**RADIATION DETECTION USING ROBOT**

Generally, robot motion planning system has been an increasingly important technology since it was first developed in 1950s by W. Grey Walter due to its excellent capabilities of monitoring and controlling in variety of applications . Such application can greatly improve information needed for the preparation of accurate future plans thus maximizing results. An autonomous mobile robot must be able to interact with its surrounding regardless or not it is a robust environment to gain useful information describing the environment it experienced for decision-making purposes

Radiation is an unseen threat that may either save a life or kill thousands of communities. A constant or a slight exposure to any level of radiation may be dangerous. Safety procedures and precautions must be taken by those who work with harmful radioactive sources without any failure to ensure their security and others around them. Therefore, in order to minimize risks of accidents, workers must use the right equipment to handle the right job. However, having the right equipment does not guarantee safety until one knows how to correctly operate the equipment.

The radiation is measured by detecting the levels of Alpha (a), Beta (B), and Gamma (y) in the air. Testing and evaluation experiments that are carried out exhibit the capability of the proposed system to detect radiation leaking, alarm harmful levels and ensure the realization of some behavioural properties like utility and robustness against such operational Obstacles as natural barriers and weather conditions.