

In Czechoslovakia, crude oil was for the first time examined in this way on samples from bore Lubná-1. The assemblage of organisms established there fully corresponds to that from the Neogene sediments of the Carpathian foredeep. As it is considered to be autochthonous, the conclusion can be drawn that oil originated there in the Neogene.

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## Applied micropaleontology in the Cretaceous of Moravia

### (Abstract)

The Upper Cretaceous of Moravia has a complete stratigraphic sequence. It is developed in marine facies. All subsequent substages from the Cenomanian to the Maastrichtian were determined by means of foraminifers. In some partial basins the thickness of sediments is more than 5000 meters, especially in the Silesian Flysch trough. The sediments were zoned according to the pattern elaborated by BANDY (1967) and his ideas based in the evolutive lines of Cretaceous planktonic *Globotruncanids* and *Heterohelicids*. From the ratio of different species of planktonics found in the outer Flysch all the Moravian territory belongs to the transitional zone between the Boreal and the Mediterranean bioprovinces. Flysch biotop does not show any of this pattern. It is explained as a permanently subsiding trough with changeable conditions in the salinity (PH factor) redox potential, clarity of water and other abiotic as well as biotic factors, all of them affected by the huge inrush of terrigenous material, coming from the cordilleras, exotic blocks and from the Bohemian massiv too. This biotope is represented by very primitive foraminifers rarely accompanied by planktonics (*radiolarians*).

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## The Foraminifera and their Significance for the Stratigraphy of the Cretaceous of Bohemia

(Abstract)

Upper Cretaceous sediments of the Bohemian Massif were deposited in a period ranging from the Upper Cenomanian to the Lower Santonian. On the basis of micropalaeontologic investigations it has been possible to distinguish the Upper Cenomanian; the Lower, Middle and Upper Turonian; and the Lower and Upper Coniacian. Only sandy sediments, which did not favour preservation of the foraminifers, were deposited during Lower Santonian time.

According to their stratigraphical significance, the foraminifera can be subdivided into the following groups:

1. Species having no stratigraphical significance, these are found in beds ranging in age from the Cenomanian or Lower Turonian to the Coniacian (*Lenticulinae*, most of *Fronicularia*, *Nodosaria*, *Valvulineria lenticula* [REUSS], *Textularia foeda* REUSS, and others).

2. Species limited only to a certain part of the Upper Cretaceous, mostly to its lower portion (up to the end of Middle Turonian) or to the Upper Turonian and Coniacian.

3. Species which were referred to by F. BETTENSTAEDT (1952) as "Häufigkeitsfossilien". These are of wider stratigraphical range over large areas, but confined to certain stratigraphical units in relatively small areals; as in the Cretaceous of Bohemia.; such a limited stratigraphical range is chiefly due to ecological factors; *Cassidella tegulata* (REUSS), *Vaginulina ensis* REUSS, *Stensiöina granulata* (OLBERTZ), *Stensiöina exsculpta* (REUSS), etc.