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KRAJETE
Learning From Nature.

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UNIVERSITÄT LINZ

Doktorandenstelle/PhD position – project *BioHyMe*

Background

In order to provide sufficient energy the regenerative production of electricity is on the advance. However, by switching to renewable electricity production the need to store excess electricity is on demand, because storing and distributing electricity is still a limiting factor. Moreover, society requires fuels for mobility purposes. To purposefully combine both goals - excess electricity storage and generation of fuels - it would be possible to use the power-to-gas technology by electrolyzing water for subsequent excess renewable electricity conversion to molecular hydrogen (H_2). Thereafter, H_2 can be used to biologically reduce carbon dioxide to methane in a process referred to as biological methane production.

Goals

The ultimate goal of the project ***BioHyMe*** is to prioritize pure- or co-culture systems of methanogens (and additional microorganisms) for achieving ground breaking technical advances in biological methanation by applying novel bioprocessing techniques.

Prerequisites

The ideal candidate possesses knowledge of methanogens. An asset would be if the candidate possesses hands-on anaerobic cultivation and fermentation experience as well as knowledge of microbiology, biotechnology, technical chemistry and/or biochemical engineering.

We offer

state of the art anaerobic cultivation and fermentation facilities. The candidate will be integrated in an interdisciplinary team working in anaerobic microbiology and biotechnology, technical and analytical chemistry as well as in chemical engineering at the interface between academia and industry.

Possible start and duration of the thesis

The PhD position can be filled now and the project is scheduled to start on the 1st of February 2016.

Please contact

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