relative to La is well pronounced [(Nb/La)n = 0.41-0.48] as well of other HFSE which is typical of subduction zone magmas.

However, although the chemistry of Badenian calc-alkaline basalt-andesite rocks in Baranja is similar to those of the recent orogenic and subduction related areas, the origin of their primary magma should be linked to post-orogenic geotectonic environment typical for continental margin (back-arc) rift-basin. Thus, the geotectonic setting of Baranja volcanic rocks harmoniously complements initial extension phase of Neogene geodynamic evolution of Pannonian Basin proposed by many authors. The Pannonian Basin is interpreted as post-colision continental back-arc basin which extended during the Miocene due to uplift the upper mantle diapirs that caused strong trancurent faulting. This allows the differentiation of the Basin in several small pull apart rhomboidal depression. Calc-alkaline basaltic to basaltic andesite magmas, which may fractionated to andesitic and/or dacite and rhyolite extrusives, erupted along weakened tectonic zones of the basinal depressions.

Middle and Upper Triassic slope and basin carbonates along the Neo-Tethyan (Meliata) margin (NE Hungary): facies and paleoenvironmental interpretation

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The studied area, the Aggtelek-Rudabánya Hills (NE Hungary) is part of the Silicic nappe system of the Inner Western Carpathians. In the Triassic pre-rift stage (from ?Middle–Late Permian to Middle Anisian) the evolution of the area was uniform, however, during the Neotethyan synrift stage in the Early-Middle Anisian the Steinalm carbonate ramp broke up, creating three different tectonostratigraphic units: the pelagic Bódva Unit, the Szőlősardó Unit representing slope sedimentation and the Aggtelek Unit where the carbonate platform building continued until the Late Norian. During the time period between the Middle Anisian and Rhaetian different types of carbonate rocks were deposited on the slopes and in the basins of these units: 1) greyish pink bedded limestone that suffered multiple phases of brecciation, 2) red, nodular, cherty limestone with purple-red shale intercalations, 3) grey to red bedded limestone with stromatactis structures, 4) the Massiger Hellkalk and Hangendrotkalk Members of the Hallstatt Formation and 5) grey, cherty beds of the Pötschen Formation.

Within the framework of the current study sedimentary and microfacies analyses were conducted regarding the Middle and Upper Triassic slope and basin carbonates of the three units, including resampling and revision of important drilling cores, detailed geological mapping of the surface outcrops and thin-section analysis. The next step in the near future will be the Conodont-biostratigraphical revision of important, yet not dated cores and profiles as well as stable isotope and other instrumental analyses.

The aim of the work is to create a modern and comprehensive facies model for the different rock types thus to gather additional data related to their paleoenvironment and paleogeographical position, clarify the similarities and differences between the different formations and try to correlate the Hungarian examples to the Austrian ones. A future goal is to use these newly acquired data and interpretations to help understand the otherwise very complex structural system and tectonic movements of the Aggtelek-Rudabánya Hills by determining the original relative position of the tectonostratigraphic units.