

ANALYSIS OF SEDIMENTATION IN OLD LITHUANIAN QUATERNARY BASINS

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There are known sequences mainly of the sandy sediments up to 30 m outcropped in the river valleys of Lithuania, the origin of which was under discussion until now. A detailed structural, textural and compositional research in Eastern Lithuania was carried out. The several sequences of Prepleistocene and Pleistocene deposits were analysed with the main emphasis to the intertill ones. The sequences of deposits in Daumantai, Vetygala, Vilkiškės, Tartokai and Rokai outcrops were investigated. As a result of structural, grain size and geochemical analysis the lithocomplexes were distinguished and correlated. The changes of deposit features in relation with all the obtainable parameters of sedimentation were estimated to identify the sedimentary environments. Distinguished and described lithofacies represent a non-glacial sedimentation. The preglacial deposits in Daumantai and Vetygala, the interglacial deposits in Vilkiškės and Tartokai and interstadial in Rokai outcrops were identified. The lithofacies represents the sedimentation in palaeobasins of different origin: Pleistocene interglacial and interstadial lakes and the lakes of probably ice-dammed valleys of the end or beginning of interglacials. Prepleistocene lake and alluvial systems. The palaeobasin reconstruction was carried out on the basis of sequence correlation.