

Optimization of toxic metals adsorption on DEA-calix[4]arene appended silica resin using central composite design

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Supplementary Figures

- Fig. 1. Response surface plots of desirability for the effects of pH, adsorbent Dosage and metal ion concentration on the % adsorption of Pb^{2+}
- Fig. 2. Response surface plots of desirability for the effects of pH, adsorbent Dosage and metal ion concentration on the % adsorption of Cd^{2+}
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- Fig. 4. Langmuir adsorption isotherm of Pb^{2+} , Cd^{2+} and Hg^{2+} on DEA- C4 resin.
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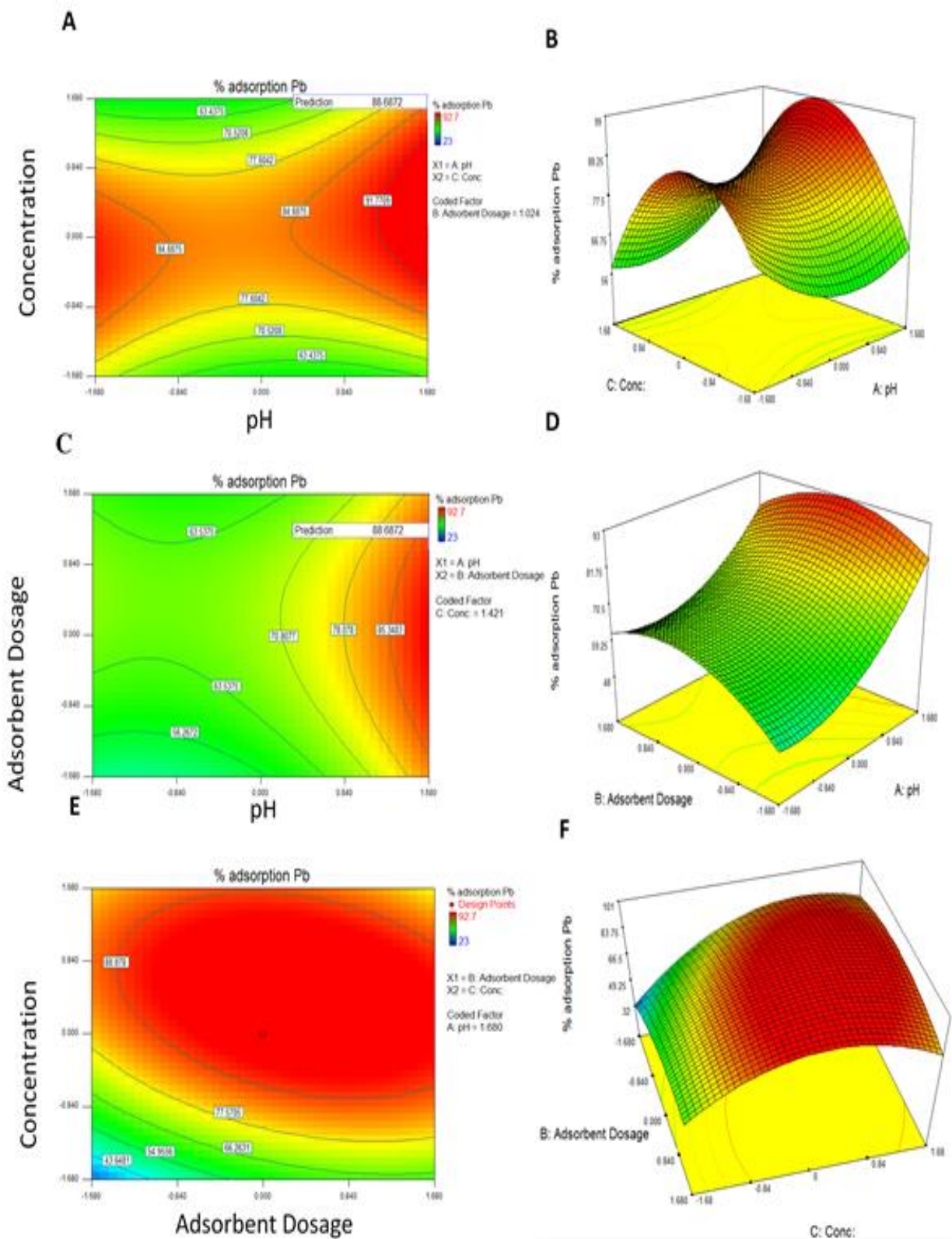


