

This bachelor thesis presents new results on characterization of migmatite xenoliths assimilation, which occurs in the heterogeneous Lipnice granite of the Melechov massif in form of lenses, schlierens and biotite clusters, and aims to identify the relicts of assimilated migmatites in the homogeneous granite. The thesis consists of three main chapters. The first one focuses on a broad introduction into the geology central European Variscides, brief characterization of the Bohemian Massif, lithology of Moldanubian Unit, and evolution of the associated Variscan granite magmatism. Second part of the thesis deals with the granite petrogenesis, and characterization of granite plutons of the Moldanubian batholith, including the northernmost exposure, the Melechov massif. The third part presents results of my own research, which comprises petrography of studied thin-sections and chemical analysis of whole rock and minerals, in particular the micas and feldspars in the Lipnice granite of the Melechov massif. The research is based on analysis of four thin-sections of the Lipnice granite using optical polarization and electron microscope as well as the microprobe. Observing of the chemistry of biotite in xenoliths and in granite and their correlation shows, that biotite in the Lipnice granite is rather homogeneous whereas muscovite probably represents migmatite relicts in the homogeneous granite and preserves a record of assimilation of surrounding migmatites.