**Cover Page for Supplementary Information**

**Manuscript title: Novel magnetic biosorbent prepared by oak shell waste material as an efficient adsorbent for consecutive removal of Pb2+, Ag+, Ba2+, Sr2+ and chromate from aqueous solutions**

**Author list:** Maryam Adibmehr. Hossein Faghihian\*

Department of Chemistry, Shahreza Branch, Islamic Azad University, Shahreza, Iran P.O. Box 311-86145, Shahreza, Iran

**Total number of pages (including the cover page):** 8 pages

**This Supplementary Information contains:**

**Figure S1.** EDAX analysis of AC-Fe3O4-DTZ sample.

**Figure S2.** Adsorption capacity of Pb-ads-4(a), Ag-ads-4(b),Ba-ads-4(c), Sr-ads-4(d) adsorbents.

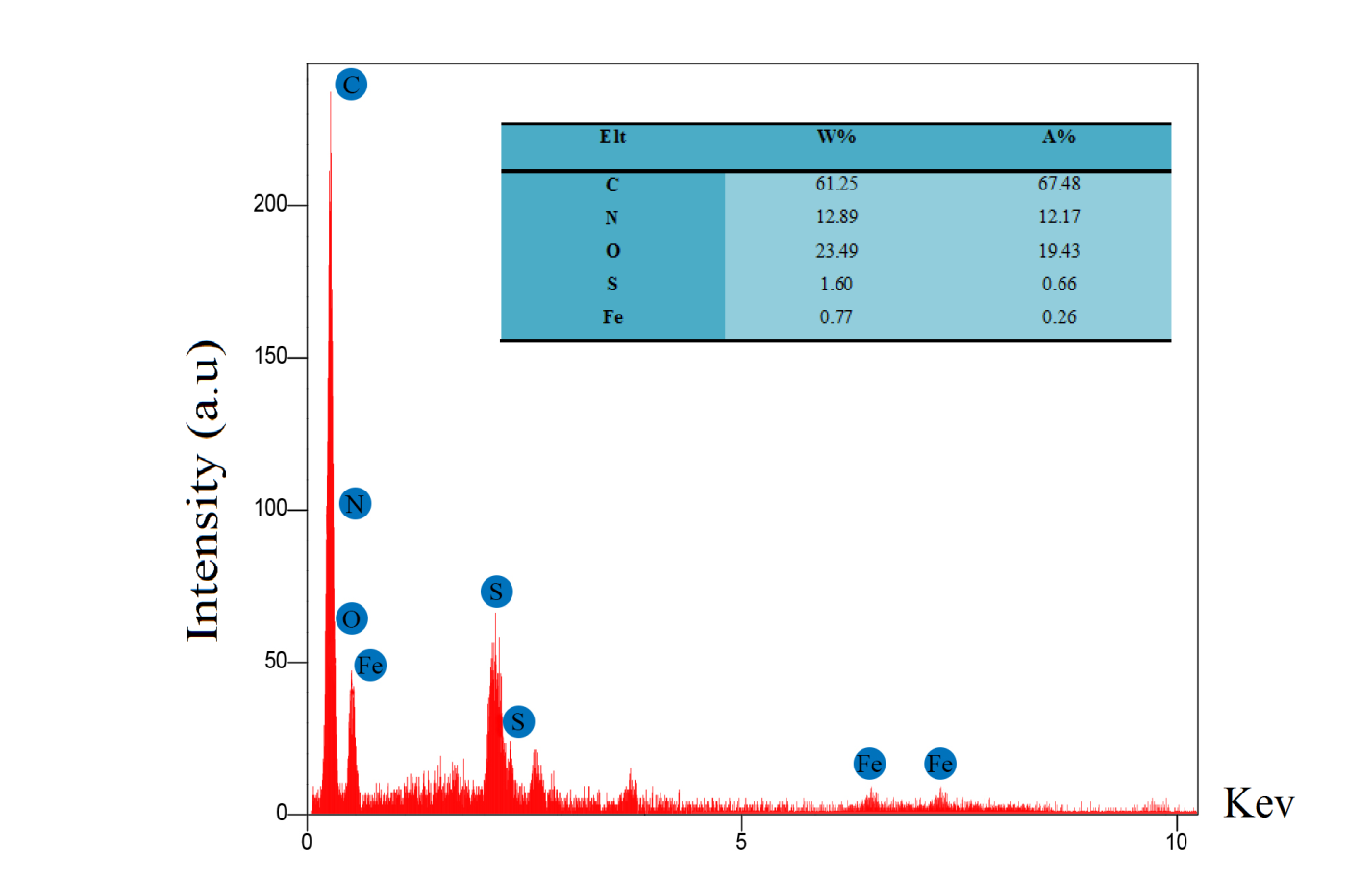
**Figure S3.** Pseudo-first-order kinetics equation.

