DEPARTMENT OF MATERIALS, TEXTILES AND CHEMICAL ENGINEERING

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MICROKINETIC ENGINE: KINETICS MADE ACCESSIBLE

micro Kinetic Engine

ShARP Engineering

Services in Chemical Reaction, Reactor and Process Engineering

OUR GOALS.

MAKING KINETICS ACCESSIBLE…

Provide a strong, versatile and user-friendly software platform as a tool to unravel complex chemical kinetics with a push of a button.

TO IMPROVE CHEMICAL PROCESSES.

Accelerate the implementation of innovative, green processes. Increase the viability of existing state-of-the-art plants and decrease their negative impact on the environment.

SETTING UP BUSSINESS.

MARKET.

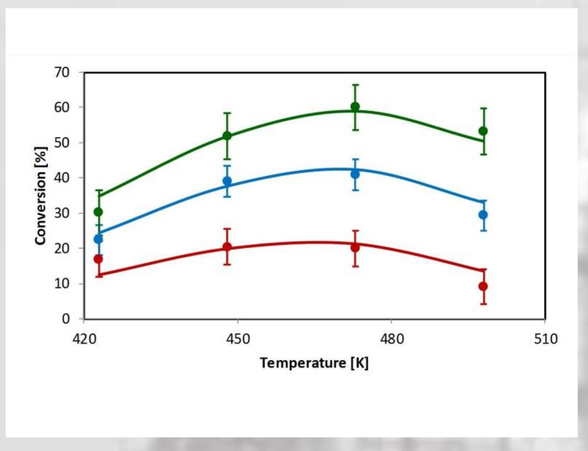
Chemical industry (international and national). Research and academic institutes with a focus on chemical engineering.

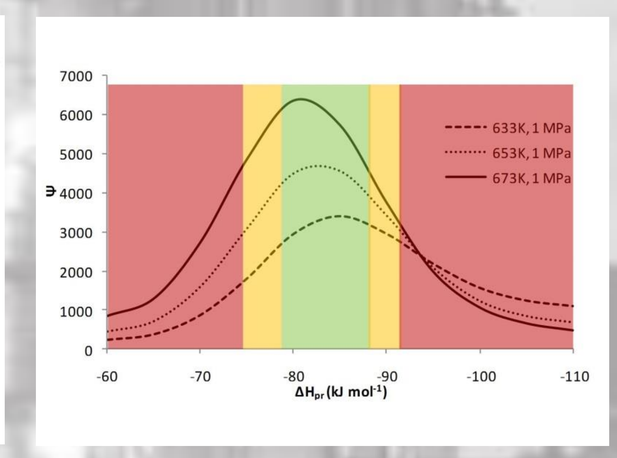
INTEREST.

By various international chemical companies through hands-on training sessions.

EXPECTED TTM – Time2Market.

Q2-2017: academic license available
Q3-2017: finalization of the GUI
Q4-2017: commercial license available





MAIN FEATURES.

USER FRIENDLY.

In contrast to competitor software, microKinetic Engine does not require any programming effort thanks to smart interfacing.

TWO MODES.

Both kinetic simulations as model regression to user experimental data can be performed in an automated manner.

REACTOR TYPES.

Four ideal reactor types can be simulated with microKinetic Engine: (semi-)batch reactor, plug flow reactor and continuous stirred tank reactor.

ASSESSMENT.

The model performance and regression results can be assessed easily by a large number of statistical tests and visual tools.

REACTION NETWORK.

The reaction network is defined either manually by smart interfacing of through an optional reaction network generator.

AND BEYOND…

Through the implementation of User Defined Equation, models beyond chemical kinetics can be built, regressed and assessed.

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micro Kinetic Engine

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