



MASTER STUDENT INTERNSHIP IN IDENTIFICATION OF APPROACHES TO FOSTER THE EFFICIENT USE OF WATER AND ENERGY (M/F)

Internship | 6 months | Fulltime/40h | Belvaux

Context

With a team of more than 170 scientists and engineers from life science, environmental science, and IT science, the “Environmental Research and Innovation” (ERIN) department has the necessary interdisciplinary knowledge and skills to tackle major environmental challenges our society is facing today: climate change mitigation, ecosystem resilience, sustainable energy systems, efficient use of renewable resources, environmental pollution prevention and control.

The selected candidate will join ERIN’s Environmental Policies group (EPS), a research group of the Sustainability Assessment and Circularity (SUSTAIN) research unit. The EPS group aims to contribute to a better control of environmental risks and the development towards a tox-free, circular and sustainable society via science based support to the definition, implementation and evaluation of environmental policies at national and EU level and regulatory support for RDI at the interface of science, technologies and policies.

Description

The resources of water are limited in Luxembourg while the consumption by industry, the tertiary sector and the households is substantial, e.g. for cooling and heating processes. Given the expected economic and population growth in the next decades, the use efficiency needs to be improved to stay within the boundaries of this natural resource. Thereby, there is often a trade-off to be made between water and energy consumption.

The trainee will collect and review information (publications, standards, industry survey, etc.) to identify best practices and innovative technical solutions as well as water (and related energy) management approaches that allow an efficient use of water for selected applications. This may include HVAC, cooling processes (e.g. of data centres), production of drinking water, etc. Depending on the available data, the trainee will also quantify water saving potentials and/or develop simple tools that allow companies to do such a quantification. The results should be summarized in a final report (optionally as Master thesis). (S)he can also contribute to the dissemination of the results.

The trainee will learn about these water management approaches and technologies to optimise the water (and connected energy) consumption in industry and the tertiary sector and their application in the framework of the European and national policies.

Profile

Education

- Master (or Bachelor) student

Competencies

- Natural science or engineering

Language

- English is mandatory
- French or German is considered an asset

Job reference: ERIN-2020-Intern-012

Application file:

- A CV
- A motivation letter

Apply online: [ERIN-Internship](#)

Your working environment

The research department

With its multidisciplinary team, the Environmental Research and Innovation department (ERIN) brings together the necessary interdisciplinary knowledge and skills to tackle the major environmental challenges of our time: climate change mitigation, ecosystem resilience, sustainable energy systems, efficient use of renewable resources as well as environmental pollution prevention and control.

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