

## “Method Validation in Analytical Chemistry”

Ensuring analytical methods are fit for the intended purposes.

Course Duration: 2 days

### Course Overview

This comprehensive training course is meticulously designed to provide participants with an in-depth understanding of method validation principles and practices. The curriculum encompasses essential statistical tools, performance characteristics, and documentation requirements critical for effective method validation.

Participants will gain valuable insights into method validation to ensure the methods are fit for the intended uses with the required accuracy, reliability, and consistency upon which business and regulatory decisions can be made.

**Who Should Attend:** This course is ideally suited for:

- Laboratory analysts
- Quality control personnel
- Research scientists
- Individuals involved in the development, validation, and transfer of analytical methods

### Course Objectives

Upon completion of this course, participants will be able to:

- Articulate the importance of method validation and its integral role in the analytical process.
- Apply fundamental statistical tools for method validation.
- Evaluate and interpret method performance characteristics.
- Comprehend the requirements of ISO 17025 pertaining to method validation.
- Document and report method validation data effectively.

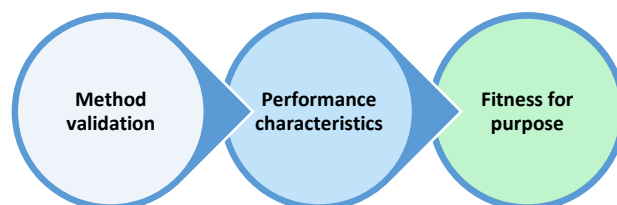
### Course Content

The course focuses on the fundamentals, including the definition and importance of method validation, ISO 17025 requirements, the analytical process, and basic statistical tools such as the Central Limit

Theorem, t-tests, F-tests, ANOVA, pooled standard deviation (SD), and relative standard deviation (RSD). It delves into method performance characteristics, including selectivity, working range, calibration, regression analysis, limits of detection and quantification, sensitivity, and ruggedness, procedures for estimating precision (repeatability, reproducibility, and intermediate precision) and bias (utilizing certified reference materials and spike recovery), interlaboratory comparisons, documentation, reporting, and continuous monitoring of method validation data.

### Course Highlights

- Interactive lectures and discussions
- Practical exercises and workshops
- Real-world case studies
- Expert instructors



Invest in a professional development program to build laboratory personnel's proficiency in method validation.

For further information, please contact: Metrochem Consultancy Services (002505991-X), 28 Jalan USJ 2/4B, 47600 Subang Jaya  
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