Electrochemical behavior of indium in sulfate solutions

Electrochemical characteristics of deposition and dissolution of indium in sulfate solutions using the method of cyclic voltammetry were determined. The effect of the polarization of the interval and scan rate at electrochemical reactions which occur in the system was studied. It is established that the processes occurring in the discharge-ionization of indium in sulfate solutions have phasic character. The study of the influence of the potential scan rate on the electrochemical behavior of indium showed an increase in current peaks and the shift of the potentials for the cathodic process to negative values, and for the anode - towards positive values. This indicates the irreversible character of the studied electrode processes.