

Abstract:Environmental safety is a significant feature necessary for the healthy life style. Any abnormality in the environment changes the atmospheric parameters such as humidity, temperature, smoke, level of carbon monoxide and sound. Fatal health issues such as loss or weakening of immunity & infertility occurs due to the different activities occurring in nuclear power plants such as recycling of nuclear fuel and leakage of radiation that add low levels of radiation to the atmosphere. Leakage of nuclear radiation gets mixed with fresh air in the atmosphere that results into the increase of temperature, humidity, smoke, level of carbon monoxide and sound. In this work, a wireless sensor network is used for measuring the changes in these parameters which in turn are displayed by the Thingspeak Linux based web server available freely. Monitoring of the parameters in the environment is based on Internet of Things (IoT) as radiation leakage is detected by using sensors and is transmitted to the remote location via IoT and displayed using Thingspeak web server. **View less**