Frictional wear is the main cause of wear on machine parts and tools. Annual economic losses due to friction wear account for almost 2% of national GDP. Therefore, studies on friction and the search for new materials, including lubricating oils, greases, and solid lubricants, are a topical issue of important social and economic interest. With developing industry and modern production technologies, requirements for wear strength under demanding operating conditions, such as high speeds, high loads, high vacuum, radiation, and operating temperature range, are increasing. Currently, an intense search is underway for self-lubricating materials and coatings. These include, among others, powder metallurgy, laser alloying, thermal spraying, and PVD and CVD techniques.

In particular, topics of interest include, but are not limited to:

- manufacturing methods for self-lubricating coatings and materials;
- coatings produced by different processes, additive manufacturing processes, thermal spray, laser and plasma processing, PVD, CVD, plating, etc.;
- microstructural analysis of self-lubricating coatings
- wear mechanism;
- wear resistance of self-lubricating coatings and materials.