



Experimental Study of Nitrate Absorption Isotherms Determination on Latium Composite Overactive Carbon

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Abstract

The aim of this study is to verify the amount of nitrate absorption on Latium composite over active carbon in which pH parameters, temperature, pollutant concentration, contact time for absorbent were considered. It was determined that optimum condition for absorbent are pH=3, T= 0 °C and initial concentration of solution=10 ppm, then absorption parameters verified and after drawing absorption isotherms (Langmuir, freundlich) in nitrate absorption process it was evident that languir model had the most conformity with experimental data gained Latium composite on active carbon.

Keywords: Nitrate, Absorption isotherms, Active carbon, Latium.

1. Introduction

Underground water is a major source for provision of drinking water all over the world. Different sources such as agriculture waste water, industrial waste water treatment plants. Azotized fertilizers agriculture true runoff water is the water pollution sources by nitrate which produce many problems for environment. One of the major pollution sources is nitrate [1]. Consumption of water polluted by nitrate could threat the human health. Methomoglubinmia disorder or children aqueous syndrome is caused due to consumption of water