**Figure S4.** Pseudo-second-order kinetics equation.

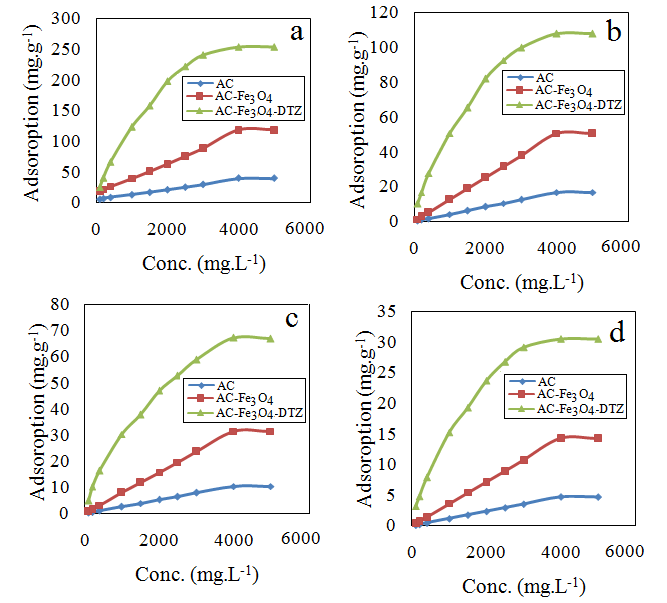
**Figure S5.** Equilibrium distribution of Cr (VI) species in aqueous medium.

**Figure S6.** Langmuir, Freundlich, Redlich-Peterson,Sips isotherm of Pb-ads-4 (a), Ag-ads-4 (b),Ba-ads-4 (c), Sr-ads-4 (d) adsorbents.

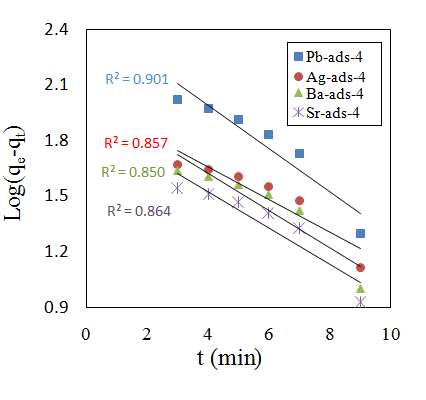
**Figure S7.** Van‘t Hoff plot of ln Kd versus 1/T.



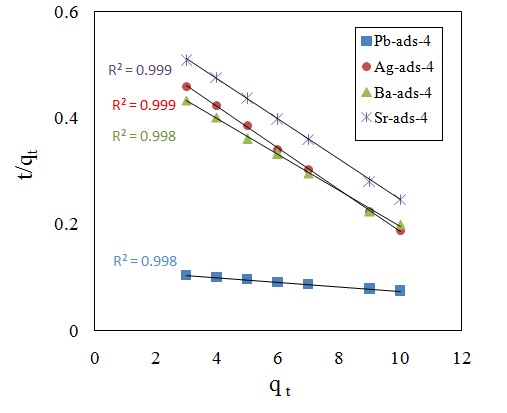
**Fig. S1.** EDAX analysis of AC-Fe3O4-DTZ sample.



