

The assessment of Environmental Radioactivity in Heqal village in Saudi Arabia and its impact on public health

Tuesday, 14 November 2023 14:30 (5 minutes)

This senior project seeks to monitor Environmental Radioactivity (ERA) within Heqal village in Saudi Arabia, which has a high incidence of cancer. The research project will measure the radiation levels in the region's air, water, sand, stones, and plants. The study will utilize a Geiger counter and other radiation detection apparatus in the field work. The collected data will be analyzed to ascertain the village's radiation exposure-level. The significance of this research lies in the fact that it will aid in identifying potential sources of radiation exposure that may be contributing to the village's elevated cancer rates. It will also provide policymakers and public health officials with essential information for developing strategies to reduce radiation exposure and prevent future cases of cancer. Samples are collected from various locations within the village, including residential areas, agricultural fields, and water sources, as part of the research methodology. Using chemical separation techniques in the laboratory, the samples will be analyzed for their radioactive content.

The results of this study are expected to substantially contribute to our understanding of in the villages with a high incidence of cancer. Additionally, the findings can inform future research on radiation monitoring and management strategies for comparable communities worldwide. Overall, by identifying potential sources of nuclear radiation exposure and devising effective prevention strategies, this senior project is a crucial step towards enhancing public health outcomes.

Speaker Bio

Primary authors: Mr KHARSHAN, Abdulmajeed (King AbdulAziz University); Dr QUTOB, Maher (King AbdulAziz University); HSNANIN, Maher Zohir S (King AbdulAziz University); Prof. FALLATAH, Othman Abdulrahman (King AbdulAziz University); Mr ALLSBHANI, Ragheb (King AbdulAziz University)

Presenter: HSNANIN, Maher Zohir S (King AbdulAziz University)

Session Classification: Day 2- Research Pitch Competition - II

Track Classification: Student competition