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## History of the Pollution in Tomsk Region (Siberia, Russia) According to the Study of High-Moor Peat Formations

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### ABSTRACT

A method that could be used to detect the change of the environment was used to determine the input of trace elements from the atmospheric fallouts into the biosphere near Tomsk city (West Siberia, Russia) during the last century. In this study we used high-moor peat formations because of the wide-spread occurrence of bogs in this region. Investigations of the raised peat bogs in areas with different degree of anthropogenic impact showed that the distribution of trace elements in the upper parts of peat deposits depends on the location of bogs towards industrial sources. The highest concentrations of Ca, Fe, Cr, Co, Sc, Hf and rare earth elements were found in the upper part of the bog located near the city Tomsk. Distribution of trace elements in the vertical profiles of raised peat deposits near cities Tomsk and Seversk reflects the industrial specialization of these cities and the dynamic of the atmosphere pollution. Studies of radioactive elements ( $^{137}\text{Cs}$ ,  $^{238}\text{Pu}$ ,  $^{239}\text{Pu}$ ) have indicated their inputs from global fallouts.

### KEYWORDS

Atmosphere Pollution, High-Moor Peat, Trace Elements in Peat

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