

European Research & Innovation Project

Reactor Optimisation by Membrane Enhanced Operation

Interview with Reinhard Rauch "Biomass gasification systems" area manager, BIOENERGY 2020+ GmbH, Austria

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

I am married, I have 2 children and I consider myself extremely lucky as my job is also my hobby. My background is in technical chemistry, which I studied at Technical University Vienna, where I also did my PhD in the area of biomass conversion.

In 2009 I started on a part time basis, at the centre of competence Bioenergy2020+, where I am at the moment responsible for the area "biomass gasification systems". This area is divided into two units, "gasification" and "synthesis gas conversion».

By end of February 2017 I will leave ROMEO. I will indeed hold a professorship for "chemical conversion of renewable energies" at Karlsruhe Institute of Technology. All the work I was responsible for in ROMEO will be undertaken by Jürgen Loipersböck. Jürgen has already been working for Bioenergy2020+ for several years. He has already done some work for ROMEO, e.g. high temperature CO-shift experiments. He did his master thesis on hydrogen production from biomass, so he knows many technical details of this conversion chain and will fit perfectly into the project and team.

What does your daily job look like?

I am mainly involved in meetings with scientific and industrial partners. I also take parts in discussions on work progress of PhD and master students. Finally, I get to travel a lot to conferences or meetings.



AROMEO has an innovative approach of combining two steps into one, which will reduce investment and operation costs

What excites you in ROMEO?

The idea of combining a water gas shift reactor with a separation step. For Bioenergy2020+ this project gives the chance to further improve the gas upgrading.

From your perspective, what is innovative with ROMEO (that hasn't been done before)?

As mentioned before the innovative approach of combining two steps into one, which will reduce investment and operation costs.

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

From my point of view, reaching the expected quality of hydrogen is challenging.

Could you give us a concrete example of a benefit that could be expected from ROMEO?

The main benefit for Bioenergy2020+ is that in this project, different gas upgrading strategies can be investigated, and in this way the gas treatment will be simplified. The results will be used also for other technologies, like Fischer Tropsch synthesis.

hanks for answering my questions and all the best with your new position!



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BIOENERGY 2020+ GmbH offers research, development, demonstration and other services in the field of biomass to energy to its customers. https://www.bioenergy2020.eu/

