Preliminary Study on Radon Concentration of Bricks and Block(Building Materials) Using Lr-115 Solid State Nuclear Track Detectors

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Abstract

Radon is a natural radioactive gas derived from geologic materials. Inhalation of the short-lived decay products of radon has been linked to an increase in the risk of developing lung cancers if present at elevated levels. Accurate knowledge of exhalation rate plays an important role in characterization of the radon source strength in some building materials. In this research, radon exhalation rate were be measured from bricks and blocks of building materials by using LR-115, to estimate the radiation exposure in the atmosphere. The radon concentrations from the bricks and blocks were found to vary from 206 to 305Bqm^{-3}. The levels of radon concentrations caused by the construction materials in the blocks and bricks were found within the internally recommended range 5mSvyr^{-1}.

Key word: Radon, Building Material, LR-115, Radon Concentration

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