

On template synthesis in the ternary system Ni(II)-thiosemicarbazide- diacetyl

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Abstract

A new complexation process in the ternary system Ni(II)- hydrazinomethanethioamide (thiosemicarbazide)-2,3-butanedione (diacetyl) has been studied. Complexation occurs in an aqueous ethanol solution and in nickel(II) hexacyanoferrate(II) gelatin-immobilized matrix systems. It has been shown that, under these conditions, the process involves the "self-assembly" (template synthesis) of Ni(II) macrotricyclic complexes with a new chelating ligand - 4,5-dimethyl-1,8-dimercapto-2,3,6,7- tetraaza-1,3,5,7-octatet-raene-1,8-diamine with the (NSSN) coordination of donor atoms to the metal atom. © 2013 Pleiades Publishing, Ltd.

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