

Magnetic Properties of $(\text{Fe}/\text{Co})_{83}(\text{Sn}/\text{P})_5\text{B}_{12}$ RQ Ribbons

Beata Butvinová ^{a)}, Pavol Butvin, Peter Švec Sr., Irena Janotová, Dušan Janičkovič
and Igor Maťko

*Institute of Physics Slovak Academy of Sciences, Dúbravská cesta 9, 845 11 Bratislava,
Slovakia.*

^{a)} Corresponding author: beata.butvinova@savba.sk

Abstract. The system of FeCoSn(P)B in the ribbon form has been successfully prepared by planar flow casting on air, studied for the thermal analysis and magnetic properties. After annealing at 400 °C during two times the soft-magnetic properties result for shorter time significantly better - H_c decreased by ~ 30 %. Substitution of 2 at % P for Sn has a positive effect on the formation of stable magnetic anisotropy oriented along the ribbon axis and a slight increase in magnetic saturation (up to 1.80 T).