

## Workshop Invitation

### Closing the Gap to Industrial Application

### Optimal Production Scheduling of Large-scale Industrial Processing Plants with INOSIM Digital Twins

Thursday, 15.12.2022,

09:30 – 12:30

Participate online

[MS Teams Link](#)

or visit us in Dortmund

Joseph-von-Fraunhofer-Str. 20  
44227 Dortmund

Please register for the workshop here – it's free: [Registration](#)

## Overview

No matter how well designed your production plants are – if your production schedules are not top-notch, you will lose time and money. Today, production scheduling is often done manually, which is tedious, expensive, and inefficient. Most approaches for the automatic generation of optimal production schedules have so far only had limited success in industrial applications.

The objective of this workshop is to provide a platform for interested industrial experts and researchers from the batch processing domain to learn about the current state of the art of optimal production scheduling solutions and to discuss the challenges and benefits of their industrial deployment. Impulse talks from leading industrial and academic experts will provide different perspectives on the topic. The OptiProd.NRW consortium will give an in-depth overview of a new simulation-driven software solution for the automatic generation of optimal production schedules that has been tailored to address the key challenges that arise in the industrial deployment of such solutions. The system is demonstrated on a complex industrial formulation plant of Bayer AG.

## Agenda

09:00 – 09:30	<b>Arrival and Coffee</b>
09:30 – 09:45	<b>Welcome and Overview</b> Dr. Christian Sonntag, INOSIM Group (Project Coordinator)
09:45 – 10:15	<b>Optimal Production Scheduling in Practice: Pain Points, Challenges, and Benefits</b> Impulse talks from industry by: <b>Dr. Rolf Becher, BASF SE</b> <b>Dr. Andreas Schluck, Bayer AG</b>
10:15 – 10:45	<b>When to Use What and How? Experiences with Different Approaches to Industrial Scheduling Problems</b> Christian Klanke and Prof. Dr. Sebastian Engell, Technische Universität Dortmund
10:45 – 11:15	<b>Coffee Break</b>
11:15 – 12:00	<b>The OptiProd.NRW Solution for Optimal Production Scheduling of Large-scale Industrial Processing Plants</b> Christian Klanke, Engelbert Pasioka, Christian Koslowski, Dominik Bleidorn, Dr. Christian Sonntag, and Prof. Dr. Sebastian Engell
12:00 – 12:30	<b>Discussion and Feedback</b>
12:30	<b>End of Workshop / Lunch</b>