Fig. 1. Response surface plots of desirability for the effects of pH, adsorbent Dosage and metal ion concentration on the % adsorption of Pb^{2+}

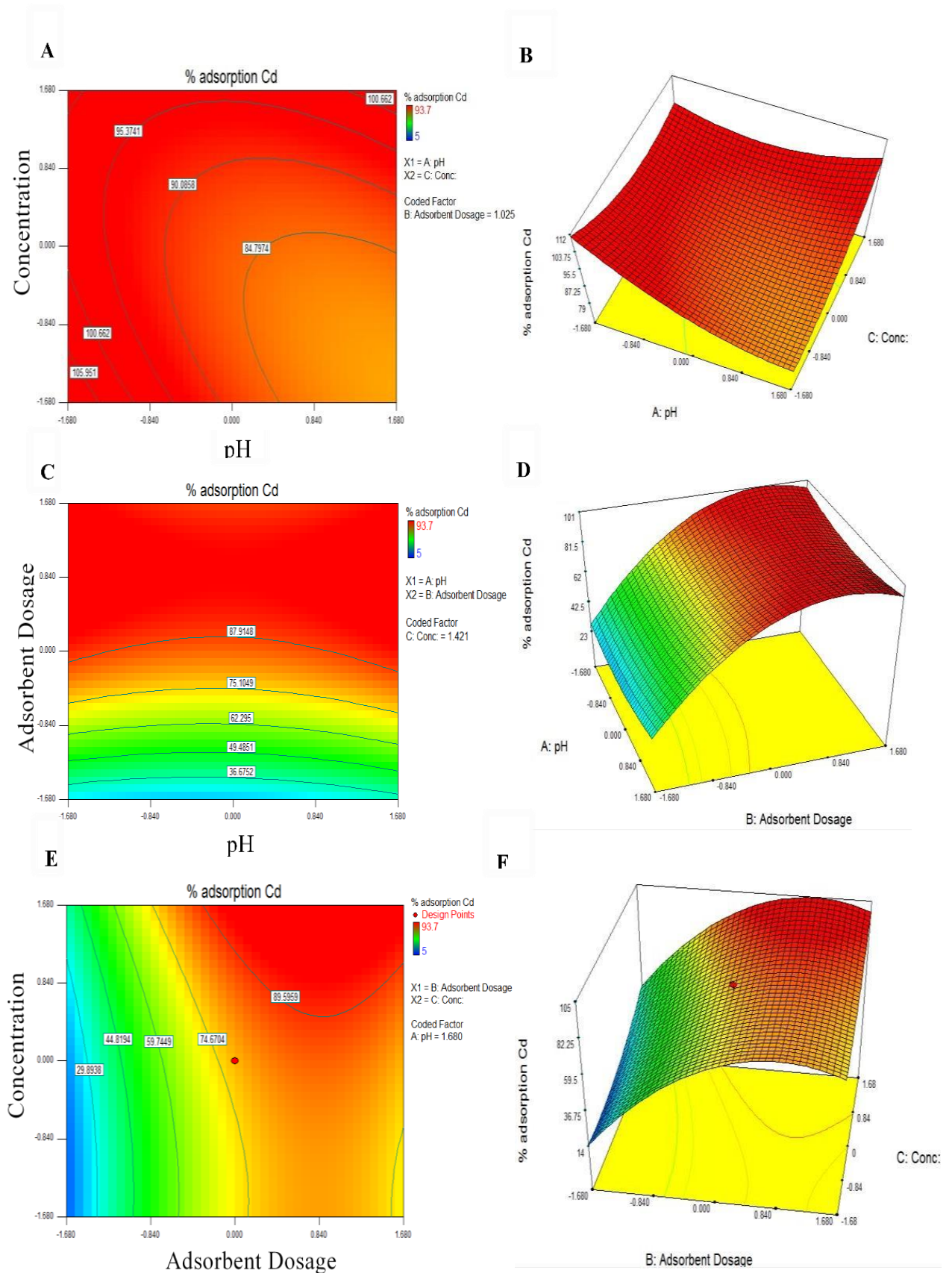


Fig. 2. Response surface plots of desirability for the effects of pH, adsorbent Dosage and metal ion concentration on the % adsorption of Cd^{2+}

