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Title: GEOCHEMICAL CHARACTERISTIC OF THE LENA RIVER DELTA, EAST SIBERIA, RUSSIA

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Study of geochemical aspects of sedimentation on shelf zone, sea estuaries and river deltas in Arctic is actual at the present time due to the interest of research contribution of river to the formation of the seas waters.. Big part of research of formation and output of terrigenous material by Siberian Rivers covered by Russian and German scientists (Gordeev 1983; Savenko, 2006; Alekseevsky, 2009; Bolshiyarov; Rachold 1999; 2006, et.al.). But many of the geochemical studies conducted by scientists in terms of the marine side and estuaries are not studied well. River deltas are serve an important function of sedimentary geochemical barriers, and kind of biofilters of terrigenous material for up to 90% of suspended particular matter and up to 40% of dissolved substances flowing to the ocean. Our interests are concentrating on the Lena River (East Siberia, Russia) as a biggest delta in the Arctic. The study is based on multiyear data from periodic literature and field data form regular Russian-German expeditions to the delta. The results have been showed different sources and role of different factors on formation of geochemical flow of the Lena River Delta. Concentrations of dissolved and suspended substances from different water objects of the Delta (big and small delta channels, inflows from ice-complex, lakes etc.) allow to make first conclusions about a transformation of the geochemical flow from the top of the delta to the sea edge.