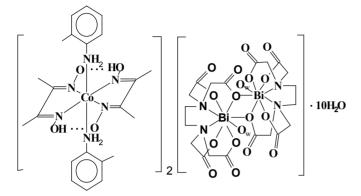
The invention relates to the chemistry of heterometallic coordinative compounds, namely to the decahydrate of di(μ_2 -O)-bis {aquaethylenediamine tetraacetatobismuthate(III)} of 1,6-di(2-toluidine)bis(dimethylglyoximato)cobalt(III)} 1,6-[Co(2-tol)_2(DH)_2]_2 [Bi_2(H_2O)_2(Edta)_2] \cdot 10H_2O, where 2-tol=2-CH_3C_6H_4NH_2, DH_2=CH_3C(NOH)C(NOH)CH_3, H_4Edta=(HOOCCH_2)_2N(CH_2)_2N(CH_2COOH)_2}, which may be used in radio electronics as initial compound for bismuth cobaltate obtaining.

Summary of the invention consists in the synthesis of the decahydrate of $di(\mu_2-O)$ -bis {aquaethylenediamine tetraacetatobismuthate(III)} of 1,6-di(2-toluidine)bis-(dimethylglyoximato)cobalt(III) of the formula:



The compound obtained as a result of low-temperature pyrolysis and short-time high-temperature posttreatment forms a polycrystalline powder of BiCoO₃.

The bismuth cobaltate formation in such case proceeds in one stage, at a lower temperature (1,1...1,4 times) and more reduced time (2...12 times) compared with the closest solution.

Claims: 2 Fig.: 5