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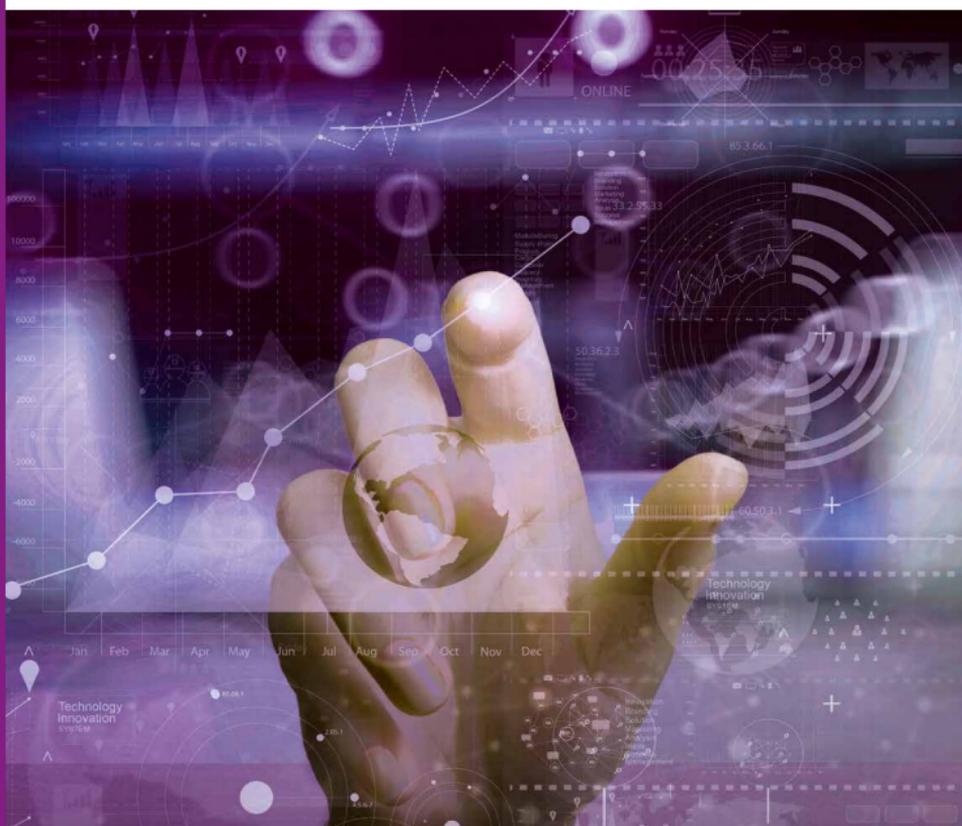
**KoMSO**

# KoMSO CHALLENGE WORKSHOP

## Challenges for Mathematical Modeling, Simulation and Optimization for Advanced Process Control of Batch Processes

**FEBRUARY 9 & 10, 2017**

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Heidelberg Collaboratory  
for Industrial Optimization



Interdisciplinary Center  
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## KoMSO CHALLENGE WORKSHOP

# Challenges for Mathematical Modeling, Simulation and Optimization for Advanced Process Control of Batch Processes

Batch processes are an important way of manufacturing chemicals. They are particularly important for the production of specialty chemicals due to their flexibility, simplicity and low investment costs.

This workshop treats opportunities and challenges to improve the operation of batch processes in the framework of Real Time Optimization and of Nonlinear Model Predictive Control. This includes newly developed models of reaction kinetics, new sensors and new fast mathematical optimization methods for process operation. The effects of model-based optimizing control are demonstrated by presenting problems from several application areas, e.g. polymerization processes.

The aim of this workshop is to bring together representatives from both academia and industry in order to determine mathematical challenges of common interest, to improve and integrate process control solutions for applications across various industries, and to foster synergies and collaborations.

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