

The invention relates to the chemistry of coordinative compounds with organic ligands from the class of nitroimidazoles, which can be used as biologically active compounds, catalysts, etc.

The invention consists in that it is proposed a process for producing coordinative compounds of some biometals, such as Co(II), Ni(II) and Zn(II) with 2-nitro-4,5-diphenyl-imidazole upon interaction of 4,5-diphenyl-imidazole with nitrates of Co(II), Ni(II) and Zn(II) in pure methanol or containing a small amount of water. In solvothermal conditions (170°C, 3 hours) the heterocyclic nucleus of 4,5-diphenylimidazole is nitrated in position C2, and the ions of initial metals are associated with the nitration product through chelation, with the involvement of the nitro group and one nitrogen atom of the heterocycle nucleus. At the same time the solvent (methanol) complements the coordination sphere of the central ion.

The result of the invention consists in that in solvothermal conditions it is concomitantly produced the nitration of heterocyclic nucleus and the coordination of the reaction product, at the same time the metal nitrates serve as acid-free nitrating agents and a source of central ions for chelation with the final nitro-imidazole.

Claims: 1

Fig.: 1