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Traces of Sr-90 in the Sediments of the Danube River

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As part of the "Joint Danube Survey 3 (JDS 3)," a project by the International Commission for the protection of the Danube River (ICPDR), we have investigated the amount of radiostrontium (Sr-90) in sediment samples taken from the Danube river. The material was extracted from the geologic matrix chemically, separated from other radonuclides using a strontium-specific ion exchange resin (Eichrom) and quantitative measurement by liquid scintillation counting (LSC). For the most part, we found minor activities of maximum 10 Bq/kg and, overall, very low levels of Sr-90 pollution. The most contaminated of sediment was found in the upper Danube –especially near Moson and Dravski Kut, where the Drava enters the Danube and at some places near the river delta.

This survey is the first its type for 90Sr and, therefore, little prior data is available for comparison.

Country or International Organization

Austria

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