**Electronic Supplementary Information**

**Bionanocomposites based on layered silicates and cationic starch as eco-friendly adsorbents for hexavalent chromium removal**

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**Fig. S1** FESEM images of the starting clays CL and Bnt and the bionanocomposites derived from these clays and cationic starch with degree of substitution 0.85 (CST1) and 0.55 (CST2)
**Fig. S2** EDX spectra of CST1/CL bionanocomposite (a) before and (b) after adsorption of chromate oxyanions:
Fig. S3 Fitting of kinetics data for chromate adsorption by the CST/clay bionanocomposites to the linear forms of (a) the pseudo-first order model and (b) the pseudo-second order model:
**Fig. S4** Mole fraction of Cr(VI) species as a function of pH for a total concentration of 0.38 mM, determined from the MEDUSA software for chemical equilibrium diagrams:

![Cr(VI) species fraction vs pH](image1)

**Fig. S5** Mole fraction of phosphoric acid species as a function of pH for a total concentration of 0.38 mM, determined from the MEDUSA software for chemical equilibrium diagrams. The dotted line indicates the fraction of each species at pH 7.5:

![Phosphoric acid species fraction vs pH](image2)