



AL043: Food Lab Sampling & LIMS

Training Description:

The reliability of analytical data thus obtained depends on several factors, sampling being the major factor. Current analytical methods require only few grams of food sample to analyze. Thus, it is necessary that a sample be as representative of the population as possible.

A **Laboratory Information Management System (LIMS)** is computer software that is used in the laboratory for the management of samples, laboratory users, instruments, standards and other laboratory functions such as invoicing, and work flow automation.

LIMS is designed for a wide variety of laboratory environments operating in many scientific and industrial disciplines.

Application of modern technology techniques inside laboratory is one most important modern ways of progress. Facilitating everything inside laboratory starting from samples receiving and handling, completing the analysis procedures, reporting the final analysis results, retrieving the old stored data results, auditing inventory of materials, is now can be handled easily by application and implementation of some kinds of software named as **Laboratory Information Management Systems (LIMS)**.

Using the Implementation of such systems can easily facilitate and control all procedures inside laboratory starting from sampling plan until final analysis reporting. Also, authorization of data available inside laboratory can be easily controlled through access control for every person inside laboratory.

Training Objectives:

By the end of the training, participants will be able to:

- ✓ Discuss the food lab sampling
- ✓ Explain the food laboratory
- ✓ Practice the Laboratory Information Management System (LIMS)

Training Designed for:

This course is intended for all Laboratory Managers, Analytical Chemists, Food Technologists, Medical Scientists, Laboratory Supervisors, Research and Development Scientists, Microbiologists, and Quality Assurance/Control Managers and all Laboratory Professionals.

Training Requirement:

"Hand's on practical sessions, equipment and software will be applied during the course if required and as per the client's request."

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client's learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

DAY ONE:

❖ Laboratory

- Organization Chart
- Role of Laboratory's Person
- Chemical Handling and Classification
- Chemical Reactions
- Reaction Types
- Poisons and Carcinogens
- Handling Toxic Substance
- Spillages Inside Laboratory

DAY TWO:

❖ Food Laboratory

- Components of Food
- Food Sampling
- The Food Chemistry Laboratory
- Advanced Laboratory Equipment for Food Analysis
- Gas Chromatography
- High Performance Liquid Chromatography
- Mass Spectrometry
- Gas Chromatography – Mass Spectrometry (GC-MS)

DAY THREE:

❖ Laboratory Information Management System (LIMS)

- Introduction to Information Systems
- Starting LIMS
- Users
- Roles
- Material Types
- Equipment Types
- Test Plans
- Data Entry

DAY FOUR:

❖ Laboratory Information Management System (LIMS) (Continuation)

- Sample Group
- Materials
- Inventory
- Storage Locations
- Suppliers
- Tests
- Results Entry

❖ Practical Session/Lab Visit

DAY FIVE:

- ❖ Laboratory Information Management System (LIMS) (Continuation)
 - Standards
 - Laboratory Equipment
 - Reports
- ❖ Course Conclusion
- ❖ POST-ASSESSMENT and EVALUATION

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Fees:

TBA as per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:

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