Environmental Gamma Spectrometry System

Environmental Gamma Spectrometry System (EGSS) is a standalone, solar powered, and battery-operated unit that can be installed in open field. It has a 2" diameter by 2" height Nal(TI) scintillator based gamma spectrometer, together with GM tube based gross gamma detectors. The multichannel analyser used in the spectrometer is developed in-house and eliminates the requirement of a PC for data logging. The in-house designed and fabricated mechanical assembly of the system houses all of its electronic PCBs and radiation detectors and protects them from environmental conditions. The establishment of a network of such field-installed systems with online communication would facilitate the real-time identification of radionuclide releases in case of radiological/nuclear emergencies. This would help in turn to facilitate prompt radionuclide-specific countermeasures in case of such incidents.

