

Tackling Analysis of Complex Sensory & Consumer Test Design Structures

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Duration: 3 hours

Audience: Open to all interested persons

Background: Basic knowledge and experience of analysis of variance

The standard approach to analysing replicated sensory panel data becomes more complex when either systematic variation within samples makes it impossible for each assessor to experience the same sample (e.g. meat steaks) or in personal care applications where samples need to be tested using different parts of the assessor's body (shaving left v right side, deodorant application left v right).

In consumer tests we may want to investigate demographic differences in liking both overall and as interactions with our samples.

This workshop considers analysis of variance models for rating scale data with crossed, nested and interaction effects, we discuss strategies for setting up the correct model and choosing the appropriate noise variation for each test. Case studies will be illustrated with code and output from SAS® and R.

We will also discuss the two approaches to mixed model analysis using classical ANOVA and REML and give our views on the topic of replication in sensory trials.

Laptops are not required.