



# LIMS . Laboratory Information Management System

## Introduction:

The traditional way of managing Lab samples data is improving a lot. Modern Labs uses different applications for managing efficiently their Lab Data.

#### In this programme delegates will learn:

- LIMS (Lab information Management System)
- Laboratory Data Organization and Storage
- LIMS development and Functionality
- Impact of a LIMS on the Laboratory
- Data Transfer/Instrument Interfaces
- Calibration of laboratory equipment
- Interface with Different ERP Systems and much more

By attending this training and activity-based programme, delegates will be able to return to the office confident in their ability to work in their Lab effectively; thus, enabling them to raise their profile within their organisation.

## **Target Audience:**

- Lab personnel usually Chemists, Analyst, Scientists, Managers, supervisors
- Those who want to increase their skills in LIMS applications
- Those who want to develop and enhance their role within their organisation

# **Training Methodology:**

The programme will be interactive and practical. There will be work in groups and pairs as well as individual exercises and everyone will get an opportunity to discuss their issues with trainer. Each day will end with time to produce an action plan for delegates' continuing development.

# **Course Objectives:**

## Participants attending the programme will:

- Improve the skills by understanding the benefits of using LIMS
- Be able to plan correct time for implementation of LIMS
- How productivity of Lab will be increased
- Reports development and automation
- Sample Scheduling
- Analyst & Instrument certification
- How LIMS can help in getting ISO17025

## **Course Outline:**

## Day 1 - Introduction

- A brief introduction to LIMS
- Understanding the basic LIMS sample lifecycle
- Taking a sample through its lifecycle from Login to Review.
- Static and dynamic data

- LIMS key concept: Sample Test Result
- Simple analyses with numeric, text, list and RTF components

#### Day 2 - Instruments, Product and Analysis Management

- Data Transfer/Instrument Interfaces
- Instruments Data (Calibration, Preventive maintenance)
- Computerized control of an instrument or analyser
- Automation of analytical instrumentation
- Lab Computer network (WAN, LAN) (Hand held devices)
- Products specification

#### Day 3 - More features

- Traceability of data results
- Statistical Laboratory Data Analysis (SQC Charting)
- Users Management
- Folders Management
- Samples Scheduling

## Day 4 - Why and when LIMS is needed

- Why Implement a LIMS?
- Who and why needs LIMS?
- ISO17025 and LIMS
- Architectural Different Model of a LIMS
- Impact of a LIMS on the Laboratory
- Common Misconceptions for LIMS

### Day 5 - Persuasive Communications

- Technologies of LIMS Life-cycles and development
- The LIMS Assessment, Needs, Approval, and Evolution
- The LIMS Costs
- Principle of Leadership
- Interactive Communication Skills
- Managerial problem Solving and Decision Making
- Support Roles and Resources
- Error Resolution
- Maintenance and Continuous Improvements