KWK Kompetenzzentrum für Kraft-Wärme-Kopplung

OTH Amberg-Weiden

We are looking for committed applicants for the following master´s thesis

Opportunities of EEG systems for hydrogen production

International Energy Engineering, Energy Technology, or comparable

The “Centre of Excellence for Combined Heat and Power” (KoKWK) bundles the research activities of the OTH Amberg-Weiden in the field of sector coupling technologies with an interdisciplinary team of engineers and scientists. The implementation of the energy transition affects all areas of research and development at KoKWK. Innovative energy supply strategies, the increasing integration of renewable energies and the associated sector coupling require flexible energy systems, which we deal with as part of our research work. In co-operation with the hydrogen region Nordoberpfalz and the research project HyBaBo we are looking for a motivated master student.

NORD OBER PFALZ | WASSERSTOFF REGION H2NOPF

HyBaBo Hydrogen Region Bavaria - Bohemia

Topic Description

- Investigation of electricity marketing options for PV systems after the EEG feed-in tariff expires
- Investigation of the potential of electricity self-utilisation, calculation of self-sufficiency rates and self-supply rates.
- Investigation of the potentials of hydrogen production from PV surplus electricity, comparison with battery storages
- Using energy system modelling for developing and optimisation of several power supply solutions
- Calculation of levelized costs of energy / levelized costs of storage

Basic Qualifications

- Bachelor’s degree in the fields of Energy Engineering, Energy Technology, Mechanical Engineering, Environmental Technology, Renewable Energies or similar
- Interest in the field of energy, especially hydrogen
- Enthusiasm for software applications
- Initial experience in OEMOF or Python would be desirable
- High degree of independent working, commitment & flexibility

What we offer

As part of your Master's thesis, you will gain valuable practical experience in the field of applied research. Within our team, you will be individually supervised as part of your thesis and receive a comprehensive introduction to the topic. If required, a workstation is available for you in the KWK-Technikum.

If you are interested please send us an application to a.reinhardt@oth-aw.de

If you have any questions on the topic, please contact Anna Lena Reinhardt