

SEMINAR ON MAGNETISM AND SUPERCONDUCTIVITY

We kindly inform You that on **Wednesday**

November 20th at 10:00

there will be a **seminar in room 203, building I,**

where

dr Leszek Gładczuk

(Institute of Physics PAS)

will deliver a lecture on:

“Optimization of metal layer growth parameters to achieve materials with desired physical properties”

The physical properties of materials currently under investigation depend heavily on their preparation techniques. The ongoing trend toward miniaturization of electronic nanostructures, combined with the discovery of novel phenomena, is broadening and intensifying research in this area. Most structures used in modern electronics consist of a series of ultra-thin layers deposited sequentially. These layers must exhibit high phase and crystalline homogeneity, as any imperfections in one layer can propagate into subsequent layers, disrupting the growth of the entire structure. Defects arising during the growth process can significantly restrict, or even prevent, the achievement of the required technical parameters. Therefore, precise control over the technological process at each stage of production is essential to ensure the quality of the final structure.

In this seminar, I will discuss various methods for achieving uniform crystalline thin layers of tantalum, cobalt, MgO, Sn, and CoSn. I will also review research findings that demonstrate the high structural quality of these layers, along with their distinctive mechanical and magnetic properties.

The seminar will be given in Polish on-site in room 203.

ZOOM transmission will be available too - link is provided on the IP PAS website.

We sincerely invite You

Roman Puźniak / Andrzej Szewczyk / Henryk Szymczak