



Course

Using the General Unified Threshold Model of Survival (GUTS) in risk assessment of plant protection products

Do you want to apply GUTS models for the refinement of risk assessment of plant protection products? But have no access to an easy-to-use and reliable software or insufficient background knowledge and expertise in the application of this model? The use of GUTS has been recommended in a recent EFSA scientific opinion on toxicokinetic-toxicodynamic (TKTD) models for use in the authorization of plant protection products. This course focuses on the assessment of PPP risk under time-variable exposure in surface water, and offers a targeted combination of lectures and hands-on exercises, using state-of-art standalone software. This combination of theory and practice is an excellent opportunity to deepen your knowledge and understanding of the link between exposure and effects, and to build your TKTD modelling skills.

Content & Result

The course focuses on the application of GUTS models for assessing the risk of PPP under time-variable exposure in aquatic systems. GUTS stands for the General Unified Threshold model for Survival, and is the accepted toxicokinetic-toxicodynamic approach for the endpoint survival. The theory behind GUTS models will be introduced, and course participants will learn how to use the latest implementation of the GUTS models in a user-friendly standalone software, practice assessing the results and learn how to interpret them. Hands-on exercises include model calibration and validation, and model predictions in consideration of the recommendations given by EFSA. Participants should at least hold a Bachelor degree or similar in natural sciences, and have some experience with the use of models, preferably in risk assessment.

Location:	Wageningen
Dates:	16, 17 and 18 October 2019
Courseleader:	Dr Andreas Focks, Wageningen Environmental Research
Lecturers:	Dr Roman Ashauer, Syngenta Dr Tjalling Jager, DEBtox research

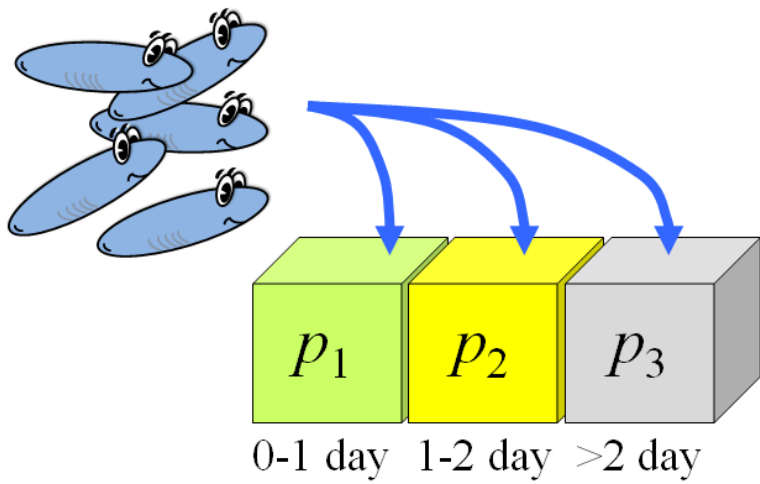
Our approach

A hands on training by the combination of lectures, exercises and discussions. Back home you can apply new knowledge and approaches straight away in your daily work

Target audience

This course aims at professionals interested in applying GUTS for the authorization of plant protection products (PPPs):

- Consultants and business representatives working for industry and/or consulting agencies who apply GUTS for dossiers (evaluation, preparation and submission).
- Scientists performing research on TKTD modelling with interest in GUTS applications in risk assessment
- Regulators working for admission authorities who evaluate dossiers containing GUTS applications or are in general interested in an improved link between exposure and effects



Programme

Day 1 Wednesday, 16 October 2019 (afternoon)

- Opening and introduction
- Problem formulation and overview of the tiered approach for regulatory risk assessment and the role of GUTS models therein
- Theoretical background of GUTS as toxicokinetic-toxicodynamic model
- Introduction to model calibration and parameter optimisation
- Hands-on exercises with GUTS software: model calibration
- Short discussion and feedback on model calibration
- Dinner

Day 2 Thursday, 17 October 2019 (whole day)

- Strategies for model calibration and interpretation of calibration results (based on the exercises of Day 1).
- Quality control of model calibration - technical aspects and documentation
- Model validation – general aspects and specifics for GUTS
- Hands-on exercises with GUTS software: model validation
- Discussion and feedback on validation: when is a model 'good enough'?
- Model predictions using GUTS: Endpoints, methods and documentation
- Hands-on exercises, calculation of LPx
- Short discussion and feedback
- Dinner

Day 3 Friday, 18 October 2019 (morning)

- Strategies for model validation, predictions, and interpretations (based on exercises of Day 2)
- Model documentation and relation of GUTS output to the regulatory questions, documentation
- Future developments
- Evaluation, certification ceremony and closing
- Lunch
- End of course

Practical information

Course fee

The course fee is €1950,- (no charge of VAT) and covers tuition, course materials, coffee/tea, lunches, 2 dinners.

Employees of an admission authority/university can apply for a reduced course fee of €1500,-. Traveling and accommodation costs are not included. A few places at reduced fees are given on application for PhD students, please contact the course leader for more information.

Maximum number of participants: 30

Registration

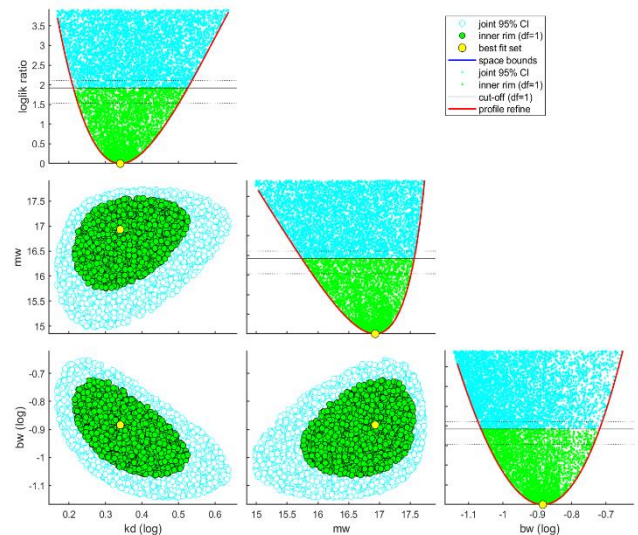
Registration is open now and closes at 17 September 2019, or if the maximum number of 30 participants is reached. A few weeks before the course starts, participants will receive additional information about the course.

Registration is possible via

<https://forms.gle/2RocUcZQZKzPVT6J7>

More information online via

http://www.debttox.info/guts_course.html



Contact

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