



Oil and Gas Laboratory Operations  
Management Training Conference





# Oil and Gas Laboratory Operations Management Training Conference

## Introduction

An oil and gas production laboratory is vital to maintaining control of field operations. Managers, technicians, chemists, and other professionals must have a comprehensive understanding of a field laboratory's abilities and limitations so that they can better use the laboratory and its staff to control and optimize the oilfield process.

Including laboratory management training, a laboratory management certificate program, or laboratory management certification can empower these individuals with the necessary laboratory manager skills to enhance their effectiveness in this role.

## Targeted Groups

- Managers.
- Technicians.
- Chemists.
- Professionals have a solid comprehension of the abilities and limitations of a field laboratory.

## Conference Objectives:

At the end of this oil and gas laboratory operations management conference, the participants will be able to:

- Understand the function, importance, and operation of oil and gas laboratories.
- Optimize the day-to-day operation of oil and gas laboratory operations.
- Gain insight into why Quality Management is essential within Oil and Gas Laboratories and how a laboratory management certificate can be beneficial.
- Comprehend how the results obtained from the laboratory can enhance the operation of the processing system and contribute to the integrity of plant and equipment.
- Understand process chemicals' function and their effective utilization.
- Understand metering systems operation and how laboratory data contribute to accurate metering and tanker loading custody transfer.
- Efficiently run a laboratory in the context of petroleum laboratories.
- Produce accurate and reliable results.
- Calculate chemical injection rates.

## Targeted Competencies:

At the end of this oil and gas laboratory operations management conference, the target competencies will be able to:

- Know about measuring and reporting vital data.
- Compliance with legislative criteria.
- Understanding provides an early warning of potential plant problems.
- Control and optimization of the injection of oilfield chemicals.
- Learn first-line analysis and identify unknown substances/deposits.
- Understand the determination of product quality and fiscal measurements.
- Laboratory Quality Management.
- Use the laboratory for problem-solving.

## Enhancing Oil and Gas Laboratory Management Skills:

Efficient oil and gas laboratory operations management is crucial for oil and gas operators to ensure accurate results and optimal performance. This conference will provide attendees with a robust set of laboratory management skills, a deeper understanding of laboratory management systems, and the potential to earn a laboratory management certificate, all essential for a successful career in managing petroleum laboratories.

Through informative sessions and interactive workshops, participants in the oil and gas laboratory operations management conference will be equipped with the skills and earn valuable certifications such as the laboratory manager certification or laboratory management certification, which can enhance their careers in the oil and gas industry.

## Conference Content:

### Unit 1: Role of the Laboratory Chemist in Oil and Gas Laboratories:

- Quality Assurance and Control.
- Control of Chemicals.
- Health, Safety, and Environmental Considerations.
- Adherence to Legislation.

### Unit 2: Laboratory Management:

- Laboratory Quality Management.
- Equipment Maintenance.
- Housekeeping.
- Calibrations.
- Stock Management.
- Reporting.
- Chemical Segregation and Storage.



### **Unit 3: Sampling of Process Fluids:**

- The importance of representative sampling.
- Health and Safety Considerations.
- Pressurize sampling of oil and gas.
- Atmospheric Sampling.
- Water Sampling.

### **Unit 4: Laboratory Analysis:**

- Base Sediment and Water.
- Water in Oil by Karl Fischer.
- Oil in Water Testing.
- Density Measurement.
- Determination of Reid Vapour pressure.
- General Produced Water Testing.
- Potable Water Testing.
- Utility Analysis.
- Microbiological Analysis.

### **Unit 5: Plant and Equipment:**

- Separation Systems.
- Oilfield Chemicals.
- Enhanced Oil Recovery.
- Metering.
- Summary.