Highlights of the manuscript: "*Model-based optimal design of experiments for parameter precision: Supercritical Extraction case*" by Sliczniuk and Oinas.

* Parameter-distributed model for mass transfer in supercritical CO₂ extraction of chamomile oil and dynamically changing operating conditions
* Theoretical basis and tailored formulations for model-based optimal experimental design
* Distinct optimal design strategies identified across pressure regimes
* Experiments near the critical point provide higher information gain than at high pressures