

Final Symposium | ONLINE sessions

Agenda

Thursday, 2 April 2020

13:00 Opening and Welcome

Christine Maul, Covestro Deutschland AG - Sebastian Engell, TU Dortmund

13:10 Overview of the CoPro Project

Sebastian Engell, TU Dortmund

13:25 Presentation of sister projects

COCOP – Matti Vilkkko (TAU, FIN)

FUDIPO - Konstantinos Kyprianidis (Mälardén University, SWE)

MONSOON – Rosaria Rossini (Linksfoundation, IT)

MORSE – Heli Helaakoski (VTT, FIN)

14:05 Introduction to the CoPro poster sessions

Sebastian Engell, TU Dortmund

Programme of and links to the poster sessions see next pages.

6 parallel poster sessions will be repeated in each time slot. Each session lasts 45 minutes. Presentations will be in the indicated order. Change of sessions is possible.

14:15 CoPro Posters and demonstrations I - 6 sessions in parallel

15:00 CoPro Posters and demonstrations II - 6 sessions in parallel

15:45 CoPro Posters and demonstrations III - 6 sessions in parallel

16:25 Wrap up and programme of day 2

Sebastian Engell, TU Dortmund

All poster sessions will be held in parallel in all three time slots.

The posters will also be available on the CoPro web site www.spire2030.eu/copro

Parallel poster and demonstration sessions 1-4

Repeated three times – Start at 14.15 / 15.00 / 15.45 hrs.

Session 1: Operator support	Session 2: Site-wide optimisation
<ul style="list-style-type: none"> • Operator support for improving energy and material efficiency <i>Presenter: Patrick Schiermoch (INEOS)</i> • Anomaly detection in polyethylene production <i>Presenter: Peter Krause (divis)</i> • Optimisation of the production and procurement of technical gases <i>Presenter: Roberto Lemoine (Covestro)</i> • Optimum operation of evaporator networks in viscose fibre production <i>Presenter: Alexander Arnitz (Lenzing)</i> 	<ul style="list-style-type: none"> • Large-scale optimisation of production and logistics in chemical plants <i>Presenter: Simon Wenzel (TUDO)</i> • Modelling concept and model library for large-scale optimisation in chemical plants <i>Presenter: Yannik-Noel Misz (TUDO)</i> • Power plant scheduling under uncertainty <i>Presenter: Keivan Rahimi-Adli (INEOS)</i> • Cross company site-wide optimisation without sharing of sensitive data <i>Presenter: Lukas Maxeiner (TUDO)</i>
Session 3: Planning and scheduling	Session 4: Thermal processes
<ul style="list-style-type: none"> • Planning and scheduling of consumer goods production <i>Presenter: Apostolos Elekidis (CERTH)</i> • Planning and scheduling of make and pack processes <i>Presenter: Christian Klanke (TUDO)</i> • Large-scale production scheduling in the food industry <i>Presenter: Georgios Georgiadis (CERTH)</i> • Day-ahead impacts of European electricity consumption <i>Presenter: Alessio Santecchia (EPFL)</i> 	<ul style="list-style-type: none"> • Optimal operation of sterilisation processes in food production <i>Presenter: Carlos Gomez (UVA)</i> • Thermal models for process optimisation in the canning industry <i>Presenter: Antonio Álvarez Alonso (CSIC)</i> • Optimisation of the operation of heat exchangers <i>Presenter: Maria Marcos (UVA)</i>

Parallel poster and demonstration sessions 5-6

Repeated three times – Start at 14.15 / 15.00 / 15.45 hrs.

Session 5: IT Integration and model management	Session 6: Hybrid modelling
<ul style="list-style-type: none"> • Intexc Integration Suite (Demonstration) <i>Presenter: Udo Enste (LeiKon)</i> • Model Management Platform (Demonstration) <i>Presenter: Jonathan Höges (LeiKon)</i> 	<ul style="list-style-type: none"> • Surrogate modelling tool and workflow in gPROMS <i>Presenter: Maarten Nauta (PSE)</i> • Data-driven and hybrid modelling tool <i>Presenter: Maarten Nauta (PSE)</i> • Estimation of grey-box models with constraints <i>Presenter: Jose L. Pitarch (UVA)</i>

The CoPro partners

Industrial end users and use case providers



Technology providing SMEs



Universities



Research institutes



Impact SME



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Friday, 3 April 2020

Theme: Digitalisation for Sustainability

Facilitator: Dr. Stefan Krämer, Bayer AG

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- 09:30** **Opening and welcome**
Prof. Dr. Sebastian Engell, TU Dortmund
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- 09:35** **Address by MinDirig. Karl-Uwe Bütof**
Ministry of Economy, Innovation, Digitalisation and Energy
Federal State of North-Rhine Westphalia, Germany
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- 09:45** **Presentation by Dr. Klaus Schäfer**
Chief Technology Officer of Covestro AG
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- 10:00** **From digitalisation to optimisation: Overview of the results of CoPro**
Prof. Dr. Sebastian Engell, Coordinator of CoPro, TU Dortmund
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- 10:15** **IT Integration: The Challenge and the CoPro solution**
Dr. Udo Enste, CEO, LeiKon, Herzogenrath
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- 10:30** **Human factors in digitalisation**
Jane Arnold, Head of Global Process Control Technology, Covestro AG
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- 10:45** **Break**
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- 11:00** **Green Deal and Industrial Strategy – what does it mean for the process industry?**
Jürgen Tiedje, Head of Unit Sustainable Industry Systems, Directorate-General for Research and Innovation, EU Commission
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- 11:15** **The SPIRE Roadmap**
Angels Orduna, Director of A.SPIRE
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- 11:30** **Digitalisation in the SPIRE Roadmap**
Dr. Martin Winter, CEFIC
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- 11:45** **Panel discussion: Digitalisation and optimisation for sustainability**
Facilitator: Dr. Stefan Krämer
Panel: Karl-Uwe Bütof, Prof. Dr. Sebastian Engell, Dr. Klaus Schäfer, Jürgen Tiedje, Dr. Martin Winter
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