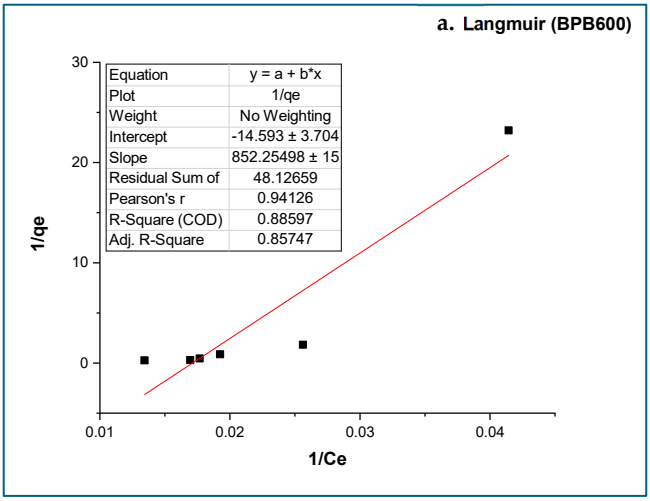
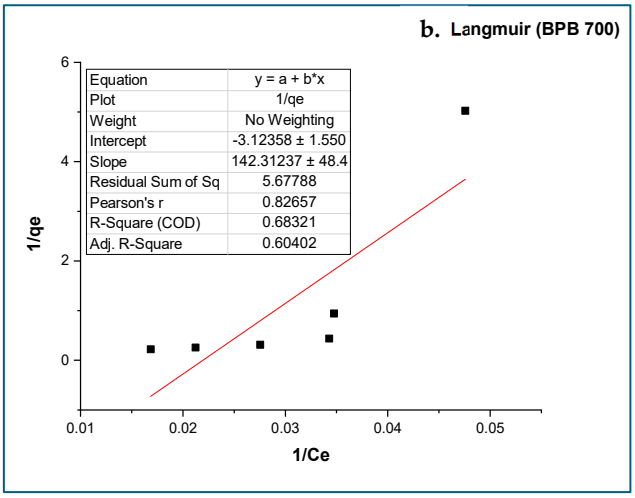
Supplementary Figures

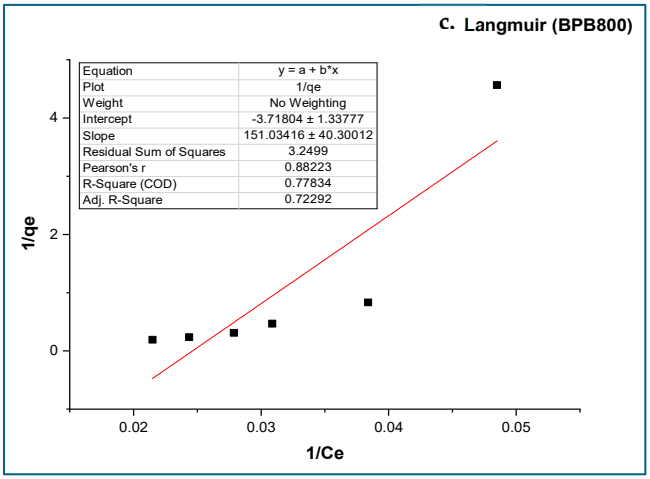
a. Langmuir (BPB600)



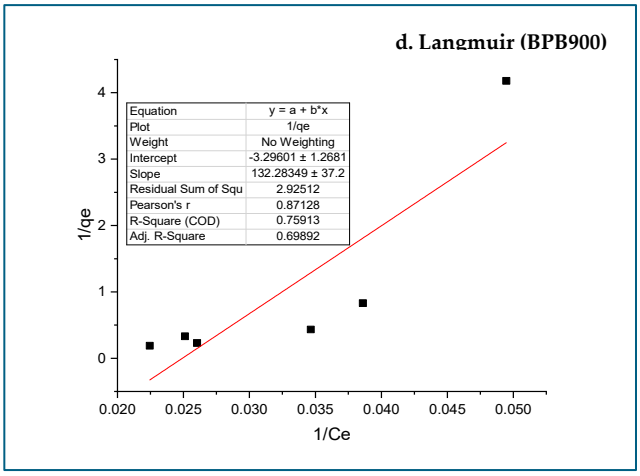
b. Langmuir (BPB 700)



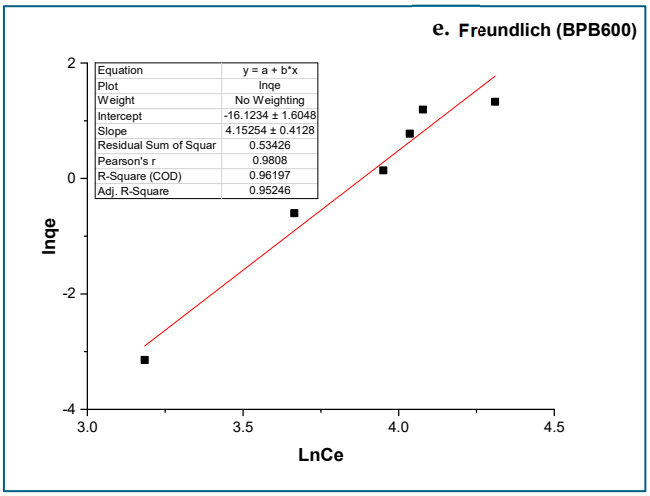
c. Langmuir (BPB800)



