MIRION TECHNOLOGIES

MIRIONSERVICES

SU-477

LabSOCS™ Measurements

DESCRIPTION

Mirion's SU-477 training course was designed to provide comprehensive instruction for proper use of the LabSOCS Efficiency Calibration Software. This course will focus on proper selection and use of the standard LabSOCS geometry templates for accurate modeling of samples and creation of optimized efficiency calibration files. Lecture and discussion topics will include: use of the "Geometry Composer" interface, typical applications for LabSOCS sample geometry templates, tips for proper template parameter entry, use of the Materials Library editor, and proper use of LabSOCS calibration files within Genie™ software. Common sample geometries (including paper disk, charcoal-filled air filter cartridge, polyethylene bottle, and Marinelli beaker) will be selected as practical examples to demonstrate the complete LabSOCS efficiency calibration process. Cascade summing corrections will be discussed as a method to improve the accuracy of nuclide activity calculations during routine sample analyses. Approximately 60% of this 3-day course will be presented in lecture format, with the remaining 40% allocated for group discussion and practical exercises.

HOW YOU WILL BENEFIT

Attendees who complete this course will become proficient with "Geometry Composer" and other features of Genie software needed to create LabSOCS efficiency calibration files. Attendees will also learn how to use LabSOCS calibration files within Genie software to obtain accurate sample analysis results. This knowledge will enable attendees to perform gamma spectroscopy measurements with improved productivity, accuracy, and confidence. Supervisors and managers will benefit from the knowledge and confidence gained by course attendees, ensuring a more efficient and defensible analytical process for their gamma spectroscopy measurement program.

WHO SHOULD ATTEND

This course is intended for technical and supervisory personnel with little or no prior experience using LabSOCS software, but who will be responsible for performing and approving LabSOCS efficiency calibrations and gamma spectroscopy measurements using those calibrations within the Genie or Apex-Gamma™ software environment.

COURSE CONTENT

- General Review of Gamma Spectroscopy
- Introduction to LabSOCS Sample Geometry Templates
- Comprehensive LabSOCS Software Tutorial
- LabSOCS Software Exercises
- Cascade Summing Effects and Cascade Corrections
- LabSOCS Measurement Procedure and Sample Report Text

SUPPLEMENTAL COURSE CONTENT

- Review of Genie Gamma Acquisition & Analysis
- Genie Certificate File and Nuclide Library Editors
- Genie Energy/Shape Calibrations
- Recommended Genie Analysis Steps and Parameters
- Quality Assurance Considerations
- Recommendations for Using LabSOCS within Apex-Gamma Software

PREREQUISITES

This course is intended for individuals who are familiar with basic gamma spectroscopy principles and measurement applications. Attendees should also have some prior experience with Mirion's Apex-Gamma and/or Genie software packages. Successful application of LabSOCS measurement requires proper use of the "Geometry Composer" sample modeling interface, Nuclide Library editor, Analysis Sequence files, and other features of Genie software. Prior attendance of Mirion's Genie software Basic Operations (SU-470) training course (or equivalent experience) is strongly recommended.

MIRION UNIVERSITY

To register, visit
www.mirion.com/na-courses