

Table S1: Uncertainties of adsorption experiment parameters.

Parameter	Error	Remark
Material (dye and sorbent) mass	± 0.1 mg	Balance uncertainty
Solution preparation and dilution	± 0.02 μ L ± 0.05 mL	Pipette error Measuring flask error
pH adjustment	± 0.02	Standard error of pH meter
Temperature	± 0.4 $^{\circ}$ C	Temperature controller error
Absorbance measurement	0.25 %	Standard uncertainty percent
Calibration curve fitting	1.28 %	Standard uncertainty percent