1.4.d. Presentations given in Praha*) and Bratislava**)

Eva Benešová

Applied micropaleontology in the Paleogene of Moravia

Paleogene sediments of Moravia (Ždánice Unit) contain macrofossils for biostratigraphical correlations. From other groups of fossils smaller foraminifera are suitable for stratigraphical zonation. Stratigraphical ranges of most of planctonic foraminiferal species and their evolutionary lineages may be correlated with planctonic zones used in worldwide measurement. The benthonic part of all foraminiferal assemblages yields material for studying ecological conditions and for the reconstruction of the development and changes in the sedimentary provinces.

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N. Gabrielová

Plant microremains in crude oil

(Abstract)

Recently, the study of organic microremains has proved to be useful in the solution of problems connected with migration of crude oil and its genesis. These problems have been dealt with by many authors (J. C. Sanders, 1937; K. R. Čepikov & A. M. Medvedeva, 1953, 1960, 1961; A. Horowitz & Y. Langozsky, 1965; C. Sittler, 1955; J. Tomor, 1950, 1964, and others) who studied oils of different ages from important petroleum areas. For obtaining microorganisms from crude oil, laboratory preparation is necessary, which mostly consists in filtration or separation by centrifugation. After a microscopic study, the assemblages of organisms from crude oil are compared with those known from the reservoir rocks.

*) Ústr. Ústav Geologický, Malostr. Nám. 19, Praha 1.

**) D. Stur Institute of Geology, Mlynska dolina 1, Bratislava.

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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E. Hanzlíková

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)*.