## **SUMMARY**

Higher concentrations of radon are probably harmful to our health, on the other side its lower concentrations have terapeutical effect, which is used in a spa. Its characteristical properties are suitable for mineralogical research, hydrological and environmental studies and for an earthquake and vulcanic prognosis. In this work, there are explained methods of ray measuring, scintilation detektor and ionization chamber and there are compared devices like radon-in-air monitor, device with a hydrphobical membrane and device with a method using olive-oil. dtto cz.