

**Abstract:**

Komořany Lake, regarded as one of the most important sites of the Czechoslovak Quaternary, was situated at the southern foot of the Krušné hory Mountains, northwest from the Starý Most town, between the villages of Souš, Komořany, Ervěnice, Dřínov, Albrechtice, Černice and Dolní Jiřetín. Due to its size, Komořany Lake belonged to the largest bodies of water in the Czechoslovak Republic (25 km<sup>2</sup>) and due to the quantity of organogenic sediments get into the focus of paleoecologists. Gytty sediments which occupy comparatively thick position in the lake infilling, formed a continuous record from the Last Glacial period to the Subatlantic period and up to now have been processed mainly from the paleoecological point of view. In this work the organogenic sediments are studied from the sedimentary record using modern geochemical methods (TOC/TN and  $\delta^{13}C$ ) for the first time in Komořany Lake history. The work was based on profiles (PK-1-C, PK-1-Ch, PK-1-I and PK-1-W) which were taken between 1977-1983 before a complete exploitation of Komořany Lake sediments as a result of coal mining in the Most Basin in the 1980's.