

FULL-TIME ACADEMIC POSITION IN STRUCTURAL ENGINEERING

ÉCOLE POLYTECHNIQUE DE BRUXELLES – BRUSSELS SCHOOL OF ENGINEERING

Reference : 2017/Axxx
Application deadline: xxx
Start date: 01/10/2021

Job description

INTEGRITY, MAINTENANCE AND DURABILITY OF ENGINEERING STRUCTURES

The School of Engineering (EPB) of the Université Libre de Bruxelles (ULB) wishes to develop competencies in the field of structures in Civil Engineering, including the experimental identification and characterization of structural integrity and durability, as well as the conception and the design of structural repairs.

A full time academic position is now vacant at BATir department, aiming at reinforcing research and teaching activities in Civil Engineering. The School seeks to hire a full-time, high-level scientist with proven track-record in experimental research, able to develop comprehensive research projects engaged with building materials engineering and structural engineering.

Candidates need to demonstrate excellent competencies in the experimental characterization of materials and structure in Civil Engineering.

The chair holder will develop his/her own research activity (including obtaining external research contracts) in the Laboratory of Civil Engineering (LGC) of BATir department with the opportunity to collaborate with the researchers in charge of the following chairs, amongst others: Non-linear Mechanics of Structures and Materials, Robustness of structure, Structural health monitoring of civil infrastructure, Cement and Concrete material engineering, Soil Mechanics.

He/she will benefit from existing research equipment of the Laboratory of Civil Engineering, which will be enriched by his/her own activity.

Area of Research:

The field of research associated with the academic position relates to 'integrity, maintenance and durability of engineering structures', essentially from an experimental point of view. This area of research entails aspects related to structural and civil engineering. The successful applicant is expected to have developed expertise in one or more of the topics related to the domain:

- Experimental study of the pathology and stability of structures
- Design of consolidation and strengthening of structures (timber, masonry, concrete, steel, soil, ...)
- Material research related to consolidation and strengthening of civil engineering structures and materials
- Experimental characterization of civil structures and infrastructures

Educational and scientific duties:

The successful applicant will be active at the Bachelor's level, more particularly in Civil Engineering and Architectural Engineering and in the Master's programs in Civil Engineering and Architectural Engineering. The teaching duties include lectures, exercise and laboratory sessions as well as, where relevant, industrial visits. Proposing and supervising students' projects and master theses are part of the position.

Courses covered at the time of appointment:

The successful applicant is expected to have sufficient expertise to contribute to the following courses (lectures and/or practical sessions):

- CNST-H-303 : Analyse des structures 1
- CNST-H-3002 : Analyse des structures 2
- PROJ-H-305: Projet de conception de structure
- CNST-H-4xx : Integrity, maintenance and durability of engineering structure

Depending on his/her expertise, the successful candidate can also be invited to participate in existing courses in the civil engineering and architectural engineering curriculum, both at the bachelor and master levels. In the framework of the ULB-VUB Bruface Master in civil engineering and architectural engineering, courses are taught in English while Bachelor courses in both trainings are taught in French. Consequently, the successful candidate must be able to teach in both French and English.

The successful applicant will have the opportunity to adapt courses in agreement with his/her domain of research.

Teaching duties may be reviewed periodically and are subject to modification over time.

Qualifications required :

PhD degree (with doctoral thesis) in Engineering

Skills required

- Applicants should have at least 4 years of research experience at the time of their recruitment.
- Post-doctoral experience and an excellent scientific record are a plus.
- Exchange periods outside of the applicants' home institution (during or after their PhD) will be taken into consideration when evaluating applications.
- Applicants who do not speak French (level C1) may be granted a period of adaptation, but they must be able to teach in French at the end of the third year following their appointment.
- Level C1 in English. Candidates must be capable of teaching in English at the time of their appointment.
- Career stage: an experienced researcher (4-10 years) or more experienced researcher (>10 years) is preferred.

Interested ?

For more information, please contact Mr/Ms **xxx (telephone: +32 2 xxx.xx.xx – E-mail: xxx@ulb.ac.be)**.

Applications must be sent by e-mail to the rectorate of the Université Libre de Bruxelles (recteur@ulb.ac.be) and to the faculty deanship (xxx.xx@ulb.ac.be).

They must include the following :

- an application letter
- a Curriculum vitae including a list of publications (a template can be downloaded at <http://www.ulb.ac.be/tools/CV-type.rtf>)
- any relevant documents showing 4 years of research experience

- a 7,000-character report (4 pages) presenting the applicant's research activities and a research project, including how these will integrate into ULB's research teams
- a teaching dossier including a 7,000-character report (4 pages) on the applicant's previous teaching activities and a teaching project for the first five years in this position; these must be relevant to the faculty and to the teaching profiles for the programmes to which the applicant is to contribute
- a note on the applicant's international achievements and projects (no more than 4 pages)
- the names and e-mail addresses of five referees (respecting the gender balance) who may be contacted by those in charge of evaluating applications. These referees should not have conflicts of interest because of family or emotional ties.

By sending in their application, applicants acknowledge they have read and understood the additional information and the regulations relevant to research staff, available at the following address

<http://www.ulb.ac.be/emploi/academique.html>.

FICHE ADMINISTRATIVE

qui doit impérativement accompagner la vacance

n° de vacance : 2017/Axxx

Domaine : (liste Paysage)

Discipline : (au choix)

Poste(s) au cadre : 17-x-xxx-xxx (x) (x.xx ETP) / poste SAP

Références CoA : <Grefte>

Rattachement Enseignement : Département/Service (Mnémon + intitulé)

Rattachement Recherche : Centre de recherche/Unité de recherche (Mnémon + intitulé)

EURAXESS SPECIFIC INFORMATION

Main Research Field : (cf liste EURAXESS)

Sub Research Field : (cf liste EURAXESS - facultatif)

Required educational level: Phd Degree in (Degree Field – voir liste domaines EURAXESS)

Required Languages :

Français : (basic – good – excellent – native)

English : (basic – good –excellent – native)

'autre langue' : (basic – good –excellent – native)

Type of contract : temporary

Hours per week : 38

Required Research Experiences : (domaine – voir liste EURAXESS) : (nombre d'années d'expérience)

Researcher profile : Early stage researcher (0-4 years)

Experienced researcher - R3 (4 – 10 years) (vous pouvez laisser les 2 profils si vous le souhaitez)

Additional requirements :

[texte libre où l'on peut renseigner les domaines et disciplines non disponibles dans les listes Euraxess par exemple]