

# ENGINEERING & CONSULTANCY ADAPTATION TO NUCLEAR ENVIRONMENTS

## **CHALLENGES**

The characterization of nuclear materials and waste requires the measurement of **representative specimens** in terms of radioactivity, while ensuring the **safety of operators and facilities**. Numerous measurement solutions must therefore be handled in gloveboxes or hot cells, while offering the **same measurement reliability** as in standards conditions. A more specific challenge lies in **the use and maintenance of these solutions**, that must stay as simple and economical as possible.

## **SOLUTION**

Our engineering skills are applied to the design or the adaptation of solutions for their use in nuclear enclosures like gloveboxes or hot cells. We integrate your requirements in terms of nuclear safety, userfriendliness, resistance, radioprotection and maintainability.

We take care of mechanical and electrical design, safety, control-command, IT development. Special attention is paid to the easiness of operations with gloves or remote manipulators, to the installation of electronics outside the enclosure, to the supply of earthquake resistant chassis, to easily transferable and installable spare parts, etc.

The installation of the solution can occur in a new or in an already operative enclosure.

Our past achievements include more specifically the adaptation of calorimeters and thermal analysis stations but can be extended to our whole range of solutions.

### **BENEFITS**

## **Enhance safety**

- By limiting exposure of operators and sensitive instrument parts (eg electronics) to radiation
- By integrating environmental risks from the design phase (earthquakes, etc)

# Reliable and representative measurements

- By proposing the same measurement quality as with a standard instrument
- By allowing measurement of radioactive samples

## Adapted use and maintenance

- By optimizing the solution's ergonomics to its targeted place of operation
- By easing the access to elements whose maintenance is critical

# **ENGINEERING & CONSULTANCY**



Pre-studies based on your needs

**CUSTOM DEVELOPMENTS** 

Let's Innovate together

#### **AUTOMATION CAPABILITES**

Mechanical and Handling Systems

#### **NUCLEAR SAFETY**

**Coverage of your Operational Constraints** 

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