

## Early Cretaceous ammonites and dinoflagellates from the Western Tatra Mountains, Poland

Zdeněk Vašíček, Błażej Błażejowski, Andrzej Gaździcki, Maria Król, Jerzy Lefeld, Petr Skupien, and Andrzej Wierzbowski


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The first Early Cretaceous (Valanginian–Hauterivian) ammonite fauna from the lower part of the Kościeliska Marl Formation (Wściekły Żleb Member) of the Lower Sub-Tatric (Krížna) Nappe, in the Lejowa Valley of the Tatra Mountains are described. The fauna is precisely placed in the succession and consists of five species: *Olcostephanus densicostatus*, *Spitidiscus* cf. *cankovi*, *Criosarasinella* cf. *subheterocostata*, *Crioceratites primitivus*, and *Crioceratites coniferus* and additionally an aptychus *Didayilamellaptychus seranonis*. Remarkable are the valves of anomiid bivalves attached to body chamber of large size heteromorph ammonite *C. primitivus*. Moreover, a variety of stratigraphically important organic-walled dinoflagellate cysts are recovered from this locality. Dinoflagellates: *Cymosphaeridium validum*, *Circulodinium vermiculatum*, and representatives of *Bourkidinium* define the Upper Valanginian–Lower Hauterivian *Sentusidinium* sp. A Dinocyst Subzone of the *Cymosphaeridium validum* Zone. The character of deposits, the palynofacies, and associations of dinoflagellate cysts indicate a calm marine outer neritic environment.

**Key words:** Ammonoidea, Anomiidae, Dinoflagellata, Valanginian, Hauterivian, Western Carpathians.

Zdeněk Vašíček [[zdenek.vasicek@ugn.cas.cz](mailto:zdenek.vasicek@ugn.cas.cz)], Institute of Geonics, Academy of Sciences of the Czech Republic, Studentská 1768, CZ-708 00 Ostrava-Poruba, Czech Republic. Błażej Błażejowski [[bblazej@twarda.pan.pl](mailto:bblazej@twarda.pan.pl)] (corresponding author) and Andrzej Gaździcki [[gazdzick@twarda.pan.pl](mailto:gazdzick@twarda.pan.pl)], Institute of Paleobiology, Polish Academy of Sciences, Twarda 51/55, 00-818 Warszawa, Poland. Maria Król [[mkrol@tpn.pl](mailto:mkrol@tpn.pl)], Tatra National Park, Kuźnice 1, 34-500 Zakopane, Poland. Jerzy Lefeld [[222gama@gmail.com](mailto:222gama@gmail.com)], Institute of Geological Sciences, Polish Academy of Sciences, Twarda 51/55, 00-818 Warszawa, Poland. Petr Skupien [[petr.skupien@vsb.cz](mailto:petr.skupien@vsb.cz)], Department of Geological Engineering, Faculty of Mining and Geology, VŠB-Technical University of Ostrava, 17. listopadu 15, CZ-708 33 Ostrava-Poruba, Czech Republic. Andrzej Wierzbowski [[andrzej.wierzbowski@uw.edu.pl](mailto:andrzej.wierzbowski@uw.edu.pl)], Faculty of Geology, University of Warsaw, Żwirki i Wigury 93, 02-089 Warszawa, Poland.

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