

**Chemical composition of organic
sediments from the Mizerów
peatland (Upper Vistula River
Valley, southern Poland) -
preliminary study**

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Based on physical and geochemical properties, peats are one of the most heterogeneous sediments. Both parameters allow to reconstruct sedimentation stages of organic sediments. The geochemical investigation of the Mizerów peatland was done by using a X-ray fluorescence. Distribution of elements in individual layers of the studied sediments is a record of deposition of peat, which may be used to characterization of environmental conditions in the biogenic reservoir. The concentration of elements as well as their selected ratios have been used to determine e.g. state of eutrophication, redox condition character. Moreover, as the indicator of the denudation intensity TOC (Total Organic Carbon) was applied. Record of changes in environmental conditions has been compared with vegetation in the studied area.