



“Over the last years I got more and more engaged with the topic of hydrogen production from biomass. Most exciting here with ROMEO is this combination of chemical reactor and membrane separation.”

Hi, Jürgen ! Can you please tell us a little bit about yourself ?

Directly after school I started at the competence center Bioenergy2020+. As I was always interested in science I began to study beside work at the University of Applied Science Pinkafeld. I graduated there in June 2016 and began to take over projects in Bioenergy2020+. In September 2017 I started my PhD at the technical university in Vienna.

Beside work and studies I'm very enthusiastic in sports. As Taekwondo trainer I like to work with people, aiming to improve their skills. As Austrian I love the mountains and like nearly every sport you can do there. I do hiking, climbing and a little skiing.

What is your favorite work subject ?

I'm not sure what my favorite work is. I love to work in the laboratory where I “produce” new data as well as to travel to conferences where I can present our new investigations. Also the construction and operation of research plants is a very challenging and interesting topic.

I guess I have no favorite work subject. In my opinion the combination of all these things makes this work so nice.

What does your daily job look like?

I start the day with a coffee. I guess this is my only job routine. As research is very challenging, I face new problems every day. Also every day we have to find solutions for these upcoming problems.

How did you get involved in ROMEO?

Over the last years I got more and more engaged with the topic of hydrogen production from biomass. So it was a good option for me to take over Dr. Rauchs work in this sector. Most

exciting is this combination of chemical reactor and membrane separation.

What is your PhD about? What objectives do you have to reach to contribute to the ROMEO project?

I work as researcher now for a couple of years. After my master thesis I decided to stay in this field and start doing a PhD thesis. It will focus on hydrogen production from biomass. Special focus will be laid on process improvement by adsorption processes.

A part of my PhD will be the design of the gas cleaning unit for ROMEO. A better gas cleaning system will make it easier to produce nice results with the ROMEO reactor.

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What are, according to you, the major challenges to be overcome in ROMEO?

Combining two processes is always challenging. In this case catalysts have to be developed or adapted as well as new membrane separators have to be design. I expect that this project will help to reduce our energy consumption. For some industrial applications major energy and CO₂ reductions can be expected, if we succeed.

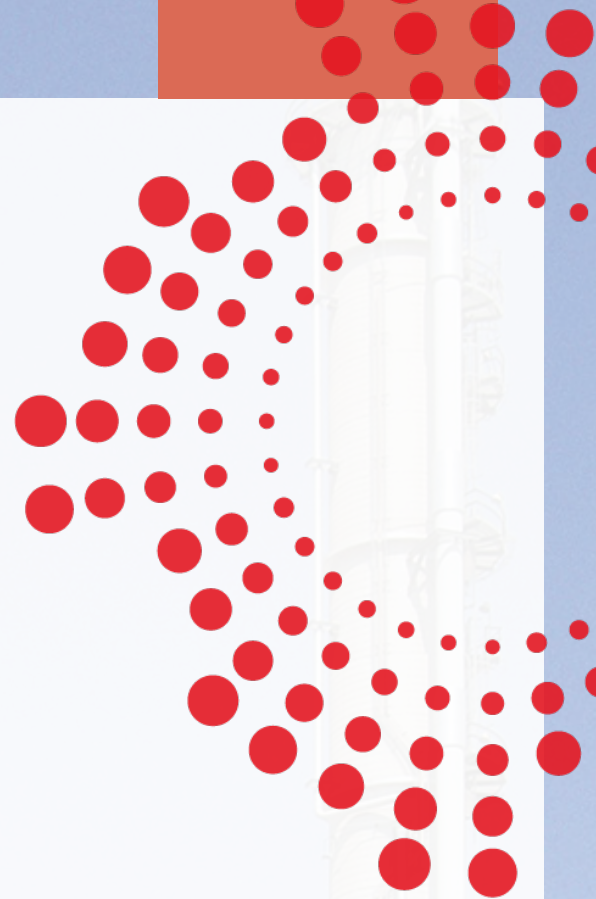
Thanks for your time, Jürgen !

BIOENERGY2020's competences cover research and development topics in the field of small scale, as well as medium and large-scale biomass combustion and biomass-based combined heat and power production systems.

The main role of BIOENERGY2020 in ROMEO is the demonstration of the Water Gas Shift reaction combined with membrane separation under industrial conditions. This demo plant will use CO or CO-containing syngas derived from biomass.



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ROMEO in brief

Funded by European Commission
(Horizon 2020)

Start date:

14 September 2015

End date:

13 September 2019

Budget:

6 Million €

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Scientific Coordinator - Dr. Frank Stenger

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REACTOR OPTIMISATION BY MEMBRANE ENHANCED OPERATION

H2020-EU.2.1.5

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