

## Online Course

# Validation of Chemical Methods for Residue Analysis

**Analytical laboratories that perform chemical analysis on veterinary drugs, toxins, pesticides and contaminants need to demonstrate that their methods are fit for purpose. Multiple validation approaches exist (e.g. EU 2021/808, SANTE/12682/2019, CODEX CAC/GL 71-2009) and it is often unclear how to implement these and how to come to a practical set-up of experiments. In this online course you will learn step by step to draft a validation plan for your own validation case.**

## Target group

Professionals with a technical background in industry, in governmental, commercial or academic laboratories in the area of food and feed safety residue analysis. At least a BSc or comparable is required in a relevant field. In addition, work experience of at least 2 years is required in the field of chemical analysis of residues.

## Results

After successfully attending the online course, you will have developed a validation approach for your own validation case. Via working on this case, you will:

- Understand the phases to go through for a fit for purpose validation
- Be able to determine the relevant validation parameters
- Have a good understanding of the meaning of trueness, precision, CC $\alpha$  and CC $\beta$
- Be able to determine measurement uncertainty
- Have hands-on experience with evaluation of the analytical data
- Be able to prepare a validation report

**Date** 7 Mar – 13 Apr 2022

**Location** Online

**Duration** 6 weeks | 32 hours

Course leader dr. Bjorn Berendsen,  
Wageningen Food Safety  
Research

## Outline and topics

This online course offers you an attractive mix of online learning including knowledge clips, reading material, exercises, Q&A, group assignments, individual assignments, participation in live virtual classroom sessions and the opportunity to apply all new knowledge to your own case. Online you can consult our experts directly and interact with fellow trainees. Quizzes are offered throughout the course to further enhance your knowledge.

In seven modules you will learn the theoretical background on the validation of quantitative confirmatory methods and all the steps that lead to a validated method.

## Programme (times in GMT)

Within 32 hours, spread over 6 weeks, this course will guide you through the field of validation of chemical methods for residue analysis. The virtual live kick-off will take place in week one. From then onwards you will have access to the online learning environment with learning materials. Five live online sessions with the course leader and experts have been scheduled. Each live session will be recorded and available through the online learning environment to watch afterwards. In between the live sessions, you are able to carry out training activities in your own pace and at any given time.

### Module 1 Introduction

- Introduction of the course, lecturers and participants
- Overview of regulations
- Validation protocol
- Live virtual classroom: Tuesday 8 March, 9.00 am (GMT)

### Module 2 Fundamental knowledge

- Performance characteristics: quantification, trueness, recovery and matrix effects
- Measurement uncertainty: repeatability and reproducibility, CCa and CCB
- Qualitative versus quantitative methods, confirmation criteria
- Live virtual classroom: Thursday 17 March, 9.00 am (GMT)

### Module 3 Design of a validation plan

- Selecting performance characteristics
- Minimum requirements
- Design of experiments
- Live virtual classroom: Tuesday 22 March, 9.00 am (GMT)

### Module 4 Data evaluation

- Calculations: quantification, trueness, repeatability and reproducibility, CCa and CCB
- Calculations: recovery and matrix effect, ruggedness
- Application
- Live virtual classroom: Wednesday 30 March, 8.00 am (GMT)

### Module 5 & 6 Reporting and Other Validation procedures

- Outcome assessment
- Validation report
- Ongoing method validation
- Screening method
- Verification and extension

### Module 7 Closure

- Final quiz
- Reflections and Evaluation
- Certificate
- Live virtual classroom: Wednesday 13 April, 8.00 am (GMT)

## Practical information



The course fee is € 1,495,- per person and gives you 4 months access to the course content. An early bird fee (€ 1,295,-) is applicable when you register before December 21st, 2021.



Between 10 and 25 participants/  
Max. 25 participants.



After completion of this course a personalised certificate is issued.

## Registration

Enrollment is possible until February 15, 2022, or until the maximum number of participants is reached.

Register via [www.wur.eu/academy](http://www.wur.eu/academy).

[Register](#)

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### Contact

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