



Concentration profile of the platinum group elements in peat deposit near a historic Pb-Ag mining district

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Concentrations of platinum group elements (PGE) and Ag were studied in a minerotrophic peat deposit near a historic Pb-Ag mining district (Přibram, Czech Republic). The PGE determinations were performed by quadrupole ICP-MS after NiS fire assay procedure. In the individual peat layers (dated by measurement of ^{210}Pb activity) the PGE concentrations were low and ranged from 0.015 ng.g⁻¹ (Ir) to 11.8 ng.g⁻¹ (Pt). The enrichment of PGE (especially Pt) compared to the Earth crust contents were observed during two periods. The peak in the second half of 19th century was explained by massive increase of ore mining and affinity of PGE to concentrate in molten lead during Pb processing. The recent PGE enrichment in peat layers might be explained by automobile (with catalytic converters) exhaust fumes or processing of computer electronic parts by the smelter.