

For whom

QC Personnel
Quality Analysts
Chemists
Lab Supervisors
Technicians
Environmental &
Process
Engineers
Managers

Good Laboratory Practice

Good Laboratory Practice governs the organisational process and conditions, under which laboratory tests are planned, performed, monitored, recorded and reported. It ensures that the correct result is attained on every analytical test performed and facilitates proof of the validity of the test result. The importance of using Standards, Controls, Calibrators and Certified Reference Materials cannot be over-emphasised in attaining the correct test result and these will be covered in detail in this seminar.

In addition 4 contributory key parameters will also be dealt with extensively in this seminar:

- ◆ Measuring Instrument
- ◆ Measuring Accessories e.g. Electrodes or Cuvettes
- ◆ The Sample
- ◆ The Operator

The combination of all these parameters affects technical validation, comparability, quality control/assurance, proficiency testing and traceability – in simple terms Good Laboratory Practice.

This Seminar will deal with all factors contributing to Good Laboratory Practice and will use simple electrochemical tests as a model for more sophisticated analysis such as Chromatography, Spectroscopy, Spectrophotometry, Fluorimetry and other methodologies.

The Seminar will also cover how you can put the issues raised into effect in your own laboratory. A series of case studies and workshops will be presented to illustrate and provide practical examples of all the points raised. The Seminar will be presented by a team of contributors with extensive experience in all aspects of laboratory practice.

CONTENT

◆ Quality of the Analytical Result

Traceability, Accuracy, Uncertainty of Measurement, Calibration: The unbroken chain, Comparability, Primary Standards, Certified Reference Materials, Quality Control, Sampling Procedure.

◆ Accreditation

Audits and Reviews, Certificates of Analysis, Staff training, Document control, Preparation for Accreditation.

◆ Equipment

Measuring instruments, Fitness for purpose, Model selection, Accuracy, Resolution, Communications capability, Instrument Qualification.

◆ Sensors and accessories

The role of sensors, e.g. pH electrodes, How pH electrodes work, Care and Maintenance, Applications.

◆ Validation of analytical methods

Selectivity and Specificity, Range, Linearity, Sensitivity, Limit of Detection, Limit of Quantitation, Ruggedness, Accuracy, Determination of Uncertainty

◆ Standards

Calibration standards and buffers, Measures to assure quality, Stability, Accuracy, Uncertainty, Storage, Choice of values/levels, Validation, Traceability

◆ Calibrated Glassware

Specification, Certified/Traceable Glassware, USP compliance, EP compliance, Calibration of Glassware



Good Laboratory Practice Seminar & Workshop Programme

10.00	Introduction
10.20	Quality of the Analytical Result
10.40	Standards
11.10	Instrument Qualifications
11.40	Coffee
11.45	Theory of Karl Fischer
12.35	Workshop 1. Groups A, B, & C A - Method Validation B - Qualification of pH & Conductivity Meters C - Electrode Care & Maintenance
1.00	Lunch
2.00	Workshop 2. Groups A, B & C to rotate
2.45	Coffee
3.00	Workshop 3. Groups A, B & C to rotate
3.45	Video
4.15	Calibrated Glassware
4.45	Conclusion and Questionnaire to be completed.