Final consortium meeting of CoPro
Final consortium meeting on April 2, 2020 discusses the project outcomes

In 3 ½ years of joint work in CoPro, several proofs of concepts of advanced on-line optimisation and scheduling solutions were completed and demonstrated successfully in industrial environments, and innovative solutions at TRL levels of up to 8 have been put into operation at the plants of the industrial end users. The participating SMEs have developed new products and prototypes of new software tools, and model libraries and new algorithms have resulted from the work of the research partners. The project results were published in 13 papers in scientific journals and 28 reviewed conference papers. Several PhD theses are in the process of completion.

At the web-based final plenary meeting of the CoPro consortium on April 2, 2020 before the CoPro Final Symposium (see https://bit.ly/CoProFinalSymposiumPressRelease), the 17 project partners discussed the outcomes of the project and the insights and experiences gained in a virtual roundtable.

From the perspective of the industrial partners, the collaboration between research institutes, technology providers and end users resulted in large steps forward towards the use of advanced tools for monitoring, optimisation and scheduling in industrial environments. Benedikt Beisheim of INEOS in Köln, one of the industrial end users, underlined that thanks to CoPro his company has made great progress in monitoring and improving the overall resource and energy efficiency of their plants as well as in anomaly detection. Also the prototypes for the optimisation of the power plant and of networks of coupled plants were very beneficial in demonstrating the potential of advanced optimisation. Francesc Corominas of Procter & Gamble agreed to this positive summary: “CoPro has been a great help in providing knowledge we didn’t have before”, he stated.

The SMEs within the project consortium were also very satisfied with the outcomes. New software products and prototypes have been developed by several of them during the project. The collaboration with industrial partners from different sectors provided valuable inputs to the development of the tools and opened doors for future collaborations. “We gained new insights from working with partners from the process industry”, said Thomas Bäck from divis, a German SME that specialises in data analytics. “This has greatly improved our understanding of data availability and data quality in the process industry.” Daniel Adrian Cabo from ASM, a Spanish SME specializing in Manufacturing Execution Systems, emphasized the long-term impacts of CoPro: “The results are very promising. We also gained new contacts from all over Europe and can build on our experiences in further projects.”

Also the research institutes and universities stressed the excellent results and efficient collaboration within the project. Michail Georgiadis from CERTH stated, that CoPro had been “the most successful EU research project in which he participated in over twenty years.” All researchers highlighted the productive multidisciplinary collaboration within CoPro and the positive experience of working on real industrial problems and applying advanced methods to these. Sebastian Engell, the project coordinator from TU Dortmund, Germany, summarised: “In this project we maintained a good balance between applications and developing generally useful tools and methods. I think we all can be very satisfied with the outcomes. It was a pleasure to work in such a great consortium”.

The participants regretted that after so many enjoyable in-person meetings during the course of the project, the final consortium meeting and the final symposium had to be organised “screen to screen”, but nonetheless lively discussion emerged and the web-based final symposium attracted more than 150 participants.

Details on the results of CoPro can be found at https://www.spire2030.eu/copro in the “Outcomes” section and at https://www.spire2030.eu/copro/New-Event/copro-final-symposium-materials-event
Final consortium meeting, April 2\textsuperscript{nd} 2020

- Antonio Alonso
  - CSIC

- Carlos Vilas
  - CSIC

- Ivan Kantor
  - EPFL

- Alessio Santecchia
  - EPFL

- Francois Marechal
  - EPFL

- Cesar de Prada
  - UVA

- José Luis Pitarch
  - UVA

- Maria Marcos
  - UVA

- Carlos Gómez Palacín
  - UVA

- Michail Georgiadis
  - CERTH

- Georgios Georgiadis
  - CERTH

- Apostolos Elekidis
  - CERTH

- Simon Wenzel
  - TUDO

- Lukas Maxeiner
  - TUDO

- Yannik-Noel Misz
  - TUDO

- Christian Klanke
  - TUDO

- Darius Harwardt
  - TUDO