

The ErCo₂ compound belongs to a group of RECo₂ compounds (R – rare earth) crystallizing in the cubic Laves phase C15. The influence of substitution of p-element (3% of Al, Si, Ga, Ge, In in Co) on magnetic, transport and magnetoelastic properties was studied in this work. All substitutions shift transition temperature to higher temperatures (from 43 K in the case of Ga to 52 K in the case of In). The In substitution shows the most different behavior in comparison to the data of pure ErCo₂ compound — transition temperature shifted from 33 K to 52 K, phase transition is of the second order contrary to pure ErCo₂ and no metamagnetic transition above T_C was observed.