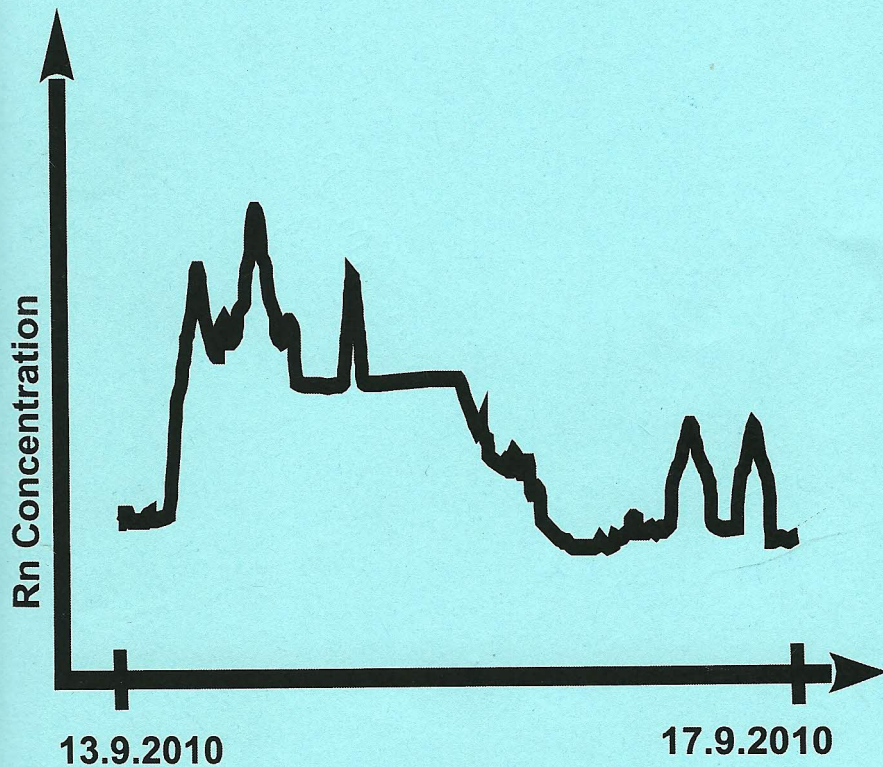


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## Radon Exhalation from Phosphogypsum Bricks

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Phosphogypsum can be classified as TENORM and one of the main environmental concerns of its use is the radon exhalation from this material.

The recycling of the phosphogypsum is very important from the social-economic point of view and also regarding environmental preservation. A possible way to reuse of phosphogypsum is the manufacture of building materials.

The aim of this study is to evaluate the radon exhalation from phosphogypsum bricks used at houses construction.

A practical approach to measure radon exhalation rates directly from the surface of the material is to allow radon to build up in a container over time. The device used to this practical radon measuring are called accumulator.

In this study a hermetically closed glass can had been used as the accumulator. The phosphogypsum brick and a diffusion chamber with CR-39 were enclosed inside the accumulator. The exhalation rate was determined through the radon concentration at accumulator.

It were assessed the radon exhalation rate from bricks manufactured with phosphogypsum from different origins.