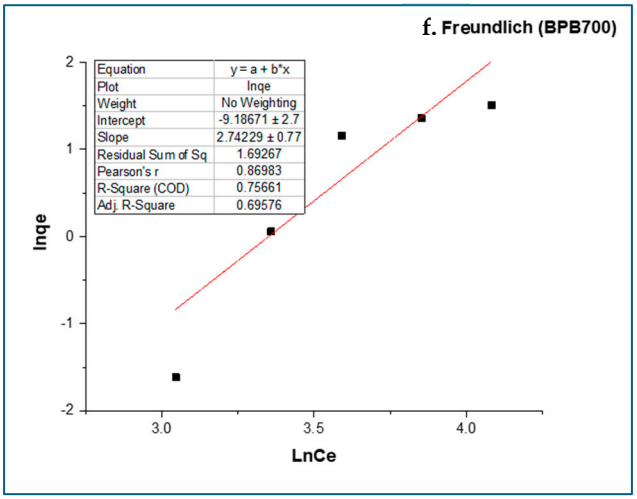
d. Langmuir (BPB900)



e. Freundlich (BPB600)



f. Freundlich (BPB700)



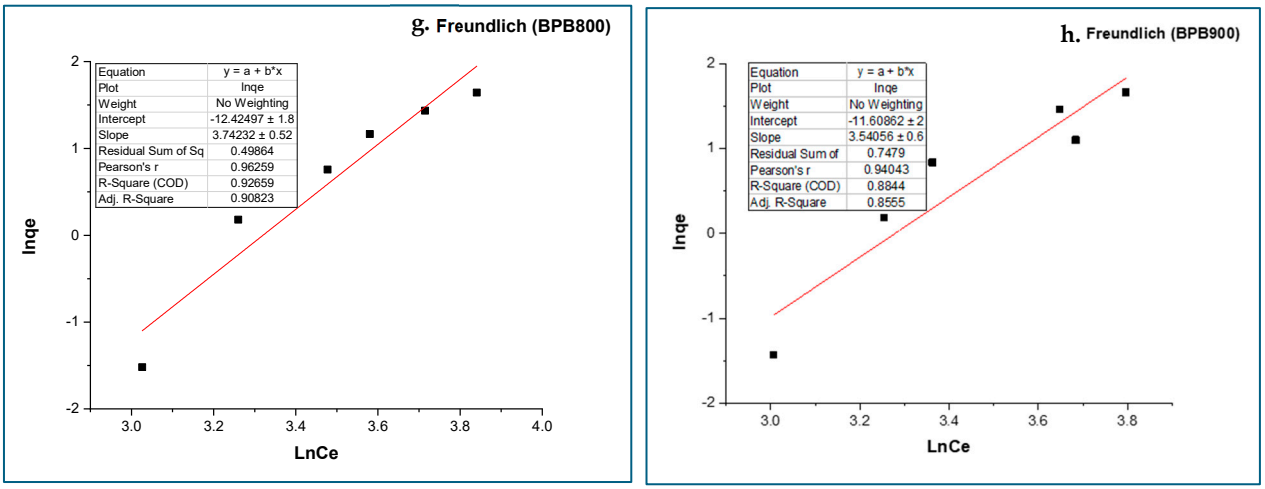


Figure S1: Langmuir isotherms (a. BPB600, b. BPB700, c. BPB800, d. BPB00), and Freundlich isotherms (e. BPB600, f. BPB700, g. BPB900), respectively.

Supplementary tables

Table S1: Porous properties of banana peel biochar

Samples	SSA (m^2/g)	V_t (cm^3/g)	V_{mic} (cm^3/g)	V_{meso} (cm^3/g)	V_{mic}/V_t (%)	V_{meso}/V_t (%)	d_{ave} (nm)
BPB600	ND	ND	-	-	-	-	-
BPB700	7.85	0.026	0.0020	0.028	7.75	92.25	13.16
BPB800	13.49	0.030	0.0016	0.028	5.37	94.63	8.78
BPB900	14.12	0.027	0.0022	0.024	8.34	91.66	8.46

[SSA (S_{BET}): Specific surface area, V_t= Total pore volume, d_{ave}= Average pore diameter, V_{mic}= Micropore volume, V_{meso}= Mesopore volume]

Table S2: Adsorption capacity of ibuprofen by banana peel biochar

Ibuprofen Concentration (mg/L)	Adsorption capacity (mg/g)			
	BPB600	BPB700	BPB800	BPB900
25	0.054	0.258	0.275	0.239
50	0.548	1.061	1.198	1.205
75	1.151	2.292	2.131	2.307
100	2.171	3.186	3.206	3.149
125	3.299	3.896	4.198	4.330
150	3.779	4.532	5.173	5.273