Friedrich-Alexander-Universität
Technische Fakultät

Lehrstuhl für Chemische Reaktionstechnik
Universität Erlangen-Nürnberg

Department für Chemie und Bioingenieurwesen

Lehrstuhl f. Chemische Reaktionstechnik

PhD-position

Start date: Now!

The project consortium „ProHyGen“ aims to develop a floating offshore wind turbine with integrated hydrogen storage in LOHC.

The planned first project stage will develop the plans for a 5 MW prototype.

The tasks of CRT include:

- Setup of a moving lab-scale hydrogenation reactor to simulate the influence of movement due to waves.
- Experimental evaluation of influence of movement and other environmental influences that are to be expected under offshore conditions on the operation of the hydrogenation reactor.
- Examination of fluid distribution in the reactor under wave-like movement.
- Optimization of plant configuration for offhshore operation.
- Establishment of key parameters for an offshore LOHC-hydrogenation plant on a 5 MW-scale.
- Plant design for 5 MW hydrogenation plant for offshore operation
- System integration with other units like electrical power systems, sensor systems and remote control, water management and desalination, electrolysis, tank & loading infrastructure etc. in close cooperation with partners.
- Contribution to the P&ID oft he complete floating platform.

Requirements:

- Master of chemical engineering or similar
- Fluent use of CAD programs
- Ability to work in a strongly cooperative environment with the academic and industrial partners

Program start: 01.09.2023

Program duration: 3 years

All genders welcome.

Contact:

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