

Reduction of rhenates (VII) with hydrogen chloride in alcohols: the structural aspects of the *trans* -tetrachloridomethoxidooxidorhenate(VI) products.

Autorzy

Małgorzata Hołyńska

Stefane Dehnen

Florian Weigend

Tadeusz Lis

Rok wydania

2014

Czasopismo

Inorganica Chimica Acta

Numer woluminu

411

Strony

26-29

DOI

10.1016/j.ica.2013.11.010

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

A series of phosphonium *trans*-tetrachloridomethoxidooxidorhenates(VI) was isolated as primary products of the reaction of rhenate(VII) anions with hydrogen chloride in alcohols. The complex $[\text{ReOCl}_4(\text{OCH}_3)]^-$ anion structure is investigated in detail. It is shown, that in the $[\text{ReOCl}_4(\text{OCH}_3)]^-$ anion no *trans* influence of the formally "triple" Re–O bond is present as a result of the "ligands competition effect". Additionally, quantum-chemical investigations were performed to elucidate the steric and electronic influence of different alkoxido substituents.

Słowa kluczowe

Rhenium (VI), *trans* influence, X-ray diffraction studies, DFT studies

Adres publiczny

<http://dx.doi.org/10.1016/j.ica.2013.11.010>

Strona internetowa wydawcy

<http://www.elsevier.com>