

Primary environmental radioactivity education

ENDO, Misaki^{1*} ; YAMANAKA, Masanori²

¹College of Science and Technology, Nihon University, ²College of Science and Technology, Nihon University

The physics of radioactivity or the radiation has very close relation to developments of physics from the beginning of the 20th century. The human being does not have an organ taking in radioactivity directly, which is different from visible light, hearing, temperature, and the taste. The radioactivity is an extremely mysterious phenomenon historically in this way, and this is why the elucidation was pushed forward. In addition, the radiation is statistical phenomenon because radiation is a phenomenon caused by an atomic nucleus change and an electronic state change of the atom. However, this historically important and mysterious phenomenon is not almost taught in a beginning class or the secondary education. It is only handled for a last unit in physics II of the high school. A public, who did not learn physics about the radioactivity and who experienced the nuclear power plant accident that it follows East Japan great earthquake disaster of 2011, face the radioactivity. As a result, confusion occurred about intuitive and sensible understanding about the radioactivity. On the basis of the above-mentioned background, we make a teaching plan about the beginning class in the radioactivity education and report the result that we practiced in high school and university cooperation educations.

Keywords: Radioactivity education