JOB OFFER

PhD position on:
Sustainability performance evaluation of alternative business models in the frame of the circular economy

We offer
In the framework of the INTERREG ECY-TWIN project “Eco-cycle Innovation for the Textile and Woodworking Industries” we offer a PhD position (3.75 years full time with annual renewal, starting date: 01/09/2018 – 30/06/2022). This position holds a double responsibility: (i) the execution of the project work, and (ii) the development and execution of academic PhD research in relation to the project which will be valorised in scientific papers and a doctorate.

Project - The main objective of the INTERREG ECY-TWIN project is to stimulate and guide private companies in the textile (clothing) and wood (furniture) sector in their activities and their strategy towards sustainable growth, more specifically, to incorporate circular economy and alternative economic models (functional economy, product service systems, etc.). The project will, together with the companies, develop a global eco-innovation strategy for this.

Project activities are:
- Establish collaborations with private companies
- Organise and animate seminars and workshops with companies on LCA, footprinting, eco-design, circular economy models, alternative economic models
- Assess sustainability performance of the strategies/projects implemented by demonstrator companies.

PhD – Linked to the ECY-TWIN project the PhD research would analyze the effectiveness of alternative business models to increase (as part of the circular economy model) sustainability of products and services. How and to which extend do alternative business models affect efficient resource use, quality and longevity of goods, affect recycling rates, etc...? How do alternative business models affect directly or indirectly consumer behaviour? Which rebound effects can be expected? Is there an interaction effect between alternative business models and the different material cycling concepts (reuse, remanufacture, recycling, ...)? How do the abovementioned mechanisms affect the sustainability performance of products and services from a life cycle perspective? Through selected case studies (e.g. shared with the ECY-TWIN project) the PhD would aim to contribute to 1) unravel the mechanisms and effects of different circular economy and alternative business models (including consumer behaviour); and 2) to the methodological development on sustainability assessment of circular economy activities.

The PhD project will be supervised by Prof. Wouter Achten (ULB - IGEAT) and Dr. Vanessa Zeller (ULB – IGEAT)

We look for
The ideal candidate (profile)

- holds a Master in a project relevant domain (e.g. Environmental Science, Environmental Management, Ecological economics, Environmental Engineering, Bioscience engineering, Management),
- has knowledge and experience with executing quantitative impact assessment. Ideally this candidate is acquainted, or has experience with sustainability impact assessment tools of products and services (i.e. life cycle thinking).
- has knowledge on, or a keen interest in circular economy, functional economy, product service systems and their implication on sustainability performance.
- has strong organisational and communication skills to interact with companies and consumers, and to organise and animate seminars, workshops, working groups, and communicate project and research results.
- is fully proficient in French and has a good level in written and spoken English.
Further, the candidate should be graduated with at least one distinction grade. The candidate has strong analytical thinking skills, can approach complex issues in a systematic way and has the capacity to work autonomously towards objectives and deadlines.

**Work environment**

Founded in 1834, Université libre de Bruxelles (http://www.ulb.ac.be) has a long tradition of excellence in Research with four scientific Nobel Prizes, one Fields Medal, three Wolf Prizes and two Marie Curie Excellence Awards. It is one of the largest and best Research Universities in Belgium, with a student population of 24,000 and with almost 1,600 PhD in progress, in partners with 20 Doctoral schools. ULB has considerable experience with European funding programmes and is involved in more than 160 projects financed by both the 7th European Framework Programme and Horizon 2020.

The **Institute for environmental management and land-use planning** (IGEAT – http://igeat.ulb.ac.be) is an interdisciplinary education and applied research Institute. It hosts a Master on Environmental Science and Management with about 250 students. Scientific staff is about 50 interdisciplinary researchers. The group Environmental, Societal and Land Management (GESTe) is one of the research units of IGEAT. This multidisciplinary team specializes in environmental assessment in the broad sense. The group masters assessment techniques for products and services (e.g. life cycle thinking), projects (e.g. environmental impact assessment), as well as for plans (e.g. strategic environmental assessment) and programs and policies.

The **research group around Prof. Wouter Achten** (3 post-docs, 6 PhD researchers, 1 research collaborator) focusses on life cycle thinking research and has activities on life cycle sustainability assessment, social LCA, Input-Output LCA, spatio-temporal LCA, territorial LCA etc., and this in the context of food systems, forestry products, waste management, circular economy and bio-based production systems.

**Apply**

For further information on the position or the research project you may contact Wouter Achten (wouter.achten@ulb.ac.be; +32 2 650 43 22). To apply, you should send an application to wouter.achten@ulb.ac.be. The application consists of:

- a **cover letter** stating your motivation for this position and past experiences regarding the content of this vacancy.
- an **extensive curriculum vitae** (including annual study results, and any scientific output, e.g. thesis, presentation, papers, chapters),
- a **full text digital copy of your best scientific output** so far (paper written for a course, master thesis, presentation, ...)
- the names and coordinates of **2 reference persons**

Applications have to be send no later than **July 22nd**.

**Keywords**

Circular economy, product service systems, functional economy, Life cycle thinking, wood and textile