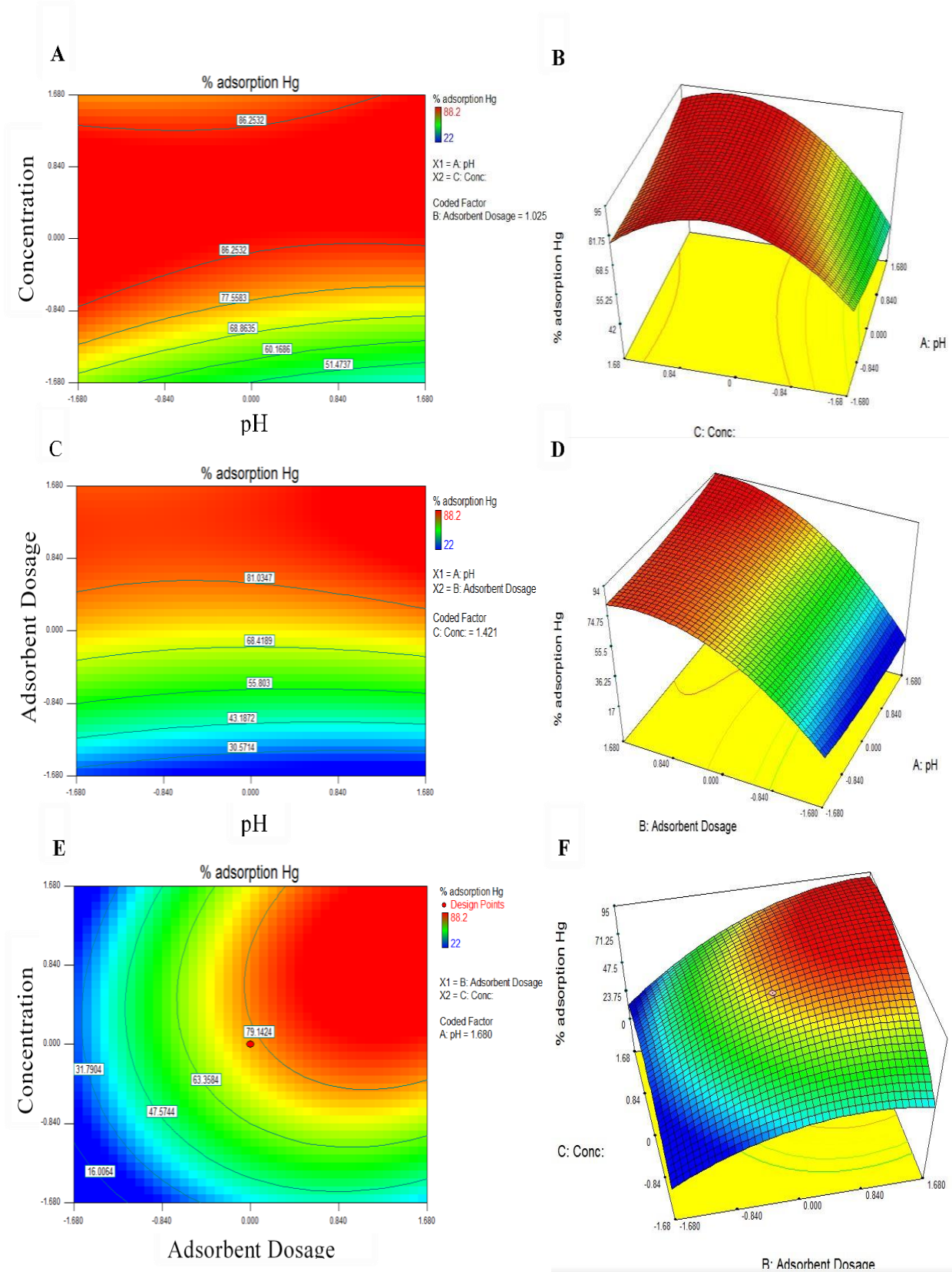


Fig. 3. Response surface plots of desirability for the effects of pH, adsorbent Dosage and metal ion concentration on the % adsorption of Hg^{2+}

