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**MEASUREMENT OF RADON GAS IN COAL MINE IN
THE PROVINCE CORUM**

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Existence of natural and half-life radio-active sources on earth and their decay products in the environments such soil, rocks, building materials, food, water and air is basic reason for radiation that people exposed to. Due to the fact that these radio-active sources are disproportionate in the environment, and doses people exposed to as a result of inner and outer radio-activation largely differ in accordance with daily routines. Radon is the only radio-active gas appearing as a result of uranium decay and existing in the nature. Because the source of Radon is uranium and uranium's disproportion in the nature, it is necessary to determine its average value in the soil. Annual concentration ratios determined by Turkish Atomic Energy Authority (TAEK) is 400 Bq/m³ at homes and 1000 Bq/m³ at workplaces on average in Turkey. In this study, Radon gas was measured at coal mines located in the province, ORUM. Thirty-three passive Radon detector (Cr-39) were placed in different points and depths of the mine. These detectors were left at these places for approximately sixty days and analysed in an isolated environment at the end of that period. Average Radon concentration activity was measured as 285,89 Bq/m³. As a consequence, it was observed that the results found are considerably below the values determined by TAEK.