

Binding Form of Trace Elements in Sediment of a Meromictic Lake – Ewa Szarek-Gwiazda

Summary

Speciation of trace elements in the sediment of a meromictic Piaseczno Lake (inundated opencast sulphur mine, southern Poland) with permanently anoxic monimolimnion was studied. A 6-step sequential extraction procedure was applied to determine operationally defined phases: exchangeable (F1), carbonate (F2), easily reducible (F3), moderately reducible (F4), organic/sulphides (F5), and residual (F6) in the sediment. The differences in trace elements (except Mn) speciation in the littoral sediment with the respect of lake depths were not found. Considerable difference in the trace elements speciation between the littoral sediment and permanently anoxic profundal one was found.