



“ Being a researcher means uncovering the unknown and this is exactly what appeals to me. The ambiguity makes it challenging and exciting at the same time. Never stop being curious! ”

#### **Hi Jakob. Can you please tell us a little bit about yourself?**

I'm originally from Augsburg, a beautiful old city located in Southern Germany. After a year as a civil servant assignment abroad in Buenos Aires, Argentina, I studied Chemical Engineering at the Friedrich-Alexander University in Erlangen. During that period, I did an internship at BASF in Ludwigshafen and studied a semester of Industrial Engineering in Barranquilla, Colombia.

At the end of 2016, I moved to Copenhagen in order to pursue a PhD at the Technical University of Denmark (DTU) working on the ROMEO project. With DTU being one of the best technical universities in Europe, I am excited to contribute to this project and study under some of the best in Europe.

#### **What is your PhD project about? What objectives do you have to reach?**

Our role at DTU in the ROMEO project is to immobilize catalyst systems on membranes and to optimize their performance. I am very interested in this project, as it includes regular lab work and at the same time, I have the opportunity to build a test rig for continuous operations by myself!

Furthermore, we are characterizing the modules in order to acquire more knowledge on coating techniques and catalyst systems. We do that by applying multi-disciplinary analysis techniques, preferred non-invasive ones.

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

As a PhD student, the diversity of my daily work fascinates me and so, every day is different. Lab work, supervising students, teaching and even attending some lectures is part of our day-to-day business.

Furthermore, I enjoy being part of the interface between the industry and academia, especially in ROMEO with all its industrial partners. The project is very challenging with its ambitious goals, but at the same time, this is what keeps me motivated.

## What is appealing to you in being a researcher?

Being a researcher means uncovering the unknown and this is exactly what appeals to me. The ambiguity makes it challenging and exciting at the same time. Never stop being curious!  
\*smiles\*.

## What excites you in ROMEO?

There are two things in ROMEO which attract me a lot.

On one hand is the scientific part with its high set goals and its enormous impact on process intensification if we succeed.

On the other hand, it is ROMEO's close cooperation of academia and industry. It is amazing to see how problem-solving strategies can vary when you compare the two of them.

**Thanks for answering my questions and all the best with your PhD!**

### ROMEO in brief

Funded by European Commission  
(Horizon 2020)

**Start date:**

14 September 2015

**End date:**

13 September 2019

**Budget:**

6 Million €

**Contacts:**

Evonik - DE

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Scientific Coordinator - Dr. Frank Stenger

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The research portfolio of the Centre for Catalysis and Sustainable Chemistry (CSC) from the Department of Chemistry at DTU is focused on homogeneous and heterogeneous catalysis, gas separation and absorption, development of new materials, process design and conversion of biomass.

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