

Structure and magnetic properties of the FeMnCo-based high entropy alloys

Karolina Kutynia,¹ Zbigniew Śniadecki,² Anna Przybył,¹ and Piotr Gębara¹

¹*Department of Physics, Częstochowa University of Technology,
Armii Krajowej 19, 42-200 Częstochowa, Poland*

²*Institute of Molecular Physics, Polish Academy of Sciences,
Smoluchowskiego 17, 60-179 Poznań, Poland*

The influence of alloying by Pd, Os and Y on the structure and magnetic properties of the FeMnCo-based high entropy alloys was investigated. The structure was studied using the X-ray diffraction and Mossbauer spectroscopy. The DSC studies were performed in order to reveal structural transformations. The Curie temperature was measured using magnetic balance. Moreover, a magnetic properties were studied using Lakeshore VSM 7307 vibrating sample magnetometer.