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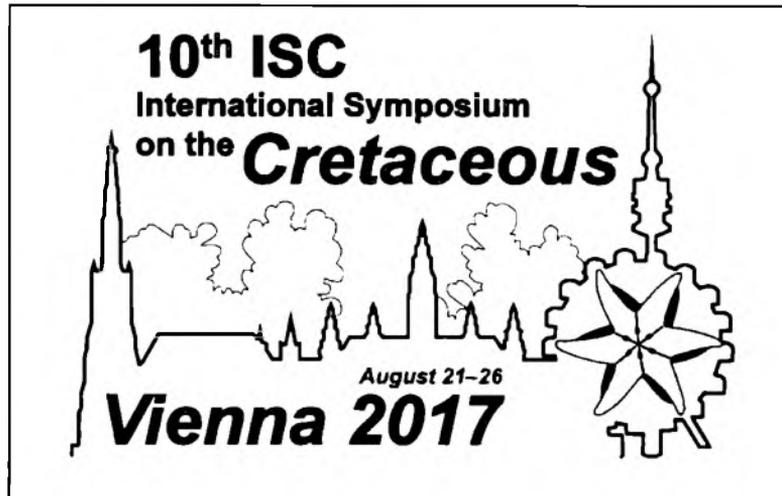
Benjamin Sames (Ed.)

ABSTRACTS

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BENJAMIN SAMES (Ed.)



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Late Cretaceous microfossils (Foraminifers and Radiolarians) as indicators of paleoclimate fluctuations (by example of the Russian sector of eastern Europe)

Kopaevich, L.^{1,*} and Vishnevskaya, V.²

1) Lomonosov Moscow State University, Moscow, Russia, *E-mail: lfkopaevich@mail.ru

2) Geological Institute of RAS, Moscow, Russia

The main Late Cretaceous palaeoceanographic features of the Russian Platform (RP) and Crimea-Caucasus (CC) area were controlled by the Tethyan/Boreal connection and sea-level changes (BARABOSHKIN et al., 2003). Rifting or some extension took place in the Crimea-Caucasus area during Albian-Cenomanian (NIKISHIN et al., 2008). This event resulted in the closing of the RP longitudinal sea connection, which was gradually interrupted. However, the foraminifers of the RP kept the previous structure and assemblages consist mainly of benthic taxa, similar to those of the West Siberian assemblages. Unlike in the RP, typical planktonic elements of the Tethyan fauna are clearly observed in the CC basin (keeled groups, rotaliporids and planomalinids). Among radiolarians, most *Crolanium*-species and the last representatives of the conical dictyomitrids became extinct at the Albian-Cenomanian boundary. These data on microfossil events indicate a gradual climate change. The most important foraminifers of the RP were calcareous benthic species, for which a detailed zonation has recently been proposed (BENIAMOVSKY & KOPAEVICH, 2001). At the same time, the Cenomanian was a time of diversification of the *rotaliporids* in the CC area. In the Cenomanian successions of the study area, there are no less than 4–5 species of *Thalmanninella* s.l., a typical group of Peri-Tethyan basins. New genera such as *Guttacapsa* and *Lipmanium* appeared, being accompanied by mass occurrences of pseudoaulophacoid discoid forms among radiolarians. These microfossil events indicate a warming, and prevailing influence of the Tethys.

During the Turonian–Coniacian interval the warm Tethyan Ocean extended to the north, however since the latest Santonian the water mass of the RP underwent a gradual cooling. Cold Boreal water influence (siliciclastic facies) is recognized along the northern margin of the RP. An obvious prevalence of benthic foraminifers and the presence of cosmopolitan taxa among planktonic forms are characteristic of the RP basin. The Uppermost Santonian–Lower Campanian is characterized by low diversity assemblages of planktonic foraminifers as the variety of previous groups reduced, and new morphotypes such as the globotruncanids s.l. developed gradually and not immediately achieved a high diversity. The appearance of the Family Prunobrachidae among radiolarians and the presence of taxa adapted to the boreal environment confirmed a cold water penetration near the Santonian-Campanian boundary (KOPAEVICH & VISHNEVSKAYA, 2016). Obvious warming impulses are associated with the terminal Maastrichtian. A deepening of the RP basin and a warming were recognized for the *Pseudotextularia elegans* interval. Isotopic data and calcareous dinoflagellate cysts (GUZHIKOV et al., 2017) confirm this warming impulse.

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