



Sorption of Some Heavy Metals Ions by Phosphorus-Containing Polymer Sorbent in Dependence from Medium Acidity

R.M. Alosmanov*, A.A. Azizov, A.M. Maharramov, I.A. Bunyad-Zadeh

Department of Chemistry, Baku State University, Baku, Azerbaijan

Received April 23, 2011; Accepted September 12, 2011

Abstract: Effect of pH medium on sorption degree of the Cu^{2+} , Zn^{2+} , Co^{2+} , Ni^{2+} , Hg^{2+} and Pb^{2+} ions by phosphorus-containing sorbent on the basis of polybutadiene under their individual and combined presence in aqueous solutions has been investigated. It has been established that pH_{opt} value for metal ions extraction from their individual solutions are determined not only by polymer sorbent but also by metals states in solution. Intervals of solution acidity for selective (Hg^{2+}) and combined metal ions extraction from aqueous solutions have been also revealed.

Key Words: *polymer sorbent, sorption, heavy metals, pH medium*

* Corresponding: e-mail: r_alosmanov@rambler.ru; Tel:(+994)0503780183