ROMEO

REACTOR OPTIMISATION BY MEMBRANE ENHANCED OPERATION

Editorial

First newsletter, **March 2016**

Welcome to the ROMEO project and its first newsletter.
This is the first of a series of bi-annual newsletters aiming at providing you with updates on what happens with ROMEO.

ROMEO stands for Reactor Optimisation by Membrane Enhanced Operation. The project started in September 2015 and has received 6 million euros funding from the European Union's Horizon 2020 research and innovation programme.

ROMEO is developing a **new reactor** (two-in-one) **concept** using homogeneous catalysis and membrane technology to carry out chemical synthesis and downstream processing in a single step. ROMEO's reactor will improve efficiency and long-term sustainability for the process industry that is highly dependent on energy, raw materials and water resources.

Later in the project, **two plants** will be built to **demonstrate** the efficiency of ROMEO's technology in a near industrial environment. We will keep you updated on progresses made towards the building of these ambitious demo plants.

I am particularly confident in ROMEO's consortium and its **transdisciplinary approach**: all partners bring their unique expertise and also work outside their discipline to understand and contribute to the project's objective.

On behalf of the partners, I am glad to report that we are strongly committed to make ROMEO a successful journey creating **new intellectual and material know-how**, leading to the drastic reduction energy consumption and emissions in industrial catalytic gas-phase reactions.

The aim of ROMEO is to **reduce energy consumption** by up to 80% **and emissions** by up to 90% in industrial catalytic gas-phase reactions. Additionally, ROMEO will increase flexibility and adaptability to different processes and volume requirements. This will lead to increasing competitiveness for the whole European process industry, by reducing the time to market. **If we succeed, it will be a small revolution for chemical process engineering and a huge step towards more sustainable processes.**

We hope you are as excited as we are about this project! Please feel free to contact us should you want more information about the project.

Prof. Robert Franke - Project Coordinator- Evonik