Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information for

Adsorption of potentially toxic metals on negatively charged liposomes: Equilibrium isotherms and quantitatively modelling

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Content

Table S1. The species distribution of metal ions by modelling

Species name	% of total concentration	Species name	% of total concentration	Species name	% of total concentration	Species name	% of total concentration	Species name	% of total concentration
Ni		**Zn**		**Co**		**Fe**		**Cr**	
Ni^{2+}	29.353	Zn^{2+}	15.374	Co^{2+}	24.91	$FeHPO_4^+$	1.95	$Cr(OH)_2^+$	7.421
$NiH_2PO_4^+$	0.374	$ZnHPO_4$ (aq)	83.99	$CoHPO_4$ (aq)	74.978	$FeOH^{2+}$	0.024	$CrOH^{2+}$	0.641
$NiHPO_4$ (aq)	70.175	$ZnOH^+$	0.334	$CoOH^+$	0.108	$Fe(OH)^{2+}$	95.468	$Cr(OH)_3$ (aq)	91.924
$NiOH^+$	0.08	$Zn(OH)_2$ (aq)	0.117			$Fe(OH)_3$ (aq)	1.488	$Cr(OH)_4^-$	0.011
$NiNO_3^+$	0.015	$ZnSO_4$ (aq)	0.184			$Fe(OH)_4^-$	1.071		
Ni^{2+}	29.353	Zn^{2+}	15.374						
Species name	% of total concentration	Species name	% of total concentration	Species name	% of total concentration	Species name	% of total concentration	Species name	% of total concentration
Ba		**Sr**		**Cd**		**Ag**		**Hg**	
Ba^{2+}	69.486	Sr^{2+}	61.412	Cd^{2+}	6.876	Ag^+	99.992	$Hg(OH)_2$	93.022
$BaHPO_4$ (aq)	30.484	$SrHPO_4$ (aq)	37.929	$CdHPO_4$ (aq)	93.045			$HgCl_2$ (aq)	0.102
$BaNO_3^+$	0.029	$SrH2PO_4^+$	0.625	$CdOH^+$	0.012			HgClOH (aq)	6.874
		$SrNO_3^+$	0.033	$CdCl^+$	0.067				

1. The speciation distribution of metals were calculated by Visual-MINTEQ software, version 3.0
2. The highest concentration of metal ions, the corresponding PBS concentration, pH 7.5 and temperature 25℃ were used in speciation calculation.