



MiChem Dynamics
LEADING CHANGE

WATER MICROBIOLOGY METHOD VERIFICATION AND UNCERTAINTY OF MEASUREMENT (IMPLEMENTATION OF ISO 13843 AND TR28-03) TRAINING

This course aims to give an understanding of the protocol to be implemented for the verification of reference methods and validated alternative methods for implementation in a Water testing laboratory.

It is aligned with the newly revised accreditation requirement (TR28-03) and ISO 13843:2017 Water quality – Requirements for establishing performance characteristics of quantitative microbiological methods.

ISO 13843:2017 should be implemented, in addition to specific accreditation requirements, by all microbiological water laboratories that verify methods used for the analysis (quantification of microorganisms) in all types of water.



THE COURSE WILL RUN OVER A PERIOD OF 2 DAYS

LEARNING OUTCOMES:

- Understand the underlying theoretical structure of method validation and verification (secondary validation).
- Implement additional method verification requirements.
- Understand the implementation of the accreditation requirement TR28-03 Criteria for validation, verification, uncertainty of measurement and quality assurance in microbiological and molecular Testing.
- Understand through practical examples of alternative and reference methods how methods should be verified.

WHO SHOULD ATTEND THIS COURSE:

- Laboratory / Quality managers
- Analysts / technicians
- Technical signatories
- Anyone involved in method development in a microbiology laboratory

MINIMUM ENTRY REQUIREMENTS:

- Fluency in English writing and reading skills

TUITION:

- Training material included (English)
- Certificate of attendance or competence (based on outcome of assessment) will be issued on successful completion of training.

COURSE OVERVIEW:

DAY 1

- Introduction
 - Method validation vs. method verification
 - Types of microbiological methods

COURSE OVERVIEW:

- Method scopes with practical examples
- Water method verification in a single laboratory (ISO 13843 Clause 7)
 - Introduction to the performance characteristics (sensitivity, specificity, false positive rate, false negative rate, selectivity, efficiency, repeatability and uncertainty of counting).
 - Determination of performance characteristics
 - Types and number of samples and confirmations
 - Practical examples of water method verification

DAY 2

- Accreditation requirements: TR28 Version 03
 - Selection of matrices
 - Validation and verification documents
 - Validation and verification frequency
 - Validation and verification performance characteristics
 - Practical examples of water and swab method verification
 - Quality control and quality assurance
 - The use of media
 - The use of reference material and reference cultures
 - The use of Polymerase Chain Reaction (PCR) technology
- Test (assessment)

