

**MONTE CARLO SIMULATION FOR COINCIDENT PLASTIC SCINTILLATOR
DETECTORS MONITORING RADON-NEUTRON INTERACTION IN SOIL FOR
EARTHQUAKE EARLY WARNING SYSTEMS**

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This study utilizes Monte Carlo simulation technique to model the detection apparatus employing plastic scintillators for recording photons produced by the interaction between radon and neutrons. Furthermore, the interactions of neutrons from cosmic, with the near surface atmosphere, along with radon present in the soil are investigated. The object/purpose is to establish correlations between abnormal radon levels and imminent seismic events, in suggestion of providing a prospective early warning mechanism for earthquakes.