English abstract

The bachelor thesis is focussed on problems of Jurassic subduction of Meliatic ocean in the region of the Western Carpathians. This oceanic domain opened during the Middle Triasic and closed at the end of Middle Jurassic. The existence of the oceanic domain in the Western Carpathians is documented by sedimentary rocks of oceanic origin glaucophane bearing basalts and serpentinized ultramafic rocks preserved in the area of the presumed suture zone. The chemical composition of metabasalts corresponds to the transition between the basalts of mid-oceanic ridges and basalts of island arcs. The metabasalts underwent high-pressure, low-temperature metamorphism, which proves their drag into to substantial depths during subduction and were later exhumed to structurally lower parts of the accretionary wedge. The research was focussed on identification of deformation record in units of the southern Gemeric Superunit, Meliata Unit (Borka Nappe) and Silicic Nappe. Four deformation events D1 – D4 were identified on the basis of structural analysis in the studied area. Deformation events D1 – D3 show distinct record in different units and are associated with roughly east-west direct of compression connected with the subduction of Meliatic oceanic plate, exhumation of its parts into an accretion complex built above the subduction zone and thrusting of these rock complexes over the Gemeric Superunit. Deformation event D4 affected all studied units and is associated with north-south compression. Based on previous research in the studied area this deformation event is interpreted is realated in relation to Cretaceous convergence in the Western Carpathians.

Key words: Western Carpathians; Bôrka Nappe; Meliatic unit; Silicic Nappe; subduction; suture