



Environmental monitoring and radiation protection in Škocjan Caves, Slovenia

V. Debevec Gerjevič (1) and P. Jovanovič (2)

(1) Škocjan Caves Regional Park, Department for Research and Development, Divača, Slovenia (vanja.debevec@psj.gov.si),
(2) Institute of Occupational Safety, Ljubljana, Slovenia (peter.jovanovic@zvd.si)

Škocjan Caves were listed as UNESCO World Heritage Sites in 1986, due to their exceptional significance for cultural and natural heritage.

Park Škocjan Caves is located in South Eastern part of Slovenia. It was established with aim of conserving and protecting exceptional geomorphological, geological and hydrological outstanding features, rare and endangered plant and animal species, paleontological and archaeological sites, ethnological and architectural characteristics and cultural landscape and for the purpose of ensuring opportunities for suitable development, by the National Assembly of the Republic of Slovenia in 1996.

Park Škocjan Caves established monitoring that includes caves microclimate parameters: humidity, CO₂, wind flow and radon concentration and daughter products. The approach in managing the working place with natural background radiation is complex.

Monitoring of Radon has been functioning for more than ten years now. Presentation will show the dynamic observed in the different parts of the caves, related to radon daughter products and other microclimatic data. Relation of background radiation to carrying capacity will be explained.

Implementing the Slovene legislation in the field of radiation protection, we are obligated to perform special measurements in the caves and also having our guides and workers in the caves regularly examined according to established procedure. The medical exams are performed at Institution of Occupational Safety, Ljubljana in order to monitor the influence of Radon to the workers in the cave. The equivalent dose for each employed person is also established on regular basis and it is part of medical survey of workers in the caves.

A system of education of the staff working in the caves in the field of radiation protection will be presented as well.