### Final Symposium | ONLINE sessions

#### Agenda

**Thursday, 2 April 2020**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter(s)</th>
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<tbody>
<tr>
<td>13:00</td>
<td><strong>Opening and Welcome</strong></td>
<td>Christine Maul, Covestro Deutschland AG - Sebastian Engell, TU Dortmund</td>
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<tr>
<td>13:10</td>
<td><strong>Overview of the CoPro Project</strong></td>
<td>Sebastian Engell, TU Dortmund</td>
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<td>13:25</td>
<td><strong>Presentation of sister projects</strong></td>
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<td></td>
<td>COCOP – Matti Vilkko (TAU, FIN)</td>
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<td>FUDIPO - Konstantinos Kyprianidis (Mälarden University, SWE)</td>
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<td>MONSOON – Rosaria Rossini (Linksfoundation, IT)</td>
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<td>MORSE – Heli Helaakoski (VTT, FIN)</td>
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<td>14:05</td>
<td><strong>Introduction to the CoPro poster sessions</strong></td>
<td>Sebastian Engell, TU Dortmund</td>
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<td></td>
<td><em>Programme of and links to the poster sessions see next pages.</em></td>
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<td></td>
<td><em>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.</em></td>
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<td>14:15</td>
<td><strong>CoPro Posters and demonstrations I</strong> - 6 sessions in parallel</td>
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<tr>
<td>15:00</td>
<td><strong>CoPro Posters and demonstrations II</strong> - 6 sessions in parallel</td>
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<tr>
<td>15:45</td>
<td><strong>CoPro Posters and demonstrations III</strong> - 6 sessions in parallel</td>
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<td>16:25</td>
<td><strong>Wrap up and programme of day 2</strong></td>
<td>Sebastian Engell, TU Dortmund</td>
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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](http://www.spire2030.eu/copro)
Parallel poster and demonstration sessions 1-4
Repeated three times – Start at 14.15 / 15.00 / 15.45 hrs.

<table>
<thead>
<tr>
<th>Session 1: Operator support</th>
<th>Session 2: Site-wide optimisation</th>
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| • Operator support for improving energy and material efficiency  
  Presenter: Patrick Schiermoch (INEOS) | • Large-scale optimisation of production and logistics in chemical plants  
  Presenter: Simon Wenzel (TUDO) |
| • Anomaly detection in polyethylene production  
  Presenter: Peter Krause (divis) | • Modelling concept and model library for large-scale optimisation in chemical plants  
  Presenter: Yannik-Noel Misz (TUDO) |
| • Optimisation of the production and procurement of technical gases  
  Presenter: Roberto Lemoine (Covestro) | • Power plant scheduling under uncertainty  
  Presenter: Keivan Rahimi-Adli (INEOS) |
| • Optimum operation of evaporator networks in viscose fibre production  
  Presenter: Alexander Arnitz (Lenzing) | • Cross company site-wide optimisation without sharing of sensitive data  
  Presenter: Lukas Maxeiner (TUDO) |

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<tr>
<th>Session 3: Planning and scheduling</th>
<th>Session 4: Thermal processes</th>
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| • Planning and scheduling of consumer goods production  
  Presenter: Apostolos Elekidis (CERTH) | • Optimal operation of sterilisation processes in food production  
  Presenter: Carlos Gomez (UVA) |
| • Planning and scheduling of make and pack processes  
  Presenter: Christian Klanke (TUDO) | • Thermal models for process optimisation in the canning industry  
  Presenter: Antonio Álvarez Alonso (CSIC) |
| • Large-scale production scheduling in the food industry  
  Presenter: Georgios Georgiadis (CERTH) | • Optimisation of the operation of heat exchangers  
  Presenter: Maria Marcos (UVA) |
| • Day-ahead impacts of European electricity consumption  
  Presenter: Alessio Santecchia (EPFL) | |
Parallel poster and demonstration sessions 5-6
Repeated three times – Start at 14.15 / 15.00 / 15.45 hrs.

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<tr>
<th>Session 5: IT Integration and model management</th>
<th>Session 6: Hybrid modelling</th>
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<tr>
<td>• Intexc Integration Suite (Demonstration)</td>
<td>• Surrogate modelling tool and workflow in gPROMS</td>
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<tr>
<td><em>Presenter: Udo Enste (LeiKon)</em></td>
<td><em>Presenter: Maarten Nauta (PSE)</em></td>
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<tr>
<td>• Model Management Platform (Demonstration)</td>
<td>• Data-driven and hybrid modelling tool</td>
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<tr>
<td><em>Presenter: Jonathan Höges (LeiKon)</em></td>
<td><em>Presenter: Maarten Nauta (PSE)</em></td>
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<td>• Estimation of grey-box models with constraints</td>
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<td><em>Presenter: Jose L. Pitarch (UVA)</em></td>
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The CoPro partners

Industrial end users and use case providers

- Lenzing
- Covestro
- Trinsa
- INEOS
- P&G

Technology providing SMEs

- Leikon
- DISS
- PSE
- Orsoft

Universities

- Technical University of Denmark
- Universidad de Valladolid
- EPFL

Research institutes

- CERTH
- CSIC
- Inno

Impact SME
Friday, 3 April 2020

Theme: **Digitalisation for Sustainability**
Facilitator: Dr. Stefan Krämer, Bayer AG

**09:30 Opening and welcome**
Prof. Dr. Sebastian Engell, TU Dortmund

**09:35 Address by MinDirig. Karl-Uwe Bütof**
Ministry of Economy, Innovation, Digitalisation and Energy
Federal State of North-Rhine Westphalia, Germany

**09:45 Presentation by Dr. Klaus Schäfer**
Chief Technology Officer of Covestro AG

**10:00 From digitalisation to optimisation: Overview of the results of CoPro**
Prof. Dr. Sebastian Engell, Coordinator of CoPro, TU Dortmund

**10:15 IT Integration: The Challenge and the CoPro solution**
Dr. Udo Enste, CEO, LeiKon, Herzogenrath

**10:30 Human factors in digitalisation**
Jane Arnold, Head of Global Process Control Technology, Covestro AG

**10:45 Break**

**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

**11:15 The SPIRE Roadmap**
Angels Orduna, Director of A.SPIRE

**11:30 Digitalisation in the SPIRE Roadmap**
Dr. Martin Winter, CEFIC

**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