



Contribution ID: 11

Type: Verbal

## Natural radionuclides in sediments and rocks from Adriatic Sea

*Tuesday, April 20, 2010 5:50 AM (20 minutes)*

During the International Scientific Cruise to Adriatic and Ionian Seas organised by the International Atomic Energy Agency (IAEA), sediment and rock samples were collected at different locations. Sediments were sampled with grab corer at six locations in the middle and south Adriatic Sea. Rocks were collected on three islands (Palagruža, Brusnik, Jabuka) in the Adriatic Sea. In the samples, natural radionuclides U-238, U-234, Th-232, Th-230 and Ra-226 were determined. Samples were first dried, crushed and homogenised. After that, radiochemical separation procedures were applied. After radiochemical separation, samples were measured by alpha spectrometry system equipped with PIPS (Passivated implanted planar silicon) detectors. Activity concentrations of natural radionuclides in samples were from 11.7 to 27.0 Bq/kg for U-238, from 7.9 to 28.1 Bq/kg for U-234, from 13.2 to 31.9 Bq/kg for Th-232, from 17.1 to 40.9 Bq/kg for Th-230 and from 8.3 to 52.3 Bq/kg for Ra-226. In the presentation, the obtained values are discussed in detail and compared with results of similar investigations carried out elsewhere.

**Primary author:** Mr ŠTROK, Marko (Jožef Stefan Institute)

**Co-authors:** Dr SMODIŠ, Borut (Jožef Stefan Institute); Mr PETRINEC, Branko (Institute for Medical Research and Occupational Health)

**Presenter:** Mr ŠTROK, Marko (Jožef Stefan Institute)

**Session Classification:** Radionuclides in the Environment, Radioecology 2

**Track Classification:** Radionuclides in the Environment, Radioecology