

PhD-position

(subject to grant approval)

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 offshore 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 of the 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: (SUBJECT TO GRANT APPROVAL) June 2023

The grant proposal is still under evaluation by the project agency. This position will only become available if the the proposal is accepted.

Program duration: 3 years

All genders welcome.

Contact:

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