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VRIJE
UNIVERSITEIT
BRUSSEL

open a 3 year full time PhD fellowship (M/F) position starting in February 2018 on the topic

Circular economy in the building sector Les Casernes Case Study in Ixelles (Brussels)

Background

This research project aims at creating in the area 'Les Casernes' a hot spot in Circular Economy for academic and building sector players as well as entrepreneurs. This project will contribute making ULB and VUB major players in the City beyond their knowledge capacity by creating new construction, designing, or collaborative methods leading to a possible new life style. Les Casernes will then become a vibrant meeting place where training and other actions related to circular economy will take place.

The research has been developed with the workshops output and results obtained by Aristide Athanassiadis (ULB) in a report commissioned by Brussels Environment entitled [« L'économie circulaire dans le secteur de construction à Bruxelles »](#). (currently available in French only). The proposed research project will also establish links with the H2020 project 'Buildings As Material Banks' supported by Anne Paduart (VUB).

The research project will be cast into 4 main work-packages:

1. Identify the main opportunities for circular economy
2. Design strategies for the reuse of existing material streams
3. New collaborative approach between building stakeholders in order to foster circular economy
4. An experimental for circular economy

Research environment

The PhD fellow will be based in the ULB BATir dept (Prof. Ph. Bouillard et A. Athanassiadis) and conducts his/her research jointly with the VUB TRANSFORM research team (Prof. N. De Temmerman et Dr. A. Paduart) in close cooperation with both university administration departments.

BATir (Building, Architecture & Town Planning <http://batir.ulb.ac.be>) is a research centre of the Ecole Polytechnique de Bruxelles (ULB). This centre is composed of more than 60 researchers active in research and teaching related to the building environment: civil, architectural and urban engineering. BATir currently conduct many research projects on circular economy and urban metabolism.

The research team TRANSFORM exists for more than 10 years and studies how the current building practice can evolve towards a circular economy in which more importance is given to our resources, financial means and social aspects. TRANSFORM aims to bypass the excessive use of building materials and the enormous waste streams generated by the current building sector, but also unexpected life cycle costs by designing buildings with the future life cycle in mind (www.vub.ac.be/ARCH/ae-lab/projects).

Candidate attributes and skills

- MSc Architectural or Civil Eng., MA Architecture or Urban Design (or similar).
- Architectural design, including graphical tools and databases.
- Professional experience with reusing material in the construction (from architectural and practical perspective).
- Awareness and interest in challenges related to circular economy, design for change, urban metabolism, industrial ecology, BIM.
- Interested in academic and applied research.
- Experience in collaborative projects.
- Good communication skills with different players (architects, researchers, contractors, associations, ...).
- Languages: good knowledge of French, Dutch and English.

Contact

For further information, feel free to contact Prof. Philippe Bouillard, +3226502756 ou Philippe.Bouillard@ulb.ac.be.

The application package will contain a CV, a letter of motivation highlighting the relevant experience and skills together with a 2 page research proposal consistent with the project. It must be emailed to Prof. Philippe Bouillard (Philippe.Bouillard@ulb.ac.be) by 8th January 2018. Short-listed candidates will be interviewed on 22th January 2018 AM.