

## **Synthesis and characterization of MnBi nanoparticles for permanent magnets applications**

In this graduate thesis, intermetallic MnBi particles were synthesized, via the surfactant assisted ball milling method. The ball milling was conducted in two different ways: at first with a high energy mill and the addition of oleic acid and oleylamine as the surfactants and then with a conventional mill and the addition only of oleic acid. In both cases the structural and magnetic properties of the particles were studied, as well as the influence of the surfactants.