

VIRTUAL SEMINAR

Wednesday, 24.11.2021 at 13:00

MPŠ Seminar 3

**Significant coercivity enhancement of hot-deformed bulk magnets
by two-step diffusion process using a minimal amount of Dy**

Matic Korent, Jožef Stefan Institute

Hot-deformed Nd-Fe B magnets are of great interest because of their excellent texture along the easy magnetization axis and consequently their maximum energy product, $(BH)_{\max}$. However, due to the low value of coercivity, there is still plenty of room for the improvement of magnetic properties. In the following seminar it will be shown that a high coercivity can be achieved in a thick Nd-Fe-B anisotropic magnet by recently developed two-step diffusion process using a small amount of Dy. Due to the low Dy concentration, a relatively high remanence is retained even after the two-step diffusion process, with an excellent temperature coefficient of coercivity.