

Mid-conference Field trips: Field Trip 6



Field Trip 6

(Sept. 9, 2010)

The evolution of the Cenozoic Rhine Graben Rift System: Micropaleontological evidence

Field Trip Leaders: Prof. Jörg Pross and Prof. Wolfgang Oschmann

The Rhine Graben forms a major segment of the Cenozoic Rift system running through Western Europe. From late Eocene to mid-Oligocene times, regional tectonic subsidence and eustatic sea-level rise caused the Rhine Graben to be part of a marine gateway connecting the Tethys and the North Sea. At the same time, there was a narrow marine connection to the western Paratethys. This field trip focuses on exploring transgressive sedimentary sequences of Rupelian (Early Oligocene age) as exposed in the Mainz Embayment (northern Rhine Graben). Sediments deposited in the central parts of the embayment during that time consist of silt- and claystones up to 200 m thick; bottom-water oxygenation fluctuated strongly and ranged from aerobic to nearly anaerobic conditions. These sediments, which can be sampled during the field trip, contain abundant Oligocene benthic foraminifera, ostracods and organic-walled dinoflagellate cysts.

Costs:

30 Euros

Programme: Travel to the Frankfurt area from Bonn by bus (the bus will leave Bonn at 7:30 am and will return to Bonn by 15:30).

