

INDOOR RADON DETERMINATION WITH TRACK DETECTORS MEASURED IN RADIOLOGICAL MONITORING AND DATA ACQUISITION NETWORK

Péter Rell, Laura Nagyné Bereczki, Zsolt Homoki

National Public Health Center
National Research Directorate for Radiobiology and Radiohygiene (NPHC
NRDRR)

The determination of indoor radon activity concentration is one of the most important topics for radiation protection of population.

The Government Decree 487/2015 (which came into effect on the first of January 2016) determines the necessity of establishment of a national radon action program and introduced an indoor radon reference level as well.

Several measurement programs were carried out in the last decade at NRDRR laboratory. The indoor radon program has been operated in the part of the annual program of Radiological Monitoring and Data Acquisition Network (RAMDAN) for three years.

In co-operation with local authorities, indoor radon activity concentration was measured in 54 buildings. The measurements were taken place on the houses ground floor. The selected houses have no basement and sludge was not built in. The full measurement period was one year, which was divided into quarter year cycles. The annual average radon activity concentration was calculated from the quarterly results. Polycarbonate track detectors in diffusion chambers were used to define the radon levels. Automatic microscope was used for determination of track density. The results of the last three years are discussed.