



**SU-480-2**

# HPGe Setup and Troubleshooting

## DESCRIPTION

This course will present the steps required to properly setup your HPGe detector for analytical measurements and some suggested troubleshooting techniques to ensure peak performance of your gamma spectroscopy system. This course will also provide an overview of the different types of germanium detectors available for various applications.

## HOW YOU WILL BENEFIT

Attendees will develop a competency for ensuring their system is operating properly, allowing for high quality gamma spectroscopy measurements. Also, attendees will gain basic troubleshooting skills that will enable them to identify common detector problems and initiate corrective actions. Attendees are encouraged to bring real world examples from their facility to promote discussions.

## WHO SHOULD ATTEND

This course is intended for spectroscopists who are responsible for setting up, calibrating, and operating gamma spectroscopy systems. This course is relevant for both laboratory applications and in situ application.

## COURSE CONTENT

- ✓ What types of HPGe detectors are available and benefits of each:
  - LEGe™ Low Energy Detectors
  - SEGe™ Standard Electrode Coaxial Detectors
  - BEGe™ Broad Energy Detectors
  - SAGe™ SAGE Well Detectors
- ✓ How to setup the HPGe detector for your application
- ✓ Understanding signal chain information from detector spec sheets
- ✓ Parameters that can be adjusted and their effect on your system
- ✓ Calibration of your HPGe detector
- ✓ Quality Control checks to monitor system performance and verify system functionality
- ✓ Troubleshooting your HPGe detector system
  - What can go wrong and how to identify the problem
  - Troubleshooting techniques aimed at identifying and correcting the problem
  - Leakage current measurements
  - Pole Zero adjustments
  - Thermal cycles

## PREREQUISITES

Familiarity with Canberra's Genie or Apex Gamma Lab Productivity Suite software is helpful.

To register, visit  
[www.mirion.com/na-courses](http://www.mirion.com/na-courses)