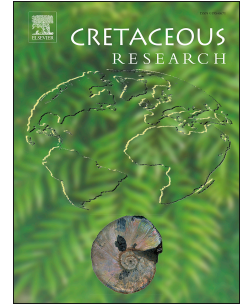


# Accepted Manuscript

Cephalopods, small vertebrate fauna and stable isotope ( $\delta^{13}\text{C}$ ,  $\delta^{18}\text{O}$ ) record from the Jurassic-Cretaceous transition (uppermost *Crassicollaria* through *Calpionella* Zones) of the Outer Western Carpathians, Kurovice quarry (Czechia)



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1 **Cephalopods, small vertebrate fauna and stable isotope ( $\delta^{13}\text{C}$ ,  $\delta^{18}\text{O}$ ) record from the**  
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15 **Abstract:** An unusual and very important macrofauna has been recorded in the deep water  
16 environment (i.e. below the aragonite CCD) of the uppermost Tithonian – lower Berriasian  
17 carbonate calpionellid-bearing sequence of the Kurovice section (Czechia). Rhyncholites,  
18 belemnites, and small vertebrate fauna of elasmobranchians (Neoselachii) are reported herein  
19 from a submarine slump probably resulting from a tsunami-like event. The Jurassic –  
20 Cretaceous (J/K) boundary interval is well demarcated by the occurrence of small globular  
21 *Calpionella alpina*, the J/K boundary marker established by the Berriasian Working Group.  
22 Rhyncholites, belemnites, and elasmobranchians are re-evaluated herein within the modern  
23 taxonomic concept, and they are stratigraphically investigated. High resolution sampling  
24 provided new data on the stable isotope record ( $\delta^{13}\text{C}$  and  $\delta^{18}\text{O}$ ) from the uppermost part of the  
25 *Crassicollaria* through the *Calpionella* Zones. The stable isotope record shows only minor  
26 excursions of the  $\delta^{13}\text{C}$ , with values below 0.5‰, and typically varying from 0.7‰ to 1.2‰ V-  
27 PDB; the most negative peak  $\delta^{13}\text{C} = 0.2\text{‰}$  V-PDB is recorded in the uppermost  
28 *Crassicollaria* Zone. A slightly negative shift of carbon isotope values exceeds about 0.2‰ at  
29 the J/K boundary. A similar trend at the critical J/K boundary interval (base of the *Calpionella*

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