



European  
Commission

### JRC Mission

As the science and knowledge service of the European Commission, the Joint Research Centre's mission is to support EU policies with independent evidence throughout the whole policy cycle.



## Training workshop on practical aspects for regulatory GMO control implementation Programme

JRC Geel  
6-8 March 2018

**The European Commission's  
science and knowledge service**  
Joint Research Centre



EU Science Hub  
[ec.europa.eu/jrc](http://ec.europa.eu/jrc)



@EU\_ScienceHub



EU Science Hub - Joint Research Centre



Joint Research Centre



EU Science Hub

Joint  
Research  
Centre

## Tuesday 6 March 2018

- 09:00 Arrival at the JRC - Participants' registration
- 09:30 Welcome and opening remarks (Guy Van den Eede)
- Introduction of trainers & participants
- Framing of the training workshop: format and programme (Maddalena Querci)
- 10:30 Coffee break
- 11:00 **Topic 1: Regulatory and methodological aspects**
- Introduction to the EC JRC and its role in support to the European legal frame on GMOs (Maddalena Querci/ Guy Van den Eede)
  - GMO Testing: Objectives, implementation and selection of analytical strategies according to the country's regulatory requirements (Ugo Marchesi)
- 12:30 Lunch
- 14:00 **Topic 2: Quality criteria and quality management in a GMO detection laboratory**
- General concepts related to quality management and implementation of GMO testing laboratory
- Practical aspects of regulatory GMO testing: critical quality points experiences from a small lab from a small country (Gilbert Moris)
  - General aspects of sample preparation (Frank Narendja)
  - Testing strategies and challenges in GMO analysis according to the purpose of the analysis (Gilbert Moris)
  - Review of the "critical quality points" encountered during PCR analysis (Frank Narendja)
  - Implementation of validated PCR-methods in an enforcement laboratory (Method's performance - Method's verification) (Frank Narendja)
  - Expression of results and some aspects of compliance decisions (Frank Narendja)
- 15:30 Coffee break
- 16:00 **Topic 2 continuation**
- 17:30 Departure to the hotel

## Wednesday 7 March 2018

- 09:00 **Topic 2 continuation**
- 10:30 Coffee break
- 11:00 **Topic 3: Proficiency Testing**
- The role of ISO/IEC 17043 in support of ISO/IEC 17025 accreditation
- Why participation to PT is important from a quality system perspective (Pieter Dehouck)
- Proficiency tests for GMOs in food and feed
- PTs organised for GMOs, in particular PTs organised by the EURL GMFF, explanation on how data evaluation is being done, as well as what can be learned from this, pointing to the major problems that result in unsatisfactory performance scores (Wim Broothaerts)
- 12:30 Lunch

- 14:00 **Topic 4: Reference materials in GMO analysis**
- Reference materials and how to use them:  
How to best use reference materials and how to use them for estimating measurement uncertainty (Stefanie Trapmann)
- 15:30 Coffee break
- 16:00 Visit to the reference materials processing hall:  
How GMO CRMs are produced and implications for their use (Håkan Emteborg)
- 17:30 Departure to the hotel

## Thursday 8 March 2018

- 09:00 **Topic 5: GMO testing strategies & tools for implementation of the matrix approach**
- Group 1: (a) GMO testing strategies & tools for implementation of the matrix approach & practical exercise on GMO-Matrix (Alexandre Angers)
- Group 2: (b) visit to the GMO laboratory (Philippe Corbisier)
- 10:45 Coffee break
- 11:15 **Topic 5 continuation**
- Group 1: (b) visit to the GMO laboratory (Philippe Corbisier)
- Group 2: (a) GMO testing strategies & tools for implementation of the matrix approach & practical exercise on GMO-Matrix (Alexandre Angers)
- 13:15 Lunch
- 14:30 Discussion on:
- Combination of requirements for proper operation of a control laboratory
  - Topics of interest to the participants and/or emerged during the training
- Conclusions: wrap-up on key learning from the training & feed-back from participants
- 16:00 End of the training programme

- (a) Practical Exercise:** experimental design, methods selection, analysis of results and reporting
- Phase 1: Each group will receive some background information on two unknown samples, e.g. sampling origin, sample labelling, list of ingredients or information on accompanying documents. The group has to decide the analytical approach (which species, which GM events should be checked and by which methods), select the methods and set up the plan of analysis including considering quality management aspects as RM needed.
- Phase 2: According to the selection a set of "analytical results" will be provided to the group. The group has to interpret the results and compile the test report.
- (b) Visit to the GMO laboratory:** participants will visit the GMO laboratory and discuss with laboratory staff on lab design, work flow including handling of samples as well as handling of reference materials, instruments maintenance and calibration issues.