

Assessment of Soil Pollution with Presumably Contaminating Elements in Moscow **Recreational Areas Using Instrumental Neutron Activation Analysis**

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Urban area is subjected to intensive pollution due to continuous anthropogenic activity. In order to assess the influence of thermal power plants and waste incineration plants on soil pollution in Moscow the content of 37 major and trace elements was determined using neutron activation analysis in soils collected at two different depths in the vicinity of the potential pollution sources. Comparison of the mass fractions of determined elements with upper continental crust value evidenced high similarity of the values, except Ca. The Discriminant Analysis was applied to reveal similarities between the collected soils composition. The distribution of major, as well as of trace elements in analysed soils indicates on their mixed origin. Contamination factor, enrichment factor, geoaccumulation index and pollution load index were used for a comprehensive evaluation of the soil contamination with presumably contaminating elements Cr, Ni, Zn, As, Sb and Hg, but only for some places the pollution load index was no greater than 1.05, suggesting a localized moderate contamination in the vicinity of only few thermal power plants.