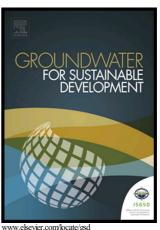
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ACCEPTED MANUSCRIPT

Radon in the groundwater in the Amman-Zarqa Basin and related environments in Jordan

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Abstract

The occurrence of radon (²²²Rn) in environment (groundwater and indoor air) from geogenic sources is receiving an growing attention due to its adverse impact on human health worldwide including Jordan. Highlighting the current status of radon in Jordan, the present study of radon concentrations in ground waters in the Amman-Zarqa basin (AZB) was investigated. Groundwater samples were collected from fifteen wells located in three main areas of Ras Al-Ain, Al-Rsaifeh and Al-Hashemite. Radon concentration was measure using Liquid scintillation counting (LSC) Tri- Carb 3110 with discriminator andthe highest values for radon concentration in water were observed in Al-Rsaifeh area and ranged from 4.52 up to 30.70 Bq/l with an average of 11.22 Bq/l, which were attributed to the decay of naturally distributed uranium in phosphate

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