European Institute
for Energy Research
by EDF and KIT

22J006 – Internship proposal

Development & Testing of Hydrogen System Prototype

Context

The European Institute for Energy Research was founded by EDF and the KIT in 2002 aiming at enhancing collaboration through joint projects applied to industrial issues. With its applied research orientation EIFER is bridging the gap between science and industry since more than 15 years. In the context of the European energy transition, EIFER provides research-based innovative energy solutions for the sustainable growth of cities, local communities and industries.

EIFER is looking for an intern to contribute to the development and testing of hydrogen components to be installed in a demonstration project. The innovative prototype will be designed and 3-D modelled by the student, with strong support from project engineers in EIFER and from project partners. Finally, the prototype will be manufactured and tested in the EIFER-laboratories. In addition, the student will support the team with the techno-economic analysis of the project.

The assigned tasks involve

Technical design and development of the prototype

- Definition of system specifications in close collaboration with project partners, including physical visits to partner facilities for detailed exchanges
- Mechanical and process design & calculations
- Selection of suitable components & exchange with suppliers
- Detailed 3D modelling of the prototype

Manufacturing & testing of prototype

- Assembly of the functional prototype
- Creation of a test plan for safety and functionality testing
- Building a test-bench and carrying out the test campaign
- Evaluation, interpretation and documentation of results

Safety studies

- Participation in safety studies performed with external companies
- Implementation of safety measures and documentation
- Creation of user instructions manual

Required qualifications / skills

The typical profile expected for this position would include:

- Enrollment in a degree in engineering.
- Rigor and respect of the requirements in terms of quality and deadlines.
- Proven interest in the field of energy and environment, and hydrogen in particular.

EIFER | Europäisches Institut für Energieforschung EDF-KIT EWIV
Emmy-Noether-Str. 11
76131 Karlsruhe | Germany

Tel.: +49 (0) 721 61051330
Fax: +49 (0) 721 61051332
contact@eifer.org
www.eifer.org

Geschäftsführerin: Dr. Nurten Avcı
Handelsregister: Amtsgericht
Mannheim HRA 104823
USt-IdNr: DE 814587731

- Proven knowledge of 3D modelling software (e.g.: Autodesk Inventor, CATIA V6, Solidworks, etc.)
- Professional working proficiency in English (institute's official working language), French or German knowledge is an advantage.

The applicant must be enrolled at a university during the whole time of the training.

What you can expect

- An international experience in a stimulating multi-disciplinary, multi-cultural environment at the interface between research and one of the largest energy utilities worldwide.
- Acquisition of valuable knowledge from a team with great experience in the field of hydrogen and overall energy.
- A contribution to the key challenge of our era: the fight against climate change through the decarbonization of the energy supply.

Conditions

- Duration: 6 months.
- Starting date: as soon as possible.
- Location: EIFER, Emmy-Noether-Str. 11, 76131 Karlsruhe, Germany or remotely.
- Working hours: 39.5 hours per week.
- Monthly compensation: 450 € gross (compulsory internship).

Contact

If you want to join our motivated team, please forward your electronic application with one single PDF of max. 5MB to jobs@eifer.org (cover letter + curriculum vitae). Please refer to offer number **22J006**.
For additional information concerning the work, please contact Rami Chahrouri, chahrouri@eifer.org, Tel. +49 (0) 721/6105-1453.