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New indicator reactions involving sulfur-containing organic compounds for the kinetic determination of selenium

Garifzyanov A., Toropova V., Budnikov G., Gainutdinova D.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

New indicator reactions were proposed for the determination of selenium by the kinetic method based on the reduction of Methylene Blue by some sulfur-containing organic compounds. It was demonstrated that a high sensitivity of the determination of selenium is attained using unithiol and thiomalic, 2,3-dithiomercaptopropionic, and rubeanic acids as reducing agents. In the presence of unithiol, down to 4 ng/mL selenium can be determined. © 2001 MAIK "Nauka/Interperiodica".