SEMINARIUM Z MAGNETYZMU I NADPRZEWODNICTWA

Uprzejmie zawiadamiamy, że w **środę**

1 grudnia 2021 r., o godz.10:00

odbędzie się seminarium **on-line (link podany jest na stronie IF PAN)**,

na którym

Dr. Alexandr Kazakov

(Institute of Physics of the Polish Academy of Sciences and MagTop Centre)

wygłosi referat na temat:

"Magnetic, caloric and transport properties of Ni-Mn-In-based alloys"

The study of the magnetocaloric effect in magnetic materials gained a second breath after the discovery of a giant magnetocaloric effect in rare-earth compounds and opened perspectives of its practical utilization. One of the directions was to search for new rare-earth-free compounds which would possess comparable magnetic characteristics. One of the candidates for such material are Heusler alloys. Within this work, we've focused on the properties of non-stoichiometric Ni-Mn-In Heusler alloys. These alloys are characterized by near room temperature structural martensitic transition, with different magnetic properties in austenitic and martensitic phases. In the talk, I would discuss the unusual behavior of magnetization in the low-temperature structural phase [1], and changes in magnetocaloric [2] and magnetotransport properties [3,4] with various doping [5,6].

[1] V.N. Prudnikov, et al., Phys. Solid State 53, 490 (2011)
[2] A.P. Kazakov, et al., APL 98, 131911 (2011)
[3] V.N. Prudnikov, et al., JETP Lett. 92, 666 (2010)
[4] A.B. Granovskii, et al., JETP 115, 805 (2012)
[5] I. Dubenko, et al., J. Magn. Magn. Mater. 324, 3530 (2012)
[6] A. Kazakov, et al., J. Nanosci. Nanotechnol. 12, 7426 (2012)

Serdecznie zapraszamy

Roman Puźniak
Andrzej Szewczyk
Henryk Szymczak