Validation of Chemical Methods for Residue Analysis

Online Course

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Online Course

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/11312/2021, 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.

Date **4 Mar - 26 Apr 2024**
Location **Online**
Duration **8 weeks | 6 hrs/wk**
40-60 hours

Course leader dr. Bjorn Berendsen, Wageningen Food Safety Research

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, CCα and CCß
- Be able to determine measurement uncertainty
- Have hands-on experience with evaluation of the analytical data
- Be able to prepare a validation report

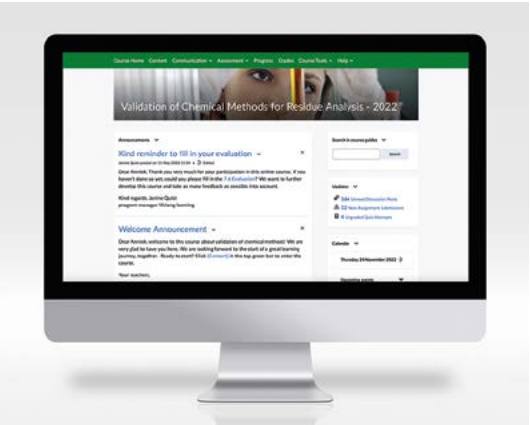
Our online programme

Within 40 to 60 hours, spread over 8 weeks, this course will guide you through the field of validation of chemical methods for residue analysis. The kick-off will take place in week one and will be live online – so virtual, with real-time interaction. Onwards, you will have access to the online learning environment BrightSpace, with learning materials to study in your own time and place. Keep in mind 75% of your time will be self-paced online learning on BrightSpace.

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.

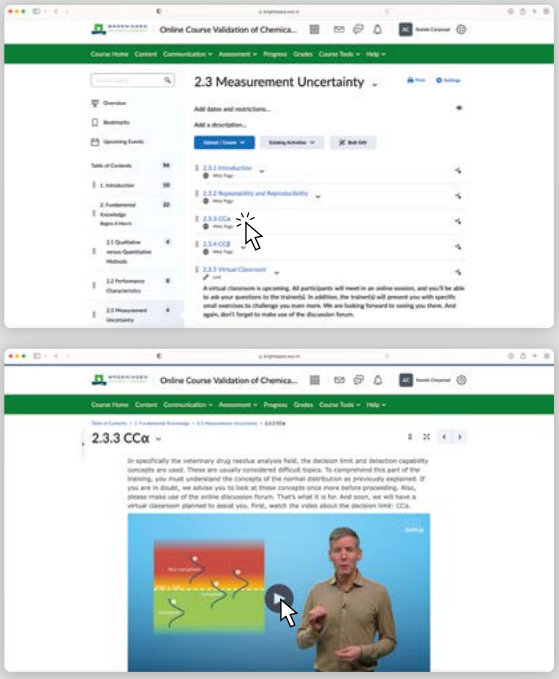
In seven modules you will learn the theoretical background on the validation of quantitative confirmatory methods and all the steps that lead to a validated method.



What to expect learning online? You will:

- watch knowledge clips and read information
- further extend your comprehension and self-assess by joining small quizzes
- share experiences and questions in a forum with your peers
- define and reflect on your learning goals
- have questions answered during the virtual classrooms
- meet and discuss group assignments during live sessions with your peers
- apply new content on your validation case and daily work
- prepare your own validation report

Each virtual classroom will be recorded and available on the online learning environment to watch afterwards. Besides learning online and self-paced, we have scheduled 6 virtual classrooms (live online), with the course leader and experts. Please find the dates of the 6 virtual classrooms below.



Module 1 Introduction

- Introduction of the course, lecturers and participants
- Overview of regulations
- Validation protocol

Module 2 Fundamental knowledge

- Performance characteristics: quantification, trueness, recovery and matrix effects
- Measurement uncertainty: repeatability and reproducibility, CCα and CCß
- Qualitative versus quantitative methods, confirmation criteria

Module 3 Design of a validation protocol

- Selecting performance characteristics
- Minimum requirements
- Design of experiments

Module 4 Data-evaluation

- Calculations: quantification, trueness, repeatability and reproducibility, CCα and CCß
- Calculations: recovery and matrix effect, ruggedness
- Application

