



SUPPLEMENTARY MATERIAL TO
Preparation, characterization and evaluation of nano manganese dioxide coated on alumina as a new adsorbent for the effective removal of phenol from aqueous samples

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Table SI. Application of NMO/Al to remove phenol from waste water sample.

Metal ions	Concentration before treatment ($\mu\text{g L}^{-1}$)*	Concentration after treatment ($\mu\text{g L}^{-1}$)	Re (%)
phenol	50.0	3.2	93.6
Cr	5.3	0.6	88.7
Pb	5.4	0.7	87.0
Cu	8.1	0.8	90.1
Ni	6.2	0.9	85.5
Cd	4.5	0.5	88.9
Mn	4.3	Not detect	100
Co	5.2	Not detect	100
As	3.7	Not detect	100

*Original sample spiked with $50 \mu\text{g L}^{-1}$ of phenol.

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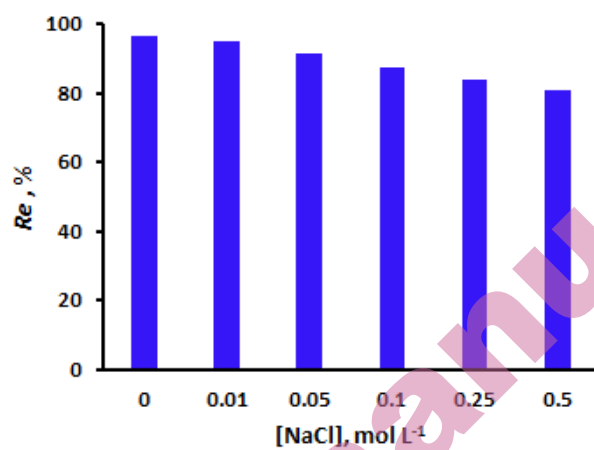


Fig. S1. Ionic strength impact on adsorption of phenol onto the NMO/Al.