

Activity

In the Mossbauer Spectroscopy Laboratory, the basic research technique is, of course, Mossbauer Spectroscopy, as well as magnetization measurements using the VSM technique and calculations of the electronic structure of the analyzed materials. The research focuses on several directions, including:

1. Research on high entropy alloys, HEA, regarding phase composition, magnetic properties, and the influence of elements on the properties of alloys.
2. Sigma phase tests in HEA alloys
3. Testing of high entropy oxides, HEOx, for magnetic properties and functional properties (materials for use in batteries)
4. Research on garnets, including high-entropy garnets, for magnetic properties in high magnetic fields
5. Research on the phylogeography of mountain and xerothermal species