



Solution, support and expertise in  
radioactivity measurements



# Why working with LAFARA ?

- **25 years of experience** in gamma analysis
- University platform
  - **Expertise** in signal processing
  - **Training** in gamma spectrometry
- **Ultra sensitive equipments** coupled to **underground environnement**
  - **Very low** detection limits
  - **Low radioactivity** measurements
  - **Fast** signal acquisition
- **Automated laboratory**
  - Analysis **365 days/ year**

# About the lab

- Radioactivity analysis in **all types of materials using gamma spectrometry**



A word cloud of various materials analyzed by the lab, including Sands, Terracotta, Waters, Sediments, Mushrooms, Gas, Concretes, Bricks, Electronics, Polymers, Resins, Filters, Metals, Vegetals, Fishes, Food, Milk, Mortars, and Cosmetics. The words are arranged in a circular pattern with varying font sizes and colors.

- **Environmental radioactivity** measurements expertise
- **Comprehensive service** for radiological characterisation of materials
- Quote at [www.lafara.obs-mip.fr](http://www.lafara.obs-mip.fr)



# Equipments

- **5 last-gen gamma spectrometers**  
ultra-sensitive HPGe
  - **3 Well type SAGe-Well®**
  - **2 planar type**
- Liquid nitrogen-free electric cooling system : **CryoPulse-5®+ cryogenerators**
- Robotic **autosampler**
- **VLA selected 24 cm thick lead castles**  
and underground environment
  - Cosmic ray reduction
  - Background signal decrease
- **High analytical capacity**

# Certifications

- Laboratory **certified by french Nuclear Safety Authority (ASN)** since 2020, in agreement with **ISO/CEI-17025** prerequisite.
- **11 ASN certifications** (matrix : water, soil & gas)
- **Continuous participation to inter-laboratory comparison** campaigns from the french Institute of Radioprotection and Nuclear Safety (**IRSN**)

Contact us :

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TYPE	MATRIX	CATEGORY	REF.	VALIDITY
1	Water	Radium-226 & daughters	1_11	12/31/2024
1	Water	Radium-228 & daughters	1_12	12/31/2024
1	Water	Weight uranium	1_17	12/31/2024
2	Soil/ sediment	> 100 keV gamma emitters	2_01	06/30/2021
2	Soil/ sediment	< 100 keV gamma emitters	2_02	06/30/2021
2	Soil/ sediment	Radium-226 & daughters	2_11	06/30/2025
2	Soil/ sediment	Radium-228 & daughters	2_12	06/30/2025
2	Soil/ sediment	Weight uranium	2_17	06/30/2025
5	Gas	> 100 keV gamma emitters	5_01	06/30/2022
5	Gas	< 100 keV gamma emitters	5_02	06/30/2022
5	Gas	Halogens	5_14	06/30/2022

Current ASN certifications

