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

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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".