

**Table S1**

Regression data for BDE209 sorption using linear sorption isotherms

Heavy metals	Concentration (mg L <sup>-1</sup> )	$K_d$ (L g <sup>-1</sup> )	$R^2$	Formula
Cd <sup>2+</sup>	0	0.165 (0.011)	0.984	y=0.165(0.011)x-0.0002
	2	0.238 (0.032)	0.994	y=0.238(0.032)x-0.0001
	3	0.314 (0.027)	0.994	y=0.314 (0.027)x+0.0007
	5	0.539 (0.049)	0.999	y=0.539(0.049)x-0.00017
	10	0.623 (0.051)	0.995	y=0.623(0.051)x-0.0009
	0	0.165 (0.011)	0.984	y=0.165(0.011)x-0.0002
Pb <sup>2+</sup>	2	0.274 (0.027)	0.998	y=0.274(0.027)x-0.0007
	3	0.301 (0.011)	0.996	y=0.301(0.011)x+0.0002
	5	0.533 (0.021)	0.998	y=0.533(0.021)x-0.0021
	10	0.637 (0.062)	0.994	y=0.637(0.062)x-0.0013
	0	0.165 (0.011)	0.984	y=0.165(0.011)x-0.0002
Cu <sup>2+</sup>	2	0.205 (0.012)	0.970	y=0.205(0.012)x-0.0012
	3	0.268 (0.021)	0.962	y=0.268(0.021)x-0.0019
	5	0.318 (0.017)	0.986	y=0.318(0.017)x-0.0014
	10	0.466 (0.019)	0.977	y=0.466(0.019)x-0.0024
	0	0.165 (0.011)	0.984	y=0.165(0.011)x-0.0002

$K_d$  is the partition coefficient and  $R^2$  is the simulated correlation constants for BDE209 sorption by linear equation. Standard deviation was shown in bracket.