

24J017 - Internship proposal

Title: Active and passive cooling solutions at urban, district and building level

Are you interested in working on Energetics and Environmental Engineering?

The European Institute for Energy Research EDF-KIT EWIV (EIFER) is looking for a

Trainee (f/m/d)

in the research group “Local Multi-Energy Systems”.

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 and utilities' needs. With its applied research orientation EIFER is bridging the gap between science and industry for more than 20 years. In the context of the European energy transition, EIFER provides research-based innovative energy solutions for the sustainable development of cities and communities, economic activities, and territories.

Internship description:

The work during the internship will start from a strong base of review of passive and active cooling solutions at a building, district and urban level, solutions based on nature (e.g. green roofs) on a building and urban level. In parallel, active and passive solutions will be ranked according to a number of indicators: energy (consumption), environmental (carbon footprint) and financial (investment and operating costs) impact. The trainee will use EDF R&D and EDF group subsidiaries feedback by conducting interviews and meetings with the relevant experts.

The assigned tasks involve

- Determination of the relevant indicators, identification of the solutions and their characteristics, comparative analysis
- Propose and build a multi-criteria and operational approach for emerging and proven solutions, adapted to different climatic contexts.
- Interviews and meetings with EDF group

Required qualifications/skills/interests

The position is aiming to Master-students in in Energetics or Environmental engineering.

- An understanding and interest to explore emerging (R&D, demonstrator phase or mature stage) passive or active cooling solutions
- Ability to write and communicate in French and English, German would be helpful

What you can expect

- A stimulating, multicultural and multidisciplinary environment
- An institute at the intersection between academic research and one of the largest energy utilities in Europe
- If the opportunity arises: participation to conferences, involvement in scientific publications

Conditions

- Duration: 6 months
- Starting date: as soon as possible
- Location: ElfER, Emmy-Noether-Str. 11, 76131 Karlsruhe, Germany
- Working hours: 39.5 hours per week
- Monthly compensation: 550 € for a compulsory internship

Contact

If you want to join a highly motivated research group, please forward your electronic application with one single pdf of max. 5MB including all relevant information (curriculum vitae and cover letter) to jobs@eifer.org. **Please refer to the offer number 24J017.**

For additional information concerning the work please contact: Jean-Sébastien Cardot
jean-sebastien.cardot@eifer.org