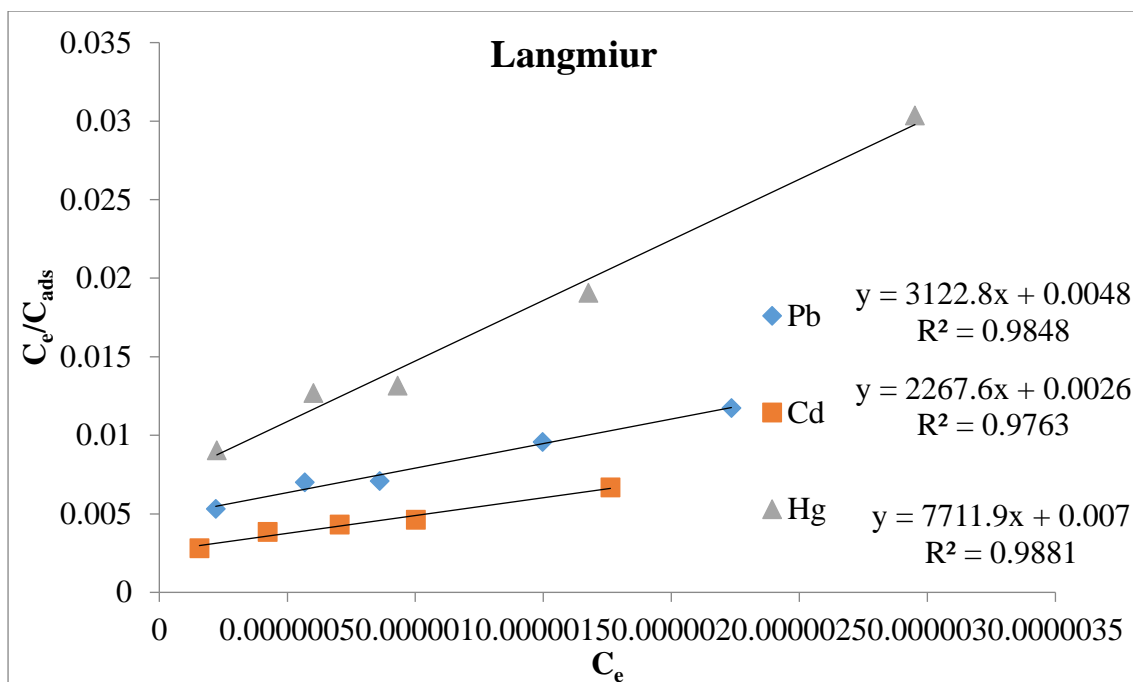


Fig. 4. Langmuir adsorption isotherm of Pb^{2+} , Cd^{2+} and Hg^{2+} on DEA- C4 resin.

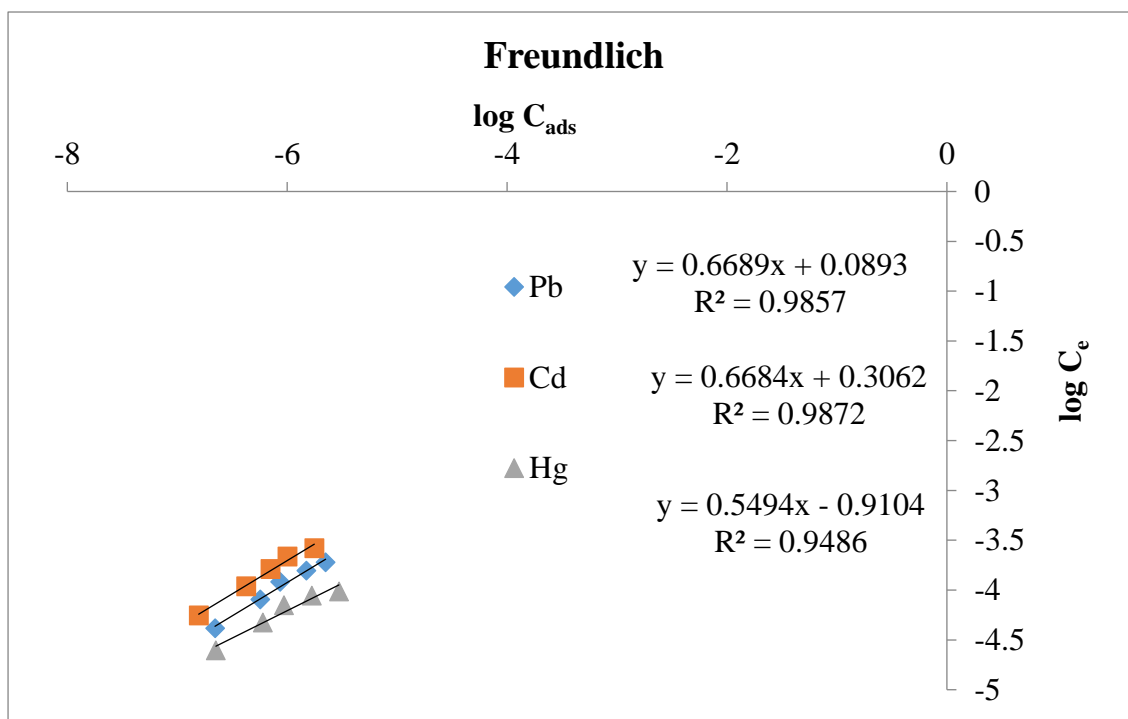


Fig. 5. Freundlich adsorption isotherm of Pb^{2+} , Cd^{2+} and Hg^{2+} on DEA- C4 resin.

