

SPALAX NG (New Generation)



Technical Partnership



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In a NuttShell

1

$\beta + \gamma$ coincidence spectrometry \rightarrow 0,2 mbq/m³ detection threshold of 4 isotopes over 8h sampling period

2

High resolution detection of the sample

3

RadioXenon concentration of the sample over 4h, 8h or 12h periods

SPALAX NG

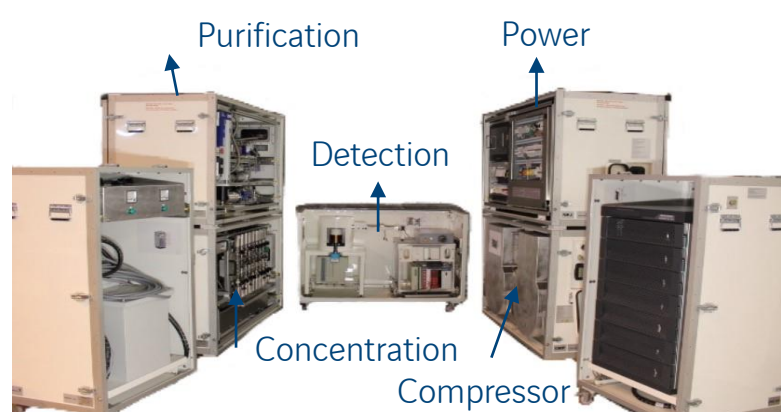
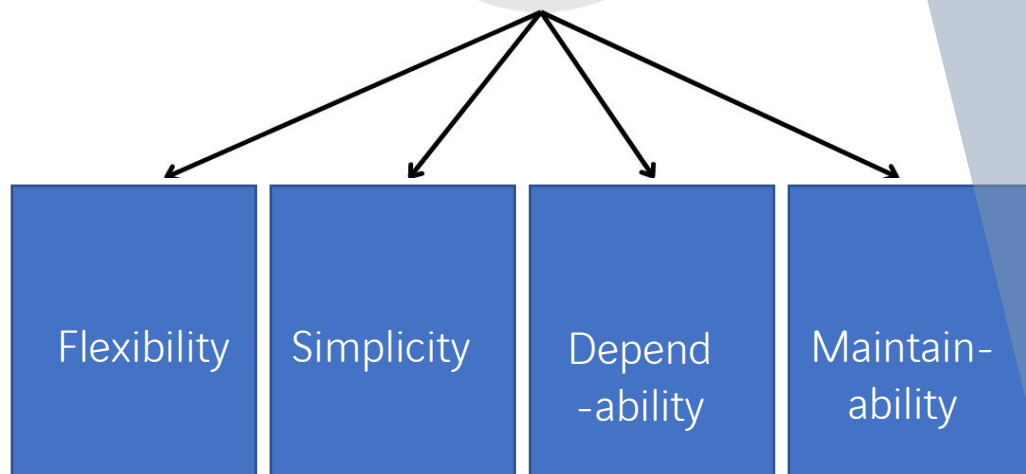
The **New Generation SPALAX** can analyse the ambient air with high resolution to constantly monitor the **RadioXenon** resulting from **Civilian or Military Nuclear Activities**.

Equipment

Architecture in 7 modules to address the following functions :

- ✓ **Sampling** 45 m³/h
- ✓ **Filtration** through membranes
- ✓ **Concentration** in Xenon on high performance adsorbant
- ✓ **Analysis** of sample by High Resolution β - γ Coincidence Spectrometry: electron (PIPSBox) - photon (HPGe)

Cegelec Défense Expertise :



