work on two Aptian-Albian sections in the are of Djebel Oust. These sections had already been investigated in the frame of the VIth African Micropaleontological Colloquium in Tunis, 1974. They have now been surveyed cartographically. Based on over 300 samples, the lithology, facies, microfacies and biostratigraphy have been investigated and documented.

The benthonic and planktonic foraminifera zonation (Tab. 1) is based on the first occurrence of index forms in the sections. Compared with former subdivisions, the biostratigraphic resolution has been considerably improved.

The individual zones are rich in benthonic and planktonic foraminifera. Their variability is considerable . The foraminifera are well preserved and show no traces of redeposition. In portions with turbidites, samples were taken from parts which had not been affected by turbiditic activities.

The sections have been correlated with Berriasian-Albian sediments of the Vocontian trough, which had been investigated by M. MOULLADE (1966, 1977), R. BUSNARDO, J.-P. THIEULOY, M. MOULLADE et al. (1979), and by A. ARNAUD-VANNEAU, H. ARNAUD, J.-P. THIEULOY and M. ARGOT (1987).

BIOZONATION OF LOWER CRETACEOUS SEQUENCES IN THE WESTERN CARPATHIANS, CSFR

J. Michalik,*, D. Rehakova* and Zd. Vasicek**

* Geological Institute of the Slovakian Academy of Sciences, Bratislava, CSFR
** Mining University, Ostrava, CSFR

Together with microfacies and microplankton, the distribution of other fossil groups has been examined in well-documented Lower Cretaceous sections of the Western Carpathians.

Biostratigraphic markers of co-occurring groups of organisms enabled the authors to compare various para-biostratigraphic scales.

Ammonites are too rare in the Western Carpathians to be applicable for a zonation of the Tithonian/Berriasian boundary beds. The localization of the J/K boundary is mainly based on the calpionellid distribution (Crassicollaria/Calpionella zones boundary). Although radiolarians have lost their importance as rock-forming oragnisms during late Jurassic time, a change in the composition of radiolarian associations at the J/K boundary is evident. Other evidence for this boundary is provided by the mass eruption of nannocones and the appearance of new nannoplankton forms.

The Berriasien/Valanginian boundary is mainly drawn with calpionellids, less commonly with radiolarians or nannoplankton. Despite the adundance of microfossils,

changes of faunal associations at the Berriasian/Valanginian boundary are rather poorly documented.

Late Valanginian and Hauterivian ammonite faunas of the West Carpathians are comparable with mediterranean associations. In general, standard ammonite zonations - especially of France and Bulgaria - are applicable. There are only a few ammonite zones which are inadequately represented by index species. The Hauterivian/Barremian boundary can be drawn with Pseudothurmannia beds, by the disappearance of aptychi, with calpionellids (Tintinnopsella), by the exploding abundance of hedbergellid foraminifera, and by changes in nannoplankton assemblages.

Both the platform carbonates and basin sediments of Barremian, Aptian, and Lower Albian age are well dated with ammonites, belemnites, micro- and nannofossils. However, the scarcity of stratigraphically important species does not allow a detailed correlation of even well-documented sections. Best results have been achieved with foraminifera and microproblematica.

The biostratigraphic correlation of Upper Albian and Cenomanian sequences is based on foraminifera and nannoplankton. The palynomorph zonation has also been applied to several sections.

LATE CRETACEOUS EVOLUTION OF THE MAGURA BASIN

N. Oszczypko

Jagiellonian University, Krakow

The Magura nappe is the largest tectonic unit of the Western Carpathians. It is linked with the Rheno-Danubian Flysch of the Eastern Alps. During tectonic movements the Magura nappe has been completely uprooted along ductile Upper Cretaceous rocks. Older deposits are only known form that part of the basin which is incorporated into the Pieniny Klippen Belt.

Three different stages can be distinguished in the sedimentary evolution of the Magura basin:

1. The Middle Jurassic-Albian (96 m.y.) extensional period with a pelagic sedimentation

2. The Cenomanian-Campanian (23 m.y.) period of hemipelagic deposition

3. The Maastricthtian-Early Oligocene (40 m.y.) mainly compressional period of turbiditic deposition

The Upper Cretaceous-Paleogene flysch deposits of the Magura nappe may be subdivided into a Campanian/Maastrichtian-Paleocene and a Lower Eocene-Lower Oligocene turbiditic complex (cycle): Each of these cycles begins with pelitic basinal