First Biennial African Conference on Fundamental Physics and Applications



Contribution ID: 75

Type: Poster

Studies on natural radioactivity in shore sediments of Swakopmund beach, Erongo region, Namibia

S.A. ONJEFU 1, 2*, N.A KGABI 3, S.H. TAOLE 1 C. GRANT 4, J. ANTOINE 4 1 Department of Physics and Electronics, North-West University, Mafikeng Campus, South Africa P.B. X2046, Mmabatho, South Africa

2Department of Natural and Applied Sciences, Namibia University of Science and Technology P.B.13388, Windhoek, Namibia

3 Department of Civil and Environmental Engineering, Namibia University of Science and Technology P.B. 13388, Windhoek, Namibia

4 International Center for Environmental and Nuclear Sciences, University of West Indices, Mona Campus, Kingston, Jamaica

E-mail: sonjefu@nust.na

Abstract

The study deals with investigation of natural radioactivity in shore sediments of Swakopmund beach. The measurements were done using a high purity germanium detector (HPGe). The results obtained were compared with those of similar studies. The absorbed dose rate, annual effective dose rate, radiological hazard radium-equivalent activity, external and internal indices and excess life time cancer risk were evaluated and compared with internationally recommended values.

Keyword: HPGe detector, radioactivity, shore sediment, Swakopmund

Author: Dr ONJEFU, Sylvanus Ameh (Namibia University of Science and Technology)

Presenter: Dr ONJEFU, Sylvanus Ameh (Namibia University of Science and Technology)