Supporting Information

**Fig. S1** EDX spectrum of the obtained Cs/PPy/Fe$_2$O$_3$ nanocomposite. Percentage of each component in the nanocomposite is shown in inset.
Fig. S2 (a) Pseudo-first, (b) pseudo-second order, and (c) intraparticle diffusion kinetics of adsorption of AG by Cs/PPy/Fe₃O₄ nanocomposite.
Fig. S3 (a) Langmuir, (b) Freundlich, and (c) Temkin isotherms for the adsorption of AG by Cs/PPy/Fe₃O₄ nanocomposite.