

Analysis of Solar Radiation Through the Use of a UV Meter: Sample Data in Critical Points in the City of Ambato

Carlos Corrales and Wasington Amancha

Departamento de Investigación,
Instituto Tecnológico Superior "Guayaquil", Ecuador

Corresponding author's Email: karlosrco@hotmail.com

Abstract: The technological development, the exploitation of resources, contribute to the contamination of the environment. For this reason, have been alterations in nature as the deterioration in the ozone layer generating high temperatures and the increase in UV radiation these waves do not need a material means to propagate, can cross interplanetary space and reach the Earth from the Sun.

In South America, the highest rates of high radiation can be felt in Ecuador, in Peru, in the Bolivian altiplano, as well as in northern Argentina and northern Chile. For this reason, humanity is exposed to different types of substances that they damage DNA. The effects of solar radiation on health, prolonged exposure to the sun's rays can cause sunstroke, put our epidermis at risk, causing spots, premature aging and the most serious, also makes us susceptible to developing skin or eye cancer.

Faced with this type of phenomena and the high rate of radiation detected in our environment, it is considered to perform an analysis with a radiation meter, allowing to generate alerts to the population. and have a database to perform vulnerability statistics in the areas with the highest population incidence in the city of Ambato.

A solar radiation meter is a meteorological instrument used to measure very precisely the incident solar radiation on the surface of the earth and interpret the acceptable levels of radiation and alert the population to high levels, on the other hand, this device records through a database of the hours of highest radiation at strategic points where there is a higher population incidence.

Keywords: Radiation, deoxyribonucleic acid, Ultra Violet Radiation