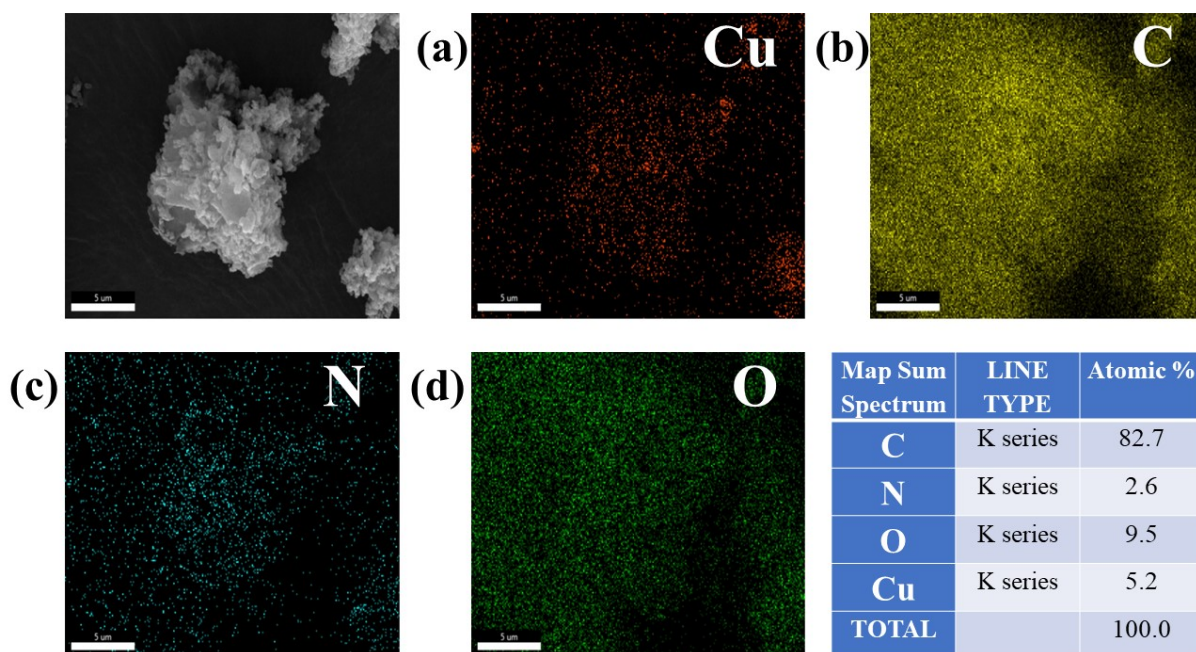


Figure S2: EDAX OF HKUST-1@CNS nanocomposite with its elemental mapping

Table S1: Comparison of HKUST-1@CNS with other reported materials for SMX adsorption

S.No.	Material	SMX Removal efficiency (%)	Time for achieving adsorption (h)	Adsorbate concentration	Adsorbent Dosage	pH of SMX	other targeted antibiotics	Reference
1.	HKUST-1@CNS	96.1	1.5	50mg/L	20mg	7	Tetracycline, Ciprofloxacin and Nalidixic acid	This work
2.	Ball milled biochar	75	24	10mg/L	10mg	7	Sulfapyridine	1
3.	CLDH	93	1	500mg/L	30mg	7	-	2
4.	Zeolite	75.49	24	1g/L	1000 mg		Ofloxacin	3
5.	GO	30	24	10mg/L	100mg/L	7	Diclofenac	4
6.	Activated alumina, PAC, and GAC	15.5, 73.4, and 34, respectively	2	20mg/L	5g/L	7	-	5
7.	TW-SO ₃ H	~60	6	100mg/L	10mg	7	Bisphenol A	6

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