

Abstract

The aim of this work is to investigate the possibilities of electrochemical generation of volatile form of zinc. For the experiments a flow-through electrolytic cell was used. The system worked in continuous flow mode. At the first part of this work relevant working parameters, such as the generation current, the flow rate of the electrolytes and the carrier gas flow rate, were optimized. Under the optimal working parameters, the calibration and other characteristics of zinc determination by electrochemical generation were performed. Basic characteristics obtained for electrochemical generation were compared with chemical generation. The limit of detection for zinc determination by electrochemical generation was 2.65 mg dm^{-3} .