RADON AND RADON DAUGHTERS INDOORS, PROBLEMS AT THE DETERMINATION OF THE ANNUAL AVERAGE

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Regulatory limits are often based on the annual average radon daughter concentration. For evident reasons this annual average can not be actually measured, in practice it is necessary to rely on shorter-term measurements of radon and/or radon daughters which are used as a basis for an estimate of the annual average. It is thus important to know the relation between different kinds of measurements used in practice and the annual average.

In order to get a quantitative basis for assessing different types of measurements in dwellings, a research program is under way at this institute.

Simultaneous measurements of radon, radon daughters and air change rates have been made and these experimental F-factors as a function of the air change rates have been compared with theoretical values. Longterm registrations of the radon concentration have been made and simultanious longterm registrations of radon and radon daughters during a whole year are planned for some dwellings. At the same time other methods will be used. The results are treated to simulate various time periods compared with the annual average.