CONCENTRATION OF RADIONUCLIDES $^{137}\text{Cs}$, $^{239+240}\text{Pu}$ and $^{40}\text{K}$ IN SOIL SAMPLES FROM SOME REGION OF TATRA’S NATIONAL PARK — PRELIMINARY INVESTIGATION

Summary

Following the Chernobyl catastrophe the natural ecosystem of the Tatra's has been seriously radioactively contaminated. The radioactive $^{137}\text{Cs}$, $^{134}\text{Cs}$, $^{90}\text{Sr}$, $^{239+240}\text{Pu}$, $^{238}\text{Pu}$, $^{241}\text{Pu}$ and $^{241}\text{Am}$ were the artificial radionuclides found in the Park. The $\alpha$, $\beta$, $\gamma$-radionuclides were introduced into the natural environment by nuclear tests conducted in the middle of the 20th century, and — in 1986 — as a result of the failure of the Chernobyl nuclear reactor. However, some radionuclides (for example $^{40}\text{K}$) are natural isotopes existing since the earth has formed.