

Radon monitoring and environmental impacts in natural using SSNTD (CR-39)

Doaa Hassan Taha Shabaan
Ain Shams University, Egypt

Abstract

Radon is basically generated in a natural way by ^{226}Ra , which is in the ^{238}U decay chain. Even though ^{222}Rn has a half-life of 3.8 d, such a noble gas is chemically stable. Inhalation of radon and its decay products is responsible of about half of the annual average effective dose received by the human due to natural sources of radiation; so we interested to study concentration of radon by different method physically and chemically in some types such as soil, laboratory waste sample, water, salt and natural textile fabrics using solid state nuclear track detectors (SSNTDs) referred to as (CR-39) in the literature, TASTRAK type, (Track Analysis System, Ltd., UK) was used. These were measured using “Sealed Can technique” and most scrutinized literature were collected from different sources including PubMed. This database has been curreted using published methods; all results led us to pay attention about the effect and impact of exposure of radon on the environment. Also, the results revealed that all of the parameters were in normal range and agree with United States Environmental Protection Agency. We were also interested to measure indoor radon concentrations in dwellings supplied with natural gas compared with those not supplied with it; conclusively, the data indicate that natural gas may represent a potential source of indoor radon. It has been published in magazines global distinct, and this work is included for working on MSc and PhD studies. Presently, it has several methods and it will be updated regularly.

Biography

Doaa Hassan Taha Shabaan has completed his PhD and Post-doctoral studies from Ain Shams University, Women's College of Arts and Science & Education. She is a Lecturer in Ain Shams University. She has published more than 6 papers in reputed journals and is interested to attend international scientific conferences. She is Reviewer in international journals like *Journal of Nuclear Science and Technology* and *African Journal of Environmental Science and Technology*. She is also currently working as an Assistant Professor at the University of Jazan, KSA.

do_tahaa@yahoo.com