

Cinetica diferencial de cobre y zinc con zincon en un sistema FIA/FLUJO interrumpido. Determinacion de cobre y zinc en latones

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A flow injection analysis (FIA)/stopped flow method is proposed for the simultaneous determination of copper and zinc. The method is based in the difference in the reaction rates between the analytes and the reagent zincon at pH 9. The flow injection analysis (FIA) manifold was optimized in order that when the injected sample reaches the detector (612 nm), only the zinc reaction is produced quantitatively. In this instant (t_1), the flow is halted in which a signal proportionally to both analytes is obtained. The subsequent increment of the signal is due to the evolution of the copper reaction and at the time (t_2) when the reaction is completed the flow is re-established. Absorbance measurements at both times allow to solve an equation system for the determination of each species in the sample. The method presents a good level of analytical features and it was applicable to the analysis of brass.