

sp., *Hystrichosphaeridium salpingophorum*, *Spiniferites pseudofurcatus*). Therefore the paleoenvironment of the dinoflagellates described was a relatively warm-water open ocean.

The identified species are distinguished by a relatively large biostratigraphic range and palaeogeographic distribution. About 60% are known in the North-American Paleocene and about 15% are known in the Australian Paleocene.

SOME STRATIGRAPHIC AND PALAEOLOGIC OBSERVATIONS ON THE CRETACEOUS/TERTIARY BOUNDARY IN THE NIKSAR REGION (PONTID-TURKEY)

N. Inan, H. Temiz

Cumhuriyet Üniversitesi, Mühendislik Fak. Jeoloji Müh. Böl. 58140 Sivas, Turkey

It has been observed that the lithologic transition between the Cretaceous-Tertiary boundary is conformable in the Niksar (Tokat, NE of Turkey) region. Kirandağ formation of Maestrichtian age, composed of limestone-marl alternation is conformably by Erencik formation of Danio-Montian age which is represented by clayey limestone. The characteristic benthic foraminifera of Upper Maestrichtian age are *Orbitoides apiculatus* SCHLUMBERGER, *Orbitoides medius* (d'ARCHIAC), *Omphalocyclus macroporus* LAMARCK, *Hellenocyclina beptica* REICHEL, *Smoutina cruysi* DROOGER, *Sirtina orbitoidiformis* BRÖNNIMANN, *Anomalina* sp., *Gyrodina* sp., *Cidelina* n.gen.n.sp (SIREL, unpublished) followed with *Laffitteina bibensis* MARIE, *Laffitteina mengaudi* (ASTRE), *Idalina sinjarica* GRIMSDALE, *Rotalia perovalis* TERQUEM, *Anomalina* sp., *Gyroidina* sp.. For this reason, these benthic foraminifera show Danian i age.

THE HYSTRICIDAE FROM THE PLEISTOCENE OF MACEDONIA (GREECE) AND A REVIEW OF THE EUROPEAN REPRESENTATIVES OF THE FAMILY

K. Koliadimou, G. Koufos

Aristotle University of Thessaloniki, Department of Geology,
54006 Thessaloniki, Greece

The remains of some hystricids from the Mygdonia basin (Macedonia, Greece) are studied; the taxonomy of the known representatives of *Hystrix* and the relevance of the various species for the biostratigraphy of Neogene / Quaternary is also discussed. The studied material comes from the locality of Gerakarou-1 (GER) which is situated into the Pleistocene deposits of the Mygdonia basin. The morphological characters of the studied specimens allow us to identify these as *Hystrix major* (GERVAIS 1859). The locality has been dated by

its fauna to Biharian (late Villafranchian).

The comparison of the known Eurasian material each together and with the new specimens allows us to distinguish two clear species in the Neogene / Quaternary: *Hystrix primigenia* (WAGNER 1848) and *Hystrix major* (GERVAIS 1859). The first is characterized by large and robust teeth with simple synclinid I and almost quadrangular occlusal surface. The other species has medium-sized and slender teeth with complicated synclinid I and more or less rounded occlusal surface.

Finally the biostratigraphy of the two species is reviewed. It is proved that *H. primigenia* is a stratigraphic indicator of late Miocene and Pliocene; on the other hand *H. major* is a stratigraphic species of latest Pliocene and early Pleistocene.

THE PETRALONA CRANIUM: C.T.-SCAN FINDINGS

P. Le Floch-Prigent*, A. Moshidou-Poizois**

*Université Paris V, U.F.R. de médecine Paris-Ouest et Biomédicale des Sts Pères, Laboratoire d'Anatomie, 45 rue des Saints Pères 75270 Paris Cedex 06, France

**Ippokratío Hospital, Department of Radiology, Aristotle University of Thessaloniki, 54006 Thessaloniki, Greece

The Petralona cranium is a very late *Homo erectus* or very early *Homo sapiens*. It is well preserved except some missings in the central bones of the face. We performed a C.T.-scan examination in order to obtain new architectural and morphological features. Two blocks of foam were carved to receive the cranium in determined positions and the C.T.-scan was performed all along the osseous axes with the reference horizontal chosen as the orbito-meatal plane (Frankfurt plane) and the two other planes: frontal and sagittal were orthogonal to the horizontal. We obtained more than one hundred sections, each one was photographed and developed at scale one; eight other sections were performed in the occlusal plane at the level of the teeth and alveolar bridge. By morphometry with a grid-point every 10mm, we measured the intra-cranial capacity. The main findings of the C.T.-scan were the semi-circular shape of the vault on the frontal sections, and its thickness of about 10mm in every point; the relationships of the frontal poles of the brain with only the posterior third of the roof of the orbits, witness of a less degree of telencephalisation in comparison with modern man. The sinuses were very large and the frontal sinuses occupied the entire width of the cranium frontward, their total capacity was calculated by morphometry between 60 and 80cc; eight partial sagittal blades inside each frontal sinus came from the front wall and reinforced the structure; the posterior wall of the sinus in contact with the cranial cavity was thicker than the anterior wall. The maxillary sinuses were also very large with a very flat anterior wall, but two many defects make uneasy the calculation of their capacity. The intra-cranial capacity was found in the three series of sections near the real, physical value of 1200 cc with a precision varying from 0,2 to 3,3% depending of the plane and of the degree of the outlines reconstruction necessity. This examination was very