

# Propositions

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1. The PSO algorithm is fast to construct D-optimal experimental designs when preferences for mixtures of ingredients are described by the multinomial logit model. However, the slower mixture coordinate-exchange algorithm leads to better designs (*Chapter 2*)
2. Bayesian experimental designs are robust: they perform well for many scenarios and never perform very poorly (*Chapter 2*)
3. A priori imposing a parametric function relating mixture parameters to amounts in the mixture-amount model often leads to large forecasting errors (*Chapter 3*)
4. Using a Gaussian process-based model for mixture-amount data avoids model comparison and testing procedures to choose the final model (*Chapter 3*)
5. Not-environmentally friendly behavior is not necessarily the outcome of individuals being not environmentally conscious but rather the lack of knowledge regarding new products (*Chapter 4*)
6. In research, where new papers are becoming abundant, quality and not quantity must be striven for
7. A result you might have not expected is also a result. Iteratively updating the analysis until theories are confirmed is not scientific
8. One cannot call science anything that changes depending on the context or geographical situation
9. Grades alone do not tell the whole: to succeed in what one does, other traits are more important
10. No research is ever completed. If you can no longer extend your own research, somebody else will do this in the future
11. All work and no play makes Jack a dull boy (*The Shining*, 1980)