English abstract

The bachelor thesis deals with the Sn-W-Li deposit at Cínovec (northwestern Bohemian Massif), which is currently much discussed due to the intense prospection of lithium mica with the potential of near-future mining. The litreture research part of the thesis first briefly introduces the concepts of magma flow and emplacement across the transcrustal magmatic system. Next, I focus on the geological evolution of the Cínovec pluton within the Altenberg-Teplice caldera, with emphasis on the granite pluton, its lithological description and mechanism of formation. The practical part of the bachelor thesis aims on the structural and mineral investigation of the fractures of the Teplice rhyolite in the immediate vicinity of the Cínovec pluton. The structural analysis showed 3 main types of joints: (1) northeast-southwest striking, dipping to the northwest; (2) northwest-southeast striking, dipping to the southwest; (3) subhorizontal, dipping to the west, southwest and west. I interpret this joint system as having formed during emplacement and cooling of the Cínovec granite, which allowed circulation of hydrothermal fluids associated with greisenization of the granite and surrounding rock.

Keywords: Cínovec pluton; greisen; cinvaldite; joint; magma emplacement