mian–Carbomiferious molasse which includes the Stephan and the Oten series. These data can throw certain doubt on the validity of distinguishing of Carboniferous and Permian systems in Central Europe within their now assumed stratigraphic and paleontological boundaries.

7. Acidic volcanic formations in the Halle region are traditionally divided into what is known as the "Upper Halle" and the "Lower Halle" porphyries, the age relations of which are the subjects of discussion either. The authors hold to the idea that the "Upper Halle quartz porphyries" represent extrusive and effusive liparites, which form in the Halle–Delitch region several dome–type volcanic centers, and the "Lower Halle quartz porphyries" are subvolcanic intrusive bodies of the granite–porphyries which formed after the "Upper Halle" liparites.

The discovery through drilling of the "Lower Halle granite–porphyries" dikes among the "Upper Halle quartz porphyries" confirm this interpretation.

8. Paleovolcanic regions in the North–West Saxony and Halle, as well as, other regions with the orogenic subsequent volcanism in Saxony and Thuringia (Thuringia Forest, Tarandtov Forest, etc.) represent volcano–tectonic depressions, which developed on magmatic, metamorphic and sedimentary Paleozoic geosyncline rocks and on the Precambrian basement. Geological structure and the development history of all depressions have much in common, however each having individual features depending on geotectonic position of the depression and the structure of its basement.

THE EVOLUTION OF THE ALTAIDS OR WHY ARE THERE NO HERCYNIDES IN ASIA?

A.M.C. SENGÖR[1], B.A. NATALIN[1], V.S. BURTMAN[2]

[1] *ITO Maden Fakültesi, Jeoloji Böl., Istanbul 80626 Turkey*

[2] *Geologicheskii Inst. Ross. Akad. Nauk, Moskva 109017, Russia*

Asia grew by about 5.3 km^2 during the evolution of the Altaid tectonic collage which includes mainly the Palaeozoic orogenic belts around the Angaran craton. In the Vendian, the Angaran and the E. European cratons were united along their present N margins and were in the S hemisphere. In the late Vendian to the late Cambrian a long ensialic island arc (the Kipchak Arc) rifted from the eastern margin of this megacraton as the two also parted, and Angara began rotating in a clockwise sense with respect to E. Europe. Subduction along the present Uralian margin of E. Europe formed the Mugodzhar arc. In the early Devonian, the S.end of the Kipchak arc collided with the Mugodzar arc and was sliced by subparallel strike slip faults forming the present W flank of the Kazakhstan orogene. Ongoing subduction to the N of the Kipchak arc formed the subduction–accretion complexes now found in N. Kazakhstan.In the late Carboniferous Angara and the European cratons had acquired roughly their present E–W distance apart but were shearing right – laterally.This tore apart the earliest West Siberian Basins.In the late Permian, the sense of the shear changed and the two cratons acquired roughly their present positions. The Altaid accretionary complexes grew mainly in front of the Kipchak arc but in Mongolia their development continued uniterruptedly into the Jurassic.In Kazakhstan some Altaid tectonics also continued into the Triassic. The Altaids resemble neither in their tectonic style nor in their temporal evolution to the European Hercynides with which they have no genetic connection either.

ICE DELIVERED DETRITUS IN THE CIRCUMPOLAR OCEAN NEAR THE TIP OF THE ANTARCTIC PENINSULA

W. SKERIES[1], A. HOFSTETTER[2] & D. MATTHIES[3]

[1] *Optische Gesteinsbestimmung, Richard Strauß–Str. 89, D – 816 79 München, Germany*

[2] *Institut für Mineralogie und Petrographie, Theresien–Str. 41, D – 80333 München, Germany*

[3] *Lehrstuhl für Forstliche Arbeitswissenschaften und Angewandte Informatik, Hohenbachern–Str. 22, D – 85354 Freising, Germany*

In the sediments off shore the Antarctic coast especially the coarse grain detritus has been delivered by swimming icebergs, which loose their endosed rubble freight by melting. Within 83 sediment sam–