

# Geological evolution of Central and South-Eastern Europe in Neogene

Editorial

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The biennially organized International Workshop on the Neogene from Central and South-Eastern Europe has become a platform for the exchange of latest observations, current knowledge and understanding, experiences, and the problems encountered in reconstruction of the geological history of the Paratethyan basins [1, 2]. The multidisciplinary approach, collaboration of international contacts and effective communication has been essential for the Paratethyan geological community due to the division of this large territory over many countries.

This topical issue includes five papers. Seko, Pipík and Doláková [3] reexamine the early Badenian (early Langhian) ostracod assemblage at the stratotype Židlochovice in the Czech Carpathian Foredeep. They also quantify the ostracod associations and infer the circalittoral/epibathyal depositional depth. Brzobohatý and Stráňík [4] reconstruct the connection between the Vienna Basin and Carpathian Foredeep in the early Badenian (early Langhian) and find ecologically homogenous marine deep water fish otolith associations in the both basins. Together with the previous authors [3] they conclude this narrow tectonic structure was deeper than 200 m and according to accessible paleontological data, the early Badenian Carpathian Foredeep was the deepest at

the territory of the Czech Republic. These bathyal conditions persisted in the Czech Carpathian Foredeep from latest Burdigalian as [5] documented on diversified fossil assemblages. With the uplift of the area this deep-water sedimentation continued in the Polish Carpathian Foredeep. Interestingly, the bathymetrical topic was discussed several times at the workshop and it seems an important problem in the isolated and semi-isolated basins with endemic fauna [6, 7].

Oszczypko and Oszczypko-Clowes [8] summarize the nanofossil biostratigraphic data and present the lithostratigraphic model of the Outer Carpathian and Polish Carpathian Foredeep and reconstruct the main tectonic and sedimentary basin evolutionary periods during the Early and Middle Miocene. They hypothesize that the deformation phase onset is younger than it was previously supposed.

Radionova et al. [9] focuses on the biostratigraphy of the key section at the Taman Peninsula in the Eastern Paratethys with an aim to synchronize observed geological events with events in the adjacent regions of Central Paratethys, Mediterranean, and the World Ocean. Their paleontological and paleomagnetic data summary suppose a pulsative relationship between the Eastern Paratethys and Mediterranean.

Diedrich [10] summarizes the taxonomic and paleoecologic data on Upper Oligocene invertebrate and vertebrate macrofossils in the clastic deposits of northern Germany.

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Its analysis of paleocommunities allows a reconstruction of the Oligocene marine coastal environment.

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