



5th International Congress on Stratigraphy

STRATI 2026

Exploring the Depths:
Bridging Tradition and Innovation in Stratigraphy

Abstract Volume

June 29-July 3, 2026, Suzhou, China





Ammonites of Tethyan Affinities in the Callovian and Upper Jurassic of the Russian Platform: A Key for Unraveling Palaeogeography, Climate Oscillation and Interregional Correlation

Mikhail Rogov¹, Dmitry Kiselev²

1. *Geological Institute of RAS, Moscow, Russia*

2. *Yaroslavl State Pedagogical University, Yaroslavl, Russia*

Abstract During the Middle Jurassic (Bathonian–Callovian) and the entire Late Jurassic, the Russian Platform was occupied by a shallow but extensive epicontinental basin, the Middle Russian Sea, connected to the Arctic basins in the north, the northern margins of the Tethys Ocean in the south, and the epicontinental seas of Western Europe in the west. This unique palaeogeographic setting facilitated the co-occurrence of molluscan faunas of different palaeobiogeographic origins. Although Boreal and Subboreal taxa predominate throughout the succession, certain intervals record incursions of Tethyan ammonites. Such events are interpreted as reflecting fluctuations in water temperature, shifts in palaeoceanographic circulation, and reorganisations of palaeogeographic connections. They also provide crucial tie-points for Boreal–Tethyan correlation. The main episodes are summarised as follows: 1) the base of the Callovian is marked by the widespread occurrence of *Macrocephalites jacquoti*; 2) the appearance of common heteromorphs (Parapatoceras) together with rare oppeliids in the Kepplerites Galilaei Subzone; 3) oppeliids are relatively common throughout the Middle and Upper Callovian, but a single record of *Rehmannia crassicostata* in the crassum biohorizon is particularly noteworthy; 4) four families of ammonites of Tethyan origin (Peltoceratidae, Aspidoceratidae, Oppeliidae, Pseudoperisphinctidae) are widely present in the Upper Callovian, with addition of Kinkelineratidae is the Lamberti Zone; 5) in the Lower and Middle Oxfordian, aspidoceratids are common, whereas oppeliids are largely confined to short intervals, such as the baccatum biohorizon (Lower Oxfordian) and the Densiplicatum–Tenuiserratum transition; 6) the Upper Oxfordian is dominated by Boreal ammonites, with a single mass occurrence of aspidoceratids (frickensis biohorizon); 7) the Lower Kimmeridgian includes several short intervals of Tethyan ammonite dominance, notably abundant oppeliids and aspidoceratids during the subtilicaelatum biohorizon, and the co-occurrence of Crussoliceras with oppeliids at the very end of the substage; 8) in the Upper Kimmeridgian, Tethyan aspidoceratids and oppeliids occur regularly alongside Boreal (cardioceratids) and Subboreal (aulacostephanids, virgatitids) taxa; 9) a few intervals with Tethyan



ammonites are recognised in the Lower Volgian; 10) the last Tethyan ammonites (*Haploceras*) are recorded in the lowermost Middle Volgian. This study was supported by the Russian Science Foundation (project no. 25-17-00210).

Key words palaeogeography, correlation, ammonites