

**International Conference on Occupational Radiation Protection:
Strengthening Radiation Protection of Workers –Twenty Years of Progress
and the Way Forward**

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Radiological Characterization of the Radioactivity at Al-Tuwaitha Nuclear Site and Determination of the Radiation Doses for Workers.

Abstract

The research aims to assess the radioactivity levels at Al-Tuwaitha nuclear site due to the remnants it contains such as destroyed buildings, facilities, and the previous activities at the site before the gulf-war, 1991. In addition to the decommissioning processes and treatment of the radioactive contamination practiced by the assigned teams from the directorates of the site since 1991 until now. Through the research, different environmental samples (soil, water, air, etc.) will be collected for measurements using different laboratory techniques such as gamma spectroscopy (HPGe), as well as portable devices.

Then, the calculated data will be used to determine the received radiation doses and their impact on workers, people, and the environment. In addition, the results will be used to calculate the Evaluation of Radiological Hazard Effects of Raeq, absorbed dose, and the annual effective dose in (Bq.Kg⁻¹, nGy.h⁻¹) and mSv.y⁻¹ (respectively, and comparing it with the global recommendation limits

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