Module 5 & 6 Reporting and Other Validation procedures

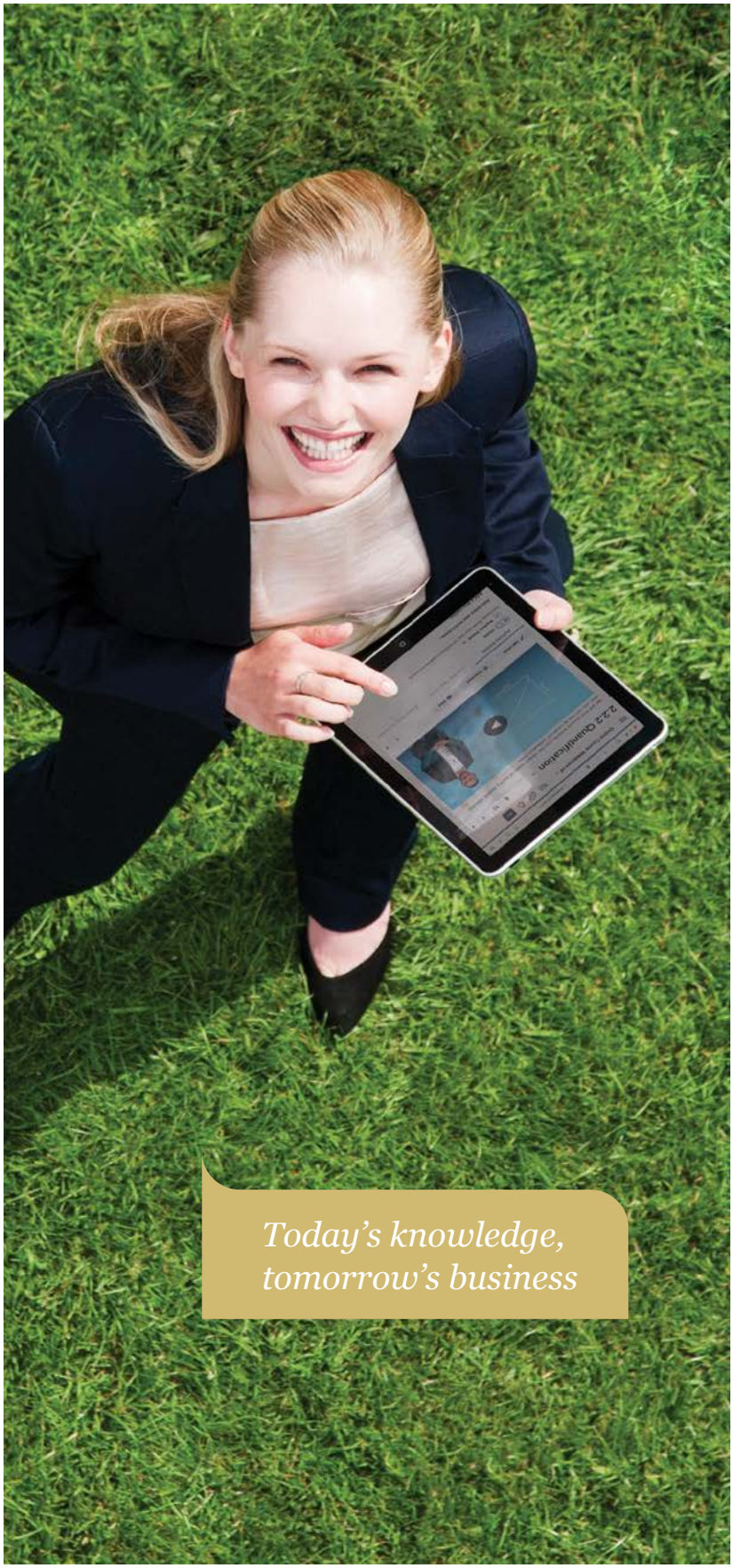
- Outcome assessment
- Validation report
- Ongoing method validation
- Screening method
- Verification and extension

Module 7 Closure

- Final quiz
- Reflections and Evaluation
- Certificate

Planning live virtual classroom sessions

- **week 1** Wednesday **6 March** **12.00-13.30** (CET)
- **week 3** Wednesday **20 March** **12.00-13.00** (CET)
- **week 4** Wednesday **27 March** **12.00-14.00** (CET)
- **week 6** Wednesday **10 April** **12.00-14.00** (CEST)
- **week 7** Wednesday **17 April** **12.00-14.00** (CEST)
- **week 8** Wednesday **24 April** **12.00-13.00** (CEST)



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 January 1, 2024.

Between 10 and 30 participants/ Max. 30 participants.

After completion of this course a personalised certificate is issued.

Study load: 40-60 hours, divided over 8 weeks (average of 6 hrs/week)

Registration

Enrollment is possible until February 26, 2024, or until the maximum number of participants is reached.
Register via www.wur.eu/academy.

For more information and registration please visit our website.