

Radon measurements for the planned thermal bath complex in Chungqing (Ba'nan) region, China

Nagy K⁽¹⁾, Csordas A⁽¹⁾, Kovacs T⁽¹⁾

⁽¹⁾Markhot Ferenc Hospital, Pannon University

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The authors have made an expert's report about the forming of the planned thermal bath complex in Chungqing (Ba'nan) region of China. They examined the measurable radon content in the Hot cave's air, in the water of the lake in the cave, in the spring near the cave, and in the spring that can be found on the other side of the mountain.

The cave is a hot cave, with a high percent of humidity (95-99%), with a temperature of 30-37,8 °C.

The air of the cave contains radon, however measurements in different parts of the cave have shown quite different results, values between 629 Bq/m³ and 6290 Bq/m³ were measured.

Caves with high temperature, high humidity, and radon content are used with very good results in healing of inflammatory rheumatological diseases, mainly spondylitis ankylopoetica.

Worthwhile radon activity was not measurable in the water of the cave's lake.

The water of the well near the cave contains calcium magnesium sulphate, it is a mineral water with high rates of minerals, with a temperature of 45 °C. It contains no radon. Due to its consistence it is useful for preserving health, and can be used for wellnes, recreation, and preventional purposes. Since its radon content is minimal (vanishing), it is suitable for bathing for masses.

The water of the spring on the other side of the mountain is mineral water containing calcium magnesium sulphate, has a high mineral rate, and has radon content.

It's radon content is 62,8 Bq/dm³. radon baths in Europe have a much higher radon concentration, however in Hungary, in the city of Eger, there is effective healing in progress with similar radon concentration in the Turkish Bath, and in the thermal Bath of the Markoth Ferenc Hospital.