

# Complexation and Spectroscopic and Electrochemical Characteristics of Platinum(II) and Palladium(II) Chelates with N-(Thio)phosphorylated Thioamides

Mashkina S., Pestova N., Ulakhovich N., Zabiroy N.  
*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

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## Abstract

In dioxane and acetonitrile solutions N-(thio)phosphorylated thiobenzamide and thioacetamide form stable chelates with Pd(II) and Pt(II) ions. The composition (1:2) and the stability constants of these chelates were determined by spectrophotometry. The electrochemical behavior of these complexes was studied in DMF solutions. The electroreduction mechanism depends strongly both on substituents in the thiocarbonyl fragment of the ligand and on the central ion. The formation of Pd(I) complexes in the first step of electroreduction of the thiobenzamide complexes was determined by ESR spectroscopy.

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