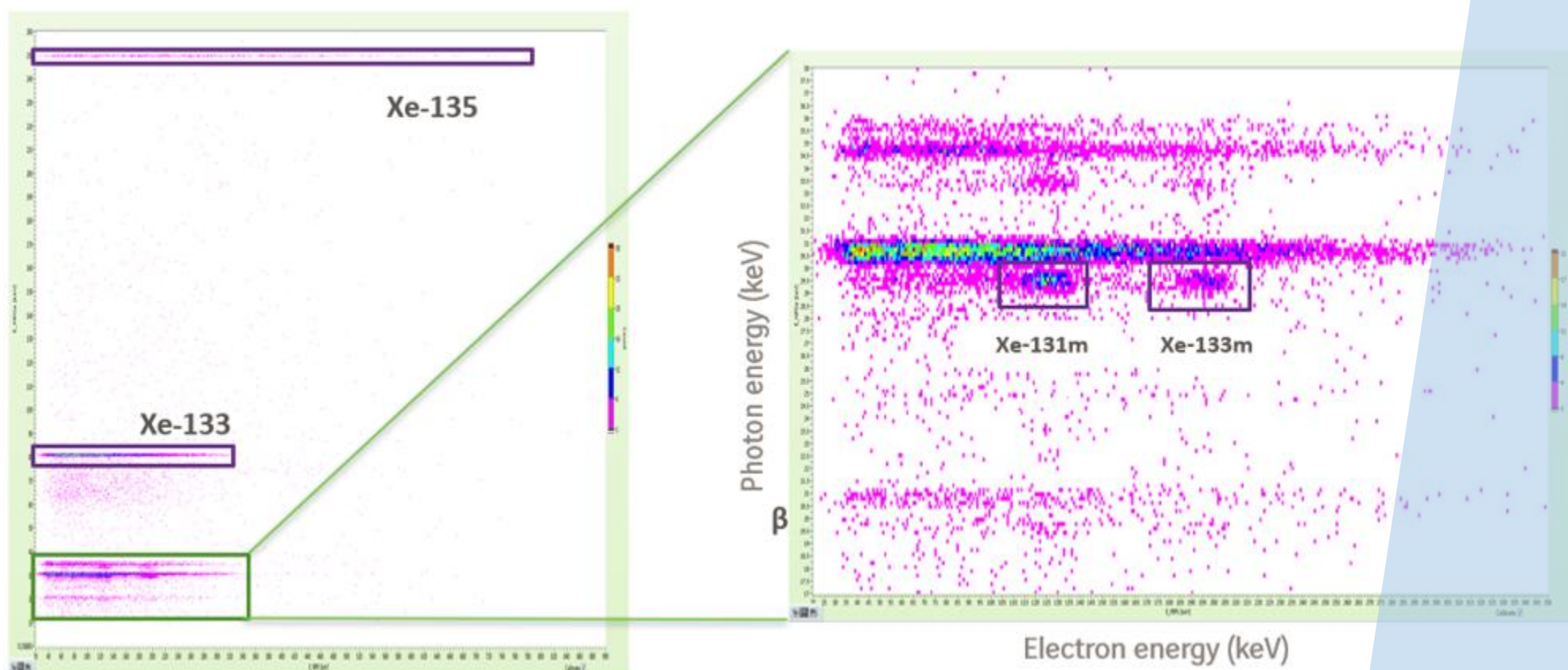
Technical aspects

STRENGTHS

The PIPSBox – A new technology to improve coincidence measurement of electrons

- ✓ Filtration and Enrichment- 8 membranes providing a factor 30 enrichment
- ✓ Purification et Concentration : 2 alternated sets of active carbon columns and one doped zeolite column
- ✓ Archiving - 16 vials allowing up to 8 archives

Coincidence $\beta + \gamma$ Detection



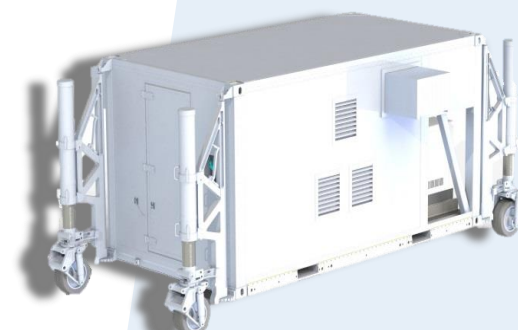
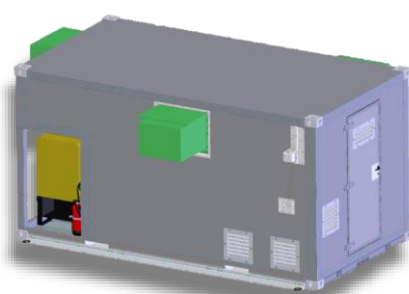
SHELTER SPALAX NG

Standalone commodity designed to house SPALAX-NG for Global rapid deployment

CEGELEC Défense know How: dependability, maintenance and flexibility



Integration of 6 modules in one container



transportation (Air, Sea, Land) and High mobility (easily redeployable)