Supplementary Materials

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Table S1. Kinetic models for the removal of molybdate using Al_2O_3.

C_0 Mo	IPD						Elovich equation		
(VI), mg/l	k_{p1}, mg/g min$^{1/2}$	C_1, mg/g	R^2	k_{p2}, mg/g min$^{1/2}$	C_2, mg/g	R^2	α, mg/(g·min)	β, g/mg	R^2
100	1.009	0.208	0.931	0.04	4.125	0.784	1.143×10^9	5.96	0.993
300	3.106	0.629	0.933	0.077	12.89	0.722	2.186×10^{15}	2.985	0.997
500	2.566	0.993	0.903	0.07	21.524	0.857	42.437	0.378	0.838
700	2.75	1.204	0.943	0.054	27.429	0.552	15.24	0.255	0.86
1000	2.967	1.673	0.932	0.149	28.637	0.774	17.51	0.234	0.868

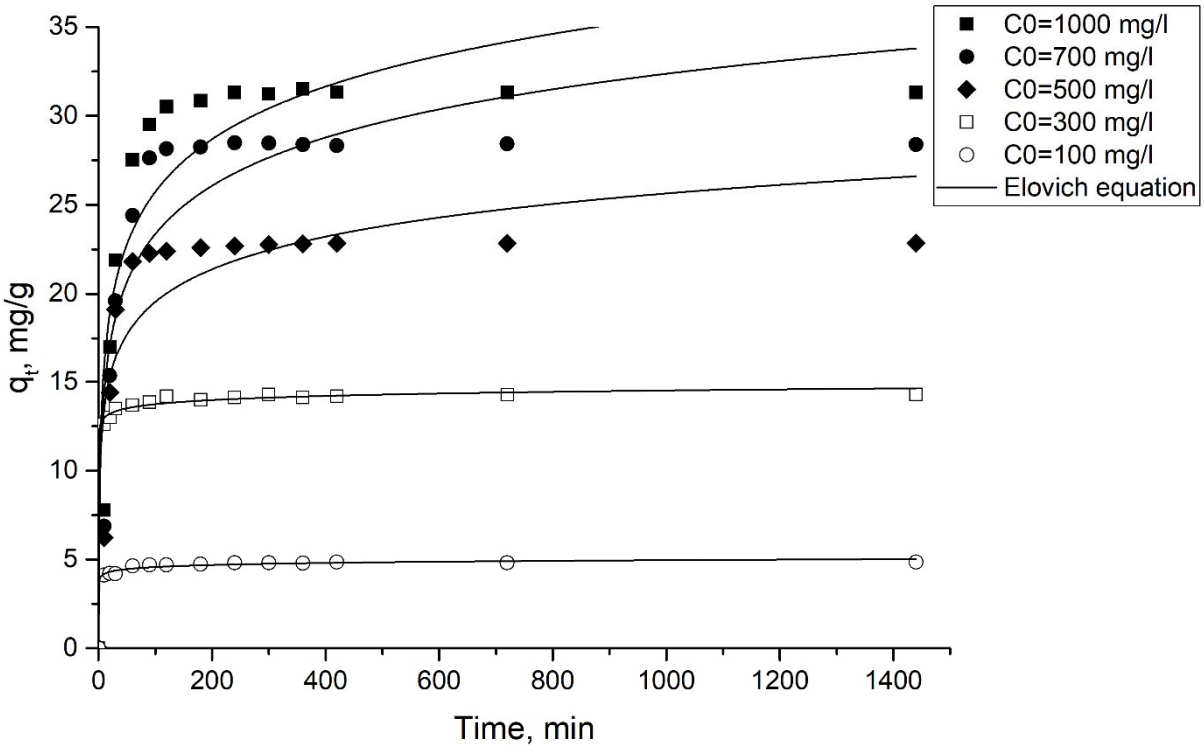

Figure S1. Elovich kinetic model for the adsorption of Mo(VI) on the Al_2O_3.

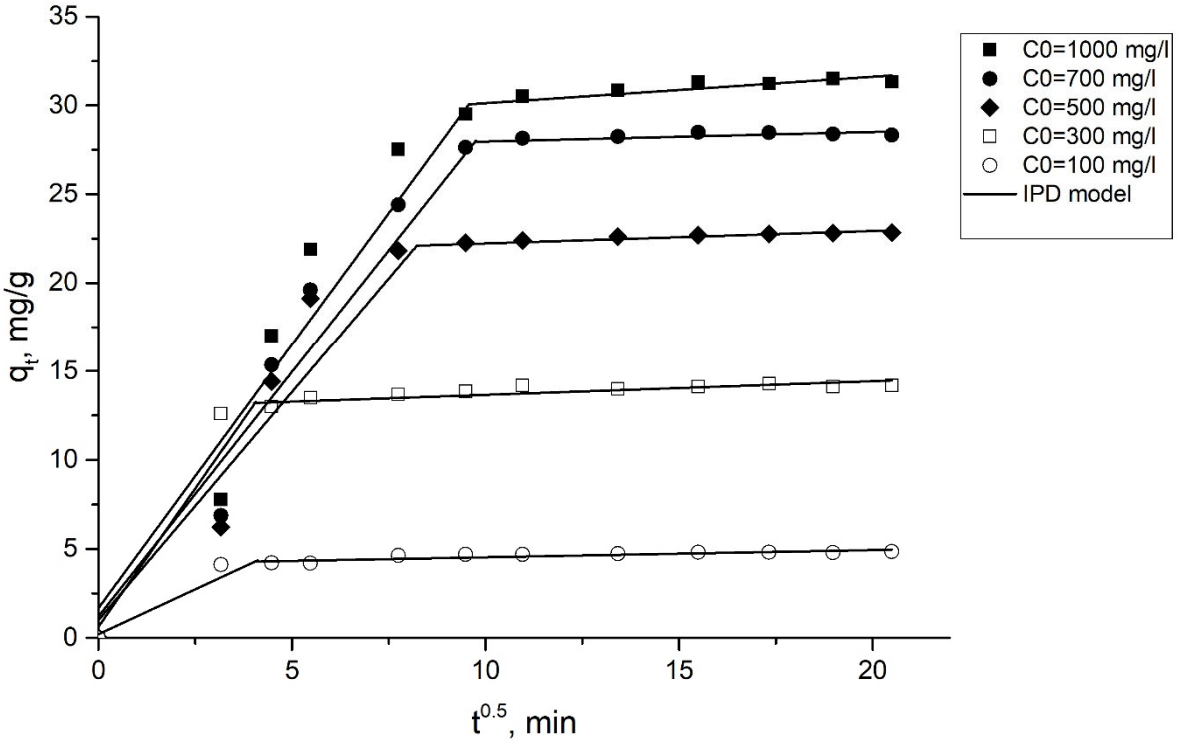

Figure S2. Intra-particle diffusion kinetic model for the adsorption of Mo(VI) on the Al_2O_3. Time up to 720 minutes.