Rhynchostreon oyster's beds from Orlové sandstones - New view for one of the most problematic palaeoecological queries of the Western Carpathian's Klippen Belt (Klape unit, Western Carpathians)

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Oyster's beds (sp. Rhynchostreon suborbiculatum Lam.) from Orlové sandstones represent one of the most problematic palaeoecological gueries of the Klippen Belt of the Western Carpathians. The presence of oyster's palaeopopulations directly within the mobile-margin zone of Tethys area, especially during the massive tectonical activity period of late Cretaceous, is really striking. In the past decades there were published several partial studies (focused mainly to sedimentary record) that capture the evolution of opinions of the strata genesis (e.g. ANDRUSOV, 1945; SALAJ & SAMUEL, 1966; MARSCHALKO & SAMUEL, 1980; MARSCHALKO, 1986 etc.). These are in principle different in conclusions and interpretation of various palaeoecological aspects of the sedimentary environment (like bathymetry, internal energy etc.). A high resolution sampling (bed by bed method) in the "Hôrka nad pumpou" section (Považské podhradie, Slovakia) provided a new dataset to comparate. In an attempt to a complex view we summarize results of detailed sedimentary analysis (grainsize), ovster's shell morphology and taphonomy. ICP MS analysis of the sedimentary rocks and new data of the stable isotope record (δ^{13} C and δ^{18} O) from *Rhynchostreon* oyster shells. In comparison with data from several oyster-bearing sequences around the European region (mainly Bohemian Cretaceous Basin and Paris Basin) could help us to understand the genesis of studied areas and also potencial influence of palaeoecological aspects to the evolution of genus Rhynchostreon Bayle.

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