

Supplementary Information

Enhanced Adsorptive Removal of Dyes using Mandarin Peel Biochars via Chemical Activation with NH_4Cl and ZnCl_2

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Table S1. The physicochemical characteristics of the dyes.

Compound (Abbreviation)	Formula ^a	MW ^a (g/mol)	Charge ^a				log <i>D</i> ^a				log <i>P</i> _a	p <i>K</i> _a
			pH	pH	pH	pH	pH	pH	pH	pH		
			3.0	5.0	7.0	9.0	3.0	5.0	7.0	9.0		
Methyl Orange (MO)	C ₁₄ H ₁₄ N ₃ NaO ₃ S	327.3	−0.21	−0.96	−1.00	−1.00	2.53	1.54	1.30	1.29	2.61	3.58
Fast Green FCF (FG)	C ₃₇ H ₃₄ N ₂ Na ₂ O ₁₀ S ₃	808.8	−1.24	−1.97	−2.01	−2.53	1.18	0.17	− 0.04	− 0.37	2.31	3.11

^a ChemAxon (<http://www.chemicalize.org>, 2nd January 2021); log *D* = distribution coefficient; log *P* = partition coefficient.