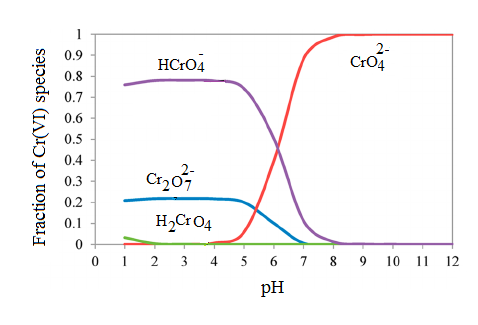
**Fig. S2.**Adsorption capacity of Pb-ads-4(a) ,Ag-ads-4(b),Ba-ads-4(c), Sr-ads-4(d) adsorbents.



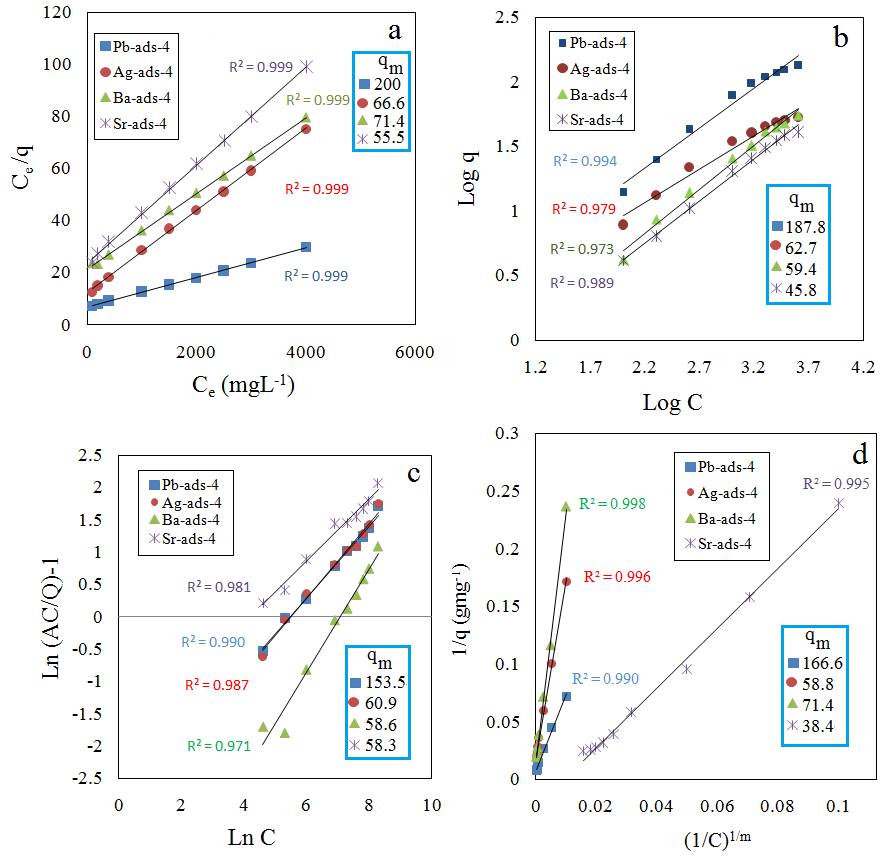
**Fig. S3.** Pseudo-first-order kinetics equation.



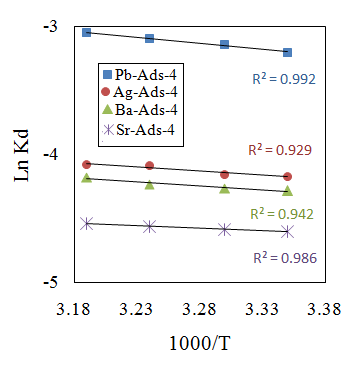
**Fig. S4.** Pseudo-second-order kinetics equation.



**Fig. S5.** Equilibrium distribution of Cr(VI) species in aqueous medium.



**Fig. S6.** Langmuir, Freundlich, Redlich-Peterson, Sips isotherm of Pb-ads-4 (a),Ag-ads-4 (b), Ba-ads-4(c), Sr-ads-4(d) adsorbents.

****

**Fig. S7.** Van‘t Hoff plot of ln Kd versus 1/T.