



**SU-890**

# iCAM™ Operations and Maintenance

## DESCRIPTION

This 2-day course is designed as an introduction to common air monitoring concepts, featuring detailed instructions on iCAM calibration and maintenance functions. The course begins with an introduction of the Mirion iCAM instrument, including a description of all components and theory of operation. Potential fault and alarm indicators will be discussed, as well as how to address problems that could arise during operation. After reviewing the hardware components, the iConfig software will be demonstrated to show the functionality of this power configuration tool. Once the iCAM setup is complete, the course will cover options and methods for calibrating the instrument, including alpha and beta calibrations along with airflow calibrations. Each step will be explained and students will be able to calibrate the instrument during a “hands-on” lab portion of the course. Other topics for discussion will include evaluation of calibration results and routine iCAM maintenance procedures. Approximately 40% of this course will be presented in lecture format, with the remaining time allocated for “hands-on” exercises and discussion.

## HOW YOU WILL BENEFIT

Attendees will become familiar with iCAM hardware, software and measurement applications and become proficient at proper iCAM system setup and operation. Supervisors and managers will benefit from the knowledge and competence gained by course attendees, achieving greater data quality for their air monitoring program.

## WHO SHOULD ATTEND

This course is intended for technologists or supervisory personnel who are somewhat familiar with the concepts and purpose of airborne radioactivity monitoring systems and who will be operating the Mirion iCAM systems. This course can serve as refresher training for experienced personnel, or as an introductory course for new personnel.

## COURSE CONTENT

- ✓ Overview of iCAM Operation
- ✓ Overview of Internal Parts
- ✓ Description of Faults and Troubleshooting
- ✓ Using Configuration Software for Troubleshooting and Setup
- ✓ Calibration Operations
- ✓ Air Monitoring and Alpha/Beta Measurement Principles
- ✓ Routine iCAM Operations
- ✓ Results and Interpretation
- ✓ Preventative and Routine Maintenance

## PREREQUISITES

Basic familiarity with Microsoft Windows 7/2000/XP operating systems as well as basic computer literacy is required. Attendees will derive more benefit from this course if they have a basic understanding of radiation detection principles and airborne radioactivity monitoring requirements at their own facility.