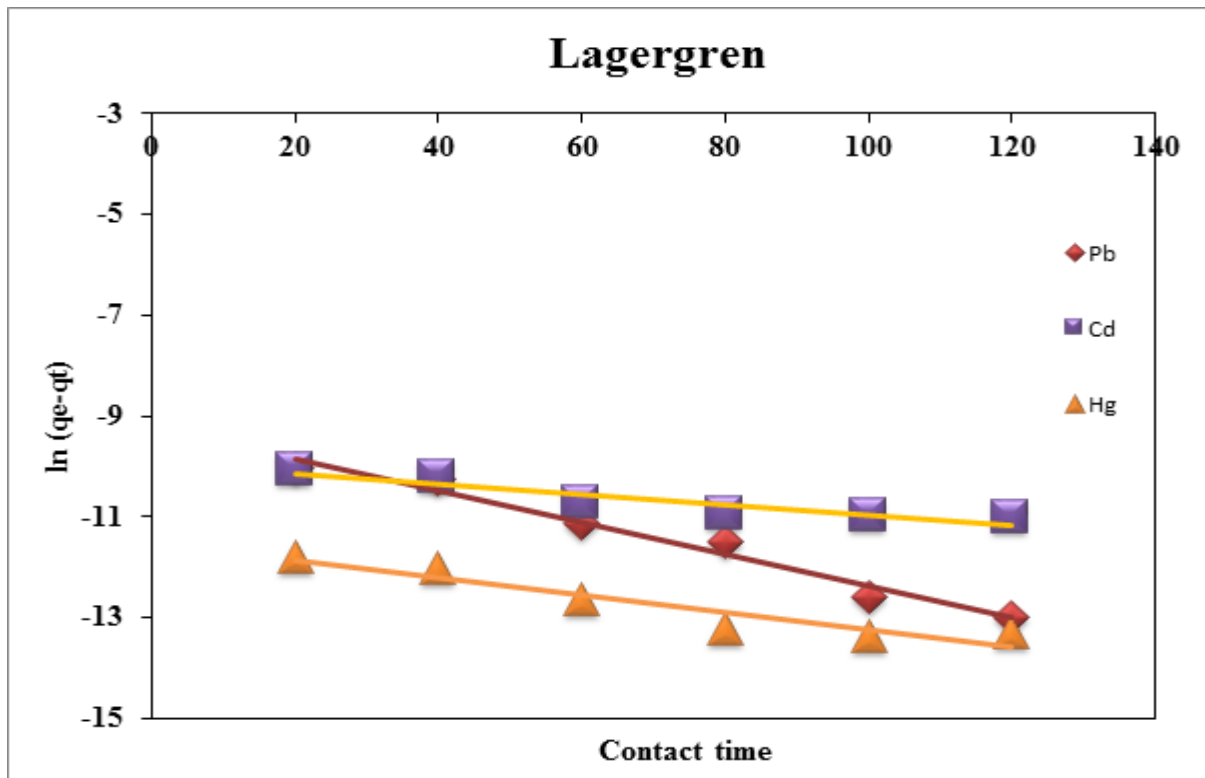


Fig. 6(a). Lagergren model for % adsorption of Pb^{2+} , Cd^{2+} and Hg^{2+}

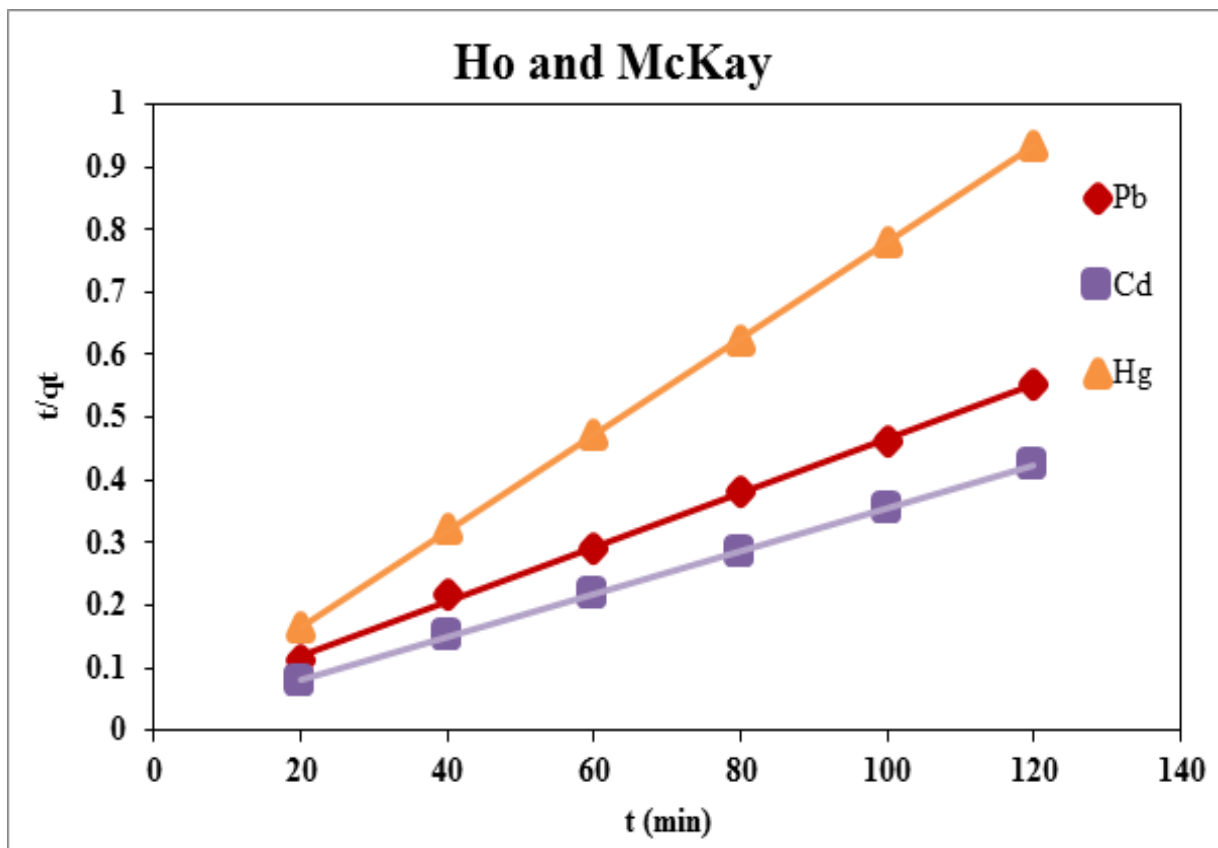


Fig. 6(b). Ho and Mckay model for % adsorption of Pb^{2+} , Cd^{2+} and Hg^{2+} .

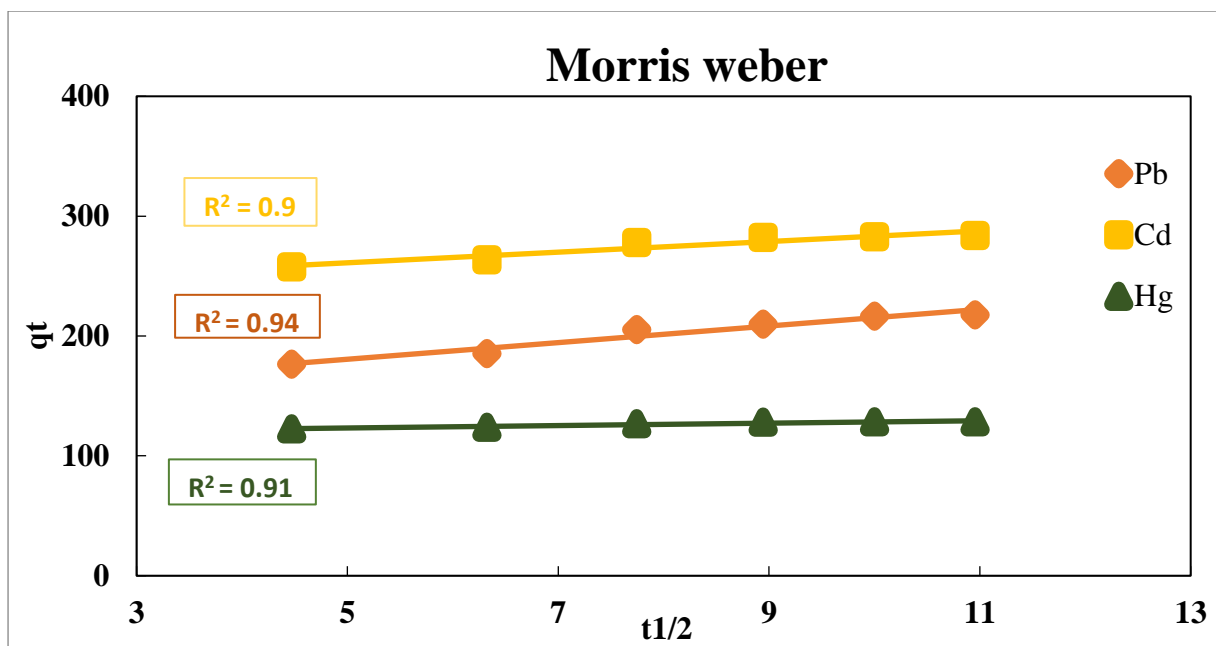


Fig. 6(c) Morris Weber model for % adsorption of Pb^{2+} , Cd^{2+} and Hg^{2+}

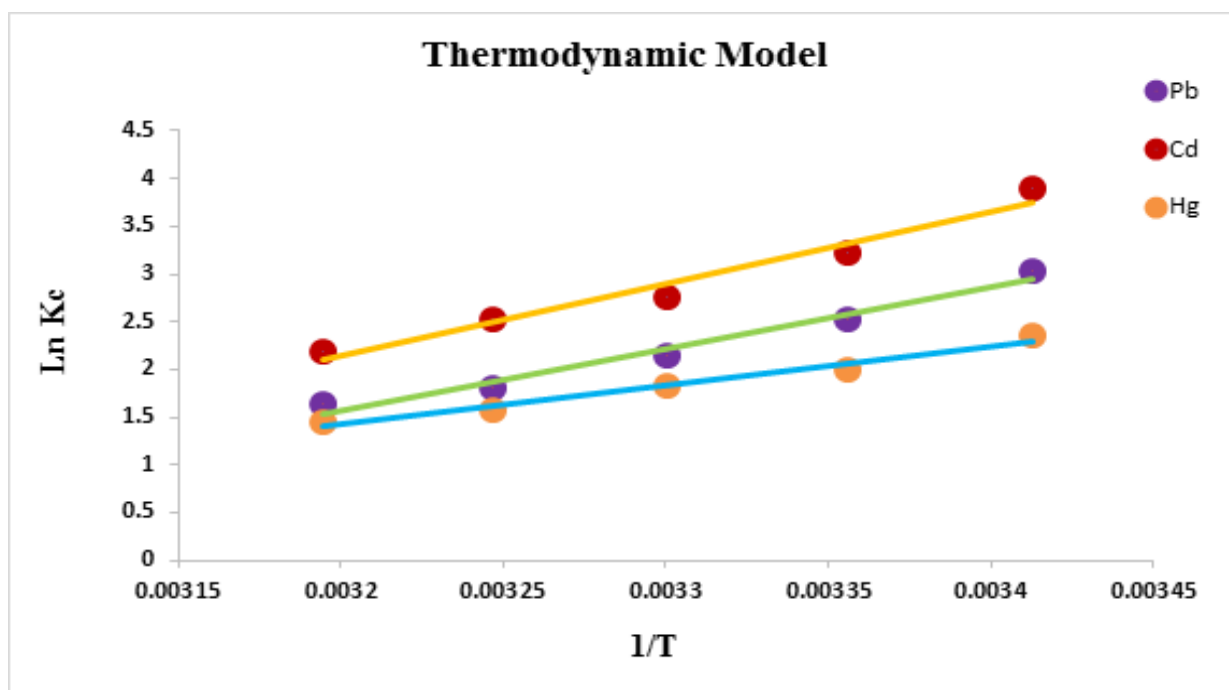


Fig. 7. Effect of temperature on the % adsorption of Pb^{2+} , Cd^{2+} and Hg^{2+} .