



## Environmental KIT - Gamma Radiation Measurements



## Discover the environment that surrounds us!



Be part of the project: develop your own experience and send an email to [educational@caen.it](mailto:educational@caen.it)

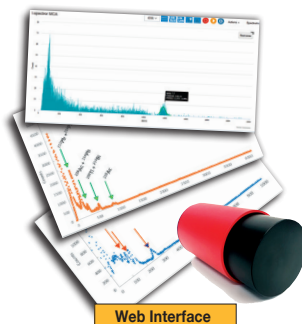
Environmental radioactivity is all around us. The public imagination often associates a negative feeling to this natural phenomenon.

To increase the familiarity with this field CAEN designed a **dedicated educational kit**, based on Silicon Photomultipliers (SiPM) matrix coupled to a CsI Scintillator .

Teaching and training experiences are performed starting from system calibration in terms of energy and by acquiring gamma spectra to study the emission and the composition of different samples.

### Experiments

- Energy Calibration
- Environmental background measurements
- Passive Radon measurements
- Samples and Photopeaks identification
- Environmental Sample measurements



Empty Beaker & Test Sample



Fertilizer and Rock Samples



Canisters of Activated Carbon



Calibration Crystal (Lu1.8Y.2SiO5:Ce)

## The future of the Educational Labs is here!

EDUCATIONAL  
HANDBOOK



FREE DOWNLOAD

A modern, digital and flexible platform developed by CAEN for teaching the fundamentals of **Statistics & Nuclear and Modern Physics**.

The **Educational Kit** allows to perform a series of experiments focused on radioactive phenomena without using a radioactive source and a detector, but simulating the signals produced by the interaction of particles with the detecting unit.

*Educational Handbook*



Free download

