Adsorption of Lead Ions from Aqueous Solution onto Activated Carbon

Abstract

The adsorption of lead ions from aqueous solutions was performed using commercial activated carbon. The adsorption equilibrium data for lead ions found to follow both Langmuir and Freundlich isotherm models. The kinetic process of lead ions adsorption onto activated carbon was found to fit the pseudosecond-order kinetic model. The thermodynamic parameters of the adsorption demonstrate that the adsorption process was spontaneous and exothermics.