

Supporting information

The unique and outstanding cadmium sequestration by polystyrene-supported nanosized zirconium hydroxides: a case study

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Table S1 The distribution ratio K_d (L/g) for three competing cations.

Competing Cations	Adsorbent	K_d (L/g) at different initial Me(II)/Cd(II) ratios in solution					
		0	4	8	16	32	64
Ca(II)	HZO-PS	300	295	36.1	12.1	4.58	1.55
	PS	400	351	145	2.23	0.327	0.137
Mg(II)	HZO-PS	300	320	275	19.9	8.40	5.12
	PS	400	385	142	7.09	1.14	0.456
Na(I)	HZO-PS	300	320	288	350	250	270
	PS	400	385	258	270	106	34.5

Figure S1 The zeta potential of $\text{Zr}(\text{OH})_4$ and the resulting HZO-PS

