Compounds $Ln_5(Ag, Ga)_{19-x}$ (Ln = Gd, Tb) – Defective Partially Ordered Representatives of the Rb_5Hg_{19} Structure Type

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New compounds $Ln_5(Ag, Ga)_{19-x}$ (Ln = Gd, Tb) have been found to crystallise with the Rb_5Hg_{19} structure type (space group $I4/m$). The crystal structures were refined for $Gd_5Ag_{1.8}Ga_{15}$ and $Tb_5Ag_2Ga_{15.6}$ from X-ray powder data: $a = 9.4635(1)$, $c = 9.8638(2)$ Å, $R_I = 0.093$ and $a = 9.4313(1)$, $c = 9.8491(2)$ Å, $R_I = 0.085$, respectively. Some positions in the crystal structures of new the compounds are occupied partially.

Key words: Crystal Structure, Ternary Gallides