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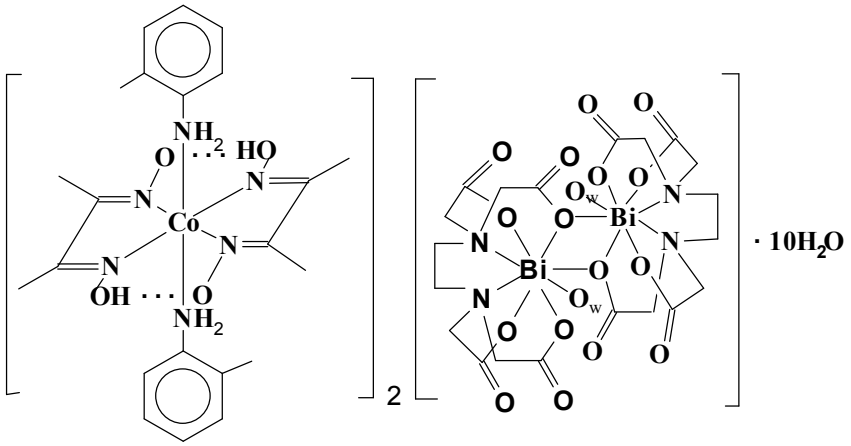
The invention relates to the chemistry of heterometallic coordinative compounds, namely to the decahydrate of di(μ_2-O)-bis {aquaethylenediamine tetraacetatobismuthate (III)} of 1,6-di(2-toluidine)bis(dimethylglyoximato)cobalt(III) {1,6-[Co(2-tol)$_2$(DH)$_2$]$_2$[Bi$_2$ (H$_2$O)$_2$(Edta)$_2$]·10H$_2$O, where 2-tol=2-CH$_3$ C$_6$H$_4$NH$_2$, DH$_2$=CH$_3$C(NOH)C(NOH)CH$_3$, H$_4$ Edta=(HOOCCH$_2$)$_2$N(CH$_2$)$_2$N(CH$_2$COOH)$_2$}. The given complex, as a result of the low-temperature pyrolysis and short-time high-temperature posttreatment, can form polycrystalline powder of BiCoO$_3$. The proposed invention may be applied in radio electronics.

Summary of the invention consists in that it is proposed the decahydrate of di(μ_2-O)-bis {aquaethylenediamine tetraacetatobismuthate (III)} of 1,6-di(2-toluidine)bis-(dimethylglyoximato)cobalt(III) of the formula



as precursor of the bismuth cobaltate.

The result consists in that 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