Ovidius University Annals of Chemistry Volume 11, Number 1, pp 22-24, 2000

Kinetic aspects of Cu (II) separation by flotation with anionic collector

Ligia STOICA, Gabriela Carmen OPROIU and Adriana ORDEANU

"Politehnica" University, Dept. of Inorganic Chemistry, 132 Calea Griviței, 78122, Bucharest, Romania

Abstract The separation of Cu (II) from diluted aqueous systems is often studied for environmental protection and copper recovery. A systematical study of the process has to take into account the dynamics of the process. The present paper reports on a study concerning the kinetics of Cu (II) hydroxospecies separation using an anionic type collector (palmitic acid), by dependence R = f (t). In the first stage of the paper the order of the process was determined by classical equations of chemical kinetics. The second stage is focused on the verification of some first order kinetic models presented in literature. The obtained results sustain a first order kinetic for the separation process of Cu (II) ions by precipitate flotation.

Keywords: copper recovery, precipitate flotation, anionic collector, palmitic acid.

ISSN-1223-7221