

Assignment

Living Lab EnTranCe

Digital Twin of an electrolyser

Client:

Jan-jaap Aué, (EnTranCe, Hydrogen applications)
Project: Hydrogen

Problem:

Description of the assignment:

Several projects at EnTranCe are connected to the electrolysis of water to produce hydrogen, a process that helps to store electric energy in a form of a chemical. Renewable electric energy is planned to be used for electrolysis in a sustainable future. The highly intermittent nature of renewable electricity (solar, wind) can cause technical and operational issues for an electrolyser. This project aims to build a mathematical model, a digital twin of an electrolyser in Python to study the operational characteristics of an electrolyser at conditions that cannot be tested experimentally. Experimental data is available to build and validate the model.

Suitable for students of the course(s):

Student participation: master thesis, technical, e.g. EUREC EMRE

EnTranCe contact person: EMRE: dr. Andras Perl, a.perl@pl.hanze.nl

Type of assignment:

Master thesis

Assignment

Living Lab EnTranCe

Period:

What are we, and where do you find us?

The Living Lab EnTranCe is the place where students work together with teachers, researchers, the business community, governments and/or civil society organisations on complex issues. We do this at the following locations:

- Location Proeftuin, Zernikelaan 17
- Location Energy Academy Europe, Nijenborgh 6.

What do we offer?

Interesting, topical and multidisciplinary research assignments in the field of energy transition.

Space for collaboration with lecturers, researchers, lecturers and the professional field.

Guidance within the innovation workshop by theme coordinators, project leaders or experts.

Are you interested?

Then please contact us:

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