



“The most exciting part in ROMEIO for me is to work on a completely new concept to establish SILP technology in a broader industrial way.”

Hi Alexander. Can you please tell us a little bit about yourself?

I was born and raised in Erlangen, so I actually did not get far away by now. I studied Molecular Science, which is more or less comparable to “regular” chemistry with a little bit more orientation into physical chemistry, here at the Friedrich-Alexander University in Erlangen. That’s why I also did my bachelor thesis in the department of physical chemistry about in-situ spectroscopy of model catalysts.

I was working at the institute of chemical reaction engineering as a student assistant for a long time and also did my master thesis about supported molten salt catalysts with nanoparticles in this institute. Since 2013 I am employed here as a PhD student.

When I am not at work I like to spend my time doing sports (especially soccer, which I am still playing in my hometown club), music (I am playing the drums in a hobby band, Mephystry (<https://www.facebook.com/Mephystry>), films and series or travelling.

What is your PhD project about?

In my PhD thesis I am mainly working on the development of an immobilized catalyst system for continuous gas phase hydroformylation reaction. To achieve this goal, I am testing different porous materials. As one part of the ROMEIO project is about the application of a membrane reactor module, I hope to be able to bring in as much help and knowledge from my previous studies as possible for this challenging approach.

The main issue in hydroformylation is the production of high boiling side products that lower the efficiency of the process. By selective separation of our aldehyde products in our catalyst system by

membrane technique, we hope to avoid this issue.

In the ROMEO project, I am mainly testing and evaluating the by then readily developed membrane module systems in a reactor setup. Then, the so gathered data is used to change or optimize the modules in collaboration with our partners.

What is the best thing about undertaking a PhD? How challenging is it?

The best thing about undertaking a PhD is to be challenged every day with something completely new. Most of the times there is no daily routine as you are working on things that were probably never done like this before.

Here in Erlangen, our institute and my co-workers provide a perfect working environment for achieving these ambitious goals. I also enjoy the possibilities to work with partners or in projects all over the world.

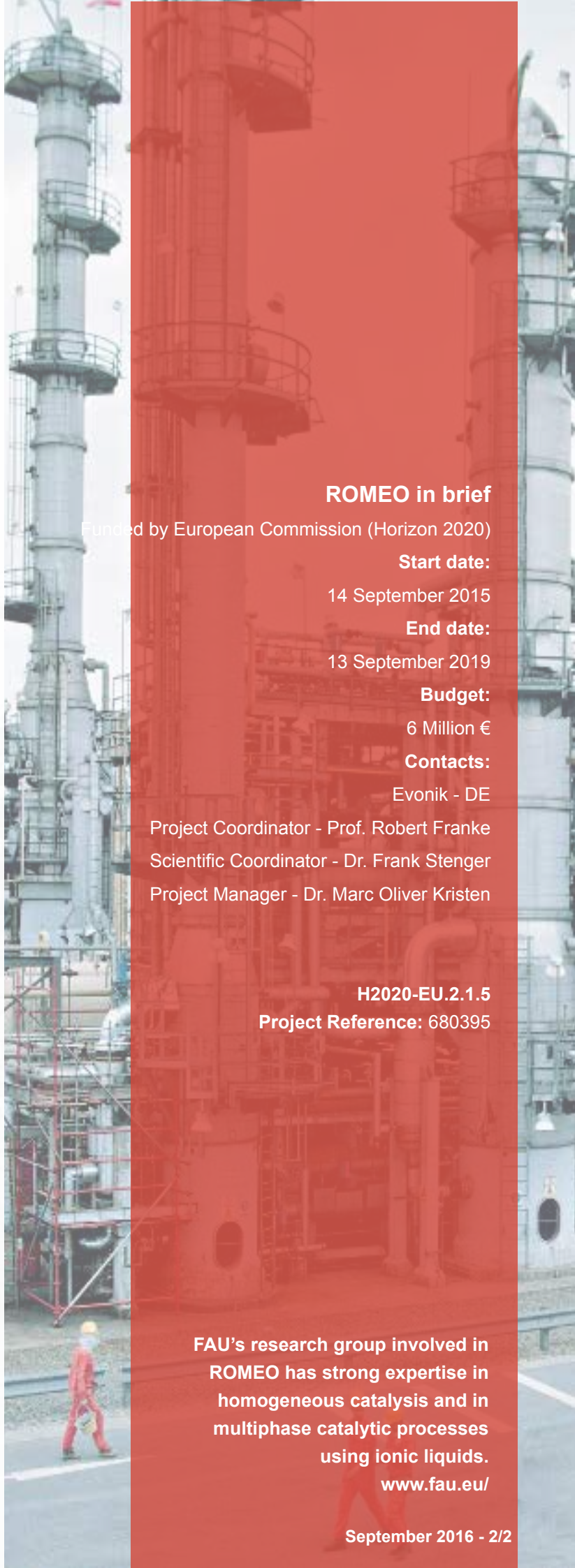
The ROMEO project is the best example of how you can work together with partners for example from Spain, Denmark or Austria.

What excites you in ROMEO?

Besides working and connecting with so many different people, the most exciting part in ROMEO for me is to work on a completely new concept to establish SILP technology in a broader industrial way. The concept is very promising and it would be a great deal if we could achieve these goals.

Do you have any plans after completing the PhD?

I would be very happy if I could go on a longer trip around the world after finishing my PhD. Besides that, I hope to find a good job that suits me in the industry. Maybe some kind of post-doc position around the world would also be interesting at the beginning.



ROMEIO in brief

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End date:

13 September 2019

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6 Million €

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FAU's research group involved in ROMEIO has strong expertise in homogeneous catalysis and in multiphase catalytic processes using